AAOS
AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS

Supplement to the Clinical Practice Guideline for the Surgical Management of Osteoarthritis of the Knee

e-Appendix 2

- Quality Evaluations
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Strength of Recommendations

Strength	Overall Strength of Evidence	Description of Evidence Quality
Strong	**Strong or Moderate**	Evidence from two or more "High" quality studies with consistent findings for recommending for or against the intervention. Or Rec is upgrade from Moderate using the EtD framework.
Moderate	**Strong, Moderate, or Limited**	Evidence from two or more "Moderate" quality studies with consistent findings, or evidence from a single "High" quality study for recommending for or against the intervention. Or Rec is upgraded or downgraded from Limited or Strong using the EtD framework.
Limited	**Limited or Moderate**	Evidence from two or more "Low" quality studies with consistent findings or evidence from a single "Moderate" quality study recommending for or against the intervention. Or Rec is downgraded from Moderate using the EtD Framework
Consensus	**No Reliable Evidence**	There is no supporting evidence, or higher quality evidence was downgraded due to major concerns addressed in the EtD framework. In the absence of reliable evidence, the guideline work group is making a recommendation based on their clinical opinion.

Surgical Management of Osteoarthritis of the Knee CPG Quality Appraisal Tables

QE - Prognostic

Study	Prognostic Study Design	Representative Population	Reason for Follow Up Loss	Prognostic Factor Measured	Outcome Measurement	Confounders	Appropriate Statistical Analysis	Strength
Agarwala, S., 2020	●	●	●	●	●	●	●	High Quality
Agarwala, S., 2020	●	●	●	●	●	●	●	High Quality
Ahmed, W., 2016	●	●	●	●	●	●	●	High Quality
Amin, A. K., 2006	●	●	●	●	●	●	●	High Quality
Amin, A. K., 2006	●	●	●	●	●	○	◑	Moderate Quality
Baker, P., 2012	●	●	●	●	●	●	○	Moderate Quality
Basdelioglu, K., 2020	●	●	●	●	●	●	●	High Quality
Benjamin, J., 2001	●	●	●	●	●	●	●	High Quality
Bonnefoy-Mazure, A., 2017	●	●	●	●	●	●	●	High Quality
Bordini, B., 2009	●	●	●	●	●	●	●	High Quality
Cao, G., 2020	●	●	●	●	●	●	●	High Quality
Clement, N. D., 2020	●	●	●	●	●	●	●	High Quality
Collins, J. E., 2017	●	●	●	●	●	●	●	High Quality
Daniilidis, K., 2016	●	●	●	●	●	●	●	High Quality
Foreman, C. W., 2020	●	●	●	●	●	●	●	High Quality
Francois, E. L., 2019	●	●	●	●	●	●	●	High Quality
Giesinger, J. M., 2018	●	●	●	●	●	●	●	High Quality
Gurunathan, U., 2018	●	●	●	●	●	●	●	High Quality
Hakim, J., 2020	●	●	●	●	●	●	●	High Quality
Hanly, R. J., 2017	●	●	●	●	●	●	●	High Quality
Hanusch, B. C., 2014	●	●	●	●	●	●	●	High Quality
Hirschmann, M. T., 2013	○	●	●	●	●	○	●	Very Low Quality
Horst, P. K., 2020	●	●	●	●	●	●	●	High Quality
Issa, K., 2017	●	●	●	●	●	●	●	High Quality
JÃ¤rvenpÃ¤Ã¤, J., 2012	●	●	●	●	●	●	◑	High Quality
Kandil, A., 2015	●	●	●	●	●	●	●	High Quality
Kuo, F. C., 2017	●	●	●	●	●	●	●	High Quality
Kuo, L. T., 2017	●	●	●	●	●	●	●	High Quality

Study	Prognostic Study Design	Representative Population	Reason for Follow Up Loss	Prognostic Factor Measured	Outcome Measurement	Confounders	Appropriate Statistical Analysis	Strength
Li, H., 2020	●	●	●	●	●	●	●	High Quality
Lizaur-Utrilla, A., 2015	●	●	●	●	●	◑	●	High Quality
Maniar, R. N., 2018	●	●	●	●	●	●	●	High Quality
Martinez-Cano, J. P., 2020	●	●	●	●	●	●	●	High Quality
Napier, R. J., 2014	●	●	●	●	●	◑	◑	Moderate Quality
Nelson, C. L., 2015	●	●	●	●	●	●	●	High Quality
NÃºÃ±ez, M., 2011	●	●	●	●	●	●	●	High Quality
O'Neill, S. C., 2016	●	●	●	●	●	●	●	High Quality
Ojemolon, P. E., 2020	●	●	●	●	●	●	●	High Quality
Polat, A. E., 2019	●	●	●	●	●	●	●	High Quality
Quinlan, N. D., 2019	●	●	●	●	●	●	●	High Quality
Rassir, R., 2020	●	●	●	●	●	●	●	High Quality
Reategui, D., 2017	●	●	●	●	●	●	●	High Quality
Sharma, L., 1996	○	●	●	●	●	●	●	Low Quality
Shih, L. Y., 2004	●	●	●	●	●	●	●	High Quality
Singh, J. A., 2013	●	●	●	●	●	●	●	High Quality
Sloan, M., 2020	●	●	●	●	●	●	●	High Quality
Steinhaus, M. E., 2020	●	●	●	●	●	●	●	High Quality
Sveikata, T., 2017	●	●	●	●	●	●	●	High Quality
Teo, B. J. X., 2018	●	●	●	●	●	●	●	High Quality
Tio, M., 2018	●	●	●	●	●	●	●	High Quality
Torres-Claramunt, R., 2016	●	●	●	●	●	●	●	High Quality
Torres-Claramunt, R., 2017	●	●	●	●	●	●	●	High Quality
Venkatesh, H. K., 2019	●	●	●	●	●	●	●	High Quality
Visser, M. A., 2019	●	●	●	●	●	●	●	High Quality
Woon, C. Y., 2016	●	●	●	●	●	●	●	High Quality
Xu, J., 2020	●	●	●	●	●	●	●	High Quality
Xu, S., 2018	●	●	●	●	●	●	●	High Quality
Xu, S., 2019	●	●	●	●	●	●	●	High Quality
Yakubek, G. A., 2018	●	●	●	●	●	●	●	High Quality
Yoo, J. H., 2018	●	●	●	●	●	●	●	High Quality

Study	Prognostic Study Design	Representative Population	Reason for Follow Up Loss	Prognostic Factor Measured	Outcome Measurement	Confounders	Appropriate Statistical Analysis	Strength
Zengerink, I., 2015	○	●	●	●	●	●	●	Low Quality

QE - Intervention - Randomized

Study	Random Sequence Generation	Allocation Concealment	Blinding	Incomplete Outcome Data	Selective Reporting	Other Bias	Strength
Abane, L., 2015	●	●	○	●	●	◐	High Quality
Abane, L., 2018	●	●	○	●	●	◐	High Quality
Affas, F., 2011	●	●	○	●	●	◐	High Quality
Aglietti, P., 2000	◐	◐	◐	●	●	◐	Moderate Quality
Aguilera, X., 2015	●	●	○	●	●	●	High Quality
Alexandersson, M., 2019	●	●	●	●	●	●	High Quality
Ali, A., 2016	●	●	○	●	●	●	High Quality
Antinolfi, P., 2014	●	◐	○	●	●	●	High Quality
Aunan, E., 2016	●	●	●	●	●	●	High Quality
Aunan, E., 2016	●	●	●	●	●	●	High Quality
Ayik, O., 2020	●	●	○	●	●	●	High Quality
Baker, P. N., 2007	○	◐	◐	●	●	○	Moderate Quality
Barrack, R. L., 1997	●	●	●	●	●	●	High Quality
Barrack, R. L., 2001	●	●	●	●	●	◐	High Quality
Barrett, W. P., 2011	●	◐	○	●	●	◐	Moderate Quality
Batailler, C., 2020	●	●	○	●	●	◐	High Quality
Batra, S., 2020	●	●	●	●	●	◐	High Quality
BeauprÃ©, L. A., 2007	●	●	○	●	●	●	High Quality
Beaupre, L. A., 2016	●	●	●	●	●	●	High Quality
Biswas, A., 2018	●	●	●	●	●	●	High Quality
Blakeney, W. G., 2011	●	●	●	●	●	◐	High Quality
Blyth, M. J. G., 2017	●	●	●	●	●	◐	High Quality
Blyth, M. J., 2015	●	●	○	●	●	◐	High Quality
Boonen, B., 2013	●	◐	●	●	●	●	High Quality
Boonen, B., 2016	●	●	●	●	●	◐	High Quality
Bourne, R. B., 1995	●	◐	◐	●	●	●	High Quality
Bradshaw, A. R., 2012	●	●	●	●	●	●	High Quality
Burnett, R. S., 2004	●	●	●	●	●	●	High Quality

Study	Random Sequence Generation	Allocation Concealment	Blinding	Incomplete Outcome Data	Selective Reporting	Other Bias	Strength
Busch, C. A., 2006	●	◑	●	●	●	●	High Quality
Calliess, T., 2017	●	●	○	●	●	●	High Quality
Campbell, D. G., 2006	●	●	●	●	●	●	High Quality
Cankaya, D., 2014	●	◑	○	●	●	●	High Quality
Carli, F., 2010	●	●	●	●	●	○	High Quality
Carlsson, A., 2005	○	◑	○	●	●	◑	Moderate Quality
Catani, F., 2004	◑	◑	◑	●	●	●	High Quality
Chan, M. H., 2012	●	●	●	●	●	◑	High Quality
Chareancholvanich, K., 2012	●	●	●	●	●	●	High Quality
Chareancholvanich, K., 2013	●	●	○	●	●	●	High Quality
Charoencholvanich, K., 2011	●	●	●	●	●	●	High Quality
Chaudhary, R., 2008	●	●	●	●	●	◑	High Quality
Chawla, L., 2019	●	●	○	●	●	●	High Quality
Chia, S. K., 2013	●	●	●	●	●	◑	High Quality
Chin, P. L., 2005	◑	●	●	●	●	●	High Quality
Chinachoti, T., 2012	●	●	●	●	●	●	High Quality
Chiu, F. Y., 2001	○	◑	◑	●	●	●	Moderate Quality
Chiu, F. Y., 2009	●	◑	○	●	●	●	High Quality
Cho, K. J., 2019	●	◑	○	●	●	●	High Quality
Cip, J., 2014	●	●	○	●	●	◑	High Quality
Clark, C. R., 2001	◑	◑	◑	◑	●	◑	Moderate Quality
Decking, R., 2005	●	●	●	●	●	◑	High Quality
Demey, G., 2011	●	●	○	●	●	●	High Quality
Digas, G., 2015	●	●	○	●	●	●	High Quality
Dimaculangan, D., 2019	●	●	●	●	●	●	High Quality
Dong, Y., 2018	●	●	●	●	●	●	High Quality
Dossett, H. G., 2014	●	●	●	●	●	●	High Quality
Dowsey, M. M., 2020	●	●	●	●	●	◑	High Quality
Drosos, G. I., 2016	●	●	○	●	●	●	High Quality
Dutton, A. Q., 2008	●	◑	●	●	●	●	High Quality
Esler, C. N., 2003	◑	●	◑	●	●	●	High Quality
Fitz, W., 2021	●	●	○	●	●	●	High Quality
Gautam, P. L., 2011	●	●	●	●	●	●	High Quality

Study	Random Sequence Generation	Allocation Concealment	Blinding	Incomplete Outcome Data	Selective Reporting	Other Bias	Strength
Georgiadis, A. G., 2013	●	●	●	●	●	◑	High Quality
Gildone, A., 2005		●	○	●	●	●	High Quality
Gilmour, A., 2018	●	◑	○	●	●	◑	Moderate Quality
Goel, R., 2019	●	●	●	●	●	●	High Quality
Good, L., 2003	●	●	●	●	●	●	High Quality
Good, R. P., 2007	◑	◑	●	●	●	●	High Quality
Guerreiro, J. P. F., 2017	●	●	○	●	●	●	High Quality
Guzel, Y., 2016	●	◑	○	●	●	●	High Quality
Ha, C., 2019	●	●	●	●	●	●	High Quality
Hamawandi, S. A., 2021	●	●	●	●	●	●	High Quality
Hamilton, W. G., 2013	◑	◑	●	○	●	◑	Moderate Quality
Hampton, M., 2020	●	●	○	●	●	◑	High Quality
Harsten, A., 2013	●	●	●	●	●	●	High Quality
Harsten, A., 2015	●	●	●	●	●	●	High Quality
Hiippala, S. T., 1997	●	●	●	●	●	●	High Quality
Hinarejos, P., 2016	●	●	●	●	●	●	High Quality
Hsu, R. W., 2019	●	◑	○	●	●	●	High Quality
Huijbregts, H. J., 2016	●	●	○	●	●	●	High Quality
Ikawa, T., 2017	●	●	○	●	●	●	High Quality
Ikeuchi, M., 2013	●	◑	●	●	●	●	High Quality
Iosifidis, M., 2014	●	●	○	●	●	●	High Quality
Ishida, K., 2011	●	◑	○	●	●	●	High Quality
Ishii, Y., 2011	○	◑	◑	●	●	◑	Moderate Quality
Jawhar, A., 2020	●	●	○	●	●	●	High Quality
Jenny, J. Y., 2001	◑	●	◑	◑	●	◑	Moderate Quality
Kadic, L., 2009	◑	●	●	●	●	◑	High Quality
Kalairajah, Y., 2005	●	●	○	●	●	◑	High Quality
Karaaslan, F., 2015	●	●	●	●	●	●	High Quality
Kaseb, M. H., 2018	●	●	○	●	●	●	High Quality
Kaseb, M. H., 2019	●	○	○	●	●	●	Moderate Quality
Kawakami, Y., 2015	●	◑	○	●	●	●	High Quality
Kayani, B., 2018	●	○	○	●	●	●	Moderate Quality

Study	Random Sequence Generation	Allocation Concealment	Blinding	Incomplete Outcome Data	Selective Reporting	Other Bias	Strength
Kendrick, B. J., 2015	●	●	○	●	●	◑	High Quality
Keyhani, S., 2016	●	●	○	●	●	●	High Quality
Khaw, F. M., 2002	●	●	○	●	●	◑	High Quality
Kim, Y. H., 2007	●	◑	◑	●	●	●	High Quality
Kim, Y. H., 2014	●	●	○	●	●	●	High Quality
Kim, Y. H., 2017	●	●	●	●	●	●	High Quality
Kim, Y. H., 2018	●	●	●	●	●	●	High Quality
Kim, Y. H., 2020	●	●	○	●	●	●	High Quality
Kim, Y. H., 2020	●	●	○	●	●	●	High Quality
Knifsund, J., 2021	●	●	●	●	●		High Quality
Koh, I. J., 2012	●	◑	◑	●	●	●	High Quality
Koh, I. J., 2019	●	●	○	●	●	●	High Quality
Kosse, N. M., 2018	●	●	○	●	●	◑	High Quality
Kotela, A., 2015	●	◑	○	●	●	●	High Quality
Kulkarni, M. M., 2019	●	●	○	●	●	◑	High Quality
Kulshrestha, V., 2017	●	●	○	●	●	●	High Quality
Lacko, M., 2017	●	◑	○	●	●	●	High Quality
Laende, E. K., 2019	●	●	●	●	●	●	High Quality
Laoruengthana, A., 2019	●	●	●	●	●	●	High Quality
Ledin, H., 2012	●	●	◑	●	●	◑	High Quality
Lee, S. H., 2013	●	●	●	●	●	●	High Quality
Lei, Y., 2020	●	◑	●	●	●	●	High Quality
Leung, P., 2018	●	●	●	●	●	●	High Quality
Li, C., 2011	◑	◑	◑	●	●	●	High Quality
Li, Q., 2018	●	◑	○	●	●	●	High Quality
Lin, S. Y., 2015	●	●	○	●	●	◑	High Quality
Liow, M. H. L., 2017	●	●	○	●	●	●	High Quality
Liow, M. H., 2014	●	◑	○	●	●	◑	Moderate Quality
Liu, D., 2014	●	●	○	●	●	◑	High Quality
Liu, J., 2014	●	◑	●	●	●	●	High Quality
Liu, P. L., 2017	●	●	○	●	●	●	High Quality
Liu, Z. T., 2012	●	●	●	●	●	●	High Quality
Lizaur-Utrilla, A., 2014	●	◑	●	●	●	●	High Quality
LÃ¼tzner, J., 2008	●	●	◑	●	●	●	High Quality
LÃ¼tzner, J., 2010	●	●	○	●	●	◑	High Quality

Study	Random Sequence Generation	Allocation Concealment	Blinding	Incomplete Outcome Data	Selective Reporting	Other Bias	Strength
MacDessi, S. J., 2020	●	●	●	●	●	◑	High Quality
Maniar, R. N., 2019	●	●	○	●	○	◑	Moderate Quality
Mao, Z., 2016	●	◑	○	●	●	●	High Quality
Matsumoto, T., 2017	●	●	○	●	●	●	High Quality
Maus, U., 2018	●	●	○	●	●	◑	High Quality
Mayman, D., 2003	●	●	●	●	●	●	High Quality
McConnell, J. S., 2012	●	●	○	●	●	●	High Quality
McEwen, P. J., 2020	●	●	●	●	●	◑	High Quality
McNamee, D. A., 2001	◑	●	●	●	●	◑	High Quality
Moghtadaei, M., 2014	●	◑	●	○	●	●	High Quality
Molloy, D. O., 2007	●	●	●	●	●	◑	High Quality
Molt, M., 2014	●	●	●	●	●	●	High Quality
Mori, N., 2016	●	●	○	●	●	●	High Quality
Murylev, V. Y., 2020	●	◑	○	●	●	●	High Quality
Nam, D., 2019	●	●	○	●	●	◑	High Quality
Newman, J. H., 1998	●	◑	◑	●	●	○	Moderate Quality
Newman, John H., 2000	●	●	◑	●	●	◑	High Quality
Nielsen, P. T., 1990	◑	◑	◑	●	●	◑	Moderate Quality
Ollivier, M., 2016	●	●	●	●	●	●	High Quality
Ollivier, M., 2018	●	●	○	●	●	●	High Quality
Omonbude, D., 2010	●	●	●	●	●	●	High Quality
Ortiz-GÃ³mez, J. R., 2017	●	●	○	●	●	●	High Quality
Ozkunt, O., 2018	●	◑	○	●	●	●	High Quality
Ã–ztas, S., 2015	●	●	○	●	●	●	High Quality
Ozturk, A., 2016	●	●	○	●	●	●	High Quality
Pandit, H., 2013	●	●	●	●	●	○	High Quality
Park, J. W., 2011	◑	◑	◑	●	●	●	High Quality
Park, S. E., 2007	●	◑	○	●	●	●	High Quality
Parker, D. A., 2001	●	◑	○	●	●	●	High Quality
Partio, E., 1995	◑	◑	◑	●	●	◑	Moderate Quality
Petursson, G., 2018	●	●	●	●	●	●	High Quality
Pfitzner, T., 2014	●	●	○	●	●	●	High Quality
Pfitzner, T., 2016	●	●	●	●	●	◑	High Quality

Study	Random Sequence Generation	Allocation Concealment	Blinding	Incomplete Outcome Data	Selective Reporting	Other Bias	Strength
Pietsch, M., 2013	◑	●	◑	●	●	◑	High Quality
Pulido, L., 2015	●	●	●	●	●	◑	High Quality
Raaij, T. M. V., 2020	●	●	○	●	●	●	High Quality
Reference: 7562	●	◑	○	●	●	●	High Quality
Reinhardt, K. R., 2014	●	◑	●	●	●	◑	High Quality
Roberts, D. W., 2015	●	●	●	●	●	◑	High Quality
Roh, Y. W., 2013	●	◑	◑	●	●	◑	High Quality
Roh, Y. W., 2013	●	●	○	●	●	●	High Quality
Rousseau-Saine, N., 2018	●	●	●	●	●	●	High Quality
Roy, S. P., 2012	●	●	●	●	●	●	High Quality
Sa-Ngasoongsong, P., 2011	●	●	●	●	●	●	High Quality
Sa-Ngasoongsong, P., 2013	●	●	●	●	●	●	High Quality
Sahin, I. G., 2019	●	●	○	●	●	●	High Quality
Sahin, L., 2014	●	●	●	●	●	●	High Quality
Sarzaeem, M. M., 2014	●	●	●	●	●	◑	High Quality
Sarzaeem, M. M., 2021	●	◑	●	●	●	●	High Quality
Scarvell, J. M., 2017	●	●	○	●	●	◑	High Quality
Schimmel, J. J., 2014	●	●	●	●	●	◑	High Quality
Schotanus, M. G. M., 2019	●	●	●	●	●	●	High Quality
Schroeder-Boersch, H., 1998	◑	◑	◑	●	●	◑	Moderate Quality
Selvanayagam, R., 2019	●	●	○	●	●	●	High Quality
Seo, J. G., 2013	●	●	○	●	●	●	High Quality
Seon, J. K., 2009	●	●	○	●	●	●	High Quality
Shaofei, Z., 2017	●	○	○	●	●	●	Moderate Quality
Silva, A. N., 2020	●	◑	●	●	●	●	High Quality
Singla, A., 2015	●	●	○	●	●	●	High Quality
Smith, A. J., 2008	●	●	○	●	●	◑	High Quality
Song, E. K., 2013	●	●	○	●	●	◑	High Quality
Song, E. K., 2017	●	●	●	●	●	●	High Quality
Song, S. J., 2019	●	●	○	●	●	●	High Quality
Spangehl, M. J., 2015	◑	●	○	●	●	◑	Moderate Quality
Steffin, B., 2009	●	●	○	●	●	●	High Quality
Stolarczyk, A., 2018	●	●	●	●	●	●	High Quality

Study	Random Sequence Generation	Allocation Concealment	Blinding	Incomplete Outcome Data	Selective Reporting	Other Bias	Strength
Stukenborg-Colsman, C., 2001	●	◑	◑	●	●	◑	High Quality
SÃ¼kÃ¼r, E., 2016	●	●	●	●	●	●	High Quality
Sun, M. L., 2020	●	●	○	●	●	◑	High Quality
Sun, P. F., 2012	●	●	◑	●	●	●	High Quality
Sun, Q., 2017	●	◑	○	●	●	●	High Quality
Sun, Y. Q., 2012	●	●	○	●	●	●	High Quality
Tanikawa, H., 2014	◑	●	●	●	●	◑	High Quality
Tanzer, M., 2002	◑	◑	●	●	●	●	High Quality
Teeter, M. G., 2019	●	●	○	●	●	●	High Quality
Thiengwittayaporn, S., 2013	●	◑	◑	●	●	●	High Quality
Thiengwittayaporn, S., 2019	●	●	●	●	●	◑	High Quality
Todesca, A., 2017	●	◑	○	●	●	●	High Quality
Toftdahl, K., 2007	◑	●	◑	●	●	●	High Quality
Tsuda, K., 2021	●	●	●	●	●	○	High Quality
Tsukada, S., 2014	●	●	○	●	●	●	High Quality
Turgeon, T. R., 2019	●	●	●	●	●	◑	High Quality
Tzatzairis, T. K., 2016	●	●	○	●	●	●	High Quality
Uesugi, K., 2014	●	●	◑	●	●	●	High Quality
Ukai, T., 2020	●	●	○	●	●	●	High Quality
van de Groes, S., 2015	●	●	●	●	●	●	High Quality
van den Boom, L. G. H., 2020	●	●	●	●	●	◑	High Quality
van Hamersveld, K. T., 2017	●	●	○	●	●	◑	High Quality
Van Leeuwen, Jamj, 2017	●	●	○	●	●	●	High Quality
Vertullo, C. J., 2017	●	●	○	●	●	●	High Quality
Vide, J., 2017	●	●	○	●	●	●	High Quality
Wang, C. G., 2015	●	●	●	●	●	●	High Quality
Wang, D., 2018	●	●	●	●	●	●	High Quality
Waters, T. S., 2003	●	●	○	●	●	◑	High Quality
Waterson, H. B., 2016	●	●	○	●	●	●	High Quality
Weidenhielm, L., 1993	●	◑	◑	●	●	◑	High Quality
Wong, J., 2010	●	●	●	●	●	◑	High Quality
Wood, D. J., 2002	●	●	●	●	●	◑	High Quality
Wu, Y., 2017	●	●	●	●	●	●	High Quality
Xie, Z., 2012	◑	◑	●	●	●	◑	High Quality
Yadeau, J. T., 2013	◑	●	○	●	●	●	High Quality

Study	Random Sequence Generation	Allocation Concealment	Blinding	Incomplete Outcome Data	Selective Reporting	Other Bias	Strength
Yan, C. H., 2015	●	●	○	●	●	●	High Quality
Yang, Y., 2015	●	●	○	●	●	●	High Quality
Yeo, J. H., 2019	●	●	●	●	●	●	High Quality
Yi, Z., 2021	●	◑	●	●	●	●	High Quality
Yim, J. H., 2013	●	○	○	●	●	◑	Moderate Quality
Young, S. W., 2020	●	●	○	●	●	◑	High Quality
Yu, X., 2020	●	◑	○	●	●	●	High Quality
Yuan, X., 2017	●	●	●	●	●	●	High Quality
Zhang, Z., 2016	●	●	○	●	●	●	High Quality
Zhou, K., 2017	●	●	●	●	●	●	High Quality
Zhu, X., 2020	●	●	●	●	●	●	High Quality

QE - Intervention - Observational ROBINS 1

Study	Participant Recruitment	Treatment recording	Confounding Variables	Outcome measurement bias	Incomplete Outcome Data	Adequate Reporting	Strength
Al-Dadah, O., 2020	●	●	●	●	●	●	Low Quality
Albrecht, D. C., 2016	●	●	●	●	●	●	Low Quality
Amin, A. K., 2006	●	●	◑	○	●	●	Low Quality
Amin, A. K., 2006	●	●	◑	◑	○	●	Low Quality
An, V. V. G., 2019	●	●	●	●	●	●	Low Quality
An, X., 2021	●	●	●	●	●	●	Low Quality
Arslan, A., 2018	●	●	●	●	●	●	Low Quality
Bagsby, D. T., 2015	●	●	●	●	●	●	Low Quality
Bagsby, D. T., 2016	●	●	●	●	●	●	Low Quality
Barker, K. L., 2018	●	●	●	●	●	●	Low Quality
Barker, T., 2017	●	●	●	●	●	●	Low Quality
Batailler, C., 2019	●	●	●	●	●	●	Low Quality

Study	Participant Recruitment	Treatment recording	Confounding Variables	Outcome measurement bias	Incomplete Outcome Data	Adequate Reporting	Strength
Baumann, F., 2017	●	●	●	●	●	●	Low Quality
Beyer, F., 2021	●	●	●	●	●	●	Low Quality
Biazzo, A., 2019	●	●	●	●	●	●	Low Quality
Blevins, J. L., 2020	●	●	●	●	●	●	Low Quality
Bohm, E. R., 2016	●	●	●	●	●	●	Low Quality
Bohm, E., 2014	●	●	○	○	●	●	Low Quality
Bollars, P., 2020	●	●	●	●	●	●	Low Quality
Boyle, K. K., 2018	●	●	●	●	●	●	Low Quality
Broberg, J. S., 2020	●	●	●	●	●	●	Low Quality
Burn, E., 2018	●	●	●	●	●	●	Low Quality
Cao, G., 2019	●	●	●	●	●	●	Low Quality
Casper, D. S., 2019	●	●	●	●	●	●	Low Quality
Chang, M. J., 2018	●	●	●	●	●	●	Low Quality
Chen, C. H., 2017	●	●	●	●	●	●	Low Quality
Chen, J. Y., 2014	●	●	●	●	●	●	Low Quality
Chen, J. Y., 2014	●	●	●	●	●	●	Low Quality
Chisari, E., 2021	●	●	●	●	●	●	Low Quality
Cho, K. Y., 2016	●	●	●	●	●	●	Low Quality
Cho, M. R., 2021	●	◑	◑	●	●	●	Low Quality
Christensen, J. C., 2020	●	●	●	●	●	●	Low Quality
Chua, H. S., 2018	●	●	●	●	●	●	Low Quality
Chun, K. C., 2017	●	●	●	●	●	●	Low Quality

Study	Participant Recruitment	Treatment recording	Confounding Variables	Outcome measurement bias	Incomplete Outcome Data	Adequate Reporting	Strength
Clement, N. D., 2020	●	●	●	●	●	●	Low Quality
Cool, C. L., 2019	●	●	●	●	●	●	Low Quality
Crizer, M. P., 2021	●	●	◑	●	●	●	Low Quality
Deroche, E., 2020	●	●	●	●	●	●	Low Quality
Di Martino, A., 2020	●	●	●	●	●	●	Low Quality
Driesman, A., 2019	●	●	●	●	●	●	Low Quality
Duchman, K. R., 2014	●	●	◑	○	●	●	Low Quality
Ellis, R. T., 2021	●	●	●	●	●	●	Low Quality
Fabre-Aubrespy, M., 2016	●	●	●	●	●	●	Low Quality
Farhan-Alanie, M. M., 2021	●	●	●	◑	●	●	Low Quality
Feng, S., 2019	●	●	●	●	●	●	Low Quality
Fisher, D. A., 2010	●	●	●	●	●	●	Low Quality
George, J., 2018	●	●	●	●	●	●	Low Quality
Gifstad, T., 2021	●	●	●	●	●	◑	Low Quality
Goh, G. S., 2018	●	●	●	●	●	●	Low Quality
Goh, G. S., 2021	●	●	●	●	●	●	Low Quality
Goplen, C. M., 2021	●	●	●	●	●	●	Low Quality
Gotz, J., 2016	●	●	●	●	●	●	Low Quality
Goyal, T., 2020	●	●	●	●	●	●	Low Quality
Guler, O., 2016	●	●	●	●	●	●	Low Quality
Hadley, S., 2017	●	●	●	●	●	●	Low Quality
Hamilton, D. A., 2021	●	●	●	○	●	●	Low Quality

Study	Participant Recruitment	Treatment recording	Confounding Variables	Outcome measurement bias	Incomplete Outcome Data	Adequate Reporting	Strength
Han, S. B., 2017	●	●	●	●	●	●	Low Quality
Hansen, D. C., 2014	●	●	●	●	●	●	Low Quality
Hauer, G., 2020	●	●	●	●	●	●	Low Quality
Hegde, C., 2013	●	●	●	●	●	●	Low Quality
Held, M. B., 2021	●	●	◑	○	●	●	Low Quality
Hino, K., 2016	●	●	●	●	●	●	Low Quality
Huang, Y. H., 2018	●	●	●	●	●	●	Low Quality
Ingall, E., 2021	●	●	●	●	●	●	Low Quality
Iriuchishima, T., 2018	●	●	●	●	●	●	Low Quality
Irmola, T., 2020	●	●	●	●	●	●	Low Quality
Iwai, T., 2013	●	●	●	●	●	●	Low Quality
Jang, B., 2014	●	●	●	●	●	●	Low Quality
Jansen, K., 2020	●	●	●	●	●	●	Low Quality
Jensen, C. B., 2021	●	●	●	●	●	●	Low Quality
Jeon, S. W., 2019	●	●	●	●	●	●	Low Quality
Jeon, Y. S., 2017	●	●	●	●	●	●	Low Quality
Jeremic, D. V., 2020	●	●	●	●	●	●	Low Quality
Jin, Q. H., 2020	●	●	●	●	●	●	Low Quality
Kahlenberg, C. A., 2021	●	●	●	●	●	●	Low Quality
Kamenaga, T., 2021	●	●	●	●	●	●	Low Quality
Karachalios, T., 2018	●	●	●	●	●	●	Low Quality
Katakam, A., 2021	●	●	●	●	●	●	Low Quality

Study	Participant Recruitment	Treatment recording	Confounding Variables	Outcome measurement bias	Incomplete Outcome Data	Adequate Reporting	Strength
Kayani, B., 2019	●	●	●	●	●	●	Low Quality
Kerens, B., 2017	●	●	●	●	●	●	Low Quality
Khatod, M., 2013	●	●	●	●	●	●	Low Quality
Kheir, M. M., 2018	●	●	●	●	●	●	Low Quality
Kim, G. W., 2021	●	●	●	●	●	●	Low Quality
Kim, J. H., 2012	●	●	◑	◑	●	●	Low Quality
Kim, M. S., 2017	●	●	●	●	●	●	Low Quality
Kim, M. S., 2019	●	●	●	●	●	●	Low Quality
Kim, S. C., 2019	●	●	●	●	●	●	Low Quality
Kim, T. W., 2016	●	●	●	●	●	●	Low Quality
Kim, T. W., 2021	●	●	●	●	●	●	Low Quality
Kim, Y. H., 2008	●	●	◑	◑	●	●	Low Quality
Kim, Y. T., 2018	●	●	●	●	●	●	Low Quality
King, C. A., 2020	●	●	●	●	●	●	Low Quality
Kinoshita, T., 2021	●	●	●	●	●	●	Low Quality
Kizilkurt, T., 2021	●	●	●	●	●	●	Low Quality
Koh, D. T. S., 2021	●	●	●	●	●	●	Low Quality
Kooner, S., 2021	●	●	●	●	●	●	Low Quality
Laende, E. K., 2019	●	●	●	●	●	●	Low Quality
Laende, E. K., 2019	●	●	●	●	●	●	Low Quality
Lau, H. P., 1998	●	●	○	◑	●	●	Low Quality
Lee, W. C., 2016	●	●	●	●	●	●	Low Quality

Study	Participant Recruitment	Treatment recording	Confounding Variables	Outcome measurement bias	Incomplete Outcome Data	Adequate Reporting	Strength
Leiss, F., 2020	●	●	●	●	●	●	Low Quality
Li, Z. J., 2018	●	●	●	●	●	●	Low Quality
Liddle, A. D., 2015	●	●	●	●	●	●	Low Quality
Liebensteiner, M., 2020	●	●	●	●	●	●	Low Quality
Lin, P. C., 2011	●	●	●	●	●	●	Low Quality
Lindberg-Larsen, M., 2015	●	●	●	●	●	●	Low Quality
Lindberg-Larsen, M., 2019	●	●	●	●	●	●	Low Quality
Liu, J., 2013	●	●	●	●	●	●	Low Quality
Liu, K. L., 2017	●	●	●	●	●	●	Low Quality
Liu, W., 2018	●	●	●	●	●	●	Low Quality
Lizaur-Utrilla, A., 2015	●	●	◑	○	●	●	Low Quality
Lizaur-Utrilla, A., 2020	●	●	●	●	●	●	Low Quality
Lum, Z. C., 2016	●	●	●	●	●	●	Low Quality
Lyu, S. R., 2021	●	●	◑	●	●	●	Low Quality
Ma, T., 2015	●		●	●	●	●	Low Quality
Manalo, J. P. M., 2018	●	●	●	●	●	●	Low Quality
Manoli, A., 3rd, 2019	●	●	●	●	●	●	Low Quality
Manzotti, A., 2007	●	●	●	●	●	●	Low Quality
Marchand, K. B., 2021	●	●	●	◑	●	●	Low Quality
Marchand, R. C., 2017	●	●	●	●	●	●	Low Quality
Marchand, R. C., 2019	●	●	●	●	●	●	Low Quality
Matsumoto, T., 2020	●	●	●	●	●	●	Low Quality

Study	Participant Recruitment	Treatment recording	Confounding Variables	Outcome measurement bias	Incomplete Outcome Data	Adequate Reporting	Strength
McLawhorn, A. S., 2017	●	●	●	●	●	●	Low Quality
Mergenthaler, G., 2020	●	●	●	●	●	●	Low Quality
Mitchell, J., 2021	●	●	◑	○	○	●	Low Quality
Mizu-uchi, H., 2008	●	●	◑	◑	●	●	Low Quality
Mohammad, H. R., 2020	●	●	●	●	●	●	Low Quality
Mohammad, H. R., 2021	●	●	○	◑	●	●	Low Quality
Naylor, J. M., 2017	●	●	●	●	●	●	Low Quality
Nicolaiciuc, S., 2019	●	●	●	●	●	●	Low Quality
Niki, Y., 2018	●	●	●	●	●	●	Low Quality
Niki, Y., 2020	●	●	●	●	●	●	Low Quality
Nugent, M., 2019	●	●	●	●	●	●	Low Quality
Numkanisorn, S., 2016	●	●	●	●	●	●	Low Quality
Ode, Q., 2018	●	●	●	●	●	●	Low Quality
Ogur, H. U., 2020	●	●	●	●	●	●	Low Quality
Ouanezar, H., 2016	●	●	●	●	●	●	Low Quality
Pacoret, V., 2020	●	●	●	●	●	●	Low Quality
Padgett, D. E., 2018	●	●	●	●	●	●	Low Quality
Park, K. K., 2019	●	●	●	●	●	●	Low Quality
Peersman, G., 2019	●	●	●	●	●	●	Low Quality
Petersen, W., 2016	●	●	●	●	●	●	Low Quality
Poultsides, L. A., 2015	●	●	●	●	●	●	Low Quality
Purcell, R. L., 2018	●	●	●	●	●	●	Low Quality

Study	Participant Recruitment	Treatment recording	Confounding Variables	Outcome measurement bias	Incomplete Outcome Data	Adequate Reporting	Strength
Quispel, C. R., 2021	●	●	●	●	●	●	Low Quality
Rodkey, D. L., 2021	●	●	●	●	●	●	Low Quality
Rodriguez-Merchan, E. C., 2016	●	●	●	●	●	●	Low Quality
Ryu, S. M., 2018	●	●	●	●	●	●	Low Quality
Sadigursky, D., 2016	●	●	●	●	●	●	Low Quality
Saini, R., 2020	●	●	●	●	●	●	Low Quality
Sarzaeem, M. M., 2017	●	●	●	●	●	●	Low Quality
Seol, J. H., 2016	●	●	●	●	●	●	Low Quality
Seol, Y. J., 2016	●	●	●	●	●	●	Low Quality
Sepah, Y. J., 2011	●	●	●	●	●	●	Low Quality
Serna-Berna, R., 2018	●	●	●	●	●	●	Low Quality
Shaw, J. H., 2021	●	○	●	◑	●	●	Low Quality
Siedlecki, C., 2018	●	●	●	●	●	●	Low Quality
Silverstein, R. S., 2021	●	●	●	●	●	◑	Low Quality
Siman, H., 2017	●	●	●	●	●	●	Low Quality
Singleton, N., 2019	●	●	●	●	●	●	Low Quality
Smith, S. R., 2017	●	●	●	●	●	●	Low Quality
Sobh, A. H., 2018	●	●	●	●	●	●	Low Quality
Song, E. K., 2017	●	●	●	●	●	●	Low Quality
Spekenbrink-Spooren, A., 2018	●	●	●	●	●	●	Low Quality
St Mart, J. P., 2020	●	●	●	●	●	●	Low Quality
Starr, J., 2018	●	●	●	●	●	●	Low Quality

Study	Participant Recruitment	Treatment recording	Confounding Variables	Outcome measurement bias	Incomplete Outcome Data	Adequate Reporting	Strength
Stempin, R., 2017	●	●	●	●	●	●	Low Quality
Stundner, O., 2012	●	●	●	●	●	●	Low Quality
Takubo, A., 2017	+	+	+	+	+	+	High Quality
Tam, K., 2018	●	●	●	●	●	●	Low Quality
Tanaka, S., 2020	●	●	●	●	●	●	Low Quality
Thuysbaert, G., 2020	●	●	●	●	●	●	Low Quality
Tille, E., 2019	●	●	●	●	●	●	Low Quality
Tille, E., 2021	●	●	●	●	●	●	Low Quality
Tuncay, I., 2015	●	●	●	●	●	●	Low Quality
Tveit, M., 2021	●	●	◑	○	●	●	Low Quality
Ugurlu, M., 2017	●	●	●	●	●	●	Low Quality
van der List, J. P., 2016	●	●	●	●	●	●	Low Quality
van der List, J. P., 2017	●	●	●	●	●	●	Low Quality
van Dorp, K. B., 2016	●	●	●	●	●	●	Low Quality
Wan, R. C. W., 2021	●	●	●	●	●	●	Low Quality
Watanabe, S., 2021	●	●	◑	◑	●	●	Low Quality
Willacy, R. A., 2020	●	●	●	●	●	●	Low Quality
Wilson, J. M., 2021	●	●	●	●	●	●	Low Quality
Witjes, S., 2020	●	●	●	●	●	●	Low Quality
Wong, J., 2019	●	●	●	●	●	●	Low Quality
Wyatt, M. C., 2015	●	●	●	●	●	●	Low Quality
Wyatt, M. C., 2019	●	●	●	●	●	●	Low Quality

Study	Participant Recruitment	Treatment recording	Confounding Variables	Outcome measurement bias	Incomplete Outcome Data	Adequate Reporting	Strength
Xu, H., 2020	●	●	●	●	●	●	Low Quality
Yacovelli, S., 2020	●	●	●	●	●	●	Low Quality
Yamagami, R., 2021	●	●	●	◑	●	●	Low Quality
Yang, H. Y., 2017	●	●	●	●	●	●	Low Quality
Yoon, H. S., 2010	●	●	●	●	●	●	Low Quality
Yuan, D., 2020	●	●	●	●	●	●	Low Quality
Zhang, S., 2021	●	●	●	●	●	●	Low Quality
Zhao, Y. T., 2015	●	●	●	●	●	●	Low Quality
Zhaohui, L., 2014	●	●	●	●	●	●	Low Quality
Ziqi, Z., 2020	●	●	●	●	●	●	Low Quality
Zuiderbaan, H. A., 2017	●	●	●	●	●	●	Low Quality
Zywiel, M. G., 2011	●	●	●	●	●	●	Low Quality

Data Tables

Table 1: PICO 1 – Intraop Drain (<24 hrs duration) vs. No Drain Used – Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zhou, 2017	High	Erythema/Ecchymosis	Postop.	Intraop Drain: <24 hrs duration	No Drain Used	RR	0.78(0.34,1.76)	NS
Zhou, 2017	High	Deep Vein Thrombosis	Postop.	Intraop Drain: <24 hrs duration	No Drain Used	RR	0.79(0.44,1.41)	NS
Zhou, 2017	High	Infection (Superficial Infection)	Postop.	Intraop Drain: <24 hrs duration	No Drain Used	RD	0.08(-0.01,0.16)	NS
Zhou, 2017	High	Infection (Deep Infection)	Postop.	Intraop Drain: <24 hrs duration	No Drain Used	RD	0.00(0.00,0.00)	NS

Table 2: PICO 1 – Intraop Drain (<24 hrs duration) vs. No Drain Used – Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zhou, 2017	High	HSS Total	Post-discharge.	Intraop Drain: <24 hrs duration	No Drain Used	Mean Difference	3.5 (-0.01, 7.01)	NS
Zhou, 2017	High	HSS Total	6 mos.	Intraop Drain: <24 hrs duration	No Drain Used	Mean Difference	0.4 (-1.63, 2.43)	NS
Zhou, 2017	High	HSS Total	14.6 mos.	Intraop Drain: <24 hrs duration	No Drain Used	Mean Difference	-0.5 (-2.13, 1.13)	NS
Maniar, 2018	Moderate	NKSS - New Knee Society Score	Preop.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-2.4 (-15.29, 10.49)	NS
Maniar, 2018	Moderate	NKSS - Objective Knee Score	Preop.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-0.2 (-7.35, 6.95)	NS
Maniar, 2018	Moderate	NKSS - New Knee Society Score	3 mos.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	7.4 (-2.76, 17.56)	NS
Maniar, 2018	Moderate	NKSS - Objective Knee Score	3 mos.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	1.9 (-2.37, 6.17)	NS
Maniar, 2018	Moderate	NKSS - New Knee Society Score	1 yr.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	0.9 (-9.28, 11.08)	NS
Maniar, 2018	Moderate	NKSS - Objective Knee Score	1 yr.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-1.1 (-3.43, 1.23)	NS
Maniar, 2018	Moderate	NKSS - New Knee Society Score	Preop.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	6 (-5.37, 17.37)	NS
Maniar, 2018	Moderate	NKSS - Objective Knee Score	Preop.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	6.3 (-1.61, 14.21)	NS
Maniar, 2018	Moderate	NKSS - New Knee Society Score	3 mos.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-6.2 (-17.33, 4.93)	NS
Maniar, 2018	Moderate	NKSS - Objective Knee Score	3 mos.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-3.1 (-7.06, 0.86)	NS
Maniar, 2018	Moderate	NKSS - New Knee Society Score	1 yr.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-3.1 (-15.90, 9.70)	NS
Maniar, 2018	Moderate	NKSS - Objective Knee Score	1 yr.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-0.1 (-2.60, 2.40)	NS

Table 3: PICO 1 – Intraop Drain (<24 hrs duration) vs. No Drain Used – Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zhou, 2017	High	Straight Leg Raise	Postop.	Intraop Drain: <24 hrs duration	No Drain Used	RR	1.15(0.72,1.83)	NS
Zhou, 2017	High	Time to Ambulation (h)	Postop.	Intraop Drain: <24 hrs duration	No Drain Used	Mean Difference	7.7 (1.68, 13.72)	No Drain Used
Zhou, 2017	High	ROM (deg)	Post-discharge.	Intraop Drain: <24 hrs duration	No Drain Used	Mean Difference	7.1 (1.87, 12.33)	Intraop Drain
Zhou, 2017	High	ROM (deg)	6 mos.	Intraop Drain: <24 hrs duration	No Drain Used	Mean Difference	5.2 (1.31, 9.09)	Intraop Drain
Zhou, 2017	High	ROM (deg)	14.6 mos.	Intraop Drain: <24 hrs duration	No Drain Used	Mean Difference	0.5 (-2.31, 3.31)	NS
Maniar, 2018	Moderate	NKSS - Functional Score	Preop.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-1.2 (-8.09, 5.69)	NS
Maniar, 2018	Moderate	NKSS - Functional Score	3 mos.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	3 (-3.00, 9.00)	NS
Maniar, 2018	Moderate	NKSS - Functional Score	1 yr.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-1.3 (-8.58, 5.98)	NS
Maniar, 2018	Moderate	NKSS - Functional Score	Preop.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-1.9 (-8.59, 4.79)	NS
Maniar, 2018	Moderate	NKSS - Functional Score	3 mos.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-3.7 (-10.12, 2.72)	NS
Maniar, 2018	Moderate	NKSS - Functional Score	1 yr.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-3.1 (-11.90, 5.70)	NS
Maniar, 2018	Moderate	ROM (deg)	Preop.	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	ROM (deg)	2 wks.	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	ROM (deg)	6 wks.	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	ROM (deg)	3 mos.	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	Straight Leg Raise	3 days	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - chi sq	N/A	NS
Maniar, 2018	Moderate	ROM (deg)	Preop.	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	ROM (deg)	2 wks.	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	ROM (deg)	6 wks.	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	ROM (deg)	3 mos.	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	Straight Leg Raise	3 days	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - chi sq	N/A	NS

Table 4: PICO 1 – Intraop Drain (<24 hrs duration) vs. No Drain Used Opioid – Use

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	Moderate	Opioid Use (mg) (Morphine)	6 hrs	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	Drain Group
Maniar, 2018	Moderate	Opioid Use (mg) (Morphine)	24 hrs	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	Opioid Use (mg) (Morphine)	48 hrs	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	Opioid Use (mg) (Morphine)	Postop.	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	Opioid Use (mg) (Morphine)	6 hrs	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	Opioid Use (mg) (Morphine)	24 hrs	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	Opioid Use (mg) (Morphine)	48 hrs	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	Opioid Use (mg) (Morphine)	Postop.	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS

Table 5: PICO 1 – Intraop Drain (<24 hrs duration) vs. No Drain Used – Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zhou, 2017	High	Length of Stay (days)	Postop.	Intraop Drain: <24 hrs duration	No Drain Used	Mean Difference	0.8 (0.14, 1.46)	No Drain Used
Maniar, 2018	Moderate	Total Blood Loss	Postop.	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	Total Blood Loss	Postop.	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS

Table 6: PICO 1 – Intraop Drain (<24 hrs duration) vs. No Drain Used – Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zhou, 2017	High	VAS Pain at Rest	Postop.	Intraop Drain: <24 hrs duration	No Drain Used	Author Reported - t-test or MW U	N/A	NS
Zhou, 2017	High	VAS Pain on Activity	3 days	Intraop Drain: <24 hrs duration	No Drain Used	Mean Difference	1 (0.29, 1.71)	No Drain Used
Zhou, 2017	High	VAS Pain on Activity	5 days	Intraop Drain: <24 hrs duration	No Drain Used	Mean Difference	1 (0.31, 1.69)	No Drain Used
Maniar, 2018	Moderate	VAS Pain	1 days	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	VAS Pain	2 days	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	VAS Pain	3 days	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	VAS Pain	4 days	12G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	VAS Pain	1 days	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	VAS Pain	2 days	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	VAS Pain	3 days	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS
Maniar, 2018	Moderate	VAS Pain	4 days	10G Intraop Drain: 24 hrs duration	No Drain Used	Author Reported - t-test	N/A	NS

Table 7: PICO 1 – Intraop Drain (<24 hrs duration) vs. No Drain Used – QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	Moderate	NKSS - Expectation and Satisfaction Score	Preop.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-1.4 (-4.52, 1.72)	NS
Maniar, 2018	Moderate	NKSS - Expectation and Satisfaction Score	3 mos.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	2.5 (-0.89, 5.89)	NS
Maniar, 2018	Moderate	NKSS - Expectation and Satisfaction Score	1 yr.	12G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	2.1 (-1.09, 5.29)	NS
Maniar, 2018	Moderate	NKSS - Expectation and Satisfaction Score	Preop.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	0.2 (-3.46, 3.86)	NS
Maniar, 2018	Moderate	NKSS - Expectation and Satisfaction Score	3 mos.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	-0.3 (-4.85, 4.25)	NS
Maniar, 2018	Moderate	NKSS - Expectation and Satisfaction Score	1 yr.	10G Intraop Drain: 24 hrs duration	No Drain Used	Mean Difference	0 (-3.72, 3.72)	NS

Table 8: PICO 2- Cemented Bone Fixation vs. Hybrid Bone Fixation- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Irmola, 2020	Low	Total Revisions	Postop 5 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.94(0.85,1.03)	NS
Lizaur-Utrilla, 2020	Low	Revision Due to Aseptic Femur Loosening	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	RD	-0.01(-0.02,0.01)	NS
Lizaur-Utrilla, 2020	Low	Revision Due to Aseptic Tibia Loosening	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	RD	0.03(0.00,0.06)	Hybrid Bone Fixation
Lizaur-Utrilla, 2020	Low	Infection (Revision Due to Deep Infection)	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	RR	1.50(0.25,8.82)	NS
Lizaur-Utrilla, 2020	Low	Revision Due to Periprosthetic Fracture	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	RR	2.00(0.18,21.78)	NS
Lizaur-Utrilla, 2020	Low	Revision Due to Polyethylene Wear	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	RR	6.00(0.73,49.12)	NS
Nugent, 2019	Low	Infection (Revision Due to Deep Infection)	Postop 10 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.84(0.63,1.13)	NS
Nugent, 2019	Low	Revision Due to Femur Fracture	Postop 10 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	2.53(0.35,18.34)	NS
Nugent, 2019	Low	Revision Due to Tibia Fracture	Postop 10 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.84(0.20,3.52)	NS
Nugent, 2019	Low	Revision Due to Femur Loosening	Postop 10 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.78(0.50,1.23)	NS
Nugent, 2019	Low	Revision Due to Patella Loosening	Postop 10 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.91(0.29,2.93)	NS
Nugent, 2019	Low	Revision Due to Tibia Loosening	Postop 10 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.69(0.51,0.93)	Cemented Bone Fixation
Nugent, 2019	Low	Revision Due to Pain	Postop 10 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.77(0.59,1.01)	NS
Nugent, 2019	Low	Revision Due to Primary Patellar Component	Postop 10 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.82(0.60,1.11)	NS
Lizaur-Utrilla, 2020	Low	Total Revisions	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	RR	3.00(1.12,8.01)	Hybrid Bone Fixation
Nugent, 2019	Low	Total Revisions	Postop 10 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.72(0.63,0.83)	Cemented Bone Fixation
Quispel, 2021	Low	Total Revisions	Postop 5 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	1.03(0.91,1.15)	NS
Quispel, 2021	Low	Death/Mortality	Postop 5 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.95(0.87,1.05)	NS
Quispel, 2021	Low	Deaths, ?30 days	Postop 1 mos.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.96(0.44,2.06)	NS
Quispel, 2021	Low	Deaths, 31-90 days	Postop 3 mos.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.64(0.33,1.22)	NS
Quispel, 2021	Low	Deaths, 91-365 days	Postop 1 yr.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	1.20(0.82,1.74)	NS
Quispel, 2021	Low	Deaths, 1-5 years	Postop 5 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	RR	0.95(0.86,1.04)	NS

Table 9: PICO 2- Cemented Bone Fixation vs. Hybrid Bone Fixation- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lizaur-Utrilla, 2020	Low	KSS Total	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-2.2 (-4.14, -0.26)	Hybrid Bone Fixation
Batailler, 2020	High	KSS Total (International)	Postop 13 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-1 (-4.20, 2.20)	NS
Batailler, 2020	High	KSS Total (International)	Postop 13 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-1.7 (-8.14, 4.74)	NS
Nugent, 2019	Low	Oxford Knee Score	Postop 6 mos.	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	0.72 (0.28, 1.16)	Cemented Bone Fixation
Nugent, 2019	Low	Oxford Knee Score	Postop 5 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	0.01 (-0.59, 0.61)	NS
Nugent, 2019	Low	Oxford Knee Score	Postop 10 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	0.25 (-0.62, 1.12)	NS

Table 101: PICO 2- Bone Cement Fixation vs. Hybrid Bone Fixation- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lizaur-Utrilla, 2020	Low	KSS Function	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-2.8 (-5.46, -0.14)	Hybrid Bone Fixation
Lizaur-Utrilla, 2020	Low	ROM (deg)	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-2.1 (-4.67, 0.47)	NS
Lizaur-Utrilla, 2020	Low	WOMAC Function	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-3.2 (-5.72, -0.68)	Hybrid Bone Fixation
Batailler, 2020	High	Flexion (deg)	Postop 13 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-2.7 (-6.98, 1.58)	NS
Batailler, 2020	High	KSS Function (International)	Postop 13 yrs.	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-0.8 (-6.27, 4.67)	NS

Table 112: PICO 2- Bone Cement Fixation vs. Hybrid Bone Fixation- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lizaur-Utrilla, 2020	Low	WOMAC Pain	Postop 15.7yrs	Cemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-3.7 (-5.84, -1.56)	Hybrid Bone Fixation

Table 123: PICO 2- Bone Cement Fixation vs. Inverse Hybrid Bone Fixation- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Irmola, 2020	Low	Total Revisions	Postop 5 yrs.	Cemented Bone Fixation	Inverse Hybrid Bone Fixation	RR	1.17(0.65,2.10)	NS

Table 134: PICO 2- Bone Cement Fixation vs. Uncemented Bone Fixation- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Irmola, 2020	Low	Total Revisions	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.69(0.62,0.77)	Cemented Bone Fixation
Kim, 2020	High	Revision Due to Aseptic Loosening	Postop 25 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.50(0.13,1.98)	NS
Kim, 2020	High	Infection (Revision due to Infection)	Postop 25 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	1.00(0.14,7.05)	NS
Nugent, 2019	Low	Infection (Revision Due to Deep Infection)	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.98(0.68,1.39)	NS
Nugent, 2019	Low	Revision Due to Fracture Femur	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.64(0.20,2.07)	NS
Nugent, 2019	Low	Revision Due to Tibia Fracture	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.32(0.11,0.91)	Cemented Bone Fixation
Nugent, 2019	Low	Revision Due to Femur Loosening	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.70(0.43,1.15)	NS
Nugent, 2019	Low	Revision Due to Patella Loosening	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.52(0.19,1.45)	NS
Nugent, 2019	Low	Revision Due to Tibia Loosening	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.80(0.56,1.15)	NS
Nugent, 2019	Low	Revision Due to Pain	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.65(0.49,0.86)	Cemented Bone Fixation
Nugent, 2019	Low	Revision Due to Primary Patellar Component	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.77(0.55,1.08)	NS
Mohammad, 2020	Low	Aseptic Loosening	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	2.39(1.57,3.63)	Uncemented Implants
Mohammad, 2020	Low	Component Dissociation	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	0.81(0.39,1.69)	NS
Mohammad, 2020	Low	Dislocation/Subluxation	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	1.33(0.76,2.35)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Mohammad, 2020	Low	Implant Fracture	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RD	0.00(-0.00,0.00)	NS
Mohammad, 2020	Low	Incorrect sizing	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RD	0.00(0.00,0.00)	NS
Mohammad, 2020	Low	Infection (Infection)	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	1.15(0.55,2.42)	NS
Mohammad, 2020	Low	Instability	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	0.65(0.32,1.31)	NS
Mohammad, 2020	Low	Lysis	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	3.67(1.02,13.14)	Uncemented Implants
Mohammad, 2020	Low	Malalignment	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	0.54(0.28,1.06)	NS
Mohammad, 2020	Low	OA Progression	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	1.31(0.92,1.86)	NS
Mohammad, 2020	Low	Other Adverse Events	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	1.41(0.88,2.27)	NS
Mohammad, 2020	Low	Patellar Mal Tracking	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RD	0.00(0.00,0.00)	NS
Mohammad, 2020	Low	Patellar Wear	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RD	0.00(0.00,0.00)	NS
Mohammad, 2020	Low	Periprosthetic Fracture	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	0.37(0.15,0.88)	Cemented Implants
Mohammad, 2020	Low	Tibial Wear	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RD	0.00(0.00,0.00)	NS
Mohammad, 2020	Low	Wear	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	1.00(0.35,2.85)	NS
Manoli, 2019	Low	Deep Vein Thrombosis	Postop 90days	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.01(-0.00,0.02)	NS
Manoli, 2019	Low	Emergency Department Visit	Postop 90days	Cemented Bone Fixation	Uncemented Bone Fixation	RR	1.14(0.71,1.82)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Manoli, 2019	Low	Fracture	Postop 90days	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.00(0.00,0.00)	NS
Manoli, 2019	Low	Hematoma	Postop 90days	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.00(-0.00,0.01)	NS
Manoli, 2019	Low	Infection (Joint Space Infection)	Postop 90days	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.00(0.00,0.00)	NS
Manoli, 2019	Low	Pulmonary Embolism	Postop 90days	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.00(0.00,0.00)	NS
Manoli, 2019	Low	Infection (Urinary Tract Infection)	Postop 90days	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.00(0.00,0.00)	NS
Laende, 2019	Low	Migration	Postop 1 yr.	Cemented Implants	Uncemented Implants	Mean Difference	-0.57 (-0.73, -0.41)	Cemented Implants
Laende, 2019	Low	Inducible Displacement (mm)	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0.2 (0.08, 0.32)	Uncemented Bone Fixation
Laende, 2019	Low	Migration (mm)	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0.02 (-0.23, 0.27)	NS
Boyle, 2018	Low	Revision due to Aseptic Loosening of the Patellar Component	Postop 5.7 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RD	-0.01(-0.02,0.01)	NS
Boyle, 2018	Low	Revision due to Aseptic Loosening of the Tibial Component	Postop 5.7 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.90(0.06,14.28)	NS
Boyle, 2018	Low	Infection (Revision due to Periprosthetic Joint Infection)	Postop 5.7 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	1.80(0.16,19.67)	NS
Boyle, 2018	Low	Total Revisions	Postop 5.7 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.90(0.18,4.40)	NS
Kerens, 2017	Low	Bearing Dislocation	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.02(-0.02,0.05)	NS
Kerens, 2017	Low	Femoral Loosening	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.02(-0.02,0.05)	NS
Kerens, 2017	Low	Femoral Malpositioning	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.02(-0.02,0.05)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kerens, 2017	Low	Infection (Infection)	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.02(-0.02,0.05)	NS
Kerens, 2017	Low	Lateral Meniscectomy	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.02(-0.02,0.05)	NS
Kerens, 2017	Low	Periprosthetic Tibial Fracture	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.84(0.05,13.04)	NS
Kerens, 2017	Low	Progression of Osteoarthritis	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.03(-0.01,0.08)	NS
Kerens, 2017	Low	Tibial Loosening	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.84(0.05,13.04)	NS
Deroche, 2020	Low	Total Revisions	Postop 23 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	1.23(0.63,2.41)	NS
Nugent, 2019	Low	Total Revisions	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.55(0.48,0.64)	Cemented Bone Fixation
Manoli, 2019	Low	Total Revisions	Postop 90days	Cemented Bone Fixation	Uncemented Bone Fixation	RD	0.08(0.04,0.11)	Uncemented Bone Fixation
Bagsby, 2016	Low	Total Revisions	Postop 6.1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	26.72(3.63,196.89)	Uncemented Bone Fixation
Quispel, 2021	Low	Total Revisions	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.97(0.86,1.09)	NS
Quispel, 2021	Low	Death/Mortality	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	1.01(0.92,1.12)	NS
Quispel, 2021	Low	Deaths, ?30 days	Postop 1 mos.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.68(0.35,1.35)	NS
Quispel, 2021	Low	Deaths, 31-90 days	Postop 3 mos.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.83(0.39,1.80)	NS
Quispel, 2021	Low	Deaths, 91-365 days	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	0.99(0.70,1.42)	NS
Quispel, 2021	Low	Deaths, 1-5 years	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	RR	1.03(0.92,1.14)	NS

Table 145: PICO 2- Bone Cement Fixation vs. Uncemented Bone Fixation- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2020	High	KSS Total	Postop 25 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1 (-1.95, -0.05)	Uncemented Bone Fixation
Kim, 2020	High	WOMAC Total	Postop 25 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0 (-1.89, 1.89)	NS
Pacoret, 2020	Low	HSS Total	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0 (-1.13, 1.13)	NS
Pacoret, 2020	Low	KSS Global	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.5 (-5.07, 2.07)	NS
Pacoret, 2020	Low	KSS Total	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-2 (-4.01, 0.01)	NS
Murylev, 2020	High	KOOS Total	Postop 3 mos.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.9 (-2.91, 1.11)	NS
Murylev, 2020	High	KOOS Total	Postop 6 mos.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	1.1 (-0.34, 2.54)	NS
Murylev, 2020	High	KOOS Total	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-4.7 (-6.95, -2.45)	Cemented Bone Fixation
Murylev, 2020	High	WOMAC Total	Postop 3 mos.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-4 (-12.00, 4.00)	NS
Murylev, 2020	High	WOMAC Total	Postop 6 mos.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-3.9 (-10.51, 2.71)	NS
Murylev, 2020	High	WOMAC Total	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	12.4 (9.11, 15.69)	Uncemented Bone Fixation
Stempin, 2017	Low	KSS Total	Postop 7.3 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1 (-5.38, 3.38)	NS
Stempin, 2017	Low	Oxford Knee Score	Postop 7.3 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.7 (-2.24, 0.84)	NS
Stempin, 2017	Low	WOMAC Total	Postop 7.3 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.6 (-5.64, 2.44)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
van Dorp, 2016	Low	KSS Total	Postop 19.5mos	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	4.3 (-126.34, 134.94)	NS
van Dorp, 2016	Low	Oxford Knee Score	Postop 19.5mos	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	1.6 (-58.51, 61.71)	NS
Deroche, 2020	Low	KSS Total (International)	Postop 23 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	5.1 (1.66, 8.54)	Cemented Bone Fixation
Nugent, 2019	Low	Oxford Knee Score	Postop 6 mos.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	1.66 (1.15, 2.17)	Cemented Bone Fixation
Nugent, 2019	Low	Oxford Knee Score	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0.72 (0.01, 1.43)	Cemented Bone Fixation
Nugent, 2019	Low	Oxford Knee Score	Postop 10 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.43 (-1.37, 0.51)	NS
Hampton, 2020	High	KSS Total	Postop 15 yrs.	Cemented Implants	Uncemented Implants	Author Reported - Mann-Whitney U test;	N/A	Uncemented Bone Fixation favored over Cemented Bone Fixation
Hampton, 2020	High	Oxford Knee Score	Postop 15 yrs.	Cemented Implants	Uncemented Implants	Author Reported - Mann-Whitney U test;	N/A	Uncemented Bone Fixation favored over Cemented Bone Fixation
Nam, 2019	High	Forgotten Joint Score	Postop 6 wks.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0 (-8.01, 8.01)	NS
Nam, 2019	High	Forgotten Joint Score	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-2 (-10.38, 6.38)	NS
Nam, 2019	High	Forgotten Joint Score	Postop 2 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	5.1 (-5.54, 15.74)	NS
Nam, 2019	High	KSS Total	Postop 6 wks.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0.3 (-5.55, 6.15)	NS
Nam, 2019	High	KSS Total	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-4.3 (-10.14, 1.54)	NS
Nam, 2019	High	KSS Total	Postop 2 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-2.9 (-8.77, 2.97)	NS
Nam, 2019	High	Overall Health Rating	Postop 2 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.2 (-5.80, 3.40)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Nam, 2019	High	Oxford Knee Score	Postop 6 wks.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0.7 (-2.25, 3.65)	NS
Nam, 2019	High	Oxford Knee Score	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.9 (-5.10, 1.30)	NS
Nam, 2019	High	Oxford Knee Score	Postop 2 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.4 (-4.18, 1.38)	NS
Karachalios, 2018	Low	KSS Total	Postop 9 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-2.3 (-6.91, 2.31)	NS
Karachalios, 2018	Low	KSS Total	Postop 9 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-2.1 (-8.98, 4.78)	NS
Karachalios, 2018	Low	Oxford Knee Score	Postop 9 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	1.3 (-9.27, 11.87)	NS
Karachalios, 2018	Low	WOMAC Total	Postop 9 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0.9 (-17.75, 19.55)	NS
van Hamersveld,2017	High	KSS Total	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.9 (-5.20, 1.40)	NS
van Hamersveld,2017	High	KSS Total	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	3.1 (-3.32, 9.52)	NS
Kerens, 2017	Low	EQ-5D Total	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported - Wilcoxon Signed-Rank test; Mann-Whitney test; Chi-Square test;	N/A	NS
Kerens, 2017	Low	KSS Total	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported - Wilcoxon Signed-Rank test; Mann-Whitney test; Chi-Square test;	N/A	NS
Kerens, 2017	Low	Oxford Knee Score	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported - Wilcoxon Signed-Rank test; Mann-Whitney test; Chi-Square test;	N/A	NS
Kerens, 2017	Low	VAS Health Status	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported - Wilcoxon Signed-Rank test; Mann-Whitney test; Chi-Square test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kerens, 2017	Low	WOMAC Total	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported - Wilcoxon Signed-Rank test; Mann-Whitney test; Chi-Square test;	N/A	NS
Kendrick; 2015	High	Oxford Knee Score	Postop 1 yrs.	Cemented Implants	Uncemented Implants	Mean Difference	-1.32 (-11.07, 8.43)	NS
Kendrick; 2015	High	Oxford Knee Score	Postop 2 yrs.	Cemented Implants	Uncemented Implants	Mean Difference	-3.17 (-13.98, 7.64)	NS

Table 156: PICO 2- Bone Cement Fixation vs. Uncemented Bone Fixation- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2020	High	KSS Function	Postop 25 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0 (-0.86, 0.86)	NS
Kim, 2020	High	ROM (deg)	Postop 25 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1 (-2.29, 0.29)	NS
Kim, 2020	High	UCLA Activity Score (no scale provided)	Postop 25 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0 (-2.83, 2.83)	NS
Pacoret, 2020	Low	KSS Function	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0 (-1.78, 1.78)	NS
Pacoret, 2020	Low	ROM (deg)	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-7.5 (-12.20, -2.80)	Uncemented Bone Fixation
Stempin, 2017	Low	KSS Function	Postop 7.3 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.8 (-6.46, 4.86)	NS
Stempin, 2017	Low	WOMAC Function	Postop 7.3 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.3 (-4.36, 1.76)	NS
Stempin, 2017	Low	WOMAC Stiffness	Postop 7.3 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0 (-0.46, 0.46)	NS
Deroche, 2020	Low	KSS Function (International)	Postop 23 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	7.9 (2.95, 12.85)	Cemented Bone Fixation
Mohammad, 2020	Low	Stiffness	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	0.71(0.23,2.25)	NS
Karachalios, 2018	Low	KSS Function	Postop 9 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.9 (-7.65, 3.85)	NS
Karachalios, 2018	Low	SF-12 Physical	Postop 9 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0.6 (-9.74, 10.94)	NS
van Hamersveld,2017	High	Extension (deg)	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0 (-1.14, 1.14)	NS
van Hamersveld,2017	High	Extension (deg)	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.3 (-0.77, 0.17)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
van Hamersveld,2017	High	Flexion (deg)	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.3 (-7.00, 4.40)	NS
van Hamersveld,2017	High	Flexion (deg)	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	1.8 (-2.90, 6.50)	NS
van Hamersveld,2017	High	KOOS ADL	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0.6 (-7.98, 9.18)	NS
van Hamersveld,2017	High	KOOS ADL	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-2.4 (-11.10, 6.30)	NS
van Hamersveld,2017	High	KOOS Symptoms	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.2 (-9.30, 6.90)	NS
van Hamersveld,2017	High	KOOS Symptoms	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-4.5 (-11.52, 2.52)	NS
van Hamersveld,2017	High	KSS Function	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-4.6 (-10.45, 1.25)	NS
van Hamersveld,2017	High	KSS Function	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	3.6 (-5.17, 12.37)	NS
Kerens, 2017	Low	ROM (deg)	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported - Wilcoxon Signed-Rank test; Mann-Whitney test; Chi-Square test;	N/A	NS
Bagsby, 2016	Low	Extension (deg)	Postop 6.1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.7 (-1.19, -0.21)	Uncemented Bone Fixation
Bagsby, 2016	Low	Flexion (deg)	Postop 6.1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-2.1 (-4.22, 0.02)	NS
Bagsby, 2016	Low	KSS Function	Postop 6.1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-24 (-29.30, -18.70)	Uncemented Bone Fixation
Silverstein, 2021	Low	Extension (deg)	Preop.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.3 (-0.96, 0.36)	NS
Silverstein, 2021	Low	Flexion (deg)	Preop.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0.3 (-1.61, 2.21)	NS
Silverstein, 2021	Low	Extension (deg)	Postop 56.6mos	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.4 (-0.80, -0.00)	Uncemented Bone Fixation

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Silverstein, 2021	Low	Flexion (deg)	Postop 50.2mos	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.6 (-2.01, 0.81)	NS
Gifstad, 2021	Low	KOOS Function	Preop.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-3 (-5.63, -0.37)	Uncemented Bone Fixation
Gifstad, 2021	Low	KOOS Function	Postop 2 mos.	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported -Bonferroni-correction; General Linear Mixed Model;	N/A	Cemented Bone Fixation
Gifstad, 2021	Low	KOOS Function	Postop 12mos	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported -Bonferroni-correction; General Linear Mixed Model;	N/A	NS

Table 167: PICO 2- Bone Cement Fixation vs. Uncemented Bone Fixation- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Manoli, 2019	Low	Readmissions	Postop 90days	Cemented Bone Fixation	Uncemented Bone Fixation	RR	1.33(0.64,2.76)	NS

Table 178: PICO 2- Bone Cement Fixation vs. Uncemented Bone Fixation- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2020	High	KSS Pain	Postop 25 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	2 (0.88, 3.12)	Cemented Bone Fixation
Stempin, 2017	Low	WOMAC Pain	Postop 7.3 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.3 (-1.19, 0.59)	NS
van Dorp, 2016	Low	Kujala Anterior Knee Pain Scale	Postop 19.5mos	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	1.6 (-109.85, 113.05)	NS
van Dorp, 2016	Low	VAS Pain	Postop 19.5mos	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-4.3 (-18.14, 9.54)	NS
Mohammad, 2020	Low	Pain	Postop 10 yrs.	Cemented Implants	Uncemented Implants	RR	1.62(1.06,2.48)	Uncemented Implants
Nam, 2019	High	VAS Pain	Postop 6 wks.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0.3 (-0.12, 0.72)	NS
van Hamersveld,2017	High	KOOS Pain	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.2 (-7.97, 7.57)	NS
van Hamersveld,2017	High	KOOS Pain	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-1.8 (-10.18, 6.58)	NS
Kerens, 2017	Low	Unexpected Pain	Postop 53mos	Cemented Bone Fixation	Uncemented Bone Fixation	RR	2.09(0.42,10.32)	NS
Bagsby, 2016	Low	KSS Pain	Postop 6.1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-4.8 (-7.40, -2.20)	Uncemented Bone Fixation
Gifstad, 2021	Low	VAS Pain During Activity	Preop.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.1 (-0.43, 0.23)	NS
Gifstad, 2021	Low	VAS Pain During Activity	Postop 2 mos.	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported -Bonferroni-correction; General Linear Mixed Model;	N/A	Cemented Bone Fixation
Gifstad, 2021	Low	VAS Pain During Activity	Postop 12mos	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported -Bonferroni-correction; General Linear Mixed Model;	N/A	NS
Gifstad, 2021	Low	VAS Pain at Rest	Preop.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	0 (-0.47, 0.47)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Gifstad, 2021	Low	VAS Pain at Rest	Postop 2 mos.	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported -Bonferroni-correction; General Linear Mixed Model;	N/A	NS
Gifstad, 2021	Low	VAS Pain at Rest	Postop 12mos	Cemented Bone Fixation	Uncemented Bone Fixation	Author Reported -Bonferroni-correction; General Linear Mixed Model;	N/A	Cemented Bone Fixation

Table 189: PICO 2- Bone Cement Fixation vs. Uncemented Bone Fixation- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
van Hamersveld,2017	High	KOOS QoL	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-3.7 (-10.28, 2.88)	NS
van Hamersveld,2017	High	KOOS QoL	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-3 (-13.67, 7.67)	NS

Table 1910: PICO 2- Bone Cement Fixation vs. Uncemented Bone Fixation- Return to activity

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
van Hamersveld,2017	High	KOOS Sport	Postop 1 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	3.1 (-7.76, 13.96)	NS
van Hamersveld,2017	High	KOOS Sport	Postop 5 yrs.	Cemented Bone Fixation	Uncemented Bone Fixation	Mean Difference	-0.6 (-14.36, 13.16)	NS

Table 2011: PICO 2- Inverse Hybrid Bone Fixation vs. Hybrid Bone Fixation- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Irmola, 2020	Low	Total Revisions	Postop 5 yrs.	Inverse Hybrid Bone Fixation	Hybrid Bone Fixation	RR	0.80(0.44,1.45)	NS

Table 2112: PICO 2- Inverse Hybrid Bone Fixation vs. Uncemented Bone Fixation- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Irmola, 2020	Low	Total Revisions	Postop 5 yrs.	Inverse Hybrid Bone Fixation	Uncemented Bone Fixation	RR	0.59(0.33,1.07)	NS

Table 2213: PICO 2- Uncemented Bone Fixation vs. Hybrid Bone Fixation- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Irmola, 2020	Low	Total Revisions	Postop 5 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	1.35(1.17,1.56)	Hybrid Bone Fixation
Nugent, 2019	Low	Infection (Revision Due to Deep Infection)	Postop 10 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	0.86(0.55,1.36)	NS
Nugent, 2019	Low	Revision Due to Fracture Femur	Postop 10 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	3.93(0.41,37.72)	NS
Nugent, 2019	Low	Revision Due to Tibia Fracture	Postop 10 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	2.62(0.48,14.28)	NS
Nugent, 2019	Low	Revision Due to Femur Loosening	Postop 10 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	1.11(0.58,2.12)	NS
Nugent, 2019	Low	Revision Due to Patella Loosening	Postop 10 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	1.74(0.39,7.79)	NS
Nugent, 2019	Low	Revision Due to Tibia Loosening	Postop 10 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	0.86(0.55,1.36)	NS
Nugent, 2019	Low	Revision Due to Pain	Postop 10 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	1.19(0.81,1.74)	NS
Nugent, 2019	Low	Revision Due to Primary Patellar Component	Postop 10 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	1.07(0.68,1.66)	NS
Nugent, 2019	Low	Total Revisions	Postop 10 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	1.30(1.07,1.58)	Hybrid Bone Fixation
Quispel, 2021	Low	Total Revisions	Postop 5 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	1.06(0.90,1.24)	NS
Quispel, 2021	Low	Death/Mortality	Postop 5 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	0.94(0.83,1.07)	NS
Quispel, 2021	Low	Deaths, ?30 days	Postop 1 mos.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	1.40(0.52,3.76)	NS
Quispel, 2021	Low	Deaths, 31-90 days	Postop 3 mos.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	0.76(0.29,2.00)	NS
Quispel, 2021	Low	Deaths, 91-365 days	Postop 1 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	1.20(0.73,1.98)	NS
Quispel, 2021	Low	Deaths, 1-5 years	Postop 5 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	RR	0.92(0.80,1.06)	NS

Table 2314: PICO 2- Uncemented Bone Fixation vs. Hybrid Bone Fixation- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Nugent, 2019	Low	Oxford Knee Score	Postop 6 mos.	Uncemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-0.94 (-1.60, -0.28)	Hybrid Bone Fixation
Nugent, 2019	Low	Oxford Knee Score	Postop 5 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	-0.71 (-1.61, 0.19)	NS
Nugent, 2019	Low	Oxford Knee Score	Postop 10 yrs.	Uncemented Bone Fixation	Hybrid Bone Fixation	Mean Difference	0.68 (-0.57, 1.93)	NS

Table 2415: PICO 3- Unicompartmental Knee Arthroplasty vs. High/Proximal Tibial Osteotomy- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Petersen, 2016	Low	Deep Vein Thrombosis	Postop 5 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	RD	-0.04(-0.13,0.04)	NS
Petersen, 2016	Low	Hematoma	Postop 5 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	RD	-0.04(-0.13,0.04)	NS
Petersen, 2016	Low	Inlay Dislocation	Postop 5 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	RD	0.04(-0.04,0.12)	NS
Rodkey, 2021	Low	Arthritis Progression	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	RR	2.79(0.85,9.20)	NS
Rodkey, 2021	Low	Aseptic Loosening	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	RD	0.04(0.02,0.06)	High Tibial Osteotomy
Rodkey, 2021	Low	Implant Loosening	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	RD	0.01(-0.00,0.02)	NS
Rodkey, 2021	Low	Other Adverse Events	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	RD	0.01(-0.00,0.02)	NS
Rodkey, 2021	Low	Nonunion/Malunion	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	RD	-0.01(-0.03,0.01)	NS
Rodkey, 2021	Low	Infection (Deep Infection)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	RD	0.00(-0.00,0.01)	NS
Rodkey, 2021	Low	Mechanical Symptoms	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	RD	0.00(-0.00,0.01)	NS
Petersen, 2016	Low	Total Revisions	Postop 5 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	RR	0.92(0.06,13.87)	NS

Table 2516: PICO 3- Unicompartmental Knee Arthroplasty vs. High/Proximal Tibial Osteotomy- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ziqi, 2020	Low	HSS Total	Postop 1 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	69.1 (67.27, 70.93)	Unicompartmental Knee Arthroplasty
Ziqi, 2020	Low	HSS Total	Postop 3 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	3.1 (0.91, 5.29)	Unicompartmental Knee Arthroplasty
Ziqi, 2020	Low	HSS Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	2.3 (-0.12, 4.72)	NS
Ziqi, 2020	Low	HSS Total	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	1.3 (-0.84, 3.44)	NS
Ziqi, 2020	Low	HSS Total	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	1.1 (-1.15, 3.35)	NS
Ryu, 2018	Low	HSS Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	4 (-0.57, 8.57)	NS
Ryu, 2018	Low	HSS Total	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	1 (-3.07, 5.07)	NS
Ryu, 2018	Low	HSS Total (Final follow-uptime not mentioned)	Postop.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	1.5 (-3.23, 6.23)	NS
Ryu, 2018	Low	Lysholm Score	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	3.8 (-3.32, 10.92)	NS
Ryu, 2018	Low	Lysholm Score	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	1.6 (-5.43, 8.63)	NS
Ryu, 2018	Low	Lysholm Score (Final follow-up time not mentioned)	Postop.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	1.8 (-4.70, 8.30)	NS
Ryu, 2018	Low	WOMAC Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-4.2 (-14.59, 6.19)	NS
Ryu, 2018	Low	WOMAC Total	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-2.1 (-13.17, 8.97)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ryu, 2018	Low	WOMAC Total (Final follow-up time not mentioned)	Postop.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-1.6 (-11.65, 8.45)	NS
Kim, 2019	Low	Lysholm Score	Postop 3 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	Lysholm Score	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	Lysholm Score	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	Lysholm Score	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	Tegner Activity Scale	Postop 3 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	Tegner Activity Scale	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	Tegner Activity Scale	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	Tegner Activity Scale	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	VAS Average	Postop 3 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	VAS Average	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2019	Low	VAS Average	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	VAS Average	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	WOMAC Total	Postop 3 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	WOMAC Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	WOMAC Total	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	WOMAC Total	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Jeon, 2017	Low	International Knee Documentation Committee	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	11.1185 (4.78, 17.46)	Unicompartmental Knee Arthroplasty
Jeon, 2017	Low	International Knee Documentation Committee	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	6.0371 (-3.42, 15.49)	NS
Jeon, 2017	Low	International Knee Documentation Committee	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	6.694 (-2.71, 16.10)	NS
Jeon, 2017	Low	KOOS Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	6.7986 (-3.69, 17.29)	NS
Jeon, 2017	Low	KOOS Total	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-1.0916 (-12.65, 10.47)	NS
Jeon, 2017	Low	KOOS Total	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	0.1245 (-11.82, 12.07)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Petersen, 2016	Low	HSS Excellent	Postop 5 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	RR	1.84(0.91,3.74)	NS
Tuncay, 2015	Low	HSS Total	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Paired Sample t-test	N/A	NS
Tuncay, 2015	Low	HSS Total	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	HSS Total	Postop 40mos	High Tibial Osteotomy (Circular External Fixator)	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 General Health	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 General Health	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 General Health	Postop 40mos	High Tibial Osteotomy (Circular External Fixator)	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Shaofei, 2017	Moderate	HSS Total	Postop 1 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	0.83 (-2.35, 4.01)	NS
Shaofei, 2017	Moderate	HSS Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	1.37 (-2.51, 5.25)	NS
Shaofei, 2017	Moderate	HSS Total	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	8.32 (4.94, 11.70)	Unicompartmental Knee Arthroplasty
Shaofei, 2017	Moderate	HSS Total	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	10.33 (6.44, 14.22)	Unicompartmental Knee Arthroplasty

Table 2617: PICO 3- Unicompartmental Knee Arthroplasty vs. High/Proximal Tibial Osteotomy- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2019	Low	UCLA Activity Score	Postop 3 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	UCLA Activity Score	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	UCLA Activity Score	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	UCLA Activity Score	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Petersen, 2016	Low	KOOS ADL	Postop 5 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Fisher exact test	N/A	NS
Petersen, 2016	Low	KOOS Symptoms	Postop 5 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Fisher exact test	N/A	UKA favored over HTO
Tuncay, 2015	Low	SF-36 Physical	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Physical	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Physical	Postop 40mos	High Tibial Osteotomy (Circular External Fixator)	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Watanabe, 2021	Low	KOOS Symptoms	Postop 22.5mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.9 (-6.10, 4.30)	NS
Watanabe, 2021	Low	KOOS ADL	Postop 22.5mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-3.6 (-8.44, 1.24)	NS

Table 2718: PICO 3- Unicompartmental Knee Arthroplasty vs. High/Proximal Tibial Osteotomy- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Tuncay, 2015	Low	SF-36 Role Emotional	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Role Emotional	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Role Emotional	Postop 40mos	High Tibial Osteotomy (Circular External Fixator)	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Social Function	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Social Function	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Social Function	Postop 40mos	High Tibial Osteotomy (Circular External Fixator)	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Vitality	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Vitality	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Vitality	Postop 40mos	High Tibial Osteotomy (Circular External Fixator)	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Mental	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Mental	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Mental	Postop 40mos	High Tibial Osteotomy (Circular External Fixator)	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Shaofei, 2017	Moderate	ROM (deg)	Postop 1 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	0.18 (-0.41, 0.77)	NS
Shaofei, 2017	Moderate	ROM (deg)	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	0.01 (-0.48, 0.50)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Shaofei, 2017	Moderate	ROM (deg)	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	2.07 (1.47, 2.67)	Unicompartmental Knee Arthroplasty
Shaofei, 2017	Moderate	ROM (deg)	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	2.81 (2.16, 3.46)	Unicompartmental Knee Arthroplasty

Table 2819: PICO 3- Unicompartmental Knee Arthroplasty vs. High/Proximal Tibial Osteotomy- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ziqi, 2020	Low	VAS Pain Walking	Postop 1 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.6 (-1.15, -0.05)	Unicompartmental Knee Arthroplasty
Ziqi, 2020	Low	VAS Pain Walking	Postop 3 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.3 (-0.73, 0.13)	NS
Ziqi, 2020	Low	VAS Pain Walking	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.3 (-0.68, 0.08)	NS
Ziqi, 2020	Low	VAS Pain Walking	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.2 (-0.41, 0.01)	NS
Ziqi, 2020	Low	VAS Pain Walking	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	0 (-0.18, 0.18)	NS
Ryu, 2018	Low	VAS Pain	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.6 (-1.45, 0.25)	NS
Ryu, 2018	Low	VAS Pain	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.1 (-1.07, 0.87)	NS
Ryu, 2018	Low	VAS Pain (Final follow-uptime not mentioned)	Postop.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.7 (-1.56, 0.16)	NS
Kim, 2019	Low	VAS Pain Walking	Postop 3 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	VAS Pain Walking	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	VAS Pain Walking	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	VAS Pain Walking	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2019	Low	VAS Worst	Postop 3 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	UKA favored over HTO
Kim, 2019	Low	VAS Worst	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	VAS Worst	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Kim, 2019	Low	VAS Worst	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Author Reported - Two-tailed Student-test; Wilcoxon-Mann-Whitney test; Fisher's exact test;	N/A	NS
Jeon, 2017	Low	VAS Pain	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-1.0696 (-2.44, 0.30)	NS
Petersen, 2016	Low	KOOS Pain	Postop 5 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Fisher exact test	N/A	UKA favored over HTO
Tuncay, 2015	Low	SF-36 Bodily Pain	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Bodily Pain	Postop 40mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Tuncay, 2015	Low	SF-36 Bodily Pain	Postop 40mos	High Tibial Osteotomy (Circular External Fixator)	High Tibial Osteotomy (Locking Plate Fixation)	Author Reported - Paired-test	N/A	NS
Shaofei, 2017	Moderate	VAS Pain	Postop 1 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.02 (-0.33, 0.29)	NS
Shaofei, 2017	Moderate	VAS Pain	Postop 6 mos.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.11 (-0.56, 0.34)	NS
Shaofei, 2017	Moderate	VAS Pain	Postop 12mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-0.72 (-1.01, -0.43)	Unicompartmental Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Shaofei, 2017	Moderate	VAS Pain	Postop 24mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-1.09 (-1.31, -0.87)	Unicompartmental Knee Arthroplasty
Watanabe, 2021	Low	KOOS Pain	Postop 22.5mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-1.1 (-6.95, 4.75)	NS

Table 2920: PICO 3- Unicompartmental Knee Arthroplasty vs. High/Proximal Tibial Osteotomy- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Petersen, 2016	Low	KOOS QoL	Postop 5 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Fisher exact test	N/A	UKA favored over HTO
Watanabe, 2021	Low	KOOS QoL	Postop 22.5mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-2 (-10.98, 6.98)	NS

Table 3021: PICO 3- Unicompartmental Knee Arthroplasty vs. High/Proximal Tibial Osteotomy- Return to activity

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Petersen, 2016	Low	KOOS Sport	Postop 5 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy (Circular External Fixator)	Author Reported - Fisher exact test	N/A	NS
Watanabe, 2021	Low	KOOS Sport	Postop 22.5mos	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	Mean Difference	-7 (-17.20, 3.20)	NS

Table 3122: PICO 3- Unicompartmental Knee Arthroplasty vs. Total Knee Arthroplasty- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Di Martino, 2020	Low	Anesthesiologic Complications	Postop 15 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.52(0.07,3.94)	NS
Di Martino, 2020	Low	Collateral Ligaments Lesions	Postop 15 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.00(-0.00, -0.00)	Unicompartmental Knee Arthroplasty
Di Martino, 2020	Low	Deep Vein Thrombosis	Postop 15 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.19(0.05,0.78)	Unicompartmental Knee Arthroplasty
Di Martino, 2020	Low	Infection (Early Infection)	Postop 15 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.58(0.14,2.42)	NS
Di Martino, 2020	Low	Femoral Fracture	Postop 15 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.93(0.37,2.34)	NS
Di Martino, 2020	Low	Total Adverse Events	Intraop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.65(0.39,1.09)	NS
Di Martino, 2020	Low	Other Adverse Events	Postop 15 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.76(0.23,2.48)	NS
Di Martino, 2020	Low	Tibial Fracture	Postop 15 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.74(0.67,4.57)	NS
Di Martino, 2020	Low	Tibial Tuberosity or Patellar Tendon Lesions	Postop 15 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.27(0.04,1.98)	NS
Di Martino, 2020	Low	Total Adverse Events	Postop 15 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.29(0.11,0.78)	Unicompartmental Knee Arthroplasty
Di Martino, 2020	Low	Vascular Lesions or Haemorragic Complications	Postop 15 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.31(0.04,2.28)	NS
Blevins, 2020	Low	Arthroscopic Debridement	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	0.03(0.00,0.05)	Total Knee Arthroplasty
Blevins, 2020	Low	Arthroscopic Lysis of Adhesions	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.03(-0.06, -0.00)	Unicompartmental Knee Arthroplasty
Blevins, 2020	Low	Irrigation and Debridement, Polyethylene Exchange	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.50(0.25,8.85)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Blevins, 2020	Low	Manipulation Under Anesthesia	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.04(-0.07, -0.01)	Unicompartmental Knee Arthroplasty
Blevins, 2020	Low	Infection (Periprosthetic Joint Infection)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	2.00(0.18,21.82)	NS
Blevins, 2020	Low	Polyethylene Exchange for Instability	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.02,0.01)	NS
Blevins, 2020	Low	Superficial Irrigation and Debridement	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.00(0.06,15.84)	NS
Liddle, 2015	Low	Bleeding	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.76(0.62,0.86)	UKA favored over TKA
Liddle, 2015	Low	Drug Reaction	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.78(0.69,0.88)	UKA favored over TKA
Liddle, 2015	Low	Urologic/Renal Complications	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.93(0.81,1.06)	NS
Liddle, 2015	Low	Wound Complications	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.56(0.48,0.65)	UKA favored over TKA
Ode, 2018	Low	Atrial Fibrillation	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Aseptic Loosening	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Aseptic Loosening after Revision	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Bedsores	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.02(-0.05,0.01)	NS
Ode, 2018	Low	Cardiac Decompensation	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Clunk Syndrome	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Infection (Deep Infection)	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ode, 2018	Low	Deep Vein Thrombosis	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.75(0.09,6.45)	NS
Ode, 2018	Low	Flap for Skin Necrosis	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Hematoma	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.07(-0.12, -0.02)	Unicompartmental Knee Arthroplasty
Ode, 2018	Low	Total Medical Complications	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.26(0.07,1.04)	NS
Ode, 2018	Low	Mechanical Complications	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.04(-0.09, -0.00)	Unicompartmental Knee Arthroplasty
Ode, 2018	Low	Patellar Complications	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.02(-0.05,0.01)	NS
Ode, 2018	Low	Patellar Fracture	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Periprosthetic Fracture	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Pulmonary Embolism	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.00(0.11,9.26)	NS
Blevins, 2020	Low	Total Revisions	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.89(0.35,2.24)	NS
Ode, 2018	Low	Sepsis	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Skin Necrosis	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Stroke	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Ode, 2018	Low	Infection (Superficial Infection)	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.01)	NS
Siman, 2017	Low	Arthroscopic Debridement Patellar Clunk Syndrome	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Siman, 2017	Low	Infection (Debridement/poly exchange for infection)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.57(0.10,24.81)	NS
Siman, 2017	Low	Implant Loosening	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.57(0.10,24.81)	NS
Siman, 2017	Low	Manipulation Under Anesthesia	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.00)	NS
Siman, 2017	Low	Open Reduction Internal Fixation for Fracture	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.03,0.00)	NS
Siman, 2017	Low	Total Adverse Events	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.45(0.09,2.12)	NS
Kulshrestha, 2017	High	Periprosthetic Fracture	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.10(-0.29,0.09)	NS
Kulshrestha, 2017	High	Respiratory Failure	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.03(-0.07,0.02)	NS
Kulshrestha, 2017	High	Wound Complications	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.20(-0.45,0.05)	NS
Lum, 2016	Low	Manipulation	Postop 5.5 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.09(-0.13, -0.05)	Unicompartmental Knee Arthroplasty
Fabre-Aubrespy, 2016	Low	Deep Vein Thrombosis	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.38(0.10,1.37)	NS
Fabre-Aubrespy, 2016	Low	Pulmonary Embolism	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.04(-0.08, -0.00)	Unicompartmental Knee Arthroplasty
Fabre-Aubrespy, 2016	Low	Radiographic Lucencies or Lysis	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.67(0.41,6.79)	NS
Fabre-Aubrespy, 2016	Low	Total Revisions	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.25(0.35,4.52)	NS
Fabre-Aubrespy, 2016	Low	Revision for Aseptic Loosening or Mechanical Failure	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	2.00(0.37,10.68)	NS
Fabre-Aubrespy, 2016	Low	Total Adverse Events	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.31(0.17,0.58)	Unicompartmental Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Fabre-Aubrespy, 2016	Low	Total Surgical Complications	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.88(0.47,1.67)	NS
Fabre-Aubrespy, 2016	Low	Infection (Urinary Tract Infection)	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.33(0.07,1.61)	NS
Fabre-Aubrespy, 2016	Low	Wound Complications	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.13(0.02,0.98)	Unicompartmental Knee Arthroplasty
Tam, 2018	Low	Cardiac Complications	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.05(-0.11,0.01)	NS
Tam, 2018	Low	Central Nervous System Complications	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	0.00(0.00,0.00)	NS
Tam, 2018	Low	Deep Vein Thrombosis	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.18(0.07,0.46)	Unicompartmental Knee Arthroplasty
Tam, 2018	Low	Infection (Infection)	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	0.00(0.00,0.00)	NS
Tam, 2018	Low	Death/Mortality	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	0.00(0.00,0.00)	NS
Tam, 2018	Low	Respiratory Complications	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	0.00(0.00,0.00)	NS
Liddle, 2015	Low	Total Revisions	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.84(0.67,1.06)	NS
Rodkey, 2021	Low	Total Adverse Events	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	High Tibial Osteotomy	RR	3.87(1.41,10.61)	High Tibial Osteotomy
Tveit, 2021	Low	Perioperative Adverse Events	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.01,0.00)	NS
Tveit, 2021	Low	Fracture	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.01,0.00)	NS
Tveit, 2021	Low	Contraction Leading to Revision	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	3.60(0.23,57.07)	NS
Tveit, 2021	Low	Revision Due to Pain	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	3.60(0.23,57.07)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Tveit, 2021	Low	Infection (Deep Infection Leading to Revision)	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.02,0.00)	NS
Tveit, 2021	Low	Cardiac Complications	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.20(0.25,5.86)	NS
Tveit, 2021	Low	Gastrointestinal Bleeding	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.00(-0.01,0.00)	NS
Tveit, 2021	Low	Pulmonary Embolism	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.01,0.00)	NS
Tveit, 2021	Low	Myocardial Infarction or Stroke	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	3.60(0.51,25.25)	NS
Tveit, 2021	Low	Cerebrovascular Accident	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.00(-0.01,0.00)	NS
Tveit, 2021	Low	Death/Mortality	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.02, -0.00)	Unicompartmental Knee Arthroplasty
Tveit, 2021	Low	Total Adverse Events	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.85(0.29,2.46)	NS
Yamagami, 2021	Low	Infection (Surgical Site Infections)	Postop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.44(0.37,0.53)	Unicompartmental Knee Arthroplasty
Yamagami, 2021	Low	Infection (Periprosthetic Joint Infection)	Postop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.42(0.31,0.57)	Unicompartmental Knee Arthroplasty
Ellis, 2021	Low	Manipulation or Extensor Failure	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.06(-0.10, -0.03)	Unicompartmental Knee Arthroplasty
Ellis, 2021	Low	Manipulation	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.05(-0.08, -0.01)	Unicompartmental Knee Arthroplasty
Ellis, 2021	Low	Extensor Mechanism Failure	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.02(-0.04,0.00)	NS
Ellis, 2021	Low	Major Aseptic Procedures	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	6.90(2.58,18.45)	Total Knee Arthroplasty
Ellis, 2021	Low	Instability	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	6.16(1.22,31.03)	Total Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ellis, 2021	Low	Component Loosening	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.64(0.28,9.63)	NS
Ellis, 2021	Low	Disease Progression	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	0.10(0.03,0.17)	Total Knee Arthroplasty
Ellis, 2021	Low	Minor Aseptic Procedures	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	2.46(0.51,11.92)	NS
Ellis, 2021	Low	Wound Dehiscence	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.02,0.01)	NS
Ellis, 2021	Low	Quadricep Repair	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.02,0.01)	NS
Ellis, 2021	Low	Patella Open Reduction and Internal Fixation	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.01(-0.02,0.01)	NS
Ellis, 2021	Low	Knee Arthroscopy	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	0.01(-0.01,0.04)	NS
Ellis, 2021	Low	Septic Revision	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.82(0.17,3.97)	NS
Ellis, 2021	Low	Debridement and Implant Retention	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	2.46(0.16,38.87)	NS
Ellis, 2021	Low	Two-Stage Revision	Postop 41mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.49(0.06,4.15)	NS
Ode, 2018	Low	Total Revisions	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.50(0.06,3.99)	NS
Lum, 2016	Low	Total Revisions	Postop 5.5 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.82(0.31,2.15)	NS
Lum, 2016	Low	Total Revisions	Postop 5.5 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.53(0.13,2.07)	NS
Tam, 2018	Low	Total Revisions	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	0.04(-0.02,0.10)	NS
Tveit, 2021	Low	Total Revisions	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.44(0.28,7.31)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jensen, 2021	Low	Total Revisions	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.40(0.20,0.81)	Unicompartmental Knee Arthroplasty
Jensen, 2021	Low	Infection (Surgical Site Infection)	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.23(0.54,2.82)	NS
Jensen, 2021	Low	Infection (Periprosthetic Joint Infection)	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.50(0.26,0.99)	Unicompartmental Knee Arthroplasty
Jensen, 2021	Low	Wound Complications	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.73(0.79,3.81)	NS
Jensen, 2021	Low	Aseptic Revision	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	2.52(1.07,5.92)	Total Knee Arthroplasty
Jensen, 2021	Low	Nonoperatively Treated Fracture	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	0.00(-0.00,0.00)	NS
Jensen, 2021	Low	Total Surgical Complications	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.85(0.62,1.17)	NS
Jensen, 2021	Low	Medical Sequelae	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.13(0.67,1.90)	NS
Jensen, 2021	Low	Deep Vein Thrombosis	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.60(0.76,3.36)	NS
Jensen, 2021	Low	Cardiac Complications	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.50(0.86,2.62)	NS
Jensen, 2021	Low	Gastrointestinal Complications	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.80(0.94,3.45)	NS
Jensen, 2021	Low	Anemia	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.00(-0.00, -0.00)	Unicompartmental Knee Arthroplasty
Jensen, 2021	Low	Medical/Mobilization	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.61(0.64,4.10)	NS
Jensen, 2021	Low	Fall	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.89(0.42,1.88)	NS
Jensen, 2021	Low	Urologic/Renal Complications	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.61(0.64,4.10)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jensen, 2021	Low	Pulmonary Complications	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.48(0.17,1.39)	NS
Jensen, 2021	Low	Stroke	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.74(0.25,2.22)	NS
Jensen, 2021	Low	Pain	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.51(0.20,1.33)	NS
Jensen, 2021	Low	Renal Complications	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.61(0.13,2.84)	NS
Jensen, 2021	Low	Total Medical Complications	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.09(0.87,1.37)	NS
Chisari, 2021	Low	Adverse Events	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.24(0.03,1.72)	NS

Table 3223: PICO 3- Unicompartmental Knee Arthroplasty vs. Total Knee Arthroplasty- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jin, 2020	Low	Forgotten Joint Score	Postop 10 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	4 (-1.44, 9.44)	NS
Jin, 2020	Low	HSS Total	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1.4 (-3.71, 0.91)	NS
Jin, 2020	Low	HSS Total	Postop 10 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.2 (-1.99, 6.39)	NS
Jin, 2020	Low	WOMAC Total	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-3.1 (-7.50, 1.30)	NS
Jin, 2020	Low	WOMAC Total	Postop 10 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-5.8 (-10.17, -1.43)	Unicompartmental Knee Arthroplasty
Al-Dadah, 2020	Low	Oxford Knee Score	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Al-Dadah, 2020	Low	Oxford Knee Score	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Al-Dadah, 2020	Low	Oxford Knee Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Witjes, 2020	Low	KSS Symptoms	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Chi-square test; Unpaired t-test; Mann-Whitney U-test;	N/A	UKA favored over TKA
Blevins, 2020	Low	Forgotten Joint Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	11 (9.37, 12.63)	Unicompartmental Knee Arthroplasty
Blevins, 2020	Low	KSS Total	Postop 6 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.1 (4.37, 5.83)	Unicompartmental Knee Arthroplasty
Blevins, 2020	Low	KSS Total	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5 (4.35, 5.65)	Unicompartmental Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Casper, 2019	Low	KSS Objective	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.6 (0.67, 2.53)	Unicompartmental Knee Arthroplasty
Casper, 2019	Low	KSS Overall	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	9 (1.90, 16.10)	Unicompartmental Knee Arthroplasty
Liebensteiner, 2020	Low	WOMAC Total	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-2.1 (-6.60, 2.40)	NS
Persman, 2019	Low	EQ-5D Total	Postop 2 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.24 (0.13, 0.35)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	EQ-5D Total	Postop 6 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.17 (0.10, 0.24)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	EQ-5D Total	Postop 12 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.16 (0.08, 0.24)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	EQ-5D Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.14 (0.05, 0.23)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	EQ-5D Total	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.12 (0.03, 0.21)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	Forgotten Joint Score	Postop 2 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.29 (-5.20, 15.78)	NS
Persman, 2019	Low	Forgotten Joint Score	Postop 6 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	11.3 (5.63, 16.97)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	Forgotten Joint Score	Postop 12 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	29.1 (22.57, 35.63)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	Forgotten Joint Score	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	39.5 (31.97, 47.03)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	Forgotten Joint Score	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	36.5 (28.43, 44.57)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	KSS Total	Postop 2 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	13.8 (5.38, 22.22)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	KSS Total	Postop 6 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	15.5 (-3.82, 34.82)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Persman, 2019	Low	KSS Total	Postop 12 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	13.7 (7.57, 19.83)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	KSS Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	14.9 (8.16, 21.64)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	KSS Total	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	8.7 (1.57, 15.83)	Unicompartmental Knee Arthroplasty
Burn, 2018	Low	EQ-5D Total	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.12 (0.06, 0.18)	Unicompartmental Knee Arthroplasty
Burn, 2018	Low	EQ-5D Total	Postop 10 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.04 (0.01, 0.07)	Unicompartmental Knee Arthroplasty
Burn, 2018	Low	Oxford Knee Score	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	4.4 (2.56, 6.24)	Unicompartmental Knee Arthroplasty
Burn, 2018	Low	Oxford Knee Score	Postop 10 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3.3 (1.81, 4.79)	Unicompartmental Knee Arthroplasty
Liddle, 2015	Low	EQ-5D Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.02(0.01,0.03)	UKA favored over TKA
Liddle, 2015	Low	EQ-5D Better	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	1.15(1.05,1.26)	UKA favored over TKA
Liddle, 2015	Low	EQ-5D Mixed Change	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.82(0.67,1.01)	NS
Liddle, 2015	Low	EQ-5D No Change	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.99(0.88,1.13)	NS
Liddle, 2015	Low	EQ-5D Worse	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.81(0.70,0.93)	UKA favored over TKA
Liddle, 2015	Low	Oxford Knee Score	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	1.54(1.21,1.88)	UKA favored over TKA
Liddle, 2015	Low	Oxford Knee Score Deterioration	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.78(0.63,0.96)	UKA favored over TKA
Liddle, 2015	Low	Oxford Knee Score Excellent	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	1.59(1.47,1.73)	UKA favored over TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liddle, 2015	Low	Oxford Knee Score Fair	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.72(0.64,0.81)	UKA favored over TKA
Liddle, 2015	Low	Oxford Knee Score Good	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.81(0.74,0.88)	UKA favored over TKA
Liddle, 2015	Low	Oxford Knee Score MCID Improvement	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	1.31(1.16,1.48)	UKA favored over TKA
Liddle, 2015	Low	Oxford Knee Score MCID No Change	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.77(0.67,0.89)	UKA favored over TKA
Liddle, 2015	Low	Oxford Knee Score Poor	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.87(0.77,0.98)	UKA favored over TKA
Barker, 2018	Low	EQ-5D VAS	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	4.57 (-3.39, 12.53)	NS
Barker, 2018	Low	EQ-5D-5L	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1.06 (-2.49, 0.37)	NS
Barker, 2018	Low	Oxford Knee Score	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.69 (-2.71, 4.09)	NS
Ode, 2018	Low	KSS Total (International)	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	4.3 (-0.11, 8.71)	NS
Purcell, 2018	Low	KSS Total	Postop 60mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1.3 (-11.86, 9.26)	NS
Goh, 2018	Low	KSS Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3 (-0.51, 6.51)	NS
Goh, 2018	Low	KSS Total	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.1 (-2.78, 2.98)	NS
Goh, 2018	Low	Oxford Knee Score	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.2 (-1.16, 1.56)	NS
Goh, 2018	Low	Oxford Knee Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-0.3 (-1.46, 0.86)	NS
Siman, 2017	Low	KSS Total	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.4 (-1.08, 3.88)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kulshrestha, 2017	High	EQ-5D VAS	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3.9 (-2.06, 9.86)	NS
Kulshrestha, 2017	High	High Activity Arthroplasty Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.3 (-0.46, 1.06)	NS
Kulshrestha, 2017	High	Oxford Knee Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.3 (-1.94, 2.54)	NS
Kim, 2017	Low	Forgotten Joint Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	6.7 (1.64, 11.76)	Unicompartmental Knee Arthroplasty
Kim, 2017	Low	WOMAC Total	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1 (-2.66, 0.66)	NS
van der List, 2017	Low	WOMAC Total	Postop 3 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	8.5 (3.59, 13.41)	Total Knee Arthroplasty
Zuiderbaan, 2017	Low	Forgotten Joint Score	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	14.6 (1.88, 27.32)	Unicompartmental Knee Arthroplasty
Zuiderbaan, 2017	Low	Forgotten Joint Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	14.5 (0.81, 28.19)	Unicompartmental Knee Arthroplasty
van der List, 2016	Low	WOMAC Total	Postop 2.8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	8.7 (1.83, 15.57)	Total Knee Arthroplasty
Lum, 2016	Low	KSS Clinical	Postop 5.5 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.7 (-1.44, 4.84)	NS
Fabre-Aubrespy, 2016	Low	Forgotten Joint Score	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.3 (4.13, 6.47)	Unicompartmental Knee Arthroplasty
Fabre-Aubrespy, 2016	Low	IKS Clinical Knee Score	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.9 (2.91, 8.89)	Unicompartmental Knee Arthroplasty
Fisher, 2010	Low	KSS Total	Postop 6 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	NS
Fisher, 2010	Low	KSS Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	NS
Fisher, 2010	Low	KSS Total	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	UKA favored over TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Fisher, 2010	Low	KSS Total	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	UKA favored over TKA
Tam, 2018	Low	KSS Total	Postop 3 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - x2 test; t-test; Fisher's exact test;	N/A	NS
Tam, 2018	Low	KSS Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0 (-3.68, 3.68)	NS
Tam, 2018	Low	KSS Total	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-2 (-5.93, 1.93)	NS
Tam, 2018	Low	WOMAC Total	Postop 3 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2 (-2.09, 6.09)	NS
Tam, 2018	Low	WOMAC Total	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3 (-2.21, 8.21)	NS
Tam, 2018	Low	WOMAC Total	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3 (-2.45, 8.45)	NS
Tveit, 2021	Low	EQ-5D Total	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.015 (-0.04, 0.07)	NS
Tveit, 2021	Low	EQ-5D VAS	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.43 (-2.39, 7.25)	NS
Knifsund, 2021	High	Oxford Knee Score	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1.1 (-3.24, 1.04)	NS
Knifsund, 2021	High	KSS Total	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1.7 (-8.35, 4.95)	NS
Knifsund, 2021	High	Oxford Knee Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.1 (-1.02, 3.22)	NS
Knifsund, 2021	High	Oxford Knee Score	Postop 2 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.7 (3.01, 8.39)	Unicompartmental Knee Arthroplasty
Knifsund, 2021	High	KSS Total	Postop 2 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	20.8 (11.11, 30.49)	Unicompartmental Knee Arthroplasty
Knifsund, 2021	High	Oxford Knee Score	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.8 (0.61, 4.99)	Unicompartmental Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Knifsund, 2021	High	KSS Total	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.4 (-0.89, 11.69)	NS
Knifsund, 2021	High	KSS Total	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.3 (-5.12, 9.72)	NS
Manzotti, 2007	Low	KSS Total	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.2 (-0.23, 2.63)	NS
Manzotti, 2007	Low	KSS Total	Postop 49mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.68 (-0.58, 3.94)	NS
Mohammad, 2021	Low	Oxford Knee Score (%Excellent/Good)	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.86(0.80,0.93)	Total Knee Arthroplasty
Mohammad, 2021	Low	Oxford Knee Score (%Excellent/Good)	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.10(1.08,1.11)	Unicompartmental Knee Arthroplasty
Tille, 2021	Low	KSS Total	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported – Mann-Whitney U test; chi-square test; Kolmogorov-Smirnov test	N/A	UKA
Tille, 2021	Low	KSS Total	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported – Mann-Whitney U test; chi-square test; Kolmogorov-Smirnov test	N/A	NS

Table 3324: PICO 3- Unicompartmental Knee Arthroplasty vs. Total Knee Arthroplasty- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jin, 2020	Low	KSS Function	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	4.7 (-0.02, 9.42)	NS
Jin, 2020	Low	KSS Function	Postop 10 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.5 (-0.52, 11.52)	NS
Jin, 2020	Low	ROM (deg)	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-2.1 (-4.90, 0.70)	NS
Jin, 2020	Low	ROM (deg)	Postop 10 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-2.4 (-4.95, 0.15)	NS
Al-Dadah, 2020	Low	WOMAC Function	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Al-Dadah, 2020	Low	WOMAC Function	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Al-Dadah, 2020	Low	WOMAC Function	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Al-Dadah, 2020	Low	WOMAC Stiffness	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Al-Dadah, 2020	Low	WOMAC Stiffness	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Al-Dadah, 2020	Low	WOMAC Stiffness	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Witjes, 2020	Low	KOOS ADL	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Chi-square test; Unpaired t-test; Mann-Whitney U-test;	N/A	UKA favored over TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Witjes, 2020	Low	KOOS Symptoms	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Chi-square test; Unpaired t-test; Mann-Whitney U-test;	N/A	NS
Witjes, 2020	Low	KSS Function	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Chi-square test; Unpaired t-test; Mann-Whitney U-test;	N/A	NS
Witjes, 2020	Low	VAS Daily Living	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	11.5 (4.66, 18.34)	Unicompartmental Knee Arthroplasty
Witjes, 2020	Low	VAS Leisure Time Activities	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	11.8 (4.55, 19.05)	Unicompartmental Knee Arthroplasty
Witjes, 2020	Low	VAS Work Activities	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	12.3 (5.02, 19.58)	Unicompartmental Knee Arthroplasty
Casper, 2019	Low	KSS Function	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	6.4 (2.48, 10.32)	Unicompartmental Knee Arthroplasty
Liebensteiner, 2020	Low	WOMAC Function	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-3 (-7.78, 1.78)	NS
Liebensteiner, 2020	Low	WOMAC Stiffness	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1.6 (-6.79, 3.59)	NS
Persman, 2019	Low	Function Score	Postop 2 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	18.8 (5.70, 31.90)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	Function Score	Postop 6 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	16.2 (7.34, 25.06)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	Function Score	Postop 12 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	21.5 (13.22, 29.78)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	Function Score	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	20 (11.64, 28.36)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	Function Score	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	14.1 (5.58, 22.62)	Unicompartmental Knee Arthroplasty
Hauer, 2020	Low	KSS Function	Postop 2.3 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3.3 (-2.49, 9.09)	NS
Burn, 2018	Low	Oxford Knee Score (Function)	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.4 (1.95, 2.85)	Unicompartmental Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Burn, 2018	Low	Oxford Knee Score (Function)	Postop 10 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.6 (0.75, 2.45)	Unicompartmental Knee Arthroplasty
Barker, 2018	Low	KOOS Function	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1.32 (-3.67, 1.03)	NS
Ode, 2018	Low	KSS Extension (International)	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0 (-0.70, 0.70)	NS
Ode, 2018	Low	KSS Flexion (International)	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	13.8 (9.22, 18.38)	Unicompartmental Knee Arthroplasty
Ode, 2018	Low	KSS Function (International)	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-3.2 (-14.16, 7.76)	NS
Purcell, 2018	Low	Flexion Contracture	Postop 60mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.6 (-0.22, 3.42)	NS
Purcell, 2018	Low	KSS Function	Postop 60mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-6.7 (-13.43, 0.03)	NS
Goh, 2018	Low	KSS Function	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.7 (-0.96, 6.36)	NS
Goh, 2018	Low	KSS Function	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.2 (-2.26, 4.66)	NS
Goh, 2018	Low	ROM (deg)	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	9.6 (6.34, 12.86)	Unicompartmental Knee Arthroplasty
Goh, 2018	Low	ROM (deg)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	10.3 (7.42, 13.18)	Unicompartmental Knee Arthroplasty
Goh, 2018	Low	SF-36 Physical	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.4 (-1.87, 2.67)	NS
Goh, 2018	Low	SF-36 Physical	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.3 (-0.85, 3.45)	NS
Iriuchishima, 2018	Low	ROM (deg)	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.6 (-1.33, 4.53)	NS
Iriuchishima, 2018	Low	ROM (deg)	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Control	Mean Difference	-1.6 (-5.13, 1.93)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Iriuchishima, 2018	Low	ROM (deg)	Postop 6 mos.	Total Knee Arthroplasty	Control	Mean Difference	-3.2 (-6.72, 0.32)	NS
Siman, 2017	Low	Flexion (deg)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	8 (5.33, 10.67)	Unicompartmental Knee Arthroplasty
Siman, 2017	Low	Flexion Contracture	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1 (-1.51, -0.49)	Total Knee Arthroplasty
Kulshrestha, 2017	High	Chair Rising Time (s)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.1 (-0.25, 0.45)	NS
Kulshrestha, 2017	High	Self-Paced Walk Test (s)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.3 (0.06, 2.54)	Total Knee Arthroplasty
Kulshrestha, 2017	High	Stair Climb Test (s)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.6 (0.12, 3.08)	Total Knee Arthroplasty
Kulshrestha, 2017	High	Timed Up and Go Test (s)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.8 (-0.45, 2.05)	NS
Kulshrestha, 2017	High	Flexion (deg)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-0.9 (-6.22, 4.42)	NS
Kulshrestha, 2017	High	KOOS ADL	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3 (-2.32, 8.32)	NS
Kulshrestha, 2017	High	Stiffness	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.10(-0.29,0.09)	NS
Kim, 2017	Low	High Flexion Knee Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3.1 (1.47, 4.73)	Unicompartmental Knee Arthroplasty
Kim, 2017	Low	WOMAC Function	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-0.6 (-1.85, 0.65)	NS
Kim, 2017	Low	WOMAC Stiffness	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.1 (-0.18, 0.38)	NS
van der List, 2017	Low	WOMAC Function	Postop 3 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	8.4 (3.45, 13.35)	Total Knee Arthroplasty
van der List, 2017	Low	WOMAC Stiffness	Postop 3 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	6.8 (0.76, 12.84)	Total Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
van der List, 2016	Low	WOMAC Function	Postop 2.8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	9.5 (2.10, 16.90)	Total Knee Arthroplasty
van der List, 2016	Low	WOMAC Stiffness	Postop 2.8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	10 (2.01, 17.99)	Total Knee Arthroplasty
Lum, 2016	Low	KSS Function	Postop 5.5 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	11.6 (6.10, 17.10)	Unicompartmental Knee Arthroplasty
Lum, 2016	Low	ROM (deg)	Postop 5.5 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	7.1 (4.80, 9.40)	Unicompartmental Knee Arthroplasty
Fabre-Aubrespy, 2016	Low	IKS Function	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3.6 (0.11, 7.09)	Unicompartmental Knee Arthroplasty
Fisher, 2010	Low	KSS Function	Postop 6 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	UKA favored over TKA
Fisher, 2010	Low	KSS Function	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	UKA favored over TKA
Fisher, 2010	Low	KSS Function	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	UKA favored over TKA
Fisher, 2010	Low	KSS Function	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	UKA favored over TKA
Fisher, 2010	Low	ROM (deg)	Postop 6 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	UKA favored over TKA
Fisher, 2010	Low	ROM (deg)	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	UKA favored over TKA
Fisher, 2010	Low	ROM (deg)	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	UKA favored over TKA
Fisher, 2010	Low	ROM (deg)	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student t-test;	N/A	UKA favored over TKA
Tam, 2018	Low	Knee Function Score	Postop 3 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3 (-2.96, 8.96)	NS
Tam, 2018	Low	Knee Function Score	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1 (-8.97, 6.97)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Tam, 2018	Low	Knee Function Score	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-4 (-11.59, 3.59)	NS
Tam, 2018	Low	ROM (deg)	Postop 3 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3 (-1.70, 7.70)	NS
Tam, 2018	Low	ROM (deg)	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	7 (3.30, 10.70)	Unicompartmental Knee Arthroplasty
Tam, 2018	Low	ROM (deg)	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1 (-2.07, 4.07)	NS
Lyu, 2021	Low	KSS Function	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	8 (2.02, 13.98)	Unicompartmental Knee Arthroplasty
Lyu, 2021	Low	KSS Function	Postop 3.7 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.7 (-2.43, 7.83)	NS
Lyu, 2021	Low	KOOS Symptoms	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.7 (-3.19, 6.59)	NS
Lyu, 2021	Low	KOOS Symptoms	Postop 3.7 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-2.1 (-6.65, 2.45)	NS
Lyu, 2021	Low	KOOS ADL	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3.9 (-2.16, 9.96)	NS
Lyu, 2021	Low	KOOS ADL	Postop 3.7 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-4.4 (-8.80, 0.00)	NS
Tveit, 2021	Low	KOOS Symptoms	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.89 (-0.96, 6.74)	NS
Tveit, 2021	Low	KOOS ADL	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.14 (-3.63, 5.91)	NS
Knifsund, 2021	High	KOOS Symptoms	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.2 (-5.29, 5.69)	NS
Knifsund, 2021	High	KOOS ADL	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-2.8 (-7.39, 1.79)	NS
Knifsund, 2021	High	KOOS Symptoms	Postop 2 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	13.3 (7.50, 19.10)	Unicompartmental Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Knifsund, 2021	High	KOOS ADL	Postop 2 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	10.4 (5.10, 15.70)	Unicompartmental Knee Arthroplasty
Knifsund, 2021	High	KOOS Symptoms	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	10.5 (5.68, 15.32)	Unicompartmental Knee Arthroplasty
Knifsund, 2021	High	KOOS ADL	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.8 (1.56, 10.04)	Unicompartmental Knee Arthroplasty
Knifsund, 2021	High	KOOS Symptoms	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	8.5 (3.41, 13.59)	Unicompartmental Knee Arthroplasty
Knifsund, 2021	High	KOOS ADL	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.2 (-1.90, 6.30)	NS
Manzotti, 2007	Low	KSS Function	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.5 (-0.74, 3.74)	NS
Manzotti, 2007	Low	KSS Function	Postop 49mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	4.71 (0.75, 8.67)	Unicompartmental Knee Arthroplasty
Jansen, 2020	Low	UCLA Activity Score	Postop 16.7mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student 2-sample t-test; Pearson Chi-Square test; Fisher exact test;	N/A	Unicompartmental Knee Arthroplasty
Jansen, 2020	Low	>1 Hour Walking Time Before Stopping Due to Knee Discomfort	Postop 16.7mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student 2-sample t-test; Pearson Chi-Square test; Fisher exact test;	N/A	Unicompartmental Knee Arthroplasty
Tille, 2021	Low	KSS Function	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported – Mann-Whitney U test; chi-square test; Kolmogorov-Smirnov test	N/A	UKA
Tille, 2021	Low	KSS Function	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported – Mann-Whitney U test; chi-square test; Kolmogorov-Smirnov test	N/A	UKA

Table 3425: PICO 3- Unicompartmental Knee Arthroplasty vs. Total Knee Arthroplasty- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Witjes, 2020	Low	KSS Expectation	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Chi-square test; Unpaired t-test; Mann-Whitney U-test;	N/A	NS
Casper, 2019	Low	KSS Expectation	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.4 (0.37, 2.43)	Unicompartmental Knee Arthroplasty
Casper, 2019	Low	KSS Symptoms	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.6 (-0.91, 2.11)	NS
Liebensteiner, 2020	Low	ROM (deg)	Postop 4 days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	8 (4.46, 11.54)	Unicompartmental Knee Arthroplasty
Liebensteiner, 2020	Low	ROM (deg)	Postop 7 days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	10 (7.27, 12.73)	Unicompartmental Knee Arthroplasty
Liebensteiner, 2020	Low	ROM (deg)	Postop 10days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	7 (4.68, 9.32)	Unicompartmental Knee Arthroplasty
Liebensteiner, 2020	Low	ROM (deg)	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	10 (7.59, 12.41)	Unicompartmental Knee Arthroplasty
Hauer, 2020	Low	ROM (deg)	Postop 2.3 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	14.7 (7.41, 21.99)	Unicompartmental Knee Arthroplasty
Hauer, 2020	Low	Tegner Activity Scale	Postop 2.3 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Mann-Whitney U Test; Wilcoxon signed-rank test	N/A	UKA favored over TKA
Liddle, 2015	Low	Readmissions	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.77(0.67,0.89)	UKA favored over TKA
Ode, 2018	Low	Patients Received Blood Transfusion	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.03(-0.07,0.00)	NS
Goh, 2018	Low	SF-36 Mental	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-0.1 (-2.56, 2.36)	NS
Goh, 2018	Low	SF-36 Mental	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1 (-1.28, 3.28)	NS
Kulshrestha, 2017	High	Patients Received Blood Transfusion	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.20(-0.45,0.05)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Fabre-Aubrespy, 2016	Low	Patients Received Blood Transfusion	Postop 8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.35(0.15,0.86)	Unicompartmental Knee Arthroplasty
Manzotti, 2007	Low	Length of Stay	Postop 49mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-3.1 (-4.12, -2.08)	Unicompartmental Knee Arthroplasty
Jensen, 2021	Low	Length of Stay	Postop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Pearson Chi-Square test; Independent Two-Sample Student t-test; Mann-Whitney U-test; Fisher Exact Test;	N/A	UKA
Jensen, 2021	Low	Length of Stay (0 days)	Postop 0 days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	42.81(30.93,59.26)	Unicompartmental Knee Arthroplasty
Jensen, 2021	Low	Length of Stay (> 2 days)	Postop 2 days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.30(0.26,0.34)	Unicompartmental Knee Arthroplasty
Jensen, 2021	Low	Length of Stay (> 4 days)	Postop 4 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.21(0.14,0.31)	Unicompartmental Knee Arthroplasty
Jensen, 2021	Low	Readmissions	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	1.02(0.87,1.19)	NS
Chisari, 2021	Low	Length of Stay	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-0.69 (-0.74, -0.64)	Unicompartmental Knee Arthroplasty
Chisari, 2021	Low	Readmissions	Postop 90days	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RR	0.63(0.12,2.04)	NS

Table 3526: PICO 3- Unicompartmental Knee Arthroplasty vs. Total Knee Arthroplasty- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jin, 2020	Low	KSS Pain	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	4.5 (2.31, 6.69)	Unicompartmental Knee Arthroplasty
Jin, 2020	Low	KSS Pain	Postop 10 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3 (0.00, 6.00)	Unicompartmental Knee Arthroplasty
Leiss, 2020	Low	Activity Pain	Postop 24 hrs	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-0.3 (-0.44, -0.16)	Unicompartmental Knee Arthroplasty
Leiss, 2020	Low	Maximum VAS Pain	Postop 24 hrs	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-0.4 (-0.56, -0.24)	Unicompartmental Knee Arthroplasty
Leiss, 2020	Low	Minimum Pain	Postop 24 hrs	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-0.3 (-0.40, -0.20)	Unicompartmental Knee Arthroplasty
Al-Dadah, 2020	Low	WOMAC Pain	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Al-Dadah, 2020	Low	WOMAC Pain	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Al-Dadah, 2020	Low	WOMAC Pain	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - ANOVA; Tukey's post-hoc pairwise comparison; Student's t-test;	N/A	NS
Witjes, 2020	Low	Anterior Knee Pain Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	10.1 (4.63, 15.57)	Unicompartmental Knee Arthroplasty
Witjes, 2020	Low	KOOS Pain	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Chi-square test; Unpaired t-test; Mann-Whitney U-test;	N/A	NS
Witjes, 2020	Low	VAS Pain	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	13.3 (6.14, 20.46)	Unicompartmental Knee Arthroplasty
Blevins, 2020	Low	VAS Pain	Postop 2 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-4.1 (-4.36, -3.84)	Unicompartmental Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Blevins, 2020	Low	VAS Pain	Postop 6 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-2 (-2.33, -1.67)	Unicompartmental Knee Arthroplasty
Liebensteiner, 2020	Low	WOMAC Pain	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1.8 (-6.12, 2.52)	NS
Persman, 2019	Low	KOOS Pain	Postop 2 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-28 (-50.73, -5.27)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	KOOS Pain	Postop 6 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-16.7 (-22.83, -10.57)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	KOOS Pain	Postop 12 wks.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-18.1 (-24.29, -11.91)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	KOOS Pain	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-24.4 (-30.61, -18.19)	Unicompartmental Knee Arthroplasty
Persman, 2019	Low	KOOS Pain	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-22.9 (-29.42, -16.38)	Unicompartmental Knee Arthroplasty
Hauer, 2020	Low	KSS Pain	Postop 2.3 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.6 (1.82, 9.38)	Unicompartmental Knee Arthroplasty
Burn, 2018	Low	Oxford Knee Score (Pain)	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.8 (1.16, 2.44)	Unicompartmental Knee Arthroplasty
Burn, 2018	Low	Oxford Knee Score (Pain)	Postop 10 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.4 (0.41, 2.39)	Unicompartmental Knee Arthroplasty
Liddle, 2015	Low	VAS Pain	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Linear/Logistic Regression	0.30(-0.33,0.92)	NS
Ode, 2018	Low	KSS Pain (International)	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-3.4 (-8.74, 1.94)	NS
Ode, 2018	Low	Unexplained Pain	Postop 32mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	0.03(-0.03,0.10)	NS
Kulshrestha, 2017	High	Anterior Knee Pain and Crepitus	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	RD	-0.06(-0.13,0.02)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2017	Low	WOMAC Pain	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-0.3 (-0.72, 0.12)	NS
van der List, 2017	Low	WOMAC Pain	Postop 3 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	10.4 (5.38, 15.42)	Total Knee Arthroplasty
van der List, 2016	Low	WOMAC Pain	Postop 2.8 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	6.5 (0.59, 12.41)	Total Knee Arthroplasty
Lum, 2016	Low	KSS Pain	Postop 5.5 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-1.6 (-4.12, 0.92)	NS
Tam, 2018	Low	Pain Score	Postop 3 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	4 (0.63, 7.37)	Unicompartmental Knee Arthroplasty
Tam, 2018	Low	Pain Score	Postop 6 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0 (-3.48, 3.48)	NS
Tam, 2018	Low	Pain Score	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-3 (-6.13, 0.13)	NS
Lyu, 2021	Low	KSS Pain	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	7.6 (2.28, 12.92)	Unicompartmental Knee Arthroplasty
Lyu, 2021	Low	KSS Pain	Postop 3.7 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-3.1 (-5.60, -0.60)	Total Knee Arthroplasty
Lyu, 2021	Low	KOOS Pain	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.8 (-2.98, 8.58)	NS
Lyu, 2021	Low	KOOS Pain	Postop 3.7 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-2.2 (-5.14, 0.74)	NS
Tveit, 2021	Low	KOOS Pain	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	2.08 (-1.99, 6.15)	NS
Knifsund, 2021	High	KOOS Pain	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.3 (-3.75, 4.35)	NS
Knifsund, 2021	High	KOOS Pain	Postop 2 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	12.4 (7.10, 17.70)	Unicompartmental Knee Arthroplasty
Knifsund, 2021	High	KOOS Pain	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	6 (1.54, 10.46)	Unicompartmental Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Knifsund, 2021	High	KOOS Pain	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.1 (-3.36, 5.56)	NS
Jansen, 2020	Low	Pain While Walking	Postop 16.7mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student 2-sample t-test; Pearson Chi-Square test; Fisher exact test;	N/A	Unicompartmental Knee Arthroplasty
Jansen, 2020	Low	Pain While Climbing Stairs or Inclines	Postop 16.7mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student 2-sample t-test; Pearson Chi-Square test; Fisher exact test;	N/A	Unicompartmental Knee Arthroplasty
Jansen, 2020	Low	Slight Pain or No Bother When Walking on Uneven Surface	Postop 16.7mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student 2-sample t-test; Pearson Chi-Square test; Fisher exact test;	N/A	Unicompartmental Knee Arthroplasty
Jansen, 2020	Low	Slight Pain or No Bother When Climbing Up or Down a Flight of Stairs	Postop 16.7mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student 2-sample t-test; Pearson Chi-Square test; Fisher exact test;	N/A	Unicompartmental Knee Arthroplasty
Jansen, 2020	Low	Slight Pain or No Bother Getting Up from a Low Couch or Chair Without Arms	Postop 16.7mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Student 2-sample t-test; Pearson Chi-Square test; Fisher exact test;	N/A	Unicompartmental Knee Arthroplasty

Table 3627: PICO 3- Unicompartmental Knee Arthroplasty vs. Total Knee Arthroplasty- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Witjes, 2020	Low	KOOS QoL	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Chi-square test; Unpaired t-test; Mann-Whitney U-test;	N/A	UKA favored over TKA
Witjes, 2020	Low	KSS Satisfaction	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Chi-square test; Unpaired t-test; Mann-Whitney U-test;	N/A	NS
Casper, 2019	Low	KSS Satisfaction	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-0.7 (-2.64, 1.24)	NS
Lyu, 2021	Low	KOOS QoL	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	4.6 (-1.10, 10.30)	NS
Lyu, 2021	Low	KOOS QoL	Postop 3.7 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-2 (-8.76, 4.76)	NS
Tveit, 2021	Low	KOOS QoL	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.28 (-5.22, 5.78)	NS
Knifsund, 2021	High	KOOS QoL	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	-2.1 (-6.83, 2.63)	NS
Knifsund, 2021	High	15-D Score	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0 (-0.02, 0.02)	NS
Knifsund, 2021	High	KOOS QoL	Postop 2 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	7.8 (1.15, 14.45)	Unicompartmental Knee Arthroplasty
Knifsund, 2021	High	15-D Score	Postop 2 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.031 (0.01, 0.06)	Unicompartmental Knee Arthroplasty
Knifsund, 2021	High	KOOS QoL	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.5 (-1.29, 12.29)	NS
Knifsund, 2021	High	15-D Score	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.02 (-0.01, 0.05)	NS
Knifsund, 2021	High	KOOS QoL	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1 (-5.29, 7.29)	NS
Knifsund, 2021	High	15-D Score	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.005 (-0.02, 0.03)	NS

Table 3728: PICO 3- Unicompartmental Knee Arthroplasty vs. Total Knee Arthroplasty- Return to activity

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Witjes, 2020	Low	KOOS Sport	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Author Reported - Chi-square test; Unpaired t-test; Mann-Whitney U-test;	N/A	NS
Lyu, 2021	Low	KOOS Sport	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.1 (-6.77, 6.97)	NS
Lyu, 2021	Low	KOOS Sport	Postop 3.7 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	1.5 (-9.25, 12.25)	NS
Tveit, 2021	Low	KOOS Sport	Postop 1 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	3.18 (-3.17, 9.53)	NS
Knifsund, 2021	High	KOOS Sport	Preop.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	0.3 (-4.49, 5.09)	NS
Knifsund, 2021	High	KOOS Sport	Postop 2 mos.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	17.6 (9.75, 25.45)	Unicompartmental Knee Arthroplasty
Knifsund, 2021	High	KOOS Sport	Postop 12mos	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	7.9 (-0.30, 16.10)	NS
Knifsund, 2021	High	KOOS Sport	Postop 2 yrs.	Unicompartmental Knee Arthroplasty	Total Knee Arthroplasty	Mean Difference	5.3 (-2.48, 13.08)	NS

Table 3829: PICO 5- Peripheral Nerve Blockade- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Rousseau-Saine,2018	High	Vomiting	Postop 2 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	RR	1.19(0.77,1.83)	NS
Rousseau-Saine,2018	High	Vomiting	Postop 3 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	RR	4.00(0.47,33.73)	NS
Rousseau-Saine,2018	High	Nausea	Postop 2 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	RR	1.18(0.91,1.53)	NS
Rousseau-Saine,2018	High	Nausea	Postop 3 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	RR	1.11(0.53,2.34)	NS
Rousseau-Saine,2018	High	Pruritus	Postop 2 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	RR	1.00(0.64,1.56)	NS
Rousseau-Saine,2018	High	Pruritus	Postop 3 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	RR	0.89(0.40,1.99)	NS
Sahin, 2014	High	Dizziness	Postop 48 hrs	Femoral Nerve Block: US-guided single-injection FNB with 40 ml of 0.5% bupivacaine and 1:200,000epinephrine	Control: Saline	RR	0.73(0.30,1.76)	NS
Sahin, 2014	High	Nausea	Postop 48 hrs	Femoral Nerve Block: US-guided single-injection FNB with 40 ml of 0.5% bupivacaine and 1:200,000epinephrine	Control: Saline	RR	0.72(0.34,1.54)	NS
Sahin, 2014	High	Pruritus	Postop 48 hrs	Femoral Nerve Block: US-guided single-injection FNB with 40 ml of 0.5% bupivacaine and 1:200,000epinephrine	Control: Saline	RR	0.59(0.18,1.91)	NS
Sahin, 2014	High	Vomiting	Postop 48 hrs	Femoral Nerve Block: US-guided single-injection FNB with 40 ml of 0.5% bupivacaine and 1:200,000epinephrine	Control: Saline	RR	0.62(0.24,1.59)	NS
Biswas, 2018	High	Nausea	Postop 48 hrs	Adductor Canal Block: 30 mL Ropivacaine 0.5% with1:400,000 epinephrine	Control: Saline	RR	0.87(0.66,1.14)	NS
Biswas, 2018	High	Nausea	Postop 48 hrs	Adductor Canal Block: 100 g of intrathecal morphine	Control: Saline	RR	0.87(0.66,1.15)	NS
Biswas, 2018	High	Pruritus	Postop 48 hrs	Adductor Canal Block: 30 mL Ropivacaine 0.5% with1:400,000 epinephrine	Control: Saline	RR	1.28(0.43,3.81)	NS
Biswas, 2018	High	Pruritus	Postop 48 hrs	Adductor Canal Block: 100 g of intrathecal morphine	Control: Saline	RR	2.13(0.79,5.78)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Biswas, 2018	High	Sedation	Postop 48 hrs	Adductor Canal Block: 30 mL Ropivacaine 0.5% with1:400,000 epinephrine	Control: Saline	RD	0.01(-0.01,0.04)	NS
Biswas, 2018	High	Sedation	Postop 48 hrs	Adductor Canal Block: 100 g of intrathecal morphine	Control: Saline	RD	0.00(0.00,0.00)	NS
Biswas, 2018	High	Urinary Retention	Postop 48 hrs	Adductor Canal Block: 30 mL Ropivacaine 0.5% with1:400,000 epinephrine	Control: Saline	RR	0.97(0.68,1.39)	NS
Biswas, 2018	High	Urinary Retention	Postop 48 hrs	Adductor Canal Block: 100 g of intrathecal morphine	Control: Saline	RR	1.07(0.75,1.51)	NS

Table 3930: PICO 5- Peripheral Nerve Blockade- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Leung, 2018	High	WOMAC Total	Postop 3 wks.	Femoral Nerve Infusion: Bupivacaine 0.125%	Control: Sham	Mean Difference	-8.7 (-15.13, -2.27)	Femoral Nerve Infusion
Leung, 2018	High	WOMAC Total	Postop 6 wks.	Femoral Nerve Infusion: Bupivacaine 0.125%	Control: Sham	Mean Difference	-5 (-12.12, 2.12)	NS
Hinarejos, 2016	High	KSS Total	Postop 6 mos.	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS

Table 4031: PICO 5- Peripheral Nerve Blockade- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Leung, 2018	High	ROM (deg)	Postop 1 days	Femoral Nerve Infusion: Bupivacaine 0.125%	Control: Sham	Mean Difference	-10.8 (-17.98, -3.62)	Control
Leung, 2018	High	ROM (deg)	Postop 2 days	Femoral Nerve Infusion: Bupivacaine 0.125%	Control: Sham	Mean Difference	-8.8 (-17.98, 0.38)	NS
Leung, 2018	High	ROM (deg)	Postop 3 wks.	Femoral Nerve Infusion: Bupivacaine 0.125%	Control: Sham	Mean Difference	-3.9 (-9.52, 1.72)	NS
Leung, 2018	High	ROM (deg)	Postop 6 wks.	Femoral Nerve Infusion: Bupivacaine 0.125%	Control: Sham	Mean Difference	-4 (-9.66, 1.66)	NS
Dimaculangan, 2019	High	ROM Active	Postop 2 days	Femoral Nerve Infusion: ropivacaine 400mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	-5.6 (-15.62, 4.42)	NS
Dimaculangan, 2019	High	ROM Active	Postop 3 days	Femoral Nerve Infusion: ropivacaine 400mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	1.1 (-9.88, 12.08)	NS
Dimaculangan, 2019	High	ROM Assisted	Postop 2 days	Femoral Nerve Infusion: ropivacaine 400mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	9.3 (-0.07, 18.67)	NS
Dimaculangan, 2019	High	ROM Assisted	Postop 3 days	Femoral Nerve Infusion: ropivacaine 400mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	9.3 (-0.27, 18.87)	NS
Wyatt, 2015	Low	ROM (deg)	Postop 1 days	Adductor Canal Block: 0.125% bupivacaine	Control: Saline	Mean Difference	3 (-4.71, 10.71)	NS
Wyatt, 2015	Low	ROM (deg)	Postop 2 days	Adductor Canal Block: 0.125% bupivacaine	Control: Saline	Mean Difference	1 (-5.82, 7.82)	NS
Wyatt, 2015	Low	ROM (deg)	Postop 3 days	Adductor Canal Block: 0.125% bupivacaine	Control: Saline	Mean Difference	2 (-3.91, 7.91)	NS

Table 4132: PICO 5- Peripheral Nerve Blockade- Opioid Use

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Rousseau-Saine,2018	High	Opioid Use	Postop 2 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	Author Reported - Unpaired, 2-sided, Student t-test; Mann-Whitney U test; Fisher exact test;	N/A	Peripheral Nerve Block favored over Sham
Rousseau-Saine,2018	High	Opioid Use	Postop 3 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	Author Reported - Unpaired, 2-sided, Student t-test; Mann-Whitney U test; Fisher exact test;	N/A	Peripheral Nerve Block favored over Sham
Hinarejos, 2016	High	Cumulative Doses of Tramadol	Postop 2 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Hinarejos, 2016	High	Cumulative Doses of Tramadol	Postop 6 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Hinarejos, 2016	High	Cumulative Doses of Tramadol	Postop 12 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Hinarejos, 2016	High	Cumulative Doses of Tramadol	Postop 24 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Hinarejos, 2016	High	Cumulative Doses of Tramadol	Postop 36 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Hinarejos, 2016	High	Cumulative Doses of Tramadol	Postop 48 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hinarejos, 2016	High	Cumulative Doses of Tramadol	Postop 72 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Dimaculangan, 2019	High	Morphine Use	Postop 4 hrs	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	-7.1 (-11.23, -2.97)	Femoral Nerve Infusion
Dimaculangan, 2019	High	Morphine Use	Postop 1 days	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	-9.2 (-19.86, 1.46)	NS
Dimaculangan, 2019	High	Morphine Use	Postop 2 days	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	4.4 (-4.66, 13.46)	NS
Dimaculangan, 2019	High	Morphine Use	Postop 3 days	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	0.7 (-2.45, 3.85)	NS
Dimaculangan, 2019	High	Total Morphine Use	Postop.	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	11.1 (-10.66, 32.86)	NS
Biswas, 2018	High	Cumulative Opioid Use	Postop 12 hrs	Adductor Canal Block: 30 mL Ropivacaine 0.5% with1:400,000 epinephrine	Control: Saline	Mean Difference	-4 (-9.78, 1.78)	NS
Biswas, 2018	High	Cumulative Opioid Use	Postop 24 hrs	Adductor Canal Block: 30 mL Ropivacaine 0.5% with1:400,000 epinephrine	Control: Saline	Mean Difference	-12 (-27.11, 3.11)	NS
Biswas, 2018	High	Cumulative Opioid Use	Postop 48 hrs	Adductor Canal Block: 30 mL Ropivacaine 0.5% with1:400,000 epinephrine	Control: Saline	Mean Difference	-18 (-38.78, 2.78)	NS
Biswas, 2018	High	Cumulative Opioid Use	Postop 12 hrs	Adductor Canal Block: 100 g of intrathecal morphine	Control: Saline	Mean Difference	-8 (-13.12, -2.88)	Adductor Canal Block
Biswas, 2018	High	Cumulative Opioid Use	Postop 24 hrs	Adductor Canal Block: 100 g of intrathecal morphine	Control: Saline	Mean Difference	-23 (-37.16, -8.84)	Adductor Canal Block

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Biswas, 2018	High	Cumulative Opioid Use	Postop 48 hrs	Adductor Canal Block: 100 g of intrathecal morphine	Control: Saline	Mean Difference	-27 (-47.09, -6.91)	Adductor Canal Block

Table 4233: PICO 5- Peripheral Nerve Blockade- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Leung, 2018	High	Length of Stay	Postop.	Femoral Nerve Infusion: Bupivacaine 0.125%	Control: Sham	Mean Difference	0.25 (-0.20, 0.70)	NS
Dimaculangan, 2019	High	Length of Stay	Postop.	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	1.3 (0.20, 2.40)	Control

Table 4334: PICO 5- Peripheral Nerve Blockade- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Rousseau-Saine,2018	High	VAS Pain at Maximal Effort	Postop 2 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	Author Reported - Unpaired, 2-sided, Student t-test; Mann-Whitney U test; Fisher exact test;	N/A	Peripheral Nerve Block favored over Sham
Rousseau-Saine,2018	High	VAS Pain at Maximal Effort	Postop 3 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	Author Reported - Unpaired, 2-sided, Student t-test; Mann-Whitney U test; Fisher exact test;	N/A	Peripheral Nerve Block favored over Sham
Rousseau-Saine,2018	High	VAS Pain at Rest	Postop 2 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	Author Reported - Unpaired, 2-sided, Student t-test; Mann-Whitney U test; Fisher exact test;	N/A	Peripheral Nerve Block favored over Sham
Rousseau-Saine,2018	High	VAS Pain at Rest	Postop 3 days	Adductor Canal Block: 15 mL of 0.25% bupivacaine with epinephrine 5 g/mL	Control: Sham	Author Reported - Unpaired, 2-sided, Student t-test; Mann-Whitney U test; Fisher exact test;	N/A	NS
Hinarejos, 2016	High	VAS Pain	Postop 2 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Hinarejos, 2016	High	VAS Pain	Postop 6 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Hinarejos, 2016	High	VAS Pain	Postop 12 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	Peripheral Nerve Block favored overcontrol
Hinarejos, 2016	High	VAS Pain	Postop 24 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hinarejos, 2016	High	VAS Pain	Postop 36 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Hinarejos, 2016	High	VAS Pain	Postop 48 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Hinarejos, 2016	High	VAS Pain	Postop 72 hrs	Periarticular Injections: 246.25 mg of ropivacaine 5mg/mL (49.25 mL), 0.5 mg of epinephrine 1 mg/mL (0.5 mL), 30 mg of ketorolac 30 mg/mL (1 mL) and0.08 mg of clonidine 0.1 mg/mL (0.8 mL), and 48.45mL of saline	Control: Saline	Author Reported - Chi-Square test; Fisher exact test; Student's t-test;	N/A	NS
Dimaculangan, 2019	High	VAS Pain	Postop 4 hrs	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	-10.2 (-24.38, 3.98)	NS
Dimaculangan, 2019	High	VAS Pain	Postop 1 days	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	2.4 (-16.32, 21.12)	NS
Dimaculangan, 2019	High	VAS Pain	Postop 2 days	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	23.5 (8.70, 38.30)	Control
Dimaculangan, 2019	High	VAS Pain	Postop 3 days	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	16.1 (0.83, 31.37)	Control
Dimaculangan, 2019	High	VAS Pain after Physical Therapy	Postop 1 days	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	-4 (-22.24, 14.24)	NS
Dimaculangan, 2019	High	VAS Pain after Physical Therapy	Postop 2 days	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	22.5 (7.04, 37.96)	Control
Dimaculangan, 2019	High	VAS Pain after Physical Therapy	Postop 3 days	Femoral Nerve Infusion: ropivacaine 400 mg, epinephrine diluted 1:1000 in saline (0.6mL)	Control: Saline	Mean Difference	21.2 (2.63, 39.77)	Control

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ortiz-Gomez, 2017	High	Mild Pain	Postop 24 hrs	Femoral Nerve Block: levobupivacaine 0.375% 20 ml	Control: Saline	Mean Difference	-4.2 (-6.74, -1.66)	Femoral Nerve Block
Ortiz-Gomez, 2017	High	Mild Pain	Postop 24 hrs	Adductor Canal Block: levobupivacaine 0.375% 30 mL	Control: Saline	Mean Difference	-3.2 (-5.75, -0.65)	Adductor Canal Block
Ortiz-Gomez, 2017	High	Moderate Pain	Postop 24 hrs	Femoral Nerve Block: levobupivacaine 0.375% 20 ml	Control: Saline	Mean Difference	-2.3 (-3.79, -0.81)	Femoral Nerve Block
Ortiz-Gomez, 2017	High	Moderate Pain	Postop 24 hrs	Adductor Canal Block: levobupivacaine 0.375% 30 mL	Control: Saline	Mean Difference	-1 (-2.60, 0.60)	NS
Ortiz-Gomez, 2017	High	No Pain	Postop 24 hrs	Femoral Nerve Block: levobupivacaine 0.375% 20 ml	Control: Saline	Mean Difference	85.5 (82.16, 88.84)	Femoral Nerve Block
Ortiz-Gomez, 2017	High	No Pain	Postop 24 hrs	Adductor Canal Block: levobupivacaine 0.375% 30 mL	Control: Saline	Mean Difference	82.8 (79.32, 86.28)	Adductor Canal Block
Ortiz-Gomez, 2017	High	Severe Pain	Postop 24 hrs	Femoral Nerve Block: levobupivacaine 0.375% 20 ml	Control: Saline	Mean Difference	-0.8 (-1.73, 0.13)	NS
Ortiz-Gomez, 2017	High	Severe Pain	Postop 24 hrs	Adductor Canal Block: levobupivacaine 0.375% 30 mL	Control: Saline	Mean Difference	-0.7 (-1.67, 0.27)	NS

Table 4435: PICO 6- Tranexamic Acid IA- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wang, 2015	High	ROM (deg)	Postop 6 wks.	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	Mean Difference	8 (2.44, 13.56)	Control
Wang, 2015	High	Thromboembolic Complications	Postop 6 wks.	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	RD	0.00(0.00,0.00)	NS
Wang, 2015	High	Wound Healing Problems	Postop 6 wks.	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	RR	0.25(0.03,2.11)	NS
Yang, 2015	High	Deep Vein Thrombosis	Postop 2 wks.	TXA IA: 500 mg of TXA in 20 mL of saline	Control: Saline	RD	0.00(0.00,0.00)	NS
Yang, 2015	High	Pulmonary Embolism	Postop 2 wks.	TXA IA: 500 mg of TXA in 20 mL of saline	Control: Saline	RD	0.00(0.00,0.00)	NS
Yang, 2015	High	Wound Hematoma	Postop 2 wks.	TXA IA: 500 mg of TXA in 20 mL of saline	Control: Saline	RD	0.00(0.00,0.00)	NS
Yang, 2015	High	Infection (Wound Infection)	Postop 2 wks.	TXA IA: 500 mg of TXA in 20 mL of saline	Control: Saline	RD	0.00(0.00,0.00)	NS
Zhaohui, 2014	Low	Blisters	Postop 90days	TXA IA: 10 mL TXA	Control	RR	1.09(0.16,7.42)	NS
Zhaohui, 2014	Low	Bruises	Postop 90days	TXA IA: 10 mL TXA	Control	RR	0.82(0.19,3.46)	NS
Zhaohui, 2014	Low	Infection (Deep Infection)	Postop 90days	TXA IA: 10 mL TXA	Control	RD	0.00(0.00,0.00)	NS
Zhaohui, 2014	Low	Deep Vein Thrombosis	Postop 90days	TXA IA: 10 mL TXA	Control	RR	0.73(0.13,4.15)	NS
Zhaohui, 2014	Low	Headache	Postop 90days	TXA IA: 10 mL TXA	Control	RR	0.82(0.19,3.46)	NS
Zhaohui, 2014	Low	Nausea	Postop 90days	TXA IA: 10 mL TXA	Control	RR	0.82(0.19,3.46)	NS
Zhaohui, 2014	Low	Subcutaneous Hematoma	Postop 90days	TXA IA: 10 mL TXA	Control	RR	0.73(0.13,4.15)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zhaohui, 2014	Low	Tense Hemarthrosis	Postop 90days	TXA IA: 10 mL TXA	Control	RD	-0.06(-0.13,0.01)	NS
Kim, 2018	Low	Deep Vein Thrombosis	Postop 14days	TXA IA: 1 g TXA	Control	RR	1.50(0.26,8.61)	NS
Kim, 2018	Low	Wound Complications	Postop 14days	TXA IA: 1 g TXA	Control	RD	-0.12(-0.20, -0.03)	TXA IA
Oztas, 2015	High	Deep Vein Thrombosis	Postop 10days	TXA IA: 2 g TXA locally on the proximal-medial surface of the patella with IA injection	Control	RD	0.00(0.00,0.00)	NS
Oztas, 2015	High	Infection (Infection)	Postop 10days	TXA IA: 2 g TXA locally on the proximal-medial surface of the patella with IA injection	Control	RD	-0.03(-0.10,0.03)	NS
Seo, 2013	High	Atrial Fibrillation	Postop 2 mos.	TXA IA: 1.5 g TXA in 100 cc saline	Control: Saline	RR	1.00(0.06,15.55)	NS
Seo, 2013	High	Deep Vein Thrombosis	Postop 2 mos.	TXA IA: 1.5 g TXA in 100 cc saline	Control: Saline	RR	1.50(0.26,8.60)	NS
Seo, 2013	High	Pulmonary Embolism	Postop 2 mos.	TXA IA: 1.5 g TXA in 100 cc saline	Control: Saline	RD	0.00(0.00,0.00)	NS

Table 4536: PICO 6- Tranexamic Acid IA- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Guerreiro, 2017	High	WOMAC Total	Postop 2 mos.	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	NS
Zhaohui, 2014	Low	HSS Total	Postop 90days	TXA IA: 10 mL TXA	Control	Mean Difference	0.1 (-4.38, 4.58)	NS
Zhaohui, 2014	Low	HSS Total	Postop 90days	TXA IA: 10 mL TXA	Control	Mean Difference	1.4 (-1.61, 4.41)	NS
Li, 2018	High	HSS Total	Preop.	TXA IA: 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS
Li, 2018	High	HSS Total	Postop 3 mos.	TXA IA: 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	TXA IA favored over Control
Li, 2018	High	HSS Total	Postop 6 mos.	TXA IA: 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS
Sa-Ngasoongsong,2011	High	KSS Total	Postop 3 mos.	TXA IA: 250 mg TXA in 5 mL volume Transamin and 20mL saline	Control: Saline	Mean Difference	4.4 (-4.69, 13.49)	NS
Sa-Ngasoongsong,2011	High	KSS Total	Postop 6 mos.	TXA IA: 250 mg TXA in 5 mL volume Transamin and 20mL saline	Control: Saline	Mean Difference	0.4 (-5.60, 6.40)	NS
Sa-Ngasoongsong,2011	High	WOMAC Total	Postop 3 mos.	TXA IA: 250 mg TXA in 5 mL volume Transamin and 20mL saline	Control: Saline	Mean Difference	-2.3 (-7.56, 2.96)	NS
Sa-Ngasoongsong,2011	High	WOMAC Total	Postop 6 mos.	TXA IA: 250 mg TXA in 5 mL volume Transamin and 20mL saline	Control: Saline	Mean Difference	-2.2 (-6.18, 1.78)	NS

Table 4637: PICO 6- Tranexamic Acid IA- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Guerreiro, 2017	High	ROM (deg)	Postop 24 hrs	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	TXA IA favored over Control
Guerreiro, 2017	High	ROM (deg)	Postop 48 hrs	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	NS
Guerreiro, 2017	High	ROM (deg)	Postop 7 days	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	NS
Guerreiro, 2017	High	ROM (deg)	Postop 21days	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	NS
Guerreiro, 2017	High	ROM (deg)	Postop 2 mos.	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	NS
Mao, 2016	High	ROM (deg)	Postop 1 mos.	TXA IA: 2 g TXA IA	Control	Mean Difference	-0.4 (-2.69, 1.89)	NS
Mao, 2016	High	ROM (deg)	Postop 2 mos.	TXA IA: 2 g TXA IA	Control	Mean Difference	1.1 (-1.56, 3.76)	NS
Mao, 2016	High	ROM (deg)	Postop 3 mos.	TXA IA: 2 g TXA IA	Control	Mean Difference	0.4 (-1.40, 2.20)	NS

Table 4738: PICO 6- Tranexamic Acid IA- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Guerreiro, 2017	High	Hemoglobin Drop (g/dL)	Postop 24 hrs	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	NS
Guerreiro, 2017	High	Hemoglobin Drop (g/dL)	Postop 48 hrs	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	TXA IA favored over Control
Sahin, 2019	High	Blood Loss	Postop 24 hrs	TXA IA: 2 g TXA for 5 min	Control: Saline	Author Reported - ANOVA; Kruskal Wallis; Mann Whitney U; Chi-square test;	N/A	TXA IA favored over Control
Tille, 2019	Low	Blood Loss	Postop 3 mos.	TXA IA: 2 g TXA	Control	Author Reported - Paired t-test; Mann-Whitney U-test; Chi-Square test;	N/A	TXA IA favored over Control
Tille, 2019	Low	Patients Received Blood Transfusion	Postop 3 mos.	TXA IA: 2 g TXA	Control	Author Reported - Paired t-test; Mann-Whitney U-test; Chi-Square test;	N/A	TXA IA favored over Control
Tille, 2019	Low	Length of Stay	Postop 3 mos.	TXA IA: 2 g TXA	Control	Author Reported - Paired t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Lacko, 2017	High	Blood Loss	Postop 24 hrs	TXA IA: 3 g TXA IA	Control	Author Reported - Tukey-Kramer test;	N/A	NS
Lacko, 2017	High	Hemoglobin (g/dL)	Postop 6 hrs	TXA IA: 3 g TXA IA	Control	Author Reported - Tukey-Kramer test;	N/A	NS
Lacko, 2017	High	Hemoglobin (g/dL)	Postop 2 days	TXA IA: 3 g TXA IA	Control	Author Reported - Tukey-Kramer test;	N/A	NS
Lacko, 2017	High	Hemoglobin (g/dL)	Postop 5 days	TXA IA: 3 g TXA IA	Control	Author Reported - Tukey-Kramer test;	N/A	NS
Lacko, 2017	High	Blood Transfusions (Units)	Postop 24 hrs	TXA IA: 3 g TXA IA	Control	Mean Difference	-0.5 (-0.91, -0.09)	TXA IA
Mao, 2016	High	Blood Loss	Postop 14days	TXA IA: 2 g TXA IA	Control	Mean Difference	-624.7 (-980.60, -268.80)	TXA IA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Mao, 2016	High	Drainage (mL)	Postop 14days	TXA IA: 2 g TXA IA	Control	Mean Difference	-433.3 (-543.11, -323.49)	TXA IA
Mao, 2016	High	Hemoglobin Drop (g/dL)	Postop 14days	TXA IA: 2 g TXA IA	Control	Mean Difference	-8.5 (-14.14, -2.86)	TXA IA
Mao, 2016	High	Patients Received Blood Transfusion	Postop 14days	TXA IA: 2 g TXA IA	Control	RR	0.51(0.24,1.10)	NS
Rodriguez-Merchan,2016	Low	Hemoglobin (g/dL)	Postop 24 hrs	TXA IA High Volume: 3 g TXA IA	Control	Mean Difference	1.4 (1.00, 1.80)	TXA IA High-volume
Rodriguez-Merchan,2016	Low	Hemoglobin (g/dL)	Postop 5 days	TXA IA High Volume: 3 g TXA IA	Control	Mean Difference	2.2 (1.81, 2.59)	TXA IA High-volume
Rodriguez-Merchan,2016	Low	Hemoglobin (g/dL)	Postop 24 hrs	TXA IA Low Volume: 2.5 g TXA IA	Control	Mean Difference	1 (0.65, 1.35)	TXA IA Low Volume
Rodriguez-Merchan,2016	Low	Hemoglobin (g/dL)	Postop 5 days	TXA IA Low Volume: 2.5 g TXA IA	Control	Mean Difference	1.3 (0.90, 1.70)	TXA IA Low Volume
Rodriguez-Merchan,2016	Low	Patients Received Blood Transfusion	Postop.	TXA IA High Volume: 3 g TXA IA	Control	RD	-0.30(-0.35, -0.25)	TXA IA High-volume
Rodriguez-Merchan,2016	Low	Patients Received Blood Transfusion	Postop.	TXA IA Low Volume: 2.5 g TXA IA	Control	RR	0.24(0.11,0.52)	TXA IA Low Volume
Digas, 2015	High	Drainage (mL)	Postop 30days	TXA IA: 2 g TXA	Control	Mean Difference	-294 (-304.52, -283.48)	TXA IA
Digas, 2015	High	Patients Received Blood Transfusion	Postop 30days	TXA IA: 2 g TXA	Control	RR	0.38(0.16,0.94)	TXA IA
Digas, 2015	High	Total Blood Loss	Postop 30days	TXA IA: 2 g TXA	Control	Mean Difference	-512 (-563.89, -460.11)	TXA IA
Digas, 2015	High	Blood Transfusions (Volume(mL))	Postop 30days	TXA IA: 2 g TXA	Control	Mean Difference	-259 (-289.92, -228.08)	TXA IA
Wang, 2015	High	Blood Loss	Postop 1 days	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	Mean Difference	-277.51 (-403.29, -151.73)	TXA IA
Wang, 2015	High	Blood Loss	Postop 3 days	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	Mean Difference	-418.6 (-580.78, -256.42)	TXA IA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wang, 2015	High	Blood Loss	Postop 5 days	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	Mean Difference	-560.55 (-783.45, -337.65)	TXA IA
Wang, 2015	High	Patients Received Blood Transfusion	Postop 6 wks.	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	RD	-0.23(-0.38, -0.08)	TXA IA
Wang, 2015	High	Hemoglobin (g/dL)	Postop 1 days	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	Mean Difference	1.07 (0.49, 1.65)	TXA IA
Wang, 2015	High	Hemoglobin (g/dL)	Postop 3 days	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	Mean Difference	1.41 (0.89, 1.93)	TXA IA
Wang, 2015	High	Hemoglobin (g/dL)	Postop 5 days	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	Mean Difference	1.16 (0.70, 1.62)	TXA IA
Wang, 2015	High	Length of Stay	Postop 6 wks.	TXA IA: 0.5 mg of TXA with 10 mL of saline	Control: Saline	Mean Difference	-1.74 (-2.74, -0.74)	TXA IA
Yang, 2015	High	Blood Loss	Postop 3 hrs	TXA IA: 500 mg of TXA in 20 mL of saline	Control: Saline	Mean Difference	-10 (-16.15, -3.85)	TXA IA
Yang, 2015	High	Patients Received Blood Transfusion	Postop 3 hrs	TXA IA: 500 mg of TXA in 20 mL of saline	Control: Saline	RR	0.53(0.28,0.99)	TXA IA
Yang, 2015	High	Hemoglobin (g/dL)	Postop 3 hrs	TXA IA: 500 mg of TXA in 20 mL of saline	Control: Saline	Mean Difference	12 (5.85, 18.15)	TXA IA
Yang, 2015	High	Hidden Blood Loss	Postop 3 hrs	TXA IA: 500 mg of TXA in 20 mL of saline	Control: Saline	Mean Difference	-169 (-234.60, -103.40)	TXA IA
Jang, 2014	Low	Hemoglobin (g/dL)	Postop 1 days	TXA IA: 1500 mg TXA IA	Control	Mean Difference	3 (-1.49, 7.49)	NS
Jang, 2014	Low	Hemoglobin (g/dL)	Postop 2 days	TXA IA: 1500 mg TXA IA	Control	Mean Difference	3 (-1.49, 7.49)	NS
Jang, 2014	Low	Hemoglobin (g/dL)	Postop 1 days	TXA IA: 3000 mg TXA IA	Control	Mean Difference	8 (3.13, 12.87)	TXA IA
Jang, 2014	Low	Hemoglobin (g/dL)	Postop 2 days	TXA IA: 3000 mg TXA IA	Control	Mean Difference	9 (3.93, 14.07)	TXA IA
Jang, 2014	Low	Hemoglobin Drop (g/dL)	Postop 1 days	TXA IA: 1500 mg TXA IA	Control	Mean Difference	-6 (-9.02, -2.98)	TXA IA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jang, 2014	Low	Hemoglobin Drop (g/dL)	Postop 2 days	TXA IA: 1500 mg TXA IA	Control	Mean Difference	-6 (-9.76, -2.24)	TXA IA
Jang, 2014	Low	Hemoglobin Drop (g/dL)	Postop 1 days	TXA IA: 3000 mg TXA IA	Control	Mean Difference	-10 (-13.19, -6.81)	TXA IA
Jang, 2014	Low	Hemoglobin Drop (g/dL)	Postop 2 days	TXA IA: 3000 mg TXA IA	Control	Mean Difference	-12 (-15.93, -8.07)	TXA IA
Jang, 2014	Low	Patients Received Blood Transfusion	Postop.	TXA IA: 3000 mg TXA IA	Control	RR	0.72(0.17,3.08)	NS
Jang, 2014	Low	Patients Received Blood Transfusion	Postop.	TXA IA: 3000 mg TXA IA	Control	RR	0.48(0.09,2.52)	NS
Jang, 2014	Low	Patients Received Blood Transfusion	Postop.	TXA IA: 1500 mg TXA IA	Control	RR	0.96(0.14,6.60)	NS
Jang, 2014	Low	Patients Received Blood Transfusion	Postop.	TXA IA: 3000 mg TXA IA	Control	RR	0.48(0.05,5.16)	NS
Zhaohui, 2014	Low	Blood Loss	Postop 6 hrs	TXA IA: 10 mL TXA	Control	Mean Difference	-48.4 (-55.91, -40.89)	TXA IA
Zhaohui, 2014	Low	Blood Loss	Postop 12 hrs	TXA IA: 10 mL TXA	Control	Mean Difference	-62.4 (-68.16, -56.64)	TXA IA
Zhaohui, 2014	Low	Blood Loss	Postop 24 hrs	TXA IA: 10 mL TXA	Control	Mean Difference	-31.6 (-36.80, -26.40)	TXA IA
Zhaohui, 2014	Low	Blood Loss	Postop.	TXA IA: 10 mL TXA	Control	Mean Difference	-260.2 (-319.29, -201.11)	TXA IA
Zhaohui, 2014	Low	Blood Transfusions (Units)	Postop.	TXA IA: 10 mL TXA	Control	Mean Difference	-1.5 (-1.95, -1.05)	TXA IA
Zhaohui, 2014	Low	Hemoglobin Drop (g/dL)	Postop.	TXA IA: 10 mL TXA	Control	Mean Difference	-1.2 (-2.38, -0.02)	TXA IA
Zhaohui, 2014	Low	Patients Received Blood Transfusion	Postop.	TXA IA: 10 mL TXA	Control	RR	0.20(0.09,0.43)	TXA IA
Chen, 2014	Low	Blood Loss	Postop 1 wks.	TXA: 1,500 mg of TXA (Cyklokapron) diluted in 100mL of 0.9% sodium chloride as a wash	Control	Author Reported - ANOVA; Pearson Chi-Square test;	N/A	TXA favored overcontrol

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Chen, 2014	Low	Hemoglobin Drop (g/dL)	Postop 1 wks.	TXA: 1,500 mg of TXA (Cyklokapron) diluted in 100mL of 0.9% sodium chloride as a wash	Control	Author Reported - ANOVA; Pearson Chi-Square test;	N/A	TXA favored overcontrol
Lei, 2020	High	Hidden Blood Loss	Postop 14days	TXA IA Four Doses: 20 mg/kg TXA before skin incision, 3 doses of 1 g (100 mL) TXA 3, 6, and 12 hrs later	Control	Mean Difference	-288.5 (-425.34, -151.66)	TXA IA Four Doses
Lei, 2020	High	Hidden Blood Loss	Postop 14days	TXA IA Five Doses: 20 mg/kg TXA before skin incision, 3 doses of 1 g (100 mL) TXA 3, 6, 12, and 18hrs later	Control	Mean Difference	-491.5 (-601.20, -381.80)	TXA IA Five Doses
Lei, 2020	High	Hidden Blood Loss	Postop 14days	TXA IA Six Doses: 20 mg/kg TXA before skin incision,3 doses of 1 g (100 mL) TXA 3, 6, 12, 18, 24 hrs later	Control	Mean Difference	-617.7 (-728.22, -507.18)	TXA IA Six Doses
Lei, 2020	High	Blood Loss	Intraop.	TXA IA Four Doses: 20 mg/kg TXA before skin incision, 3 doses of 1 g (100 mL) TXA 3, 6, and 12 hrs later	Control	Mean Difference	-27.8 (-41.46, -14.14)	TXA IA Four Doses
Lei, 2020	High	Blood Loss	Intraop.	TXA IA Five Doses: 20 mg/kg TXA before skin incision, 3 doses of 1 g (100 mL) TXA 3, 6, 12, and 18hrs later	Control	Mean Difference	-26 (-39.10, -12.90)	TXA IA Five Doses
Lei, 2020	High	Blood Loss	Intraop.	TXA IA Six Doses: 20 mg/kg TXA before skin incision,3 doses of 1 g (100 mL) TXA 3, 6, 12, 18, 24 hrs later	Control	Mean Difference	-26.2 (-39.94, -12.46)	TXA IA Six Doses
Lei, 2020	High	Length of Stay	Postop 14days	TXA IA Four Doses: 20 mg/kg TXA before skin incision, 3 doses of 1 g (100 mL) TXA 3, 6, 12, and 18hrs later	Control	Mean Difference	0.2 (-0.08, 0.48)	NS
Lei, 2020	High	Length of Stay	Postop 14days	TXA IA Five Doses: 20 mg/kg TXA before skin incision, 3 doses of 1 g (100 mL) TXA 3, 6, 12, and 18hrs later	Control	Mean Difference	0.1 (-0.23, 0.43)	NS
Lei, 2020	High	Length of Stay	Postop 14days	TXA IA Six Doses: 20 mg/kg TXA before skin incision,3 doses of 1 g (100 mL) TXA 3, 6, 12, 18, 24 hrs later	Control	Mean Difference	-0.1 (-0.41, 0.21)	NS
Lei, 2020	High	Patients Received Blood Transfusion	Postop 14days	TXA IA Four Doses: 20 mg/kg TXA before skin incision, 3 doses of 1 g (100 mL) TXA 3, 6, and 12 hrs later	Control	RD	0.00(0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lei, 2020	High	Patients Received Blood Transfusion	Postop 14days	TXA IA Five Doses: 20 mg/kg TXA before skin incision, 3 doses of 1 g (100 mL) TXA 3, 6, 12, and 18hrs later	Control	RD	0.00(0.00,0.00)	NS
Lei, 2020	High	Patients Received Blood Transfusion	Postop 14days	TXA IA Six Doses: 20 mg/kg TXA before skin incision,3 doses of 1 g (100 mL) TXA 3, 6, 12, 18, 24 hrs later	Control	RD	0.00(0.00,0.00)	NS
Lei, 2020	High	Total Blood Loss	Postop 14days	TXA IA Four Doses: 20 mg/kg TXA before skin incision, 3 doses of 1 g (100 mL) TXA 3, 6, and 12 hrs later	Control	Mean Difference	-296.3 (-435.31, -157.29)	TXA IA Four Doses
Lei, 2020	High	Total Blood Loss	Postop 14days	TXA IA Five Doses: 20 mg/kg TXA before skin incision, 3 doses of 1 g (100 mL) TXA 3, 6, 12, and 18hrs later	Control	Mean Difference	-517.5 (-631.61, -403.39)	TXA IA Five Doses
Lei, 2020	High	Total Blood Loss	Postop 14days	TXA IA Six Doses: 20 mg/kg TXA before skin incision,3 doses of 1 g (100 mL) TXA 3, 6, 12, 18, 24 hrs later	Control	Mean Difference	-643.9 (-757.50, -530.30)	TXA IA Six Doses
Kim, 2018	Low	Drainage (mL)	Postop 14days	TXA IA: 1 g TXA	Control	Author Reported - Independent t-test;	N/A	TXA IA favored over Control
Kim, 2018	Low	Hemoglobin Drop (g/dL)	Postop 14days	TXA IA: 1 g TXA	Control	Author Reported - Independent t-test;	N/A	TXA IA favored over Control
Kim, 2018	Low	Hemoglobin During Hospital Stay	Postop 14days	TXA IA: 1 g TXA	Control	Author Reported - Independent t-test;	N/A	TXA IA favored over Control
Kim, 2018	Low	Patients Received Blood Transfusion	Postop 14days	TXA IA: 1 g TXA	Control	RR	0.31(0.15,0.62)	TXA IA
Kim, 2018	Low	Total Blood Loss	Postop 14days	TXA IA: 1 g TXA	Control	Author Reported - Independent t-test;	N/A	TXA IA favored over Control
Li, 2018	High	Blood Loss	Postop.	TXA IA: 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS
Li, 2018	High	Blood Loss	Postop.	TXA IA: 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	TXA IA favored over Control
Oztas, 2015	High	Patients Received Blood Transfusion	Postop 10days	TXA IA: 2 g TXA locally on the proximal-medial surface of the patella with IA injection	Control	RD	-0.27(-0.42, -0.11)	TXA IA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Oztas, 2015	High	Drainage (mL)	Postop 10days	TXA IA: 2 g TXA locally on the proximal-medial surface of the patella with IA injection	Control	Mean Difference	-452.77 (-552.86, -352.68)	TXA IA
Oztas, 2015	High	Length of Stay	Postop 10days	TXA IA: 2 g TXA locally on the proximal-medial surface of the patella with IA injection	Control	Mean Difference	-0.06 (-0.46, 0.34)	NS
Hegde, 2013	Low	Hemoglobin (g/dL)	Postop 24 hrs	TXA IA: 10 mL TXA	Control: Saline	Mean Difference	0.75 (-0.06, 1.56)	NS
Hegde, 2013	Low	Blood Transfusions (Units)	Postop 24 hrs	TXA IA: 10 mL TXA	Control: Saline	Mean Difference	-0.87 (-1.24, -0.50)	TXA IA
Seo, 2013	High	Blood Loss	Postop 2 mos.	TXA IA: 1.5 g TXA in 100 cc saline	Control: Saline	Mean Difference	-407 (-533.58, -280.42)	TXA IA
Seo, 2013	High	Blood Transfusions (Volume(mL))	Postop 2 mos.	TXA IA: 1.5 g TXA in 100 cc saline	Control: Saline	Mean Difference	-791.2 (-909.90, -672.50)	TXA IA
Sa-Ngasoongsong,2011	High	Blood Loss	Postop 12 hrs	TXA IA: 250 mg TXA in 5 mL volume Transamin and 20mL saline	Control: Saline	Mean Difference	-178.8 (-253.00, -104.60)	TXA IA
Sa-Ngasoongsong,2011	High	Patients Received Blood Transfusion	Postop 12 hrs	TXA IA: 250 mg TXA in 5 mL volume Transamin and 20mL saline	Control: Saline	RR	0.13(0.02,0.92)	TXA IA
Sa-Ngasoongsong,2011	High	Drainage (mL)	Postop 12 hrs	TXA IA: 250 mg TXA in 5 mL volume Transamin and 20mL saline	Control: Saline	Mean Difference	-220.2 (-331.09, -109.31)	TXA IA
Sa-Ngasoongsong,2011	High	Hemoglobin Drop (g/dL)	Postop 12 hrs	TXA IA: 250 mg TXA in 5 mL volume Transamin and 20mL saline	Control: Saline	Mean Difference	-0.9 (-1.36, -0.44)	TXA IA
Cho, 2021	Low	Hemoglobin (g/dL)	Preop.	TXA IA	Control	Mean Difference	-0.37 (-0.75, 0.01)	NS
Cho, 2021	Low	Hemoglobin (g/dL)	Postop 0 days	TXA IA	Control	Mean Difference	0.09 (-0.25, 0.43)	NS
Cho, 2021	Low	Hemoglobin (g/dL)	Postop 1 days	TXA IA	Control	Mean Difference	0.21 (-0.13, 0.55)	NS
Cho, 2021	Low	Hemoglobin (g/dL)	Postop 2 days	TXA IA	Control	Mean Difference	0.47 (0.14, 0.80)	TXA IA
Cho, 2021	Low	Hemoglobin (g/dL)	Postop 3 days	TXA IA	Control	Mean Difference	0.44 (0.13, 0.75)	TXA IA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Cho, 2021	Low	Hemoglobin (g/dL)	Postop 5 days	TXA IA	Control	Mean Difference	0.53 (0.22, 0.84)	TXA IA
Cho, 2021	Low	Hemoglobin (g/dL)	Postop 7 days	TXA IA	Control	Mean Difference	0.54 (0.21, 0.87)	TXA IA
Cho, 2021	Low	Hemoglobin (g/dL)	Postop 11days	TXA IA	Control	Mean Difference	0.35 (0.03, 0.67)	TXA IA

Table 4839: PICO 6- Tranexamic Acid IA- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Guerreiro, 2017	High	VAS Pain	Postop 24 hrs	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	TXA IA favored over Control
Guerreiro, 2017	High	VAS Pain	Postop 48 hrs	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	TXA IA favored over Control
Guerreiro, 2017	High	VAS Pain	Postop 7 days	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	NS
Guerreiro, 2017	High	VAS Pain	Postop 21days	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	NS
Guerreiro, 2017	High	VAS Pain	Postop 2 mos.	TXA IA: 1 g (4 x 5 mL ampoules with concentration of50 mg/mL	Control	Author Reported - Student's t-test;	N/A	NS
Laoruengthana, 2019	High	VAS Pain	Postop 6 hrs	TXA IA: 15 mg/kg TXA IA	Control	Author Reported - Two-sided t-test;	N/A	TXA IA favored over Control
Laoruengthana, 2019	High	VAS Pain	Postop 12 hrs	TXA IA: 15 mg/kg TXA IA	Control	Author Reported - Two-sided t-test;	N/A	NS
Laoruengthana, 2019	High	VAS Pain	Postop 24 hrs	TXA IA: 15 mg/kg TXA IA	Control	Author Reported - Two-sided t-test;	N/A	TXA IA favored over Control
Laoruengthana, 2019	High	VAS Pain	Postop 48 hrs	TXA IA: 15 mg/kg TXA IA	Control	Author Reported - Two-sided t-test;	N/A	NS
Laoruengthana, 2019	High	VAS Pain	Postop 72 hrs	TXA IA: 15 mg/kg TXA IA	Control	Author Reported - Two-sided t-test;	N/A	NS
Laoruengthana, 2019	High	VAS Pain	Postop 96 hrs	TXA IA: 15 mg/kg TXA IA	Control	Author Reported - Two-sided t-test;	N/A	NS
Li, 2018	High	Pain	Postop 1 wks.	TXA IA: 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS
Li, 2018	High	Pain	Postop 6 wks.	TXA IA: 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS
Li, 2018	High	Pain	Preop.	TXA IA: 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS

Table 4940: PICO 6- Tranexamic Acid IA +Topical- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lin, 2015	High	Hemoglobin (g/dL)	Preop.	TXA IA/Topical: 1 g TXA in 20 mL normal saline using IA after joint capsule closure	Control: Saline	Mean Difference	1.9 (1.44, 2.36)	TXA IA/Topical
Lin, 2015	High	Hemoglobin (g/dL)	Postop 1 days	TXA IA/Topical: 1 g TXA in 20 mL normal saline using IA after joint capsule closure	Control: Saline	Mean Difference	1.9 (1.44, 2.36)	TXA IA/Topical
Lin, 2015	High	Hemoglobin (g/dL)	Postop 3 days	TXA IA/Topical: 1 g TXA in 20 mL normal saline using IA after joint capsule closure	Control: Saline	Mean Difference	8.4 (8.04, 8.76)	TXA IA/Topical
Lin, 2015	High	Hemoglobin Drop (g/dL)	Postop 1 days	TXA IA/Topical: 1 g TXA in 20 mL normal saline using IA after joint capsule closure	Control: Saline	Mean Difference	-2.1 (-2.48, -1.72)	TXA IA/Topical
Lin, 2015	High	Hemoglobin Drop (g/dL)	Postop 3 days	TXA IA/Topical: 1 g TXA in 20 mL normal saline using IA after joint capsule closure	Control: Saline	Mean Difference	-209.5 (-247.28, -171.72)	TXA IA/Topical
Lin, 2015	High	Patients Received Blood Transfusion	Postop.	TXA IA/Topical: 1 g TXA in 20 mL normal saline using IA after joint capsule closure	Control: Saline	RR	0.17(0.02,1.32)	NS
Lin, 2015	High	Total Blood Loss	Postop.	TXA IA/Topical: 1 g TXA in 20 mL normal saline using IA after joint capsule closure	Control: Saline	Mean Difference	642.8 (558.62, 726.98)	Control
Lin, 2015	High	Total Drainage (mL)	Postop.	TXA IA/Topical: 1 g TXA in 20 mL normal saline using IA after joint capsule closure	Control: Saline	Mean Difference	-837.9 (-926.27, -749.53)	TXA IA/Topical
Lin, 2015	High	Blood Transfusions (Volume(mL))	Postop.	TXA IA/Topical: 1 g TXA in 20 mL normal saline using IA after joint capsule closure	Control: Saline	Mean Difference	-49.8 (-107.18, 7.58)	NS

Table 5041: PICO 6- Tranexamic Acid IV- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sadigursky, 2016	Low	Headache	Postop 48 hrs	TXA: 10 mg/kg	Control	RD	-0.13(-0.25, -0.01)	TXA
Sadigursky, 2016	Low	Incontinence	Postop 48 hrs	TXA: 10 mg/kg	Control	RD	0.07(-0.02,0.16)	NS
Sadigursky, 2016	Low	Nausea	Postop 48 hrs	TXA: 10 mg/kg	Control	RR	0.52(0.14,1.88)	NS
Sadigursky, 2016	Low	Vomiting	Postop 48 hrs	TXA: 10 mg/kg	Control	RR	0.26(0.03,2.18)	NS
Yuan, 2017	High	Deep Vein Thrombosis	Postop.	TXA IV: 20 mg/kg TXA IV 30 min before incision and12 hrs after surgery	Control	RR	2.00(0.18,21.81)	NS
Yuan, 2017	High	Intramuscular Venous Thrombosis	Postop.	TXA IV: 20 mg/kg TXA IV 30 min before incision and12 hrs after surgery	Control	RR	0.88(0.33,2.35)	NS
Yuan, 2017	High	Pulmonary Embolism	Postop.	TXA IV: 20 mg/kg TXA IV 30 min before incision and12 hrs after surgery	Control	RD	0.00(0.00,0.00)	NS
Sun, 2017	High	Deep Vein Thrombosis	Postop.	TXA IV Before Tourniquet Inflation: 30 mg/kg TXA IV15 minutes before tourniquet inflation	Control	RD	0.02(-0.02,0.07)	NS
Sun, 2017	High	Deep Vein Thrombosis	Postop.	TXA IV After Tourniquet Inflation: 30 mg/kg TXA IV 15minutes after tourniquet inflation	Control	RD	0.00(0.00,0.00)	NS
Sun, 2017	High	Deep Vein Thrombosis	Postop.	TXA IV on Tourniquet Inflation: 30 mg/kg TXA IV on tourniquet inflation	Control	RD	0.04(-0.02,0.10)	NS
Liu, 2017	Low	Acute Myocardial Infarction	Postop 30days	TXA IV: 250 - 1000 mg TXA	Control: Saline	RD	-0.00(-0.00, -0.00)	TXA IV
Liu, 2017	Low	Deep Vein Thrombosis	Postop 30days	TXA IV: 250 - 1000 mg TXA	Control: Saline	RR	0.74(0.37,1.46)	NS
Liu, 2017	Low	Infection (Infection)	Postop 30days	TXA IV: 250 - 1000 mg TXA	Control: Saline	RR	1.16(0.55,2.44)	NS
Liu, 2017	Low	Stroke	Postop 30days	TXA IV: 250 - 1000 mg TXA	Control: Saline	RD	-0.00(-0.00, -0.00)	TXA IV

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liu, 2017	Low	Pulmonary Embolism	Postop 30days	TXA IV: 250 - 1000 mg TXA	Control: Saline	RR	2.52(0.26,24.22)	NS
Iwai, 2013	Low	Deep Vein Thrombosis	Postop 1 days	TXA IV One Dose: 1 g/10 mL Transamin	Control	RR	0.98(0.18,5.39)	NS
Iwai, 2013	Low	Deep Vein Thrombosis	Postop 7 days	TXA IV One Dose: 1 g/10 mL Transamin	Control	RR	1.18(0.36,3.89)	NS
Iwai, 2013	Low	Deep Vein Thrombosis	Postop 1 days	TXA IV Two Doses: 2 g/10 mL Transamin 10 min before tourniquet deflation then 3 hrs after surgery	Control	RR	1.19(0.26,5.41)	NS
Iwai, 2013	Low	Deep Vein Thrombosis	Postop 7 days	TXA IV Two Doses: 2 g/10 mL Transamin 10 min before tourniquet deflation then 3 hrs after surgery	Control	RR	1.19(0.39,3.67)	NS
Iwai, 2013	Low	Pulmonary Embolism	Postop 1 days	TXA IV One Dose: 1 g/10 mL Transamin	Control	RD	0.00(0.00,0.00)	NS
Iwai, 2013	Low	Pulmonary Embolism	Postop 7 days	TXA IV One Dose: 1 g/10 mL Transamin	Control	RD	0.00(0.00,0.00)	NS
Iwai, 2013	Low	Pulmonary Embolism	Postop 1 days	TXA IV Two Doses: 2 g/10 mL Transamin 10 min before tourniquet deflation then 3 hrs after surgery	Control	RD	0.00(0.00,0.00)	NS
Iwai, 2013	Low	Pulmonary Embolism	Postop 7 days	TXA IV Two Doses: 2 g/10 mL Transamin 10 min before tourniquet deflation then 3 hrs after surgery	Control	RD	0.00(0.00,0.00)	NS
Lee, 2013	High	Deep Vein Thrombosis	Postop 90days	TXA IV: 10 mg/kg TXA before tourniquet release and6 hrs later	Control: Saline	RR	0.75(0.18,3.11)	NS
Lee, 2013	High	Proximal Deep Vein Thrombosis	Postop 90days	TXA IV: 10 mg/kg TXA before tourniquet release and6 hrs later	Control: Saline	RD	0.00(0.00,0.00)	NS
Lee, 2013	High	Pulmonary Embolism	Postop 90days	TXA IV: 10 mg/kg TXA before tourniquet release and6 hrs later	Control: Saline	RD	0.00(0.00,0.00)	NS
Bagsby, 2015	Low	Adverse Events	Postop.	TXA IV: 10 mg/kg TXA IV	Control	RR	1.01(0.46,2.24)	NS
Bagsby, 2015	Low	Thromboembolic Complications	Postop.	TXA IV: 10 mg/kg TXA IV	Control	RR	2.48(0.23,26.48)	NS
Xianhua, 2019	High	Deep Vein Thrombosis	Postop.	TXA IV: 10 mg/kg TXA IV	Control	RR	1.50(0.26,8.50)	NS
Xianhua, 2019	High	Deep Vein Thrombosis	Postop.	TXA IV: 15 mg/kg TXA IV	Control	RR	2.00(0.39,10.31)	NS
Xianhua, 2019	High	Deep Vein Thrombosis	Postop.	TXA IV: 20 mg/kg TXA IV	Control	RR	3.00(0.64,13.98)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Xianhua, 2019	High	Deep Vein Thrombosis	Postop.	TXA IV: 30 mg/kg TXA IV	Control	RR	3.50(0.77,15.83)	NS
Oztas, 2015	High	Deep Vein Thrombosis	Postop 10days	TXA IV: 15 mg/kg TXA 1 hr before inflation and 1 hr after deflation; 10 mg/kg TXA in 100 mL isotonic sodium chloride	Control	RD	0.00(0.00,0.00)	NS
Oztas, 2015	High	Infection (Infection)	Postop 10days	TXA IV: 15 mg/kg TXA 1 hr before inflation and 1 hr after deflation; 10 mg/kg TXA in 100 mL isotonic sodium chloride	Control	RD	-0.03(-0.10,0.03)	NS
Seo, 2013	High	Atrial Fibrillation	Postop 2 mos.	TXA IV: 1.5 g TXA in 100 cc saline	Control: Saline	RD	-0.02(-0.06,0.02)	NS
Seo, 2013	High	Deep Vein Thrombosis	Postop 2 mos.	TXA IV: 1.5 g TXA in 100 cc saline	Control: Saline	RD	-0.04(-0.09,0.01)	NS
Seo, 2013	High	Pulmonary Embolism	Postop 2 mos.	TXA IV: 1.5 g TXA in 100 cc saline	Control: Saline	RD	0.00(0.00,0.00)	NS
Hiippala, 1997	High	Deep Vein Thrombosis	Postop 4 wks.	TXA IV: 15 mg/kg TXA followed by two additional doses of 10 mg/kg	Control: Saline	RR	0.97(0.14,6.57)	NS

Table 5142: PICO 6- Tranexamic Acid IV- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sadigursky, 2016	Low	WOMAC Total	Postop 3 hrs	TXA: 10 mg/kg	Control	Mean Difference	0.3 (-3.31, 3.91)	NS
Liu, 2018	Low	HSS Total	Postop 1 mos.	TXA IV: 10 mg/kg TXA	Control	Mean Difference	7.74 (5.59, 9.89)	TXA IV
Liu, 2018	Low	HSS Total	Postop 3 mos.	TXA IV: 10 mg/kg TXA	Control	Mean Difference	6.35 (3.79, 8.91)	TXA IV
Liu, 2018	Low	HSS Total	Postop 6 mos.	TXA IV: 10 mg/kg TXA	Control	Mean Difference	0.16 (-1.90, 2.22)	NS
Liu, 2018	Low	HSS Total	Postop 1 mos.	TXA IV: 15 mg/kg TXA	Control	Mean Difference	8.14 (5.70, 10.58)	TXA IV
Liu, 2018	Low	HSS Total	Postop 3 mos.	TXA IV: 15 mg/kg TXA	Control	Mean Difference	7.17 (4.66, 9.68)	TXA IV
Liu, 2018	Low	HSS Total	Postop 6 mos.	TXA IV: 15 mg/kg TXA	Control	Mean Difference	0.42 (-1.58, 2.42)	NS
Liu, 2018	Low	KSS Total	Postop 1 mos.	TXA IV: 10 mg/kg TXA	Control	Mean Difference	11.31 (7.92, 14.70)	TXA IV
Liu, 2018	Low	KSS Total	Postop 3 mos.	TXA IV: 10 mg/kg TXA	Control	Mean Difference	8.48 (4.79, 12.17)	TXA IV
Liu, 2018	Low	KSS Total	Postop 6 mos.	TXA IV: 10 mg/kg TXA	Control	Mean Difference	0.36 (-2.00, 2.72)	NS
Liu, 2018	Low	KSS Total	Postop 1 mos.	TXA IV: 15 mg/kg TXA	Control	Mean Difference	10.8 (7.58, 14.02)	TXA IV
Liu, 2018	Low	KSS Total	Postop 3 mos.	TXA IV: 15 mg/kg TXA	Control	Mean Difference	9.06 (5.28, 12.84)	TXA IV
Liu, 2018	Low	KSS Total	Postop 6 mos.	TXA IV: 15 mg/kg TXA	Control	Mean Difference	0.13 (-2.43, 2.69)	NS

Table 5243: PICO 6- Tranexamic Acid IV- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liu, 2018	Low	ROM (deg)	Postop 1 mos.	TXA IV: 10 mg/kg TXA	Control	Mean Difference	7.47 (1.59, 13.35)	TXA IV
Liu, 2018	Low	ROM (deg)	Postop 3 mos.	TXA IV: 10 mg/kg TXA	Control	Mean Difference	7.47 (3.00, 11.94)	TXA IV
Liu, 2018	Low	ROM (deg)	Postop 6 mos.	TXA IV: 10 mg/kg TXA	Control	Mean Difference	-0.69 (-5.50, 4.12)	NS
Liu, 2018	Low	ROM (deg)	Postop 1 mos.	TXA IV: 15 mg/kg TXA	Control	Mean Difference	7.84 (1.87, 13.81)	TXA IV
Liu, 2018	Low	ROM (deg)	Postop 3 mos.	TXA IV: 15 mg/kg TXA	Control	Mean Difference	8.97 (4.33, 13.61)	TXA IV
Liu, 2018	Low	ROM (deg)	Postop 6 mos.	TXA IV: 15 mg/kg TXA	Control	Mean Difference	-0.92 (-5.47, 3.63)	NS

Table 5344: PICO 6- Tranexamic Acid IV- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zhu, 2020	High	Drainage (mL)	Postop 3 days	TXA IV One Dose: 15 mg/kg TXA 30 min before surgery	Control	Mean Difference	-70.7 (-101.86, -39.54)	TXA IV One Dose
Zhu, 2020	High	Drainage (mL)	Postop 3 days	TXA IV Two Doses: 15 mg/kg TXA 30 min before surgery then 15 mg/kg 3 hrs after surgery	Control	Mean Difference	-109.1 (-141.20, -77.00)	TXA IV Two Doses
Zhu, 2020	High	Hidden Blood Loss	Postop 3 days	TXA IV One Dose: 15 mg/kg TXA 30 min before surgery	Control	Mean Difference	-31.4 (-170.07, 107.27)	NS
Zhu, 2020	High	Hidden Blood Loss	Postop 3 days	TXA IV Two Doses: 15 mg/kg TXA 30 min before surgery then 15 mg/kg 3 hrs after surgery	Control	Mean Difference	-157.3 (-294.30, -20.30)	TXA IV Two Doses
Zhu, 2020	High	Total Blood Loss	Postop 3 days	TXA IV One Dose: 15 mg/kg TXA 30 min before surgery	Control	Mean Difference	-120.9 (-263.74, 21.94)	NS
Zhu, 2020	High	Total Blood Loss	Postop 3 days	TXA IV Two Doses: 15 mg/kg TXA 30 min before surgery then 15 mg/kg 3 hrs after surgery	Control	Mean Difference	-275.3 (-418.39, -132.21)	TXA IV Two Doses
Zhu, 2020	High	Patients Received Blood Transfusion	Postop 3 days	TXA IV One Dose: 15 mg/kg TXA 30 min before surgery	Control	RR	0.75(0.28,2.00)	NS
Zhu, 2020	High	Patients Received Blood Transfusion	Postop 3 days	TXA IV Two Doses: 15 mg/kg TXA 30 min before surgery then 15 mg/kg 3 hrs after surgery	Control	RR	0.38(0.11,1.33)	NS
Sadigursky, 2016	Low	Blood Loss	Postop 24 hrs	TXA: 10 mg/kg	Control	Mean Difference	-142.7 (-269.83, -15.57)	TXA
Sadigursky, 2016	Low	Blood Loss	Postop 48 hrs	TXA: 10 mg/kg	Control	Mean Difference	-261.4 (-330.46, -192.34)	TXA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sadigursky, 2016	Low	Hemoglobin (g/dL)	Postop 24 hrs	TXA: 10 mg/kg	Control	Author Reported - Student's t-test; Mann-Whitney U test; Chi-Square test; Fisher's exact test;	N/A	TXA favored overcontrol
Sadigursky, 2016	Low	Hemoglobin (g/dL)	Postop 48 hrs	TXA: 10 mg/kg	Control	Author Reported - Student's t-test; Mann-Whitney U test; Chi-Square test; Fisher's exact test;	N/A	TXA favored overcontrol
Sadigursky, 2016	Low	Patients Received Blood Transfusion (1 Unit)	Postop 48 hrs	TXA: 10 mg/kg	Control	RR	1.24(0.43,3.62)	NS
Sadigursky, 2016	Low	Patients Received Blood Transfusion (2 Units)	Postop 48 hrs	TXA: 10 mg/kg	Control	RR	0.46(0.16,1.33)	NS
Sahin, 2019	High	Blood Loss	Postop 24 hrs	TXA IV: 15 mg/kg TXA in 100 mL saline for 30 min	Control: Saline	Author Reported - ANOVA; Kruskal Wallis; Mann Whitney U; Chi-square test;	N/A	TXA IV favored over Control
Cao, 2019	Low	Drainage (mL)	Postop 14days	TXA IV: 1 g/100 mL TXA before incision	Control	Mean Difference	-231 (-275.67, -186.33)	TXA IV
Cao, 2019	Low	Hemoglobin Drop (g/dL)	Postop 14days	TXA IV: 1 g/100 mL TXA before incision	Control	Mean Difference	-4.6 (-7.29, -1.91)	TXA IV
Cao, 2019	Low	Length of Stay	Postop 14days	TXA IV: 1 g/100 mL TXA before incision	Control	Mean Difference	-2.3 (-3.35, -1.25)	TXA IV
Cao, 2019	Low	Patients Received Blood Transfusion	Postop 14days	TXA IV: 1 g/100 mL TXA before incision	Control	RR	0.61(0.40,0.93)	TXA IV
Cao, 2019	Low	Total Blood Loss	Postop 14days	TXA IV: 1 g/100 mL TXA before incision	Control	Mean Difference	-323.9 (-444.62, -203.18)	TXA IV
Li, 2018	Low	Drainage (mL)	Postop 1 yrs.	TXA IV: 1 g of TXA IV	Control	Author Reported - Mann-Whitney U-test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Li, 2018	Low	Hidden Blood Loss	Postop 1 yrs.	TXA IV: 1 g of TXA IV	Control	Author Reported - Mann--test;	N/A	TXA IV vs. Control
Li, 2018	Low	Total Blood Loss	Postop 1 yrs.	TXA IV: 1 g of TXA IV	Control	Author Reported - Mann--test;	N/A	NS
Liu, 2018	Low	Blood Loss	Postop 7 days	TXA IV: 10 mg/kg TXA	Control	Mean Difference	-47.44 (-79.90, -14.98)	TXA IV
Liu, 2018	Low	Blood Loss	Postop 7 days	TXA IV: 10 mg/kg TXA	Control	Mean Difference	-52.52 (-85.58, -19.46)	TXA IV
Liu, 2018	Low	Blood Transfusions (Volume(mL))	Postop 7 days	TXA IV: 10 mg/kg TXA	Control	Mean Difference	-77.08 (-114.04, -40.12)	TXA IV
Liu, 2018	Low	Blood Transfusions (Volume(mL))	Postop 7 days	TXA IV: 15 mg/kg TXA	Control	Mean Difference	-83.39 (-121.30, -45.48)	TXA IV
Liu, 2018	Low	Patients Received Blood Transfusion	Postop 7 days	TXA IV: 10 mg/kg TXA	Control	RR	0.62(0.42,0.93)	TXA IV
Liu, 2018	Low	Patients Received Blood Transfusion	Postop 7 days	TXA IV: 15 mg/kg TXA	Control	RR	0.57(0.38,0.87)	TXA IV
Liu, 2018	Low	Hemoglobin (g/dL)	Postop 1 days	TXA IV: 10 mg/kg TXA	Control	Mean Difference	-3.64 (-6.69, -0.59)	Control
Liu, 2018	Low	Hemoglobin (g/dL)	Postop 7 days	TXA IV: 10 mg/kg TXA	Control	Mean Difference	-8.8 (-11.68, -5.92)	Control
Liu, 2018	Low	Hemoglobin (g/dL)	Postop 1 days	TXA IV: 15 mg/kg TXA	Control	Mean Difference	-3.08 (-6.20, 0.04)	NS
Liu, 2018	Low	Hemoglobin (g/dL)	Postop 7 days	TXA IV: 15 mg/kg TXA	Control	Mean Difference	-9.41 (-12.47, -6.35)	Control
Liu, 2018	Low	Occult Blood Loss	Postop 7 days	TXA IV: 10 mg/kg TXA	Control	Mean Difference	-142.64 (-193.63, -91.65)	TXA IV
Liu, 2018	Low	Occult Blood Loss	Postop 7 days	TXA IV: 15 mg/kg TXA	Control	Mean Difference	-157.89 (-209.12, -106.66)	TXA IV

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lacko, 2017	High	Blood Loss	Postop 24 hrs	TXA IV: 10 mg/kg TXA 20 min prior to incision then again after 3 hrs	Control	Author Reported - Tukey-Kramer test;	N/A	TXA IV favored over Control
Lacko, 2017	High	Hemoglobin (g/dL)	Postop 6 hrs	TXA IV: 10 mg/kg TXA 20 min prior to incision then again after 3 hrs	Control	Author Reported - Tukey-Kramer test;	N/A	TXA IV favored over Control
Lacko, 2017	High	Hemoglobin (g/dL)	Postop 2 days	TXA IV: 10 mg/kg TXA 20 min prior to incision then again after 3 hrs	Control	Author Reported - Tukey-Kramer test;	N/A	TXA IV favored over Control
Lacko, 2017	High	Hemoglobin (g/dL)	Postop 5 days	TXA IV: 10 mg/kg TXA 20 min prior to incision then again after 3 hrs	Control	Author Reported - Tukey-Kramer test;	N/A	TXA IV favored over Control
Lacko, 2017	High	Blood Transfusions (Units)	Postop 24 hrs	TXA IV: 10 mg/kg TXA 20 min prior to incision then again after 3 hrs	Control	Mean Difference	-0.63 (-1.00, -0.26)	TXA IV
Yuan, 2017	High	Drainage (mL)	Postop 48 hrs	TXA IV: 20 mg/kg TXA IV 30 min before incision and12 hrs after surgery	Control	Mean Difference	-40.79 (-51.26, -30.32)	TXA IV
Yuan, 2017	High	Hemoglobin (g/dL)	Preop.	TXA IV: 20 mg/kg TXA IV 30 min before incision and12 hrs after surgery	Control	Mean Difference	-0.02 (-0.19, 0.15)	NS
Yuan, 2017	High	Hemoglobin Drop (g/dL)	Postop 48 hrs	TXA IV: 20 mg/kg TXA IV 30 min before incision and12 hrs after surgery	Control	Mean Difference	-0.42 (-0.52, -0.32)	TXA IV
Yuan, 2017	High	Patients Received Blood Transfusion	Postop.	TXA IV: 20 mg/kg TXA IV 30 min before incision and12 hrs after surgery	Control	RR	0.39(0.22,0.69)	TXA IV
Sun, 2017	High	Hemoglobin Drop (g/dL)	Postop.	TXA IV Before Tourniquet Inflation: 30 mg/kg TXA IV15 minutes before tourniquet inflation	Control	Mean Difference	-12.5 (-15.48, -9.52)	TXA IV Before Tourniquet Inflation

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sun, 2017	High	Hemoglobin Drop (g/dL)	Postop.	TXA IV After Tourniquet Inflation: 30 mg/kg TXA IV 15minutes after tourniquet inflation	Control	Mean Difference	-5.1 (-8.28, -1.92)	TXA IV After Tourniquet Inflation
Sun, 2017	High	Hemoglobin Drop (g/dL)	Postop.	TXA IV on Tourniquet Inflation: 30 mg/kg TXA IV on tourniquet inflation	Control	Mean Difference	-4.6 (-7.74, -1.46)	TXA IV on Tourniquet Inflation
Sun, 2017	High	Blood Loss	Intraop.	TXA IV Before Tourniquet Inflation: 30 mg/kg TXA IV15 minutes before tourniquet inflation	Control	Mean Difference	-74.72 (-85.80, -63.64)	TXA IV Before Tourniquet Inflation
Sun, 2017	High	Blood Loss	Intraop.	TXA IV After Tourniquet Inflation: 30 mg/kg TXA IV 15minutes after tourniquet inflation	Control	Mean Difference	-6.51 (-20.03, 7.01)	NS
Sun, 2017	High	Blood Loss	Intraop.	TXA IV on Tourniquet Inflation: 30 mg/kg TXA IV on tourniquet inflation	Control	Mean Difference	1.32 (-11.42, 14.06)	NS
Sun, 2017	High	Patients Received Blood Transfusion	Postop.	TXA IV Before Tourniquet Inflation: 30 mg/kg TXA IV15 minutes before tourniquet inflation	Control	RR	0.10(0.02,0.40)	TXA IV Before Tourniquet Inflation
Sun, 2017	High	Patients Received Blood Transfusion	Postop.	TXA IV After Tourniquet Inflation: 30 mg/kg TXA IV 15minutes after tourniquet inflation	Control	RR	0.40(0.20,0.81)	TXA IV After Tourniquet Inflation
Sun, 2017	High	Patients Received Blood Transfusion	Postop.	TXA IV on Tourniquet Inflation: 30 mg/kg TXA IV on tourniquet inflation	Control	RR	0.45(0.23,0.88)	TXA IV on Tourniquet Inflation
Sun, 2017	High	Blood Loss	Postop.	TXA IV Before Tourniquet Inflation: 30 mg/kg TXA IV15 minutes before tourniquet inflation	Control	Mean Difference	-298.68 (-355.19, -242.17)	TXA IV Before Tourniquet Inflation

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sun, 2017	High	Blood Loss	Postop.	TXA IV After Tourniquet Inflation: 30 mg/kg TXA IV 15minutes after tourniquet inflation	Control	Mean Difference	-164.21 (-222.79, -105.63)	TXA IV After Tourniquet Inflation
Sun, 2017	High	Blood Loss	Postop.	TXA IV on Tourniquet Inflation: 30 mg/kg TXA IV on tourniquet inflation	Control	Mean Difference	-144.95 (-204.17, -85.73)	TXA IV on Tourniquet Inflation
Sun, 2017	High	Total Blood Loss	Postop.	TXA IV Before Tourniquet Inflation: 30 mg/kg TXA IV15 minutes before tourniquet inflation	Control	Mean Difference	-419.63 (-486.06, -353.20)	TXA IV Before Tourniquet Inflation
Sun, 2017	High	Total Blood Loss	Postop.	TXA IV After Tourniquet Inflation: 30 mg/kg TXA IV 15minutes after tourniquet inflation	Control	Mean Difference	-229.33 (-299.64, -159.02)	TXA IV After Tourniquet Inflation
Sun, 2017	High	Total Blood Loss	Postop.	TXA IV on Tourniquet Inflation: 30 mg/kg TXA IV on tourniquet inflation	Control	Mean Difference	-207.79 (-279.31, -136.27)	TXA IV on Tourniquet Inflation
Sun, 2017	High	Blood Transfusions (Units)	Postop.	TXA IV Before Tourniquet Inflation: 30 mg/kg TXA IV15 minutes before tourniquet inflation	Control	Mean Difference	-0.781 (-1.10, -0.46)	TXA IV Before Tourniquet Inflation
Sun, 2017	High	Blood Transfusions (Units)	Postop.	TXA IV After Tourniquet Inflation: 30 mg/kg TXA IV 15minutes after tourniquet inflation	Control	Mean Difference	-0.471 (-0.82, -0.12)	TXA IV After Tourniquet Inflation
Sun, 2017	High	Blood Transfusions (Units)	Postop.	TXA IV on Tourniquet Inflation: 30 mg/kg TXA IV on tourniquet inflation	Control	Mean Difference	-0.441 (-0.80, -0.08)	TXA IV on Tourniquet Inflation
Ugurlu, 2017	Low	Drainage (mL)	Postop.	TXA IV: 20 mg/kg TXA	Control	Author Reported - Chi-Square test;	N/A	TXA IV favored over Control
Ugurlu, 2017	Low	Hemoglobin (g/dL)	Postop.	TXA IV: 20 mg/kg TXA	Control	Mean Difference	0.42 (-0.22, 1.06)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ugurlu, 2017	Low	Hemoglobin (g/dL)	Postop 1 days	TXA IV: 20 mg/kg TXA	Control	Mean Difference	1.15 (0.50, 1.80)	TXA IV
Ugurlu, 2017	Low	Hemoglobin (g/dL)	Postop 2 days	TXA IV: 20 mg/kg TXA	Control	Mean Difference	1.31 (0.66, 1.96)	TXA IV
Ugurlu, 2017	Low	Length of Stay	Postop.	TXA IV: 20 mg/kg TXA	Control	Author Reported - Chi-Square test;	N/A	TXA IV favored over Control
Liu, 2017	Low	Patients Received Blood Transfusion	Postop.	TXA IV: 250 - 1000 mg TXA	Control: Saline	RR	0.71(0.65,0.77)	TXA IV
Tzatzairis, 2016	High	Blood Loss	Postop 4 days	TXA IV: 1 g TXA in 100 mL saline	Control: Saline	Mean Difference	-277.34 (-431.85, -122.83)	TXA IV
Tzatzairis, 2016	High	Hemoglobin (g/dL)	Postop 4 days	TXA IV: 1 g TXA in 100 mL saline	Control: Saline	Mean Difference	-0.43 (-0.89, 0.03)	NS
Tzatzairis, 2016	High	Length of Stay	Postop 4 days	TXA IV: 1 g TXA in 100 mL saline	Control: Saline	Mean Difference	0.05 (-0.03, 0.13)	NS
Tzatzairis, 2016	High	Hemoglobin Drop (g/dL)	Postop 4 days	TXA IV: 1 g TXA in 100 mL saline	Control: Saline	Mean Difference	-1.17 (-1.80, -0.54)	TXA IV
Tzatzairis, 2016	High	Patients Received Blood Transfusion	Postop 4 days	TXA IV: 1 g TXA in 100 mL saline	Control: Saline	RR	0.33(0.13,0.83)	TXA IV
Digas, 2015	High	Drainage (mL)	Postop 30days	TXA IV: 10% Transamin, 5 mL, 500 mg	Control	Mean Difference	-223 (-234.41, -211.59)	TXA IV
Digas, 2015	High	Patients Received Blood Transfusion	Postop 30days	TXA IV: 10% Transamin, 5 mL, 500 mg	Control	RR	0.54(0.25,1.16)	NS
Digas, 2015	High	Total Blood Loss	Postop 30days	TXA IV: 10% Transamin, 5 mL, 500 mg	Control	Mean Difference	-369 (-424.28, -313.72)	TXA IV
Digas, 2015	High	Blood Transfusions (Volume(mL))	Postop 30days	TXA IV: 10% Transamin, 5 mL, 500 mg	Control	Mean Difference	-170 (-204.65, -135.35)	TXA IV
Iwai, 2013	Low	Hemoglobin (g/dL)	Postop 1 days	TXA IV One Dose: 1 g/10 mL Transamin	Control	Mean Difference	-0.5 (-1.23, 0.23)	NS
Iwai, 2013	Low	Hemoglobin (g/dL)	Postop 4 days	TXA IV One Dose: 1 g/10 mL Transamin	Control	Mean Difference	-0.7 (-1.42, 0.02)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Iwai, 2013	Low	Hemoglobin (g/dL)	Postop 7 days	TXA IV One Dose: 1 g/10 mL Transamin	Control	Mean Difference	-0.4 (-1.14, 0.34)	NS
Iwai, 2013	Low	Hemoglobin (g/dL)	Postop 1 days	TXA IV Two Doses: 2 g/10 mL Transamin 10 min before tourniquet deflation then 3 hrs after surgery	Control	Mean Difference	0 (-0.89, 0.89)	NS
Iwai, 2013	Low	Hemoglobin (g/dL)	Postop 4 days	TXA IV Two Doses: 2 g/10 mL Transamin 10 min before tourniquet deflation then 3 hrs after surgery	Control	Mean Difference	0 (-0.72, 0.72)	NS
Iwai, 2013	Low	Hemoglobin (g/dL)	Postop 7 days	TXA IV Two Doses: 2 g/10 mL Transamin 10 min before tourniquet deflation then 3 hrs after surgery	Control	Mean Difference	0 (-0.78, 0.78)	NS
Lee, 2013	High	Drainage (mL)	Postop 24 hrs	TXA IV: 10 mg/kg TXA before tourniquet release and6 hrs later	Control: Saline	Mean Difference	-271 (-358.44, -183.56)	TXA IV
Lee, 2013	High	Drainage (mL)	Postop 90days	TXA IV: 10 mg/kg TXA before tourniquet release and6 hrs later	Control: Saline	Mean Difference	-284 (-400.95, -167.05)	TXA IV
Lee, 2013	High	Hemoglobin Drop (g/dL)	Postop 1 days	TXA IV: 10 mg/kg TXA before tourniquet release and6 hrs later	Control: Saline	Mean Difference	-0.2 (-0.62, 0.22)	NS
Lee, 2013	High	Hemoglobin Drop (g/dL)	Postop 2 days	TXA IV: 10 mg/kg TXA before tourniquet release and6 hrs later	Control: Saline	Mean Difference	0.3 (-0.16, 0.76)	NS
Lee, 2013	High	Hemoglobin Drop (g/dL)	Postop 5 days	TXA IV: 10 mg/kg TXA before tourniquet release and6 hrs later	Control: Saline	Mean Difference	0.1 (-0.41, 0.61)	NS
Lee, 2013	High	Patients Received Blood Transfusion	Postop 90days	TXA IV: 10 mg/kg TXA before tourniquet release and6 hrs later	Control: Saline	RR	0.27(0.10,0.73)	TXA IV
Sepah, 2011	Low	Drainage (mL)	Postop.	TXA IV: 1 g TXA and 1 g TXA after deflation of tourniquet	Control	Author Reported - Student's t-test;	N/A	TXA IV favored over Control

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sepah, 2011	Low	Hemoglobin (g/dL)	Postop.	TXA IV: 1 g TXA and 1 g TXA after deflation of tourniquet	Control	Author Reported - Student's t-test;	N/A	TXA IV favored over Control
Sepah, 2011	Low	Patients Received Blood Transfusion	Postop.	TXA IV: 1 g TXA and 1 g TXA after deflation of tourniquet	Control	RR	0.19(0.09,0.41)	TXA IV
Chen, 2017	Low	Blood Loss	Postop.	TXA IV: 1000 mg TXA	Control	Mean Difference	-258 (-307.39, -208.61)	TXA IV
Chen, 2017	Low	Drainage (mL)	Postop 1 days	TXA IV: 1000 mg TXA	Control	Mean Difference	-198 (-235.30, -160.70)	TXA IV
Chen, 2017	Low	Hemoglobin (g/dL)	Postop.	TXA IV: 1000 mg TXA	Control	Mean Difference	-1.19 (-1.42, -0.96)	Control
Chen, 2017	Low	Length of Stay	Postop.	TXA IV: 1000 mg TXA	Control	Mean Difference	-1.9 (-2.70, -1.10)	TXA IV
Chen, 2017	Low	Patients Received Blood Transfusion	Postop.	TXA IV: 1000 mg TXA	Control	RR	0.11(0.03,0.36)	TXA IV
Numkanisorn, 2016	Low	Drainage (mL)	Postop.	TXA IV: 10 mg/kg TXA (Transamin) 250 mg/5mL	Control	Mean Difference	-481.7 (-552.20, -411.20)	TXA IV
Numkanisorn, 2016	Low	Hemoglobin (g/dL)	Postop.	TXA IV: 10 mg/kg TXA (Transamin) 250 mg/5mL	Control	Mean Difference	0.3 (-0.13, 0.73)	NS
Numkanisorn, 2016	Low	Hemoglobin (g/dL)	Postop 12 hrs	TXA IV: 10 mg/kg TXA (Transamin) 250 mg/5mL	Control	Mean Difference	-0.7 (-0.91, -0.49)	Control
Numkanisorn, 2016	Low	Hemoglobin (g/dL)	Postop 24 hrs	TXA IV: 10 mg/kg TXA (Transamin) 250 mg/5mL	Control	Mean Difference	0.6 (0.19, 1.01)	TXA IV
Numkanisorn, 2016	Low	Patients Received Blood Transfusion	Postop 12 hrs	TXA IV: 10 mg/kg TXA (Transamin) 250 mg/5mL	Control	RR	0.33(0.18,0.62)	TXA IV
Drosos, 2016	High	Blood Loss	Postop 4 days	TXA IV: 1 g TXA	Control: Saline	Mean Difference	-219.07 (-370.34, -67.80)	TXA IV
Drosos, 2016	High	Hemoglobin (g/dL)	Postop 4 days	TXA IV: 1 g TXA	Control: Saline	Mean Difference	0.7 (0.20, 1.20)	TXA IV
Drosos, 2016	High	Patients Received Blood Transfusion	Postop 4 days	TXA IV: 1 g TXA	Control: Saline	RR	0.22(0.09,0.58)	TXA IV

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Bagsby, 2015	Low	Blood Loss	Postop.	TXA IV: 10 mg/kg TXA IV	Control	Mean Difference	7.08 (-31.00, 45.16)	NS
Bagsby, 2015	Low	Hemoglobin (g/dL)	Preop.	TXA IV: 10 mg/kg TXA IV	Control	Mean Difference	-0.49 (-1.02, 0.04)	NS
Bagsby, 2015	Low	Hemoglobin (g/dL)	Postop.	TXA IV: 10 mg/kg TXA IV	Control	Mean Difference	0.89 (0.35, 1.43)	TXA IV
Bagsby, 2015	Low	Length of Stay	Intraop.	TXA IV: 10 mg/kg TXA IV	Control	Mean Difference	0.33 (-0.06, 0.72)	NS
Bagsby, 2015	Low	Patients Received Blood Transfusion	Intraop.	TXA IV: 10 mg/kg TXA IV	Control	RR	0.30(0.15,0.59)	TXA IV
Bagsby, 2015	Low	Blood Transfusions (Units)	Intraop.	TXA IV: 10 mg/kg TXA IV	Control	Mean Difference	-0.07 (-0.12, -0.02)	TXA IV
Bagsby, 2015	Low	Blood Transfusions (Units)	Postop.	TXA IV: 10 mg/kg TXA IV	Control	Mean Difference	-0.63 (-1.00, -0.26)	TXA IV
Aguilera, 2015	High	Blood Loss	Postop.	TXA IV: 2 doses of 1 g of IV TXA	Control	Mean Difference	-598.18 (-789.98, -406.38)	TXA IV
Aguilera, 2015	High	Blood Loss (From the Drain)	Postop.	TXA IV: 2 doses of 1 g of IV TXA	Control	Mean Difference	-423.16 (-513.74, -332.58)	TXA IV
Aguilera, 2015	High	Blood Transfusions (Units)	Postop.	TXA IV: 2 doses of 1 g of IV TXA	Control	RD	-0.54(-0.68, -0.40)	TXA IV
Aguilera, 2015	High	Patients Received Blood Transfusion	Postop.	TXA IV: 2 doses of 1 g of IV TXA	Control	RD	-0.26(-0.38, -0.14)	TXA IV
Aguilera, 2015	High	Hemoglobin (g/dL)	Postop 24 hrs	TXA IV: 2 doses of 1 g of IV TXA	Control	Mean Difference	-0.4 (-1.34, 0.54)	NS
Aguilera, 2015	High	Hidden Blood Loss	Postop.	TXA IV: 2 doses of 1 g of IV TXA	Control	Mean Difference	-199.47 (-407.68, 8.74)	NS
Xianhua, 2019	High	Blood Loss	Postop.	TXA IV: 10 mg/kg TXA IV	Control	Mean Difference	-43.2 (-54.54, -31.86)	TXA IV
Xianhua, 2019	High	Blood Loss	Postop.	TXA IV: 15 mg/kg TXA IV	Control	Mean Difference	-52.7 (-63.41, -41.99)	TXA IV

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Xianhua, 2019	High	Blood Loss	Postop.	TXA IV: 20 mg/kg TXA IV	Control	Mean Difference	-62.2 (-72.81, -51.59)	TXA IV
Xianhua, 2019	High	Blood Loss	Postop.	TXA IV: 30 mg/kg TXA IV	Control	Mean Difference	-65.8 (-76.17, -55.43)	TXA IV
Xianhua, 2019	High	Patients Received Blood Transfusion	Postop.	TXA IV: 10 mg/kg TXA IV	Control	RR	0.33(0.17,0.65)	TXA IV
Xianhua, 2019	High	Patients Received Blood Transfusion	Postop.	TXA IV: 15 mg/kg TXA IV	Control	RR	0.25(0.11,0.55)	TXA IV
Xianhua, 2019	High	Patients Received Blood Transfusion	Postop.	TXA IV: 20 mg/kg TXA IV	Control	RR	0.38(0.20,0.70)	TXA IV
Xianhua, 2019	High	Patients Received Blood Transfusion	Postop.	TXA IV: 30 mg/kg TXA IV	Control	RR	0.29(0.14,0.60)	TXA IV
Lin, 2011	Low	Blood Loss	Postop 36 wks.	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	-620 (-733.42, -506.58)	TXA IV
Lin, 2011	Low	Patients Received Blood Transfusion	Postop 36 wks.	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	RR	0.20(0.05,0.87)	TXA IV
Lin, 2011	Low	Drainage (mL)	Postop 2 hrs	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	-51.6 (-78.73, -24.47)	TXA IV
Lin, 2011	Low	Drainage (mL)	Postop 4 hrs	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	-38 (-53.97, -22.03)	TXA IV
Lin, 2011	Low	Drainage (mL)	Postop 6 hrs	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	-24.5 (-37.06, -11.94)	TXA IV
Lin, 2011	Low	Drainage (mL)	Postop 24 hrs	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	42 (-2.28, 86.28)	NS
Lin, 2011	Low	Drainage (mL)	Postop 28 hrs	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	-5 (-27.24, 17.24)	NS
Lin, 2011	Low	Hemoglobin (g/dL)	Postop 1 days	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	0.6 (0.08, 1.12)	TXA IV
Lin, 2011	Low	Hemoglobin (g/dL)	Postop 2 days	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	1.2 (0.69, 1.71)	TXA IV

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lin, 2011	Low	Hemoglobin (g/dL)	Postop 3 days	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	1.3 (0.86, 1.74)	TXA IV
Lin, 2011	Low	Hidden Blood Loss	Postop 36 wks.	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	-543 (-655.69, -430.31)	TXA IV
Lin, 2011	Low	Length of Stay	Postop 36 wks.	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	-0.22 (-0.88, 0.44)	NS
Lin, 2011	Low	Total Drainage (mL)	Postop 36 wks.	TXA IV: 10 mg/kg TXA (Transamin) 50 mg/mL	Control: Saline	Mean Difference	-78 (-160.72, 4.72)	NS
Seol, 2016	Low	Drainage (mL)	Postop 1 days	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	Mean Difference	-244.5 (-337.91, -151.09)	TXA IV
Seol, 2016	Low	Drainage (mL)	Postop 2 days	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	Mean Difference	-4.4 (-37.26, 28.46)	NS
Seol, 2016	Low	Drainage (mL)	Postop 3 days	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	Mean Difference	-8.1 (-30.10, 13.90)	NS
Seol, 2016	Low	Drainage (mL)	Postop 4 days	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	Mean Difference	-23.6 (-37.50, -9.70)	TXA IV
Seol, 2016	Low	Hemoglobin (g/dL)	Postop 6 hrs	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	Mean Difference	0.1 (-0.76, 0.96)	NS
Seol, 2016	Low	Hemoglobin (g/dL)	Postop 24 hrs	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	Mean Difference	0.7 (0.11, 1.29)	TXA IV
Seol, 2016	Low	Hemoglobin (g/dL)	Postop 48 hrs	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	Mean Difference	1 (0.41, 1.59)	TXA IV
Seol, 2016	Low	Hemoglobin (g/dL)	Postop 5 days	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	Mean Difference	0.7 (-0.14, 1.54)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Seol, 2016	Low	Hemoglobin Drop (g/dL)	Postop 5 days	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	Mean Difference	-1.1 (-1.36, -0.84)	TXA IV
Seol, 2016	Low	Total Drainage (mL)	Postop 5 days	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	Mean Difference	-305.4 (-448.63, -162.17)	TXA IV
Seol, 2016	Low	Patients Received Blood Transfusion	Postop 5 days	TXA IV: 10 mg/kg TXA 10 min before tourniquet deflation and again at 3 hrs	Control: Saline	RR	0.63(0.42,0.93)	TXA IV
Keyhani, 2016	High	Blood Loss	Postop.	TXA IV: 500 mg TXA in 100 cc saline	Control: Saline	Mean Difference	-88 (-113.22, -62.78)	TXA IV
Keyhani, 2016	High	Hemoglobin (g/dL)	Postop 24 hrs	TXA IV: 500 mg TXA in 100 cc saline	Control: Saline	Mean Difference	1.2 (0.67, 1.73)	TXA IV
Oztas, 2015	High	Patients Received Blood Transfusion	Postop 10days	TXA IV: 15 mg/kg TXA 1 hr before inflation and 1 hr after deflation; 10 mg/kg TXA in 100 mL isotonic sodium chloride	Control	RD	-0.27(-0.42, -0.11)	TXA IV
Oztas, 2015	High	Drainage (mL)	Postop 10days	TXA IV: 15 mg/kg TXA 1 hr before inflation and 1 hr after deflation; 10 mg/kg TXA in 100 mL isotonic sodium chloride	Control	Mean Difference	-386.6 (-491.08, -282.12)	TXA IV
Oztas, 2015	High	Length of Stay	Postop 10days	TXA IV: 15 mg/kg TXA 1 hr before inflation and 1 hr after deflation; 10 mg/kg TXA in 100 mL isotonic sodium chloride	Control	Mean Difference	-0.1 (-0.40, 0.20)	NS
Hegde, 2013	Low	Hemoglobin (g/dL)	Postop 24 hrs	TXA IV: 10 mL (1000 mg) TXA	Control: Saline	Mean Difference	0.53 (-0.25, 1.31)	NS
Hegde, 2013	Low	Blood Transfusions (Units)	Postop 24 hrs	TXA IV: 10 mL (1000 mg) TXA	Control: Saline	Mean Difference	-0.47 (-0.91, -0.03)	TXA IV

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Seo, 2013	High	Blood Loss	Postop 2 mos.	TXA IV: 1.5 g TXA in 100 cc saline	Control: Saline	Mean Difference	-305 (-435.39, -174.61)	TXA IV
Seo, 2013	High	Blood Transfusions (Volume(mL))	Postop 2 mos.	TXA IV: 1.5 g TXA in 100 cc saline	Control: Saline	Mean Difference	-647.2 (-804.98, -489.42)	TXA IV
McConnell, 2012	High	Blood Loss	Postop.	TXA IV: 10 mg/kg TXA	Control: Saline	Author Reported - Kruskal-Wallis test; Mann-Whitney U test;	N/A	NS
Molloy, 2007	High	Blood Loss	Postop 20days	TXA IV: 500 mg TXA	Control	Mean Difference	-190 (-370.08, -9.92)	TXA IV
Molloy, 2007	High	Hemoglobin (g/dL)	Postop 20days	TXA IV: 500 mg TXA	Control	Mean Difference	-0.45 (-0.87, -0.03)	Control
Hiippala, 1997	High	Blood Loss (Volume (mL))	Postop 4 wks.	TXA IV: 15 mg/kg TXA followed by two additional doses of 10 mg/kg	Control: Saline	Mean Difference	513 (409.70, 616.30)	Control
Hiippala, 1997	High	Total Blood Loss	Postop 4 wks.	TXA IV: 15 mg/kg TXA followed by two additional doses of 10 mg/kg	Control: Saline	Mean Difference	820 (598.26, 1041.74)	Control
Kizilkurt, 2021	Low	Blood Loss (Volume (mL))	Periop.	Tranexamic Acid IV: 20 mg/kg TKA IV with Tourniquet	Control: With Tourniquet	Mean Difference	-20 (-213.13, 173.13)	NS
Kizilkurt, 2021	Low	Blood Loss (Volume (mL))	Postop 6 wks.	Tranexamic Acid IV: 20 mg/kg TKA IV with Tourniquet	Control: With Tourniquet	Mean Difference	-148 (-1444.78, 1148.78)	NS
Kizilkurt, 2021	Low	Blood Loss (Volume (mL))	Periop.	Tranexamic Acid IV: 20 mg/kg TKA IV without Tourniquet	Control: Without Tourniquet	Mean Difference	-180 (-430.00, 70.00)	NS
Kizilkurt, 2021	Low	Blood Loss (Volume (mL))	Postop 6 wks.	Tranexamic Acid IV: 20 mg/kg TKA IV without Tourniquet	Control: Without Tourniquet	Mean Difference	-340 (-1029.64, 349.64)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Chareancholvanich,2012	High	Hemoglobin Drop (g/dL)	Postop.	TXA + drain clamping: 10 mg/kg intravenous 10minpreop, 10mg/kg 3hrs postop, 1500mg oral 5d postop	No TXA + drain clamping: Saline Starch Capsule. 3hrs clamped, 3hrs released, 3hrsclamped. Then remained clamped for remaining time. Total 48hr	Mean Difference	-295 (-397.11, -192.89)	TXA + drain clamping
Chareancholvanich,2012	High	Hemoglobin Drop (g/dL)	12 hrs	TXA + drain clamping: 10 mg/kg intravenous 10minpreop, 10mg/kg 3hrs postop, 1500mg oral 5d postop	No TXA + drain clamping: Saline Starch Capsule. 3hrs clamped, 3hrs released, 3hrsclamped. Then remained clamped for remaining time. Total 48hr	Mean Difference	-1 (-2.78, 0.78)	NS
Chareancholvanich,2012	High	Patients Received Blood Transfusion	Postop.	TXA + drain clamping: 10 mg/kg intravenous 10minpreop, 10mg/kg 3hrs postop, 1500mg oral 5d postop	No TXA + drain clamping: Saline Starch Capsule. 3hrs clamped, 3hrs released, 3hrsclamped. Then remained clamped for remaining time. Total 48hr	RR	0.47(0.33,0.66)	TXA + drain clamping
Chareancholvanich,2012	High	Blood Transfusions (Units)	Postop.	TXA + drain clamping: 10 mg/kg intravenous 10minpreop, 10mg/kg 3hrs postop, 1500mg oral 5d postop	No TXA + drain clamping: Saline Starch Capsule. 3hrs clamped, 3hrs released, 3hrsclamped. Then remained clamped for remaining time. Total 48hr	Mean Difference	-0.9 (-1.16, -0.64)	TXA + drain clamping

Table 5445: PICO 6- Tranexamic Acid IV- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sadigursky, 2016	Low	VAS Pain	Postop 24 hrs	TXA: 10 mg/kg	Control	Mean Difference	-1.6 (-2.06, -1.14)	TXA
Sadigursky, 2016	Low	VAS Pain	Postop 48 hrs	TXA: 10 mg/kg	Control	Mean Difference	-0.9 (-1.49, -0.31)	TXA
Liu, 2018	Low	VAS Pain	Postop 2 days	TXA IV: 10 mg/kg TXA	Control	Mean Difference	-0.11 (-0.56, 0.34)	NS
Liu, 2018	Low	VAS Pain	Postop 7 days	TXA IV: 10 mg/kg TXA	Control	Mean Difference	-1.12 (-1.45, -0.79)	TXA IV
Liu, 2018	Low	VAS Pain	Postop 14days	TXA IV: 10 mg/kg TXA	Control	Mean Difference	-0.41 (-0.58, -0.24)	TXA IV
Liu, 2018	Low	VAS Pain	Postop 2 days	TXA IV: 15 mg/kg TXA	Control	Mean Difference	-0.08 (-0.52, 0.36)	NS
Liu, 2018	Low	VAS Pain	Postop 7 days	TXA IV: 15 mg/kg TXA	Control	Mean Difference	-1.21 (-1.55, -0.87)	TXA IV
Liu, 2018	Low	VAS Pain	Postop 14days	TXA IV: 15 mg/kg TXA	Control	Mean Difference	-0.39 (-0.56, -0.22)	TXA IV
Laoruengthana, 2019	High	VAS Pain	Postop 6 hrs	TXA IV: 10 mg/kg TXA IV	Control	Author Reported - Two-sided t-test;	N/A	NS
Laoruengthana, 2019	High	VAS Pain	Postop 12 hrs	TXA IV: 10 mg/kg TXA IV	Control	Author Reported - Two-sided t-test;	N/A	NS
Laoruengthana, 2019	High	VAS Pain	Postop 24 hrs	TXA IV: 10 mg/kg TXA IV	Control	Author Reported - Two-sided t-test;	N/A	NS
Laoruengthana, 2019	High	VAS Pain	Postop 48 hrs	TXA IV: 10 mg/kg TXA IV	Control	Author Reported - Two-sided t-test;	N/A	NS
Laoruengthana, 2019	High	VAS Pain	Postop 72 hrs	TXA IV: 10 mg/kg TXA IV	Control	Author Reported - Two-sided t-test;	N/A	NS
Laoruengthana, 2019	High	VAS Pain	Postop 96 hrs	TXA IV: 10 mg/kg TXA IV	Control	Author Reported - Two-sided t-test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Molloy, 2007	High	VAS Pain	Postop 20days	TXA IV: 500 mg TXA	Control	Mean Difference	-0.63 (-8.15, 6.89)	NS
Kizilkurt, 2021	Low	VAS Pain	Postop 6 wks.	Tranexamic Acid IV: 20 mg/kg TKA IV with Tourniquet	Control: With Tourniquet	Mean Difference	-0.1 (-3.79, 3.59)	NS
Kizilkurt, 2021	Low	VAS Pain	Postop 6 wks.	Tranexamic Acid IV: 20 mg/kg TKA IV without Tourniquet	Control: Without Tourniquet	Mean Difference	0.1 (-2.94, 3.14)	NS

Table 5546: PICO 6- Tranexamic Acid IV +Topical- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Cao, 2019	Low	Drainage (mL)	Postop 14days	TXA IV/Topical: 1 g/100 mL TXA IV + topical TXA	Control	Mean Difference	-270.7 (-319.68, -221.72)	TXA IV/Topical
Cao, 2019	Low	Hemoglobin Drop (g/dL)	Postop 14days	TXA IV/Topical: 1 g/100 mL TXA IV + topical TXA	Control	Mean Difference	-4.9 (-7.75, -2.05)	TXA IV/Topical
Cao, 2019	Low	Length of Stay	Postop 14days	TXA IV/Topical: 1 g/100 mL TXA IV + topical TXA	Control	Mean Difference	-2.4 (-3.34, -1.46)	TXA IV/Topical
Cao, 2019	Low	Patients Received Blood Transfusion	Postop 14days	TXA IV/Topical: 1 g/100 mL TXA IV + topical TXA	Control	RR	0.48(0.28,0.82)	TXA IV/Topical
Cao, 2019	Low	Total Blood Loss	Postop 14days	TXA IV/Topical: 1 g/100 mL TXA IV + topical TXA	Control	Mean Difference	-396.7 (-514.85, -278.55)	TXA IV/Topical

Table 5647: PICO 6- Tranexamic Acid IV + IA- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Li, 2018	High	HSS Total	Preop.	TXA IV/IA: 15 mg/kg TXA IV then 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS
Li, 2018	High	HSS Total	Postop 3 mos.	TXA IV/IA: 15 mg/kg TXA IV then 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	TXA IV/IA favored over Control
Li, 2018	High	HSS Total	Postop 6 mos.	TXA IV/IA: 15 mg/kg TXA IV then 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS

Table 5748: PICO 6- Tranexamic Acid IV + IA- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Karaaslan, 2015	High	Blood Transfusions (Units)	Postop 12 hrs	TXA IV/IA: 15 mg/kg TXA IV then 3 g TXA IA then 10mg/kg/h TXA IV for 3hrs	Control	Author Reported - Shapiro-Wilk test; Student's t-test; Mann-Whitney U-test;	N/A	TXA IV/IA favored over Control
Karaaslan, 2015	High	Hemoglobin (g/dL)	Postop 12 hrs	TXA IV/IA: 15 mg/kg TXA IV then 3 g TXA IA then 10mg/kg/h TXA IV for 3hrs	Control	Mean Difference	0.95 (0.40, 1.50)	TXA IV/IA
Karaaslan, 2015	High	Total Drainage (mL)	Postop 12 hrs	TXA IV/IA: 15 mg/kg TXA IV then 3 g TXA IA then 10mg/kg/h TXA IV for 3hrs	Control	Author Reported - Shapiro-Wilk test; Student's t-test; Mann-Whitney U-test;	N/A	TXA IV/IA favored over Control
Li, 2018	High	Blood Loss	Postop.	TXA IV/IA: 15 mg/kg TXA IV then 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS
Li, 2018	High	Blood Loss	Postop.	TXA IV/IA: 15 mg/kg TXA IV then 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	TXA IV/IA favored over Control
Lin, 2015	High	Hemoglobin (g/dL)	Preop.	TXA IV/IA: 1 g TXA IV 15 min before incision and 1 g TXA IA	Control: Saline	Mean Difference	2.1 (1.59, 2.61)	TXA IV/IA
Lin, 2015	High	Hemoglobin (g/dL)	Postop 1 days	TXA IV/IA: 1 g TXA IV 15 min before incision and 1 g TXA IA	Control: Saline	Mean Difference	2.5 (1.97, 3.03)	TXA IV/IA
Lin, 2015	High	Hemoglobin (g/dL)	Postop 3 days	TXA IV/IA: 1 g TXA IV 15 min before incision and 1 g TXA IA	Control: Saline	Mean Difference	9.1 (8.68, 9.52)	TXA IV/IA
Lin, 2015	High	Hemoglobin Drop (g/dL)	Postop 1 days	TXA IV/IA: 1 g TXA IV 15 min before incision and 1 g TXA IA	Control: Saline	Mean Difference	-2.6 (-2.98, -2.22)	TXA IV/IA
Lin, 2015	High	Hemoglobin Drop (g/dL)	Postop 3 days	TXA IV/IA: 1 g TXA IV 15 min before incision and 1 g TXA IA	Control: Saline	Mean Difference	-210 (-247.78, -172.22)	TXA IV/IA
Lin, 2015	High	Patients Received Blood Transfusion	Postop.	TXA IV/IA: 1 g TXA IV 15 min before incision and 1 g TXA IA	Control: Saline	RD	-0.15(-0.26, -0.04)	TXA IV/IA
Lin, 2015	High	Total Blood Loss	Postop.	TXA IV/IA: 1 g TXA IV 15 min before incision and 1 g TXA IA	Control: Saline	Mean Difference	516.4 (423.96, 608.84)	Control

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lin, 2015	High	Total Drainage (mL)	Postop.	TXA IV/IA: 1 g TXA IV 15 min before incision and 1 g TXA IA	Control: Saline	Mean Difference	-892 (-978.97, -805.03)	TXA IV/IA
Lin, 2015	High	Blood Transfusions (Volume(mL))	Postop.	TXA IV/IA: 1 g TXA IV 15 min before incision and 1 g TXA IA	Control: Saline	Mean Difference	-62.3 (-114.18, -10.42)	TXA IV/IA

Table 5849: PICO 6- Tranexamic Acid IV + IA- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Li, 2018	High	Pain	Postop 1 wks.	TXA IV/IA: 15 mg/kg TXA IV then 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS
Li, 2018	High	Pain	Postop 6 wks.	TXA IV/IA: 15 mg/kg TXA IV then 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS
Li, 2018	High	Pain	Preop.	TXA IV/IA: 15 mg/kg TXA IV then 1 g TXA IA dissolved in 20 mL 0.9% sodium chloride	Control	Author Reported - Chi-Square test;	N/A	NS

Table 5950: PICO 6- Tranexamic Acid IV + Oral- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sahin, 2019	High	Blood Loss	Postop 24 hrs	TXA IV + oral: 10 mg/kg TXA in 500 mL saline for 1 hr	Control: Saline	Author Reported - ANOVA; Kruskal Wallis; Mann Whitney U; Chi-square test;	N/A	TXA IV + oral favored overcontrol

Table 6051: PICO 6- Tranexamic Acid Oral- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yuan, 2017	High	Deep Vein Thrombosis	Postop.	TXA Oral: 20 mg/kg TXA 2 hrs before surgery and 12hrs after	Control	RR	1.00(0.06,15.83)	NS
Yuan, 2017	High	Intramuscular Venous Thrombosis	Postop.	TXA Oral: 20 mg/kg TXA 2 hrs before surgery and 12hrs after	Control	RR	0.75(0.27,2.11)	NS
Yuan, 2017	High	Pulmonary Embolism	Postop.	TXA Oral: 20 mg/kg TXA 2 hrs before surgery and 12hrs after	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Deep Vein Thrombosis	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Deep Vein Thrombosis	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Deep Vein Thrombosis	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Deep Vein Thrombosis	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Gastric Hemorrhage	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Gastric Hemorrhage	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Gastric Hemorrhage	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Gastric Hemorrhage	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Hematoma	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	RD	0.02(-0.02,0.05)	NS
Wang, 2018	High	Hematoma	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Hematoma	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Hematoma	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	RD	0.02(-0.02,0.05)	NS
Wang, 2018	High	Pulmonary Embolism	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Pulmonary Embolism	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Pulmonary Embolism	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Pulmonary Embolism	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Seizures	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Seizures	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Seizures	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Seizures	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	RD	0.00(0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wang, 2018	High	Infection (Superficial Infection)	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	RD	-0.02(-0.05,0.02)	NS
Wang, 2018	High	Infection (Superficial Infection)	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	RR	1.00(0.06,15.59)	NS
Wang, 2018	High	Infection (Superficial Infection)	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	RD	-0.02(-0.05,0.02)	NS
Wang, 2018	High	Infection (Superficial Infection)	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	RD	-0.02(-0.05,0.02)	NS
Wang, 2018	High	Total Adverse Events	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	RR	2.00(0.19,21.42)	NS
Wang, 2018	High	Total Adverse Events	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	RR	1.00(0.06,15.59)	NS
Wang, 2018	High	Total Adverse Events	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	RR	1.00(0.06,15.59)	NS
Wang, 2018	High	Total Adverse Events	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	RR	1.00(0.06,15.59)	NS
Wang, 2018	High	Wound Secretion	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	RD	0.02(-0.02,0.05)	NS
Wang, 2018	High	Wound Secretion	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	RD	0.00(0.00,0.00)	NS
Wang, 2018	High	Wound Secretion	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	RD	0.02(-0.02,0.05)	NS
Wang, 2018	High	Wound Secretion	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	RD	0.00(0.00,0.00)	NS

Table 6152: PICO 6- Tranexamic Acid Oral- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wang, 2018	High	HSS Total	Preop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	-0.3 (-2.86, 2.26)	NS
Wang, 2018	High	HSS Total	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	5.4 (4.13, 6.67)	TXA Oral
Wang, 2018	High	HSS Total	Preop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	-1.2 (-3.70, 1.30)	NS
Wang, 2018	High	HSS Total	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	7 (5.69, 8.31)	TXA Oral
Wang, 2018	High	HSS Total	Preop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	0.9 (-1.59, 3.39)	NS
Wang, 2018	High	HSS Total	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	8.7 (7.52, 9.88)	TXA Oral
Wang, 2018	High	HSS Total	Preop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	1.1 (-1.42, 3.62)	NS
Wang, 2018	High	HSS Total	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	10.1 (8.83, 11.37)	TXA Oral

Table 6253: PICO 6- Tranexamic Acid Oral- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sahin, 2019	High	Blood Loss	Postop 24 hrs	TXA Oral: 500 mg TXA ever 8 hrs	Control: Saline	Author Reported - ANOVA; Kruskal Wallis; Mann Whitney U; Chi-square test;	N/A	NS
Yuan, 2017	High	Drainage (mL)	Postop 48 hrs	TXA Oral: 20 mg/kg TXA 2 hrs before surgery and 12hrs after	Control	Mean Difference	-42.29 (-53.09, -31.49)	TXA Oral
Yuan, 2017	High	Hemoglobin (g/dL)	Preop.	TXA Oral: 20 mg/kg TXA 2 hrs before surgery and 12hrs after	Control	Mean Difference	0.01 (-0.16, 0.18)	NS
Yuan, 2017	High	Hemoglobin Drop (g/dL)	Postop 48 hrs	TXA Oral: 20 mg/kg TXA 2 hrs before surgery and 12hrs after	Control	Mean Difference	-0.44 (-0.55, -0.33)	TXA Oral
Yuan, 2017	High	Patients Received Blood Transfusion	Postop.	TXA Oral: 20 mg/kg TXA 2 hrs before surgery and 12hrs after	Control	RR	0.42(0.24,0.73)	TXA Oral
Wang, 2018	High	Blood Loss	Intraop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	-78.7 (-93.22, -64.18)	TXA Oral
Wang, 2018	High	Blood Loss	Intraop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	-72.5 (-87.10, -57.90)	TXA Oral
Wang, 2018	High	Blood Loss	Intraop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	-76.7 (-90.70, -62.70)	TXA Oral
Wang, 2018	High	Blood Loss	Intraop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	-74.3 (-88.40, -60.20)	TXA Oral
Wang, 2018	High	Hemoglobin (g/dL)	Preop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	1 (-2.67, 4.67)	NS
Wang, 2018	High	Hemoglobin (g/dL)	Preop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	-0.3 (-4.08, 3.48)	NS
Wang, 2018	High	Hemoglobin (g/dL)	Preop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	-1 (-4.63, 2.63)	NS
Wang, 2018	High	Hemoglobin (g/dL)	Preop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	-0.2 (-4.01, 3.61)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wang, 2018	High	Hemoglobin Drop (g/dL)	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	-6.4 (-9.19, -3.61)	TXA Oral
Wang, 2018	High	Hemoglobin Drop (g/dL)	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	-8 (-11.10, -4.90)	TXA Oral
Wang, 2018	High	Hemoglobin Drop (g/dL)	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	-10.7 (-17.60, -3.80)	TXA Oral
Wang, 2018	High	Hemoglobin Drop (g/dL)	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	-13 (-16.23, -9.77)	TXA Oral
Wang, 2018	High	Hemoglobin Drop (g/dL)	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	-15 (-17.67, -12.33)	TXA Oral
Wang, 2018	High	Hemoglobin Drop (g/dL)	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	-17.3 (-20.16, -14.44)	TXA Oral
Wang, 2018	High	Hemoglobin Drop (g/dL)	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	-18.7 (-21.38, -16.02)	TXA Oral
Wang, 2018	High	Hemoglobin Drop (g/dL)	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	-20 (-22.81, -17.19)	TXA Oral
Wang, 2018	High	Hidden Blood Loss	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	-81.6 (-178.31, 15.11)	NS
Wang, 2018	High	Hidden Blood Loss	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	-253.8 (-363.97, -143.63)	TXA Oral
Wang, 2018	High	Hidden Blood Loss	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	-209.6 (-296.49, -122.71)	TXA Oral
Wang, 2018	High	Hidden Blood Loss	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	-447.7 (-546.99, -348.41)	TXA Oral
Wang, 2018	High	Hidden Blood Loss	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	-329.2 (-409.71, -248.69)	TXA Oral
Wang, 2018	High	Hidden Blood Loss	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	-580.2 (-674.48, -485.92)	TXA Oral
Wang, 2018	High	Hidden Blood Loss	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	-440.3 (-511.57, -369.03)	TXA Oral

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wang, 2018	High	Hidden Blood Loss	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	-606.7 (-702.10, -511.30)	TXA Oral
Wang, 2018	High	Length of Stay	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	0.2 (-0.18, 0.58)	NS
Wang, 2018	High	Length of Stay	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	-0.2 (-0.54, 0.14)	NS
Wang, 2018	High	Length of Stay	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	-0.3 (-0.64, 0.04)	NS
Wang, 2018	High	Length of Stay	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	-0.1 (-0.44, 0.24)	NS
Wang, 2018	High	Patients Received Blood Transfusion	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	RR	0.33(0.04,3.11)	NS
Wang, 2018	High	Patients Received Blood Transfusion	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	RD	-0.05(-0.11,0.01)	NS
Wang, 2018	High	Patients Received Blood Transfusion	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	RD	-0.05(-0.11,0.01)	NS
Wang, 2018	High	Patients Received Blood Transfusion	Postop.	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	RD	-0.05(-0.11,0.01)	NS
Wang, 2018	High	Total Blood Loss	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	-160.3 (-258.07, -62.53)	TXA Oral
Wang, 2018	High	Total Blood Loss	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr postop	Control	Mean Difference	-332.4 (-451.24, -213.56)	TXA Oral
Wang, 2018	High	Total Blood Loss	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	-282.1 (-367.68, -196.52)	TXA Oral
Wang, 2018	High	Total Blood Loss	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3 hr and 7hr postop	Control	Mean Difference	-520.1 (-626.69, -413.51)	TXA Oral
Wang, 2018	High	Total Blood Loss	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	-405.9 (-485.54, -326.26)	TXA Oral
Wang, 2018	High	Total Blood Loss	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11hrs postop	Control	Mean Difference	-656.8 (-760.18, -553.42)	TXA Oral

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wang, 2018	High	Total Blood Loss	Postop 1 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	-514.6 (-592.28, -436.92)	TXA Oral
Wang, 2018	High	Total Blood Loss	Postop 3 days	TXA Oral: 2 g TXA 2 hr preop then 1 g TXA 3, 7, 11, and 15 hr postop	Control	Mean Difference	-680.9 (-785.12, -576.68)	TXA Oral
Bradshaw, 2012	High	Drainage (mL)	Postop 24 hrs	TXA Oral: 1500 mg TXA	Control: Placebo	Author Reported - Two-group t-test;	N/A	TXA Oral favored over Control
Bradshaw, 2012	High	Hemoglobin (g/dL)	Postop 24 hrs	TXA Oral: 1500 mg TXA	Control: Placebo	Author Reported - Two-group t-test;	N/A	TXA Oral favored over Control

Table 6354: PICO 6- Tranexamic Acid PAI- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Mao, 2016	High	ROM (deg)	Postop 1 mos.	TXA Peri Articular Injection: 2 g TXA PAI	Control	Mean Difference	0.9 (-1.36, 3.16)	NS
Mao, 2016	High	ROM (deg)	Postop 2 mos.	TXA Peri Articular Injection: 2 g TXA PAI	Control	Mean Difference	2.1 (-0.57, 4.77)	NS
Mao, 2016	High	ROM (deg)	Postop 3 mos.	TXA Peri Articular Injection: 2 g TXA PAI	Control	Mean Difference	-1 (-2.71, 0.71)	NS

Table 6455: PICO 6- Tranexamic Acid PAI- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Mao, 2016	High	Blood Loss	Postop 14days	TXA Peri Articular Injection: 2 g TXA PAI	Control	Mean Difference	-625.5 (-959.59, -291.41)	TXA Peri Articular Injection
Mao, 2016	High	Drainage (mL)	Postop 14days	TXA Peri Articular Injection: 2 g TXA PAI	Control	Mean Difference	-407.7 (-514.05, -301.35)	TXA Peri Articular Injection
Mao, 2016	High	Hemoglobin Drop (g/dL)	Postop 14days	TXA Peri Articular Injection: 2 g TXA PAI	Control	Mean Difference	-9.2 (-14.34, -4.06)	TXA Peri Articular Injection
Mao, 2016	High	Patients Received Blood Transfusion	Postop 14days	TXA Peri Articular Injection: 2 g TXA PAI	Control	RR	0.43(0.20,0.90)	TXA Peri Articular Injection

Table 6556: PICO 6- Tranexamic Acid Topical- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yuan, 2017	High	Deep Vein Thrombosis	Postop.	TXA Topical: 3 g TXA (total 60 mL solution)	Control	RD	-0.01(-0.02,0.01)	NS
Yuan, 2017	High	Intramuscular Venous Thrombosis	Postop.	TXA Topical: 3 g TXA (total 60 mL solution)	Control	RR	1.13(0.45,2.83)	NS
Yuan, 2017	High	Pulmonary Embolism	Postop.	TXA Topical: 3 g TXA (total 60 mL solution)	Control	RD	0.00(0.00,0.00)	NS
Georgiadis, 2013	High	Deep Vein Thrombosis	Postop 6 wks.	TXA Topical: 2 g TXA in 75 mL saline	Control: Saline	RR	0.45(0.15,1.38)	NS
Georgiadis, 2013	High	Pulmonary Embolism	Postop 6 wks.	TXA Topical: 2 g TXA in 75 mL saline	Control: Saline	RR	0.51(0.05,5.45)	NS
Wong, 2010	High	Deep Vein Thrombosis	Postop.	TXA Topical: 1.5 g TXA	Control	RR	2.26(0.22,23.71)	NS
Wong, 2010	High	Deep Vein Thrombosis	Postop.	TXA Topical: 3 g TXA	Control	RR	1.06(0.07,16.27)	NS
Wong, 2010	High	Infection (Infection)	Postop.	TXA Topical: 1.5 g TXA	Control	RD	0.03(-0.03,0.09)	NS
Wong, 2010	High	Infection (Infection)	Postop.	TXA Topical: 3 g TXA	Control	RD	0.00(0.00,0.00)	NS
Wong, 2010	High	Pulmonary Embolism	Postop.	TXA Topical: 1.5 g TXA	Control	RR	1.13(0.07,17.30)	NS
Wong, 2010	High	Pulmonary Embolism	Postop.	TXA Topical: 3 g TXA	Control	RD	-0.03(-0.08,0.03)	NS

Table 6657: PICO 6- Tranexamic Acid Topical- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wong, 2010	High	WOMAC Total	Preop.	TXA Topical: 1.5 g TXA	Control	Mean Difference	1 (-9.43, 11.43)	NS
Wong, 2010	High	WOMAC Total	Postop 6 wks.	TXA Topical: 1.5 g TXA	Control	Mean Difference	4 (-3.28, 11.28)	NS
Wong, 2010	High	WOMAC Total	Preop.	TXA Topical: 3 g TXA	Control	Mean Difference	0 (-10.73, 10.73)	NS
Wong, 2010	High	WOMAC Total	Postop 6 wks.	TXA Topical: 3 g TXA	Control	Mean Difference	5 (-3.25, 13.25)	NS

Table 6758: PICO 6- Tranexamic Acid Topical- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Georgiadis, 2013	High	ROM (deg)	Postop 3 wks.	TXA Topical: 2 g TXA in 75 mL saline	Control: Saline	Mean Difference	-0.7 (-7.25, 5.85)	NS
Georgiadis, 2013	High	ROM (deg)	Postop 6 wks.	TXA Topical: 2 g TXA in 75 mL saline	Control: Saline	Mean Difference	5.8 (0.09, 11.51)	TXA Topical
Wong, 2010	High	ROM (deg)	Preop.	TXA Topical: 1.5 g TXA	Control	Mean Difference	-3 (-8.32, 2.32)	NS
Wong, 2010	High	ROM (deg)	Postop 2 days	TXA Topical: 1.5 g TXA	Control	Mean Difference	-4 (-11.07, 3.07)	NS
Wong, 2010	High	ROM (deg)	Postop 6 wks.	TXA Topical: 1.5 g TXA	Control	Mean Difference	1 (-5.40, 7.40)	NS
Wong, 2010	High	ROM (deg)	Preop.	TXA Topical: 3 g TXA	Control	Mean Difference	-3 (-8.71, 2.71)	NS
Wong, 2010	High	ROM (deg)	Postop 2 days	TXA Topical: 3 g TXA	Control	Mean Difference	-4 (-10.40, 2.40)	NS
Wong, 2010	High	ROM (deg)	Postop 6 wks.	TXA Topical: 3 g TXA	Control	Mean Difference	-1 (-8.81, 6.81)	NS

Table 6859: PICO 6- Tranexamic Acid Topical- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yuan, 2017	High	Drainage (mL)	Postop 48 hrs	TXA Topical: 3 g TXA (total 60 mL solution)	Control	Mean Difference	-42.43 (-52.91, -31.95)	TXA Topical
Yuan, 2017	High	Hemoglobin (g/dL)	Preop.	TXA Topical: 3 g TXA (total 60 mL solution)	Control	Mean Difference	-0.12 (-0.30, 0.06)	NS
Yuan, 2017	High	Hemoglobin Drop (g/dL)	Postop 48 hrs	TXA Topical: 3 g TXA (total 60 mL solution)	Control	Mean Difference	-0.42 (-0.53, -0.31)	TXA Topical
Yuan, 2017	High	Patients Received Blood Transfusion	Postop.	TXA Topical: 3 g TXA (total 60 mL solution)	Control	RR	0.47(0.28,0.80)	TXA Topical
Ugurlu, 2017	Low	Drainage (mL)	Postop.	TXA Topical: 100 mL TXA	Control	Author Reported - Chi-Square test;	N/A	TXA Topical vs. Control
Ugurlu, 2017	Low	Hemoglobin (g/dL)	Postop.	TXA Topical: 100 mL TXA	Control	Mean Difference	0.23 (-0.32, 0.78)	NS
Ugurlu, 2017	Low	Hemoglobin (g/dL)	Postop 1 days	TXA Topical: 100 mL TXA	Control	Mean Difference	0.88 (0.33, 1.43)	TXA Topical
Ugurlu, 2017	Low	Hemoglobin (g/dL)	Postop 2 days	TXA Topical: 100 mL TXA	Control	Mean Difference	0.87 (0.32, 1.42)	TXA Topical
Ugurlu, 2017	Low	Length of Stay	Postop.	TXA Topical: 100 mL TXA	Control	Author Reported - Chi-Square test;	N/A	TXA Topical vs. Control
Guzel, 2016	High	Hemoglobin (g/dL)	Preop.	TXA Topical: 1.5 g TXA in 100 mL saline	Control	Mean Difference	-0.03 (-0.31, 0.25)	NS
Guzel, 2016	High	Hemoglobin (g/dL)	Postop 1 days	TXA Topical: 1.5 g TXA in 100 mL saline	Control	Mean Difference	0.73 (0.46, 1.00)	TXA Topical
Guzel, 2016	High	Hemoglobin (g/dL)	Postop 2 days	TXA Topical: 1.5 g TXA in 100 mL saline	Control	Mean Difference	1.24 (0.95, 1.53)	TXA Topical
Guzel, 2016	High	Total Drainage (mL)	Postop.	TXA Topical: 1.5 g TXA in 100 mL saline	Control	Mean Difference	-585.52 (-639.13, -531.91)	TXA Topical
Tzatzairis, 2016	High	Blood Loss	Postop 4 days	TXA Topical: 1 g TXA in 100 mL saline	Control: Saline	Mean Difference	-307.78 (-460.92, -154.64)	TXA Topical

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Tzatzairis, 2016	High	Hemoglobin (g/dL)	Postop 4 days	TXA Topical: 1 g TXA in 100 mL saline	Control: Saline	Mean Difference	0.03 (-0.43, 0.49)	NS
Tzatzairis, 2016	High	Length of Stay	Postop 4 days	TXA Topical: 1 g TXA in 100 mL saline	Control: Saline	Mean Difference	-0.03 (-0.03, -0.03)	TXA Topical
Tzatzairis, 2016	High	Hemoglobin Drop (g/dL)	Postop 4 days	TXA Topical: 1 g TXA in 100 mL saline	Control: Saline	Mean Difference	-1.42 (-2.06, -0.78)	TXA Topical
Tzatzairis, 2016	High	Patients Received Blood Transfusion	Postop 4 days	TXA Topical: 1 g TXA in 100 mL saline	Control: Saline	RR	0.47(0.21,1.02)	NS
Drosos, 2016	High	Blood Loss	Postop 4 days	TXA Topical: 1 g TXA in 30 mL saline	Control: Saline	Mean Difference	-294.34 (-445.23, -143.45)	TXA Topical
Drosos, 2016	High	Hemoglobin (g/dL)	Postop 4 days	TXA Topical: 1 g TXA in 30 mL saline	Control: Saline	Mean Difference	0.61 (0.12, 1.10)	TXA Topical
Drosos, 2016	High	Patients Received Blood Transfusion	Postop 4 days	TXA Topical: 1 g TXA in 30 mL saline	Control: Saline	RR	0.17(0.05,0.51)	TXA Topical
Aguilera, 2015	High	Blood Loss	Postop.	TXA Topical: 1 g of TXA in a 10 mL solution	Control	Mean Difference	-394.15 (-611.55, -176.75)	TXA Topical
Aguilera, 2015	High	Blood Loss (From the Drain)	Postop.	TXA Topical: 1 g of TXA in a 10 mL solution	Control	Mean Difference	-337.96 (-435.16, -240.76)	TXA Topical
Aguilera, 2015	High	Blood Transfusions (Units)	Postop.	TXA Topical: 1 g of TXA in a 10 mL solution	Control	RR	0.26(0.12,0.54)	TXA Topical
Aguilera, 2015	High	Patients Received Blood Transfusion	Postop.	TXA Topical: 1 g of TXA in a 10 mL solution	Control	RR	0.31(0.11,0.88)	TXA Topical
Aguilera, 2015	High	Hemoglobin (g/dL)	Postop 24 hrs	TXA Topical: 1 g of TXA in a 10 mL solution	Control	Mean Difference	-0.6 (-1.46, 0.26)	NS
Aguilera, 2015	High	Hidden Blood Loss	Postop.	TXA Topical: 1 g of TXA in a 10 mL solution	Control	Mean Difference	-32.85 (-263.30, 197.60)	NS
Keyhani, 2016	High	Blood Loss	Postop.	TXA Topical: 3 g of TXA in 100 mL saline	Control: Saline	Mean Difference	-72 (-99.60, -44.40)	TXA Topical
Keyhani, 2016	High	Patients Received Blood Transfusion	Postop.	TXA Topical: 500 mg TXA in 100 cc saline	Control: Saline	RR	0.20(0.05,0.86)	TXA Topical

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Keyhani, 2016	High	Patients Received Blood Transfusion	Postop.	TXA Topical: 3 g of TXA in 100 mL saline	Control: Saline	RR	0.30(0.09,1.01)	NS
Keyhani, 2016	High	Hemoglobin (g/dL)	Postop 24 hrs	TXA Topical: 3 g of TXA in 100 mL saline	Control: Saline	Mean Difference	1.7 (1.02, 2.38)	TXA Topical
Georgiadis, 2013	High	Blood Loss	Postop 6 wks.	TXA Topical: 2 g TXA in 75 mL saline	Control: Saline	Mean Difference	-352.9 (-524.93, -180.87)	TXA Topical
Georgiadis, 2013	High	Hemoglobin Drop (g/dL)	Postop 6 wks.	TXA Topical: 2 g TXA in 75 mL saline	Control: Saline	Mean Difference	0.9 (0.35, 1.45)	Control
Georgiadis, 2013	High	Length of Stay	Postop 6 wks.	TXA Topical: 2 g TXA in 75 mL saline	Control: Saline	Mean Difference	-0.1 (-0.45, 0.25)	NS
Wong, 2010	High	Drainage (mL)	Postop.	TXA Topical: 1.5 g TXA	Control	Mean Difference	-224 (-796.46, 348.46)	NS
Wong, 2010	High	Drainage (mL)	Postop.	TXA Topical: 3 g TXA	Control	Mean Difference	-69 (-560.20, 422.20)	NS
Wong, 2010	High	Hemoglobin (g/dL)	Preop.	TXA Topical: 1.5 g TXA	Control	Mean Difference	0.1 (-0.48, 0.68)	NS
Wong, 2010	High	Hemoglobin (g/dL)	Postop 2 days	TXA Topical: 1.5 g TXA	Control	Mean Difference	1.4 (0.83, 1.97)	TXA Topical
Wong, 2010	High	Hemoglobin (g/dL)	Preop.	TXA Topical: 3 g TXA	Control	Mean Difference	0.1 (-0.52, 0.72)	NS
Wong, 2010	High	Hemoglobin (g/dL)	Postop 2 days	TXA Topical: 3 g TXA	Control	Mean Difference	1.5 (0.93, 2.07)	TXA Topical
Wong, 2010	High	Length of Stay	Postop.	TXA Topical: 1.5 g TXA	Control	Mean Difference	0.4 (-0.32, 1.12)	NS
Wong, 2010	High	Length of Stay	Postop.	TXA Topical: 3 g TXA	Control	Mean Difference	0.2 (-0.25, 0.65)	NS
Wong, 2010	High	Readmissions	Postop.	TXA Topical: 1.5 g TXA	Control	RD	-0.03(-0.08,0.03)	NS
Wong, 2010	High	Readmissions	Postop.	TXA Topical: 3 g TXA	Control	RD	-0.03(-0.08,0.03)	NS
Wong, 2010	High	Total Blood Loss	Postop 6 wks.	TXA Topical: 1.5 g TXA	Control	Mean Difference	-315 (-495.31, -134.69)	TXA Topical
Wong, 2010	High	Total Blood Loss	Postop 6 wks.	TXA Topical: 3 g TXA	Control	Mean Difference	-402 (-585.15, -218.85)	TXA Topical

Table 6960: PICO 6- Tranexamic Acid Topical- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wong, 2010	High	VAS Pain	Preop.	TXA Topical: 1.5 g TXA	Control	Mean Difference	-0.3 (-1.84, 1.24)	NS
Wong, 2010	High	VAS Pain	Postop 2 days	TXA Topical: 1.5 g TXA	Control	Mean Difference	1.1 (-0.10, 2.30)	NS
Wong, 2010	High	VAS Pain	Postop 6 wks.	TXA Topical: 1.5 g TXA	Control	Mean Difference	0.8 (-0.12, 1.72)	NS
Wong, 2010	High	VAS Pain	Preop.	TXA Topical: 3 g TXA	Control	Mean Difference	-0.2 (-1.77, 1.37)	NS
Wong, 2010	High	VAS Pain	Postop 2 days	TXA Topical: 3 g TXA	Control	Mean Difference	1.2 (0.07, 2.33)	Control
Wong, 2010	High	VAS Pain	Postop 6 wks.	TXA Topical: 3 g TXA	Control	Mean Difference	0.8 (-0.12, 1.72)	NS

Table 7061: PICO 7- Bilateral Simultaneous TKA vs. Bilateral Staged TKA- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goyal, 2020	Low	Cardiac Complications	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.12(0.25,4.95)	NS
Goyal, 2020	Low	Deep Vein Thrombosis	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.00(-0.00,0.01)	NS
Goyal, 2020	Low	Delirium	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.68(0.31,9.08)	NS
Goyal, 2020	Low	Hyponatremia	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.05(0.29,3.86)	NS
Goyal, 2020	Low	Pulmonary Complications	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.56(0.09,3.32)	NS
Goyal, 2020	Low	Pulmonary Embolism	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.00(0.00,0.00)	NS
Goyal, 2020	Low	Infection (Surgical Site Infection)	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	5.04(0.61,41.53)	NS
Saini, 2020	Low	Adverse Events	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Author Reported - t-test; Pearson x2test;	0.90(0.30,2.60)	NS
Feng, 2019	Low	Adverse Events	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.11(0.32,3.86)	NS
Feng, 2019	Low	Wound Dehiscence (Minor)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	2.77(0.26,29.47)	NS
Feng, 2019	Low	Respiratory Complications	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.69(0.07,7.37)	NS
Feng, 2019	Low	Skin Necrosis	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.02(-0.05,0.02)	NS
Feng, 2019	Low	Infection (Superficial Infection)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.38(0.09,21.47)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Chua, 2018	Low	Infection (Infection)	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Week Staged Bilateral TKA	RR	0.88(0.52,1.47)	NS
Chua, 2018	Low	Infection (Infection)	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	3 Month Staged Bilateral TKA	RR	0.83(0.58,1.20)	NS
Chua, 2018	Low	Infection (Infection)	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Month Staged Bilateral TKA	RR	0.71(0.58,0.88)	Same Day Simultaneous Bilateral TKA
Chua, 2018	Low	Instability	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Week Staged Bilateral TKA	RR	3.76(0.52,27.08)	NS
Chua, 2018	Low	Instability	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	3 Month Staged Bilateral TKA	RR	1.57(0.64,3.90)	NS
Chua, 2018	Low	Instability	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Month Staged Bilateral TKA	RR	1.04(0.66,1.63)	NS
Chua, 2018	Low	Loosening/Lysis	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Week Staged Bilateral TKA	RR	0.81(0.52,1.27)	NS
Chua, 2018	Low	Loosening/Lysis	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	3 Month Staged Bilateral TKA	RR	0.97(0.69,1.37)	NS
Chua, 2018	Low	Loosening/Lysis	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Month Staged Bilateral TKA	RR	1.01(0.82,1.26)	NS
Chua, 2018	Low	Other Reason for Revision	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Week Staged Bilateral TKA	RR	0.75(0.47,1.21)	NS
Chua, 2018	Low	Other Reason for Revision	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	3 Month Staged Bilateral TKA	RR	1.35(0.87,2.11)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Chua, 2018	Low	Other Reason for Revision	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Month Staged Bilateral TKA	RR	1.20(0.94,1.54)	NS
Lindberg-Larsen,2019	Low	Anemia	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.41(0.05,3.73)	NS
Lindberg-Larsen,2019	Low	Cardiac Complications	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.04(-0.04,0.12)	NS
Lindberg-Larsen,2019	Low	Deep Vein Thrombosis	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.24(0.19,8.19)	NS
Lindberg-Larsen,2019	Low	Deep Vein Thrombosis, but not found	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.14(0.02,1.02)	NS
Lindberg-Larsen,2019	Low	Erysipelas	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.24(0.19,8.19)	NS
Lindberg-Larsen,2019	Low	Fall	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.06(-0.15,0.02)	NS
Lindberg-Larsen,2019	Low	Gastrointestinal Complications	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	2.48(0.49,12.45)	NS
Lindberg-Larsen,2019	Low	Hematoma	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.04(-0.04,0.12)	NS
Lindberg-Larsen,2019	Low	Infection (Infection(re-operated))	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.20(0.04,0.36)	Staged Bilateral TKA
Lindberg-Larsen,2019	Low	Infection (Infection Suspected, but not found)	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.62(0.12,3.11)	NS
Lindberg-Larsen,2019	Low	Pneumonia	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.03(-0.09,0.03)	NS
Lindberg-Larsen,2019	Low	Urologic/Renal Complications	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	3.72(0.41,33.61)	NS
Lindberg-Larsen,2019	Low	Wound Secretion (Notre-operated)	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.06(-0.15,0.02)	NS
Lindberg-Larsen,2019	Low	Wound Secretion (Re-operated)	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.04(-0.04,0.12)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lindberg-Larsen,2019	Low	Infection (Wound Rupture +Infection (re-operated))	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.03(-0.09,0.03)	NS
Arslan, 2018	Low	Deep Vein Thrombosis	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.27(0.22,7.36)	NS
Arslan, 2018	Low	Hematoma	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.97(0.37,2.52)	NS
Arslan, 2018	Low	Infection (Irrigation and Debridement, polyethylene insert exchanging due to periprosthetic infection)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.85(0.05,13.26)	NS
Arslan, 2018	Low	Pulmonary Embolism	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.69(0.16,18.24)	NS
Arslan, 2018	Low	Revision due to aseptic loosening	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.42(0.04,4.56)	NS
Arslan, 2018	Low	Infection (Revision due to periprosthetic Infection)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.01(-0.01,0.04)	NS
Arslan, 2018	Low	Infection (Superficial Infection)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.66(0.26,1.67)	NS
Sobh, 2018	Low	Deep Vein Thrombosis	Postop 90days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	3.59(1.28,10.06)	Staged Bilateral TKA
Sobh, 2018	Low	Infection (Infection)	Postop 90days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.01,0.00)	NS
Sobh, 2018	Low	Other Adverse Events	Postop 90days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.76(0.53,1.08)	NS
Hadley, 2017	Low	Adverse Events	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	2.35(0.31,17.65)	NS
Hadley, 2017	Low	Infection (Deep Superficial Infection)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.90(0.11,7.61)	NS
Hadley, 2017	Low	Pulmonary Embolism	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.02(0.01,0.03)	Staged Bilateral TKA
Hadley, 2017	Low	Respiratory Arrest	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.00(-0.00,0.01)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Bohm, 2016	Low	Cardiac Complications -Inpatient	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.06(0.86,1.30)	NS
Bohm, 2016	Low	Cardiac Complications -Outpatient	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.00, -0.00)	Simultaneous Bilateral TKA
Bohm, 2016	Low	Cardiac Complications -Overall	Postop 90days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.18(0.97,1.43)	NS
Bohm, 2016	Low	Death/Mortality (In Hospital)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	2.65(1.19,5.90)	Staged Bilateral TKA
Bohm, 2016	Low	Infection (Knee Infection -Inpatient)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.00, -0.00)	Simultaneous Bilateral TKA
Bohm, 2016	Low	Infection (Knee Infection -Outpatient)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.49(0.33,0.75)	Simultaneous Bilateral TKA
Bohm, 2016	Low	Infection (Knee Infection -Overall)	Postop 90days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.56(0.39,0.81)	Simultaneous Bilateral TKA
Bohm, 2016	Low	Pulmonary Embolism (Inpatient)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.38(1.05,1.81)	Staged Bilateral TKA
Bohm, 2016	Low	Pulmonary Embolism (Outpatient)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.81(0.98,3.33)	NS
Bohm, 2016	Low	Pulmonary Embolism (Overall)	Postop 90days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.33(1.03,1.72)	Staged Bilateral TKA
Lee, 2016	Low	Fixed Flexion Deformity (deg)	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	20.7 (16.04, 25.36)	Staged Bilateral TKA
Lee, 2016	Low	Fixed Flexion Deformity (deg)	Postop 2 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-1.6 (-3.40, 0.20)	NS
Zaho, 2015	Low	Adverse Events	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.26(0.59,2.72)	NS
Zaho, 2015	Low	Deep Vein Thrombosis	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.20(0.31,4.74)	NS
Zaho, 2015	Low	Hematoma	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.08(0.33,3.58)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zaho, 2015	Low	Pulmonary Embolism	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.03(-0.08,0.02)	NS
Zaho, 2015	Low	Wound Healing Problems	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	2.17(0.23,20.06)	NS
Ma, 2015	Low	Adverse Events	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.75(0.19,2.93)	NS
Ma, 2015	Low	Bearing Dislocation	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.25(0.08,19.30)	NS
Ma, 2015	Low	Deep Vein Thrombosis	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.63(0.06,6.62)	NS
Ma, 2015	Low	Lateral Compartment Osteoarthritis	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.02(-0.07,0.02)	NS
Ma, 2015	Low	Infection (Superficial Infection)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.25(0.08,19.30)	NS
Poultsides, 2015	Low	Accidental Puncture or Laceration During a Procedure	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.00,0.00)	NS
Poultsides, 2015	Low	Acute Myocardial Infarction	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	5.22(0.48,57.28)	NS
Poultsides, 2015	Low	Adverse Events	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.87(0.11,6.65)	NS
Poultsides, 2015	Low	Cardiac Complications	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.74(0.52,5.84)	NS
Poultsides, 2015	Low	Central Nervous System Complications (Infarction)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.00(0.00,0.00)	NS
Poultsides, 2015	Low	Deep Vein Thrombosis	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.95(1.05,3.63)	Staged Bilateral TKA
Poultsides, 2015	Low	Delirium	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.55(0.07,4.08)	NS
Poultsides, 2015	Low	Wound Dehiscence (External)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Poultsides, 2015	Low	Wound Dehiscence (Internal)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.00(0.00,0.00)	NS
Poultsides, 2015	Low	Wound Dehiscence	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.00(0.00,0.00)	NS
Poultsides, 2015	Low	Hematoma	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.01, -0.00)	Simultaneous Bilateral TKA
Poultsides, 2015	Low	Hypotension	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	4.02(1.98,8.17)	Staged Bilateral TKA
Poultsides, 2015	Low	Major Adverse Events	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.79(1.20,2.67)	Staged Bilateral TKA
Poultsides, 2015	Low	Minor Adverse Events	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	2.28(1.78,2.91)	Staged Bilateral TKA
Poultsides, 2015	Low	Nonhealing Surgical Wound	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.00,0.00)	NS
Poultsides, 2015	Low	Paralytic Ileus	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	3.27(1.87,5.69)	Staged Bilateral TKA
Poultsides, 2015	Low	Peripheral Vascular Complications	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	3.48(0.36,33.28)	NS
Poultsides, 2015	Low	Pleural Effusion	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	3.48(0.71,17.11)	NS
Poultsides, 2015	Low	Pneumonia	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.01, -0.00)	Simultaneous Bilateral TKA
Poultsides, 2015	Low	Pulmonary Complications	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.71(0.86,3.39)	NS
Poultsides, 2015	Low	Pulmonary Embolism	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	4.64(1.45,14.90)	Staged Bilateral TKA
Poultsides, 2015	Low	Sepsis	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.00,0.00)	NS
Poultsides, 2015	Low	Seroma	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Poultsides, 2015	Low	Shock/Cardiorespiratory Arrest	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	-0.00(-0.00,0.00)	NS
Poultsides, 2015	Low	Infection (Superficial Incisional Surgical Site Infection and Cellulitis)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	2.99(1.22,7.28)	Staged Bilateral TKA
Poultsides, 2015	Low	Syncope and Collapse	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	3.48(1.67,7.27)	Staged Bilateral TKA
Poultsides, 2015	Low	Tachycardia	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.73(0.27,1.99)	NS
Poultsides, 2015	Low	Urinary Retention	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.90(0.43,8.49)	NS
Poultsides, 2015	Low	Infection (Urinary Tract Infection)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	2.58(1.61,4.14)	Staged Bilateral TKA
Seol, 2016	Low	Minor Adverse Events	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	1.07(0.45,2.53)	NS
Seol, 2016	Low	Myocardial Infarction or Stroke	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	1.04(0.20,5.32)	NS
Seol, 2016	Low	Pulmonary Embolism	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RD	0.00(0.00,0.00)	NS
Seol, 2016	Low	Infection (Deep Infection)	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	0.69(0.17,2.88)	NS
Seol, 2016	Low	Cerebrovascular Accident	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	1.66(0.35,7.77)	NS
Seol, 2016	Low	Minor Adverse Events	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	0.55(0.37,0.84)	Simultaneous TKA
Seol, 2016	Low	Infection (Superficial Infection)	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	0.27(0.12,0.61)	Simultaneous TKA
Seol, 2016	Low	Deep Vein Thrombosis	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RD	0.00(-0.00,0.01)	NS
Seol, 2016	Low	Confusion	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	1.25(0.40,3.83)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Seol, 2016	Low	Pneumonia	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	0.73(0.21,2.46)	NS
Seol, 2016	Low	Infection (Urinary Tract Infection)	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	1.11(0.44,2.80)	NS
Seol, 2016	Low	Transient Acute Renal Failure	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	0.10(0.02,0.49)	Simultaneous TKA
Seol, 2016	Low	Total Adverse Events	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	RR	0.64(0.44,0.91)	Simultaneous TKA
Sarzaeem, 2017	Low	Deep Vein Thrombosis	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.03(-0.01,0.08)	NS
Yoon, 2010	Low	Hypovolemic Shock	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	-0.01(-0.02,0.01)	NS
Yoon, 2010	Low	Pneumonia	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.01(-0.01,0.02)	NS
Yoon, 2010	Low	Confusion	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.02(-0.01,0.04)	NS
Yoon, 2010	Low	Uremic Encephalitis	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.01(-0.01,0.02)	NS
Yoon, 2010	Low	Acute Renal Failure/Dialysis	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.01(-0.01,0.02)	NS
Yoon, 2010	Low	ICU Transfers	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.01(-0.01,0.02)	NS
Yoon, 2010	Low	Thromboembolic Complications	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.00(0.00,0.00)	NS
Yoon, 2010	Low	Death/Mortality	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.00(0.00,0.00)	NS
Yoon, 2010	Low	Total Adverse Events	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	RR	6.00(0.73,49.08)	NS
Siedlecki, 2018	Low	Major Adverse Events	Postop 36.8mos	Simultaneous TKA	Staged Bilateral TKA	RR	0.59(0.16,2.16)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Siedlecki, 2018	Low	Minor Adverse Events	Postop 36.8mos	Simultaneous TKA	Staged Bilateral TKA	RR	1.18(0.11,12.40)	NS
Chua, 2018	Low	Total Revisions	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Week Staged Bilateral TKA	RR	0.86(0.68,1.10)	NS
Chua, 2018	Low	Total Revisions	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	3 Month Staged Bilateral TKA	RR	1.09(0.89,1.32)	NS
Chua, 2018	Low	Total Revisions	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Month Staged Bilateral TKA	RR	0.98(0.88,1.09)	NS
Bohm, 2016	Low	Total Revisions	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.08(0.77,1.50)	NS
Bohm, 2016	Low	Total Revisions	Postop 2 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.04(0.79,1.36)	NS
Bohm, 2016	Low	Total Revisions	Postop 3 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.03(0.82,1.30)	NS
Wan, 2021	Low	Total Revisions	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RR	0.36(0.10,1.35)	NS
Wan, 2021	Low	Persistent Wound Discharge Requiring Irrigation and Debridement	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RR	0.42(0.08,2.24)	NS
Wan, 2021	Low	Wound Hematoma Requiring Open Drainage	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RR	0.84(0.05,13.25)	NS
Wan, 2021	Low	Infection (Periprosthetic Infection)	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	-0.01(-0.04,0.01)	NS
Wan, 2021	Low	Intra-Articular Hematoma	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	-0.01(-0.04,0.01)	NS
Wan, 2021	Low	Medial Collateral Ligament Injury/Avulsion	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.02(-0.01,0.05)	NS
Wan, 2021	Low	Patella-Tendon Insertion Avulsion	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.01(-0.01,0.03)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wan, 2021	Low	Fracture	Intraop.	Simultaneous TKA	Staged Bilateral TKA	RR	0.42(0.04,4.56)	NS
Wan, 2021	Low	Popliteal Artery Laceration	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	-0.01(-0.04,0.01)	NS
Wan, 2021	Low	Stroke	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.01(-0.01,0.03)	NS
Wan, 2021	Low	Infection (Chest Infection)	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.04(0.00,0.08)	Staged Bilateral TKA
Wan, 2021	Low	Infection (Urinary Tract Infection)	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RR	0.42(0.08,2.24)	NS
Wan, 2021	Low	Acute Renal Failure/Dialysis	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	-0.01(-0.04,0.01)	NS
Wan, 2021	Low	Insomnia	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.01(-0.01,0.03)	NS
Wan, 2021	Low	Gastrointestinal Bleeding	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.01(-0.01,0.03)	NS
Wan, 2021	Low	Deep Vein Thrombosis	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	0.01(-0.01,0.03)	NS
Wan, 2021	Low	Congestive Heart Failure	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	-0.01(-0.04,0.01)	NS
Wan, 2021	Low	Aspirin-Induced Gastrointestinal Upset	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	-0.01(-0.04,0.01)	NS
Wan, 2021	Low	Transient Fat Atrial Fibrillation	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	-0.01(-0.04,0.01)	NS
Wan, 2021	Low	Transient Hypotension (resolved only with fluid replacement)	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	-0.01(-0.04,0.01)	NS
Wan, 2021	Low	Peroneal Palsy	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RD	-0.01(-0.04,0.01)	NS
Wan, 2021	Low	Surgical Complications	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RR	0.65(0.26,1.68)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wan, 2021	Low	Total Medical Complications	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RR	0.84(0.37,1.92)	NS

Table 7162: PICO 7- Bilateral Simultaneous TKA vs. Bilateral Staged TKA- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goyal, 2020	Low	Oxford Knee Score	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.5 (-1.22, 0.22)	NS
Feng, 2019	Low	KSS Total (Left Knee)	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.2 (-2.42, 2.02)	NS
Feng, 2019	Low	KSS Total (Left Knee)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.7 (-1.79, 3.19)	NS
Feng, 2019	Low	KSS Total (Right Knee)	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.5 (-1.60, 2.60)	NS
Feng, 2019	Low	KSS Total (Right Knee)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.5 (-0.74, 3.74)	NS
Feng, 2019	Low	KSS Total (Left Knee)	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.2 (-2.16, 2.56)	NS
Feng, 2019	Low	KSS Total (Left Knee)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	2.4 (-0.32, 5.12)	NS
Feng, 2019	Low	KSS Total (Right Knee)	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.4 (-1.29, 4.09)	NS
Feng, 2019	Low	KSS Total (Right Knee)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-60.4 (-63.45, -57.35)	Staged Bilateral TKA
Arslan, 2018	Low	KSS Total	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.8 (-1.69, 3.29)	NS
Arslan, 2018	Low	KSS Total	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.7 (-1.66, 3.06)	NS
Huang, 2018	Low	WOMAC Total	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.3 (-3.94, 3.34)	NS
Huang, 2018	Low	WOMAC Total	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.6 (-4.16, 5.36)	NS
Lee, 2016	Low	KSS Total	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.9 (-10.16, 8.36)	NS
Lee, 2016	Low	KSS Total	Postop 2 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-1.1 (-6.89, 4.69)	NS
Lee, 2016	Low	Oxford Knee Score	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-2.1 (-6.63, 2.43)	NS
Lee, 2016	Low	Oxford Knee Score	Postop 2 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.5 (-3.28, 2.28)	NS
Zaho, 2015	Low	KSS Total (points; no scale provided)	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.3 (-2.80, 5.40)	NS
Zaho, 2015	Low	KSS Total (points; no scale provided)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.6 (-6.35, 5.15)	NS
Ma, 2015	Low	Oxford Knee Score	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.3 (-2.14, 2.74)	NS
Ma, 2015	Low	Oxford Knee Score	Postop 1 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.9 (0.33, 3.47)	Staged Bilateral TKA
Ma, 2015	Low	Oxford Knee Score	Postop 3 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.3 (-0.66, 1.26)	NS
Ma, 2015	Low	Oxford Knee Score	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.4 (-0.75, 1.55)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ma, 2015	Low	Oxford Knee Score	Postop 50mos	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.3 (-1.10, 1.70)	NS
Seol, 2016	Low	KSS Total	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-2.2 (-3.37, -1.03)	Staged Bilateral TKA
Seol, 2016	Low	WOMAC Total	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	2.4 (1.08, 3.72)	Staged Bilateral TKA
Seol, 2016	Low	KSS Total	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	0.9 (0.73, 1.07)	Simultaneous TKA
Seol, 2016	Low	WOMAC Total	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-1.4 (-1.60, -1.20)	Simultaneous TKA
Sarzaeem, 2017	Low	KSS Total	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-1 (-3.14, 1.14)	NS
Kahlenberg, 2021	Low	KOOS Total	Preop.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-0.8 (-4.69, 3.09)	NS
Kahlenberg, 2021	Low	Lower Extremity Activity Scale	Postop 1 yrs.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	1.9 (0.39, 3.41)	Simultaneous TKA
Kahlenberg, 2021	Low	KOOS Total	Postop 1 yrs.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-3.7 (-8.03, 0.63)	NS

Table 7263: PICO 7- Bilateral Simultaneous TKA vs. Bilateral Staged TKA- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goyal, 2020	Low	SF-12 Physical	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1 (-0.28, 2.28)	NS
Wyatt, 2019	Low	Oxford Knee Score (Function)	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-1.611 (-1.75, -1.47)	Staged Bilateral TKA
Feng, 2019	Low	KSS Function (Left Knee)	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.3 (-1.70, 2.30)	NS
Feng, 2019	Low	KSS Function (Left Knee)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.4 (-0.53, 3.33)	NS
Feng, 2019	Low	KSS Function (Right Knee)	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.9 (-0.91, 2.71)	NS
Feng, 2019	Low	KSS Function (Right Knee)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.2 (-1.17, 3.57)	NS
Arslan, 2018	Low	KSS Function	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.5 (-3.70, 2.70)	NS
Arslan, 2018	Low	KSS Function	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.3 (-1.82, 4.42)	NS
Arslan, 2018	Low	WOMAC Function	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.1 (-0.02, 2.22)	NS
Arslan, 2018	Low	WOMAC Function	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.6 (-1.95, 3.15)	NS
Arslan, 2018	Low	WOMAC Stiffness	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.1 (-0.60, 0.40)	NS
Arslan, 2018	Low	WOMAC Stiffness	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.1 (-0.41, 0.21)	NS
Huang, 2018	Low	SF-36 Physical	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.4 (-3.35, 4.15)	NS
Huang, 2018	Low	SF-36 Physical	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0 (-5.22, 5.22)	NS
Huang, 2018	Low	WOMAC Function	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.1 (-3.90, 3.70)	NS
Huang, 2018	Low	WOMAC Function	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.8 (-4.06, 5.66)	NS
Huang, 2018	Low	WOMAC Stiffness	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-3.4 (-12.56, 5.76)	NS
Huang, 2018	Low	WOMAC Stiffness	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-2.5 (-9.83, 4.83)	NS
Lee, 2016	Low	KSS Function	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	6.5 (-4.62, 17.62)	NS
Lee, 2016	Low	KSS Function	Postop 2 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	6.4 (-5.69, 18.49)	NS
Lee, 2016	Low	ROM (deg)	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-3 (-13.99, 7.99)	NS
Lee, 2016	Low	ROM (deg)	Postop 2 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.3 (-8.91, 9.51)	NS
Lee, 2016	Low	SF-36 Physical	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	11.1 (4.74, 17.46)	Simultaneous Bilateral TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lee, 2016	Low	SF-36 Physical	Postop 2 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	3.6 (-0.84, 8.04)	NS
Zaho, 2015	Low	ROM (deg)	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.9 (-2.32, 4.12)	NS
Zaho, 2015	Low	ROM (deg)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.9 (-2.19, 5.99)	NS
Seol, 2016	Low	Extension (deg)	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-0.9 (-1.86, 0.06)	NS
Seol, 2016	Low	Flexion (deg)	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	0.4 (-1.16, 1.96)	NS
Seol, 2016	Low	Extension (deg)	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	0.4 (0.03, 0.77)	Simultaneous TKA
Seol, 2016	Low	Flexion (deg)	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-0.3 (-1.63, 1.03)	NS
Sarzaeem, 2017	Low	KSS Function	Postop 3 mos.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	1 (-0.04, 2.04)	NS
Kahlenberg, 2021	Low	Lower Extremity Activity Scale	Preop.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	0.9 (-0.14, 1.94)	NS

Table 7364: PICO 7- Bilateral Simultaneous TKA vs. Bilateral Staged TKA- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goyal, 2020	Low	Length of Stay	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.68(0.15,18.40)	NS
Goyal, 2020	Low	SF-12 Mental	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.6 (-1.65, 0.45)	NS
Saini, 2020	Low	Readmission Within 30 Days After Surgery	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	Author Reported - t-test; Pearson x2test;	0.60(0.20,1.70)	NS
Saini, 2020	Low	Patients Received Blood Transfusion	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Author Reported - t-test; Pearson x2test;	4.30(2.80,6.80)	Staged Bilateral TKA
Feng, 2019	Low	Patients Received Blood Transfusion	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RD	0.03(-0.02,0.08)	NS
Feng, 2019	Low	Drainage (mL)	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	29.4 (-16.61, 75.41)	NS
Feng, 2019	Low	Length of Stay	Postop 1 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-3.3 (-3.76, -2.84)	Simultaneous Bilateral TKA
Lindberg-Larsen,2019	Low	Readmissions	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.83(0.58,1.17)	NS
Lindberg-Larsen,2019	Low	Total Surgical Readmissions	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.59(0.69,3.68)	NS
Huang, 2018	Low	SF-36 Health Change	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.5 (-4.33, 7.33)	NS
Huang, 2018	Low	SF-36 Health Change	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-1.9 (-7.88, 4.08)	NS
Huang, 2018	Low	SF-36 Mental	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-2.4 (-7.66, 2.86)	NS
Huang, 2018	Low	SF-36 Mental	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.5 (-2.35, 5.35)	NS
Sobh, 2018	Low	Patients Received Blood Transfusion	Postop 90days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	2.57(1.54,4.28)	Staged Bilateral TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hadley, 2017	Low	Length of Stay	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Author Reported - Student's t-test; x2test;	N/A	NS
Hadley, 2017	Low	Patients Received Blood Transfusion	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Author Reported - Student's t-test; x2test;	N/A	NS
Bohm, 2016	Low	Patients Received Blood Transfusion	Intraop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	2.20(2.12,2.29)	Staged Bilateral TKA
Lee, 2016	Low	SF-36 Mental	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	3.2 (-1.87, 8.27)	NS
Lee, 2016	Low	SF-36 Mental	Postop 2 yrs.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.6 (-4.06, 5.26)	NS
Zaho, 2015	Low	Blood Loss	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	650.5 (404.55, 896.45)	Staged Bilateral TKA
Zaho, 2015	Low	Drainage (mL)	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	142.7 (114.85, 170.55)	Staged Bilateral TKA
Zaho, 2015	Low	Hidden Blood Loss	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	180.5 (40.65, 320.35)	Staged Bilateral TKA
Zaho, 2015	Low	Length of Stay	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-9.9 (-12.21, -7.59)	Simultaneous Bilateral TKA
Zaho, 2015	Low	Patients Received Blood Transfusion	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	0.51(0.36,0.67)	Staged Bilateral TKA
Seol, 2016	Low	Length of Stay	Postop 53mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-16.1 (-17.58, -14.62)	Simultaneous TKA
Lindberg-Larsen,2015	Low	Length of Stay	Postop.	Simultaneous TKA	0-6 Month Staged Bilateral TKA	Author Reported - ANOVA; Independent sample t-test; Kruskal-Wallis test; Mann--test; Wilcoxon rank-sum test;	N/A	NS
Lindberg-Larsen,2015	Low	Readmission Within 30 Days After Surgery	Postop 30days	Simultaneous TKA	0-6 Month Staged Bilateral TKA	Author Reported - sample t-test; Kruskal-Wallis test; Mann--test; Wilcoxon rank-sum test;	N/A	NS
Lindberg-Larsen,2015	Low	Readmission Within 90 Days After Surgery	Postop 90days	Simultaneous TKA	0-6 Month Staged Bilateral TKA	Author Reported - sample t-test; Kruskal-Wallis test; Mann--test; Wilcoxon rank-sum test;	N/A	NS
Lindberg-Larsen,2015	Low	Length of Stay	Postop.	Simultaneous TKA	7-18 Month Staged Bilateral TKA	Author Reported - sample t-test; Kruskal-Wallis test; Mann--test; Wilcoxon rank-sum test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Lindberg-Larsen,2015	Low	Readmission Within 30 Days After Surgery	Postop 30days	Simultaneous TKA	7-18 Month Staged Bilateral TKA	Author Reported - sample t-test; Kruskal-Wallis test; Mann--test; Wilcoxon rank-sum test;	N/A	NS
Lindberg-Larsen,2015	Low	Readmission Within 90 Days After Surgery	Postop 90days	Simultaneous TKA	7-18 Month Staged Bilateral TKA	Author Reported - sample t-test; Kruskal-Wallis test; Mann--test; Wilcoxon rank-sum test;	N/A	NS
Biazzo, 2019	Low	Blood Loss (Volume (g/dL))	Postop 1 days	Simultaneous TKA	Staged Bilateral TKA	Author Reported - T-test; Chi-Square test;	N/A	NS
Biazzo, 2019	Low	Blood Loss (Volume (g/dL))	Postop 2 days	Simultaneous TKA	Staged Bilateral TKA	Author Reported - T-test; Chi-Square test;	N/A	Staged Bilateral TKA
Biazzo, 2019	Low	Blood Loss (Volume (g/dL))	Postop 3 days	Simultaneous TKA	Staged Bilateral TKA	Author Reported - T-test; Chi-Square test;	N/A	Staged Bilateral TKA
Biazzo, 2019	Low	Patients Received Blood Transfusion	Postop.	Simultaneous TKA	Staged Bilateral TKA	Author Reported - T-test; Chi-Square test;	N/A	Staged Bilateral TKA
Siedlecki, 2018	Low	Hemoglobin (g/dL)	Preop.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	0.7 (0.20, 1.20)	Simultaneous TKA
Siedlecki, 2018	Low	Hemoglobin (g/dL)	Postop 36.8mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	0.1 (-0.46, 0.66)	NS
Siedlecki, 2018	Low	Patients Received Blood Transfusion	Postop 36.8mos	Simultaneous TKA	Staged Bilateral TKA	RR	0.30(0.03,3.10)	NS
Siedlecki, 2018	Low	Length of Stay	Postop 36.8mos	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-6.9 (-8.26, -5.54)	Simultaneous TKA
Wan, 2021	Low	Length of Stay	4 mos.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-5.71 (-7.23, -4.19)	Simultaneous TKA
Wan, 2021	Low	Operation Time (min)	Intraop.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-27.5 (-39.85, -15.15)	Simultaneous TKA
Wan, 2021	Low	Hemoglobin (g/dL)	Preop.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	0.5 (0.14, 0.86)	Simultaneous TKA
Wan, 2021	Low	Hemoglobin (g/dL)	Postop 1 days	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-0.46 (-0.87, -0.05)	Staged Bilateral TKA
Wan, 2021	Low	Hemoglobin Drop (g/dL)	Postop 1 days	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	0.96 (0.63, 1.29)	Staged Bilateral TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wan, 2021	Low	Readmissions	Postop 30days	Simultaneous TKA	Staged Bilateral TKA	RR	0.15(0.03,0.67)	Simultaneous TKA
Wan, 2021	Low	Readmissions	Postop 90days	Simultaneous TKA	Staged Bilateral TKA	RR	0.22(0.08,0.65)	Simultaneous TKA
Wan, 2021	Low	Patients Received Blood Transfusion	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	RR	2.25(0.92,5.47)	NS
Wan, 2021	Low	Blood Transfusions (Units)	Postop 4 mos.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	0.09 (-0.10, 0.28)	NS
Kahlenberg, 2021	Low	Length of Stay	1 yrs.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-1.1 (-1.50, -0.70)	Simultaneous TKA
Kahlenberg, 2021	Low	Readmissions	Postop 1 yrs.	Simultaneous TKA	Staged Bilateral TKA	RR	0.08(0.01,0.67)	Simultaneous TKA

Table 7465: PICO 7- Bilateral Simultaneous TKA vs. Bilateral Staged TKA- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goyal, 2020	Low	VAS Pain	Postop 12 hrs	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.4 (-0.07, 0.87)	NS
Goyal, 2020	Low	VAS Pain	Postop 24 hrs	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.2 (-0.10, 0.50)	NS
Goyal, 2020	Low	VAS Pain	Postop 36 hrs	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.3 (-0.08, 0.68)	NS
Goyal, 2020	Low	VAS Pain	Postop 48 hrs	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.2 (-0.42, 0.02)	NS
Chua, 2018	Low	Patellofemoral Pain	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Week Staged Bilateral TKA	RR	0.85(0.46,1.56)	NS
Chua, 2018	Low	Patellofemoral Pain	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	3 Month Staged Bilateral TKA	RR	1.39(0.81,2.40)	NS
Chua, 2018	Low	Patellofemoral Pain	Postop 13 yrs.	Same Day Simultaneous Bilateral TKA	6 Month Staged Bilateral TKA	RR	1.17(0.87,1.58)	NS
Lindberg-Larsen,2019	Low	Rehabilitation (including pain)	Postop 30days	Simultaneous Bilateral TKA	Staged Bilateral TKA	RR	1.24(0.19,8.19)	NS
Arslan, 2018	Low	WOMAC Pain	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	-0.1 (-0.66, 0.46)	NS
Arslan, 2018	Low	WOMAC Pain	Postop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.1 (-0.76, 0.96)	NS
Huang, 2018	Low	WOMAC Pain	Preop.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	0.5 (-4.26, 5.26)	NS
Huang, 2018	Low	WOMAC Pain	Postop 6 mos.	Simultaneous Bilateral TKA	Staged Bilateral TKA	Mean Difference	1.4 (-3.18, 5.98)	NS
Kahlenberg, 2021	Low	VAS Pain	Preop.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	-0.2 (-7.67, 7.27)	NS
Kahlenberg, 2021	Low	VAS Pain	Postop 1 yrs.	Simultaneous TKA	Staged Bilateral TKA	Mean Difference	3.3 (0.24, 6.36)	Staged Bilateral TKA

Table 7566: PICO 8- Surgical Navigation- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yu, 2020	High	KSS Total	Postop 12.4mos	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	1.91 (-3.39, 7.21)	NS
Yu, 2020	High	Oxford Knee Score	Postop 12.4mos	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	1.29 (-4.19, 6.77)	NS
Selvanayagam, 2019	High	KSS Total	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	1.5 (-0.32, 3.32)	NS
Selvanayagam, 2019	High	KSS Total	Postop 2 wks.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.5 (-3.37, 2.37)	NS
Selvanayagam, 2019	High	KSS Total	Postop 6 mos.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.9 (-3.77, 1.97)	NS
Selvanayagam, 2019	High	KSS Total	Postop 1 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.4 (-0.68, 1.48)	NS
Selvanayagam, 2019	High	KSS Total	Postop 2 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	1 (0.13, 1.87)	Surgical Navigation
Selvanayagam, 2019	High	KSS Total	Postop 4 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	1 (0.25, 1.75)	Surgical Navigation
Selvanayagam, 2019	High	WOMAC Total	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.2 (-1.38, 0.98)	NS
Selvanayagam, 2019	High	WOMAC Total	Postop 2 wks.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-1.6 (-4.12, 0.92)	NS
Selvanayagam, 2019	High	WOMAC Total	Postop 6 mos.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.2 (-2.32, 2.72)	NS
Selvanayagam, 2019	High	WOMAC Total	Postop 1 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.1 (-0.51, 0.71)	NS
Selvanayagam, 2019	High	WOMAC Total	Postop 2 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.5 (-1.17, 0.17)	NS
Selvanayagam, 2019	High	WOMAC Total	Postop 4 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.5 (-0.93, -0.07)	Surgical Navigation

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hsu, 2019	High	HSS Total	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.5 (-4.53, 3.53)	NS
Hsu, 2019	High	HSS Total	Postop 8 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-2.5 (-4.41, -0.59)	Control
Hsu, 2019	High	IKS Clinical Knee Score	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-1.4 (-6.96, 4.16)	NS
Hsu, 2019	High	IKS Clinical Knee Score	Postop 8 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.3 (-2.29, 2.89)	NS
Hsu, 2019	High	WOMAC Total	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	3.5 (0.81, 6.19)	Control
Hsu, 2019	High	WOMAC Total	Postop 8 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.5 (-2.51, 1.51)	NS
Kim, 2018	High	KSS Total	Preop.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	1 (-22.85, 24.85)	NS
Kim, 2018	High	KSS Total	Postop 15 yrs.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	1 (-9.63, 11.63)	NS
Kim, 2018	High	WOMAC Total	Preop.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	2 (-41.14, 45.14)	NS
Kim, 2018	High	WOMAC Total	Postop 15 yrs.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	1 (-32.94, 34.94)	NS
Kim, 2017	High	KSS Total	Preop.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	Mean Difference	-1 (-4.61, 2.61)	NS
Kim, 2017	High	KSS Total	Postop 15 yrs.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	Mean Difference	-1 (-10.22, 8.22)	NS
Kim, 2017	High	WOMAC Total	Preop.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	Mean Difference	0 (-49.50, 49.50)	NS
Kim, 2017	High	WOMAC Total	Postop 15 yrs.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	Mean Difference	1 (-31.53, 33.53)	NS
Todesca, 2017	High	HSS Total	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Author Reported - Independent t-test; Fisher's exact test; Mann-Whitney U test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Todesca, 2017	High	HSS Total	Postop 6.4 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Author Reported - Independent t-test; Fisher's exact test; Mann-Whitney;	N/A	NS
Todesca, 2017	High	KSS Total	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Author Reported - Independent t-test; Fisher's exact test; Mann-Whitney;	N/A	NS
Todesca, 2017	High	KSS Total	Postop 6.4 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Author Reported - Independent t-test; Fisher's exact test; Mann-Whitney;	N/A	NS
Todesca, 2017	High	WOMAC Total	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Author Reported - Independent t-test; Fisher's exact test; Mann-Whitney;	N/A	NS
Todesca, 2017	High	WOMAC Total	Postop 6.4 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Author Reported - Independent t-test; Fisher's exact test; Mann-Whitney;	N/A	NS
Blyth, 2015	High	KSS Total	Postop 3 mos.	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Blyth, 2015	High	KSS Total	Postop 12mos	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Blyth, 2015	High	Oxford Knee Score	Postop 3 mos.	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	Surgical Navigation favored overcontrol
Blyth, 2015	High	Oxford Knee Score	Postop 12mos	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Yan, 2015	High	KSS Total	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-2.1 (-9.98, 5.78)	NS
Yan, 2015	High	KSS Total	Postop 3 mos.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-1.67 (-4.29, 0.95)	NS
Yan, 2015	High	Oxford Knee Score	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-3.2 (-6.70, 0.30)	NS
Yan, 2015	High	Oxford Knee Score	Postop 3 mos.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.8 (-3.38, 1.78)	NS
Cip, 2014	High	HSS Total	Postop 11 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	2.7 (0.58, 4.82)	Surgical Navigation

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Cip, 2014	High	KSS Total (Insall Knee Score Total)	Postop 7 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	10 (3.90, 16.10)	Surgical Navigation
Cip, 2014	High	KSS Total (Insall Knee Score Total)	Postop 8 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	2.6 (0.39, 4.81)	Surgical Navigation
Cip, 2014	High	WOMAC Total (Insall Knee Score Total)	Postop 10 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-7.8 (-16.45, 0.85)	NS
Beyer, 2021	Low	KSS Total	Preop.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	KSS Total	Postop 2 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	KSS Total	Postop 5 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	KSS Total	Postop 10 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	EQ-5D Total	Preop.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	EQ-5D Total	Postop 2 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	EQ-5D Total	Postop 5 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	EQ-5D Total	Postop 10 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Tsuda, 2021	High	KSS Total	Preop.	Surgical Navigation	8. Control	Mean Difference	-9.3 (-21.14, 2.54)	NS
Tsuda, 2021	High	KSS Total	Postop 6 mos.	Surgical Navigation	8. Control	Mean Difference	-0.9 (-14.63, 12.83)	NS
Tsuda, 2021	High	Oxford Knee Score	Preop.	Surgical Navigation	8. Control	Mean Difference	-3.4 (-7.25, 0.45)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Tsuda, 2021	High	Oxford Knee Score	Postop 6 mos.	Surgical Navigation	8. Control	Mean Difference	-1.9 (-5.39, 1.59)	NS
Tsuda, 2021	High	EQ-5D Total	Preop.	Surgical Navigation	8. Control	Mean Difference	-0.02 (-0.08, 0.04)	NS
Tsuda, 2021	High	EQ-5D Total	Postop 6 mos.	Surgical Navigation	8. Control	Mean Difference	0.03 (-0.04, 0.10)	NS

Table 7667: PICO 8- Surgical Navigation- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yu, 2020	High	ROM (deg)	Postop 12.4mos	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	4.63 (2.20, 7.06)	Surgical Navigation
Selvanayagam, 2019	High	KSS Function	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.8 (-2.40, 0.80)	NS
Selvanayagam, 2019	High	KSS Function	Postop 2 wks.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.2 (-3.05, 3.45)	NS
Selvanayagam, 2019	High	KSS Function	Postop 6 mos.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-1.5 (-4.75, 1.75)	NS
Selvanayagam, 2019	High	KSS Function	Postop 1 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.4 (-1.75, 0.95)	NS
Selvanayagam, 2019	High	KSS Function	Postop 2 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.5 (-0.62, 1.62)	NS
Selvanayagam, 2019	High	KSS Function	Postop 4 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0 (-0.81, 0.81)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hsu, 2019	High	Active ROM	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.3 (-4.24, 4.84)	NS
Hsu, 2019	High	Active ROM	Postop 8 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-1 (-4.04, 2.04)	NS
Hsu, 2019	High	IKS Function	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	2 (-3.03, 7.03)	NS
Hsu, 2019	High	IKS Function	Postop 8 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.3 (-4.67, 5.27)	NS
Hsu, 2019	High	SF-36 Physical	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.3 (-1.93, 1.33)	NS
Hsu, 2019	High	SF-36 Physical	Postop 8 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.3 (-2.40, 3.00)	NS
Kim, 2018	High	KSS Function	Preop.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	0 (-19.80, 19.80)	NS
Kim, 2018	High	KSS Function	Postop 15 yrs.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	0 (-28.28, 28.28)	NS
Kim, 2018	High	ROM (deg)	Preop.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	-1 (-2.57, 0.57)	NS
Kim, 2018	High	ROM (deg)	Postop 15 yrs.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	Mean Difference	-1 (-2.57, 0.57)	NS
Kim, 2017	High	KSS Function	Preop.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	Mean Difference	0 (-21.21, 21.21)	NS
Kim, 2017	High	KSS Function	Postop 15 yrs.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	Mean Difference	0 (-35.36, 35.36)	NS
Kim, 2017	High	ROM (deg)	Preop.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	Mean Difference	-2 (-4.36, 0.36)	NS
Kim, 2017	High	ROM (deg)	Postop 15 yrs.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	Mean Difference	1 (-1.18, 3.18)	NS
Todesca, 2017	High	KSS Function	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Author Reported - Independent t-test; Fisher's exact test; Mann-Whitney;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Todesca, 2017	High	KSS Function	Postop 6.4 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Author Reported - Independent t-test; Fisher's exact test; Mann-Whitney;	N/A	NS
Todesca, 2017	High	ROM (deg)	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Author Reported - Independent t-test; Fisher's exact test; Mann-Whitney;	N/A	NS
Todesca, 2017	High	ROM (deg)	Postop 6.4 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Author Reported - Independent t-test; Fisher's exact test; Mann-Whitney;	N/A	Surgical Navigation favored overcontrol
Blyth, 2015	High	KSS Function	Postop 3 mos.	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Blyth, 2015	High	KSS Function	Postop 12mos	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Blyth, 2015	High	ROM (deg)	Postop 3 mos.	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Blyth, 2015	High	ROM (deg)	Postop 12mos	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Blyth, 2015	High	SF-36 Physical	Postop 12mos	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Yan, 2015	High	KSS Function	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-1.6 (-9.91, 6.71)	NS
Yan, 2015	High	KSS Function	Postop 3 mos.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-5.5 (-13.15, 2.15)	NS
Yan, 2015	High	ROM (deg)	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	2.8 (-6.51, 12.11)	NS
Yan, 2015	High	ROM (deg)	Postop 3 mos.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-5.8 (-12.88, 1.28)	NS
Cip, 2014	High	Function Score	Postop 9 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	7.2 (2.48, 11.92)	Surgical Navigation

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Cip, 2014	High	ROM (deg) (Insall Knee Score Total)	Postop 5 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-1 (-4.77, 2.77)	NS
Beyer, 2021	Low	KSS Function	Preop.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	KSS Function	Postop 2 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	KSS Function	Postop 5 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	KSS Function	Postop 10 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Tsuda, 2021	High	KSS Function	Preop.	Surgical Navigation	8. Control	Mean Difference	-4.9 (-13.01, 3.21)	NS
Tsuda, 2021	High	KSS Function	Postop 6 mos.	Surgical Navigation	8. Control	Mean Difference	-0.6 (-9.83, 8.63)	NS

Table 7768: PICO 8- Surgical Navigation- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hsu, 2019	High	Length of Stay	Periop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.3 (-0.80, 0.20)	NS
Hsu, 2019	High	SF-36 Mental	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0 (-1.52, 1.52)	NS
Hsu, 2019	High	SF-36 Mental	Postop 8 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-0.3 (-1.91, 1.31)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hsu, 2019	High	Total Blood Loss	Periop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	-141 (-240.59, -41.41)	Surgical Navigation
Ikawa, 2017	High	Blood Loss	Postop.	Surgical Navigation: KneeAlign2	Control: Conventional Intramedullary Femoral Guide	Mean Difference	-287 (-371.40, -202.60)	Surgical Navigation
Ikawa, 2017	High	Femoral Resection Time(min)	Postop.	Surgical Navigation: KneeAlign2	Control: Conventional Intramedullary Femoral Guide	Mean Difference	2.7 (2.29, 3.11)	Control
Ikawa, 2017	High	Tourniquet Time (min)	Postop.	Surgical Navigation: KneeAlign2	Control: Conventional Intramedullary Femoral Guide	Mean Difference	-0.4 (-2.60, 1.80)	NS
Blyth, 2015	High	SF-36 Mental	Postop 12mos	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Cip, 2014	High	HSS Classification 1	Postop 12 yrs.	Surgical Navigation: Computer Navigated TKA	Control	RR	1.10(0.98,1.22)	NS
Cip, 2014	High	HSS Classification 2	Postop 13 yrs.	Surgical Navigation: Computer Navigated TKA	Control	RR	0.51(0.16,1.61)	NS
Cip, 2014	High	HSS Classification 3	Postop 14 yrs.	Surgical Navigation: Computer Navigated TKA	Control	RD	-0.01(-0.04,0.01)	NS
Cip, 2014	High	HSS Classification 4	Postop 15 yrs.	Surgical Navigation: Computer Navigated TKA	Control	RD	-0.01(-0.04,0.01)	NS
Tsuda, 2021	High	Operation Time (min)	Intraop.	Surgical Navigation	8. Control	Mean Difference	8.9 (-4.39, 22.19)	NS

Table 7869: PICO 8- Surgical Navigation- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hsu, 2019	High	IKS Pain	Preop.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.6 (-2.92, 4.12)	NS
Hsu, 2019	High	IKS Pain	Postop 8 yrs.	Surgical Navigation: Computer Navigated TKA	Control	Mean Difference	0.9 (-0.50, 2.30)	NS
Kim, 2018	High	Mild Pain	Postop 15 yrs.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	RR	1.02(0.73,1.43)	NS
Kim, 2018	High	Moderate Pain	Postop 15 yrs.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	RD	0.00(0.00,0.00)	NS
Kim, 2018	High	No Pain	Postop 15 yrs.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	RR	1.00(0.92,1.08)	NS
Kim, 2018	High	Severe Pain	Preop.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	RR	0.00(0.00,0.00)	NS
Kim, 2018	High	Severe Pain	Postop 15 yrs.	Surgical Navigation: Computer-assisted Orthopedic Surgery	Control	RR	1.00(0.14,7.05)	NS
Kim, 2017	High	Mild Pain	Postop 15 yrs.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	RR	1.05(0.71,1.55)	NS
Kim, 2017	High	Moderate Pain	Postop 15 yrs.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	RR	1.00(0.14,7.01)	NS
Kim, 2017	High	No Pain	Postop 15 yrs.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	RR	0.98(0.87,1.12)	NS
Kim, 2017	High	Severe Pain	Preop.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	RR	0.00(0.00,0.00)	NS
Kim, 2017	High	Severe Pain	Postop 15 yrs.	Surgical Navigation: Computer Navigated TKA	Control: Standard TKA	RD	0.00(0.00,0.00)	NS
Blyth, 2015	High	VAS Pain	Postop 12mos	Surgical Navigation: Electromagnetic Computer Assisted Navigation	Control	Author Reported - Two-Sample t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Cip, 2014	High	Anterior Knee Pain	Postop 6 yrs.	Surgical Navigation: Computer Navigated TKA	Control	RD	-0.07(-0.13, -0.01)	Surgical Navigation

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Beyer, 2021	Low	VAS Pain	Preop.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	VAS Pain	Postop 2 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	VAS Pain	Postop 5 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS
Beyer, 2021	Low	VAS Pain	Postop 10 yrs.	Surgical Navigation	8. Control	Author Reported - Wilcoxon test; Fisher's exact test;	N/A	NS

Table 7970: PICO 9- Risk Stratification: Diabetic vs. Control- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ojemolon, 2020	High	Death/Mortality (In Hospital)	Postop.	Diabetic	Not Diabetic	RR	1.53(1.22,1.93)	Not Diabetic
Ojemolon, 2020	High	Non-ST Segment Elevation Myocardial Infarction	Postop.	Diabetic	Not Diabetic	RR	2.31(2.01,2.66)	Not Diabetic
Ojemolon, 2020	High	Sepsis	Postop.	Diabetic	Not Diabetic	RR	1.59(1.40,1.81)	Not Diabetic
Ojemolon, 2020	High	Pneumonia	Postop.	Diabetic	Not Diabetic	RR	2.06(1.92,2.22)	Not Diabetic
Ojemolon, 2020	High	Infection (Post Procedure Infection)	Postop.	Diabetic	Not Diabetic	RR	1.92(1.58,2.32)	Not Diabetic
Ojemolon, 2020	High	Deep Vein Thrombosis	Postop.	Diabetic	Not Diabetic	RR	1.10(1.02,1.18)	Not Diabetic
Ojemolon, 2020	High	Pulmonary Embolism	Postop.	Diabetic	Not Diabetic	RR	1.27(1.17,1.37)	Not Diabetic
Ojemolon, 2020	High	Complications from Orthopaedic Device	Postop.	Diabetic	Not Diabetic	RR	0.83(0.76,0.90)	Diabetic
Ojemolon, 2020	High	Acute Renal Failure/Dialysis	Postop.	Diabetic	Not Diabetic	RR	2.67(2.61,2.74)	Not Diabetic
Ojemolon, 2020	High	Pressure Related Injury	Postop.	Diabetic	Not Diabetic	RR	1.55(1.23,1.94)	Not Diabetic
Teo, 2018	High	Infection (Infection)	Postop 2 yrs.	Diabetic	Not Diabetic	RD	-0.01(-0.02, -0.00)	Diabetic

Table 8071: PICO 9- Risk Stratification: Diabetic vs. Control- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Teo, 2018	High	KSS Total	Preop.	Diabetic	Not Diabetic	Mean Difference	-1 (-4.35, 2.35)	NS
Teo, 2018	High	KSS Total	Postop 2 yrs.	Diabetic	Not Diabetic	Mean Difference	-0.5 (-3.29, 2.29)	NS
Teo, 2018	High	Oxford Knee Score	Preop.	Diabetic	Not Diabetic	Mean Difference	1.8 (0.23, 3.37)	Not Diabetic
Teo, 2018	High	Oxford Knee Score	Postop 2 yrs.	Diabetic	Not Diabetic	Mean Difference	2.1 (0.55, 3.65)	Not Diabetic
Zhang, 2021	Low	WOMAC Total	Preop.	Diabetic	Nondiabetic	Mean Difference	-1.8 (-2.92, -0.68)	Nondiabetic
Zhang, 2021	Low	WOMAC Total	2 yrs.	Diabetic	Nondiabetic	Mean Difference	-0.7 (-1.38, -0.02)	Nondiabetic
Zhang, 2021	Low	KSS Total	Preop.	Diabetic	Nondiabetic	Mean Difference	-0.9 (-2.23, 0.43)	NS
Zhang, 2021	Low	KSS Total	2 yrs.	Diabetic	Nondiabetic	Mean Difference	-1.2 (-2.18, -0.22)	Nondiabetic
Zhang, 2021	Low	WOMAC Total	2 yrs.	Diabetic	Nondiabetic	Mean Difference	1.3 (0.12, 2.48)	Nondiabetic
Zhang, 2021	Low	KSS Total	2 yrs.	Diabetic	Nondiabetic	Mean Difference	29.6 (28.00, 31.20)	Diabetic

Table 8172: PICO 9- Risk Stratification: Diabetic vs. Control- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Teo, 2018	High	ROM (deg)	Preop.	Diabetic	Not Diabetic	Mean Difference	1 (-2.99, 4.99)	NS
Teo, 2018	High	ROM (deg)	Postop 2 yrs.	Diabetic	Not Diabetic	Mean Difference	-1 (-3.83, 1.83)	NS
Teo, 2018	High	KSS Function	Preop.	Diabetic	Not Diabetic	Mean Difference	-3.5 (-7.01, 0.01)	NS
Teo, 2018	High	KSS Function	Postop 2 yrs.	Diabetic	Not Diabetic	Mean Difference	-7.1 (-11.05, -3.15)	Not Diabetic
Teo, 2018	High	SF-36 Physical	Preop.	Diabetic	Not Diabetic	Mean Difference	-1.6 (-3.45, 0.25)	NS
Teo, 2018	High	SF-36 Physical	Postop 2 yrs.	Diabetic	Not Diabetic	Mean Difference	-2.1 (-4.04, -0.16)	Not Diabetic
Zhang, 2021	Low	SF-36 Physical	Preop.	Diabetic	Nondiabetic	Mean Difference	-1.9 (-2.47, -1.33)	Nondiabetic
Zhang, 2021	Low	SF-36 Physical	2 yrs.	Diabetic	Nondiabetic	Mean Difference	-1.3 (-1.99, -0.61)	Nondiabetic
Zhang, 2021	Low	KSS Function	Preop.	Diabetic	Nondiabetic	Mean Difference	-3 (-4.58, -1.42)	Nondiabetic
Zhang, 2021	Low	KSS Function	2 yrs.	Diabetic	Nondiabetic	Mean Difference	-2.3 (-3.91, -0.69)	Nondiabetic
Zhang, 2021	Low	ROM (deg)	Preop.	Diabetic	Nondiabetic	Mean Difference	-2.5 (-3.98, -1.02)	Nondiabetic
Zhang, 2021	Low	ROM (deg)	2 yrs.	Diabetic	Nondiabetic	Mean Difference	-2.3 (-3.51, -1.09)	Nondiabetic
Zhang, 2021	Low	Stiffness	2 yrs.	Diabetic	Nondiabetic	RR	0.97(0.54,1.72)	NS
Zhang, 2021	Low	SF-36 Physical	2 yrs.	Diabetic	Nondiabetic	Mean Difference	0.6 (-0.21, 1.41)	NS
Zhang, 2021	Low	KSS Function	2 yrs.	Diabetic	Nondiabetic	Mean Difference	0.8 (-1.01, 2.61)	NS
Zhang, 2021	Low	ROM (deg)	2 yrs.	Diabetic	Nondiabetic	Mean Difference	0.1 (-1.53, 1.73)	NS

Table 8273: PICO 9- Risk Stratification: Diabetic vs. Control- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ojemolon, 2020	High	Length of Stay	Postop.	Diabetic	Not Diabetic	Author Reported - Chi-Square test;	N/A	NS
Ojemolon, 2020	High	Patients Received Blood Transfusion	Postop.	Diabetic	Not Diabetic	RR	1.38(1.34,1.42)	Not Diabetic
Teo, 2018	High	Length of Stay	Preop.	Diabetic	Not Diabetic	Mean Difference	-0.26 (-0.90, 0.38)	NS
Teo, 2018	High	SF-36 Mental	Preop.	Diabetic	Not Diabetic	Mean Difference	-3.4 (-5.52, -1.28)	Not Diabetic
Teo, 2018	High	SF-36 Mental	Postop 2 yrs.	Diabetic	Not Diabetic	Mean Difference	-1.4 (-3.33, 0.53)	NS
Zhang, 2021	Low	SF-36 Mental	Preop.	Diabetic	Nondiabetic	Mean Difference	0.1 (-0.59, 0.79)	NS
Zhang, 2021	Low	SF-36 Mental	2 yrs.	Diabetic	Nondiabetic	Mean Difference	-0.1 (-0.48, 0.28)	NS
Zhang, 2021	Low	SF-36 Mental	2 yrs.	Diabetic	Nondiabetic	Mean Difference	-0.1 (-0.84, 0.64)	NS

Table 8374: PICO 9- Risk Stratification: Hyperglycaemia (126mg/dl vs. <126mg/dl)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Reategui, 2017	High	Total Adverse Events	1 yrs.	Stress Hyperglycaemia (Glycaemia 126 mg/dl, HbA1c <6.5%)	Control (Glycemia <126 mg/dl)	RR	5.16(2.70,9.84)	Control (Glycemia<126 mg/dl)
Reategui, 2017	High	Medical Adverse Events	1 yrs.	Stress Hyperglycaemia (Glycaemia 126 mg/dl, HbA1c <6.5%)	Control (Glycemia <126 mg/dl)	RR	33.83(4.65,246.14)	Control (Glycemia<126 mg/dl)
Reategui, 2017	High	Infection (Infection)	1 yrs.	Stress Hyperglycaemia (Glycaemia 126 mg/dl, HbA1c <6.5%)	Control (Glycemia <126 mg/dl)	RR	3.54(1.28,9.78)	Control (Glycemia<126 mg/dl)
Reategui, 2017	High	Mechanical Complications	1 yrs.	Stress Hyperglycaemia (Glycaemia 126 mg/dl, HbA1c <6.5%)	Control (Glycemia <126 mg/dl)	RR	2.82(0.86,9.29)	NS
Reategui, 2017	High	Total Adverse Events	1 yrs.	Diabetes Mellitus (Glycaemia 126 mg/dl, HbA1c?6.5%	Control (Glycemia <126 mg/dl)	RR	4.06(1.96,8.40)	Control (Glycemia<126 mg/dl)
Reategui, 2017	High	Medical Adverse Events	1 yrs.	Diabetes Mellitus (Glycaemia 126 mg/dl, HbA1c?6.5%	Control (Glycemia <126 mg/dl)	RR	17.40(2.16,140.16)	Control (Glycemia<126 mg/dl)
Reategui, 2017	High	Infection (Infection)	1 yrs.	Diabetes Mellitus (Glycaemia 126 mg/dl, HbA1c?6.5%	Control (Glycemia <126 mg/dl)	RR	2.90(0.89,9.50)	NS
Reategui, 2017	High	Mechanical Complications	1 yrs.	Diabetes Mellitus (Glycaemia 126 mg/dl, HbA1c?6.5%	Control (Glycemia <126 mg/dl)	RR	3.63(1.02,12.84)	Control (Glycemia<126 mg/dl)

Table 8475: PICO 9- Risk Stratification: Smoking vs. Control- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
An, 2021	Low	Adverse Events	Postop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	2.43(1.08,5.44)	No Passive Smoking
An, 2021	Low	Adverse Events	1 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	3.64(1.08,12.31)	No Passive Smoking
An, 2021	Low	Adverse Events	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	7.28(0.78,68.19)	NS
An, 2021	Low	Adverse Events	Postop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	1.04(0.37,2.89)	NS
An, 2021	Low	Adverse Events	1 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	1.55(0.36,6.71)	NS
An, 2021	Low	Adverse Events	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	6.22(0.66,58.42)	NS
An, 2021	Low	Cardiovascular Disease	Postop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	1.21(0.23,6.40)	NS
An, 2021	Low	Cardiovascular Disease	1 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	1.21(0.11,13.06)	NS
An, 2021	Low	Cardiovascular Disease	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RD	0.00(0.00,0.00)	NS
An, 2021	Low	Pulmonary Disease	Postop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	2.43(0.51,11.59)	NS
An, 2021	Low	Pulmonary Disease	1 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	4.85(0.45,52.22)	NS
An, 2021	Low	Pulmonary Disease	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RD	0.02(-0.02,0.06)	NS
An, 2021	Low	Deep Vein Thrombosis	Postop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	1.21(0.11,13.06)	NS
An, 2021	Low	Deep Vein Thrombosis	1 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RD	0.00(0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
An, 2021	Low	Deep Vein Thrombosis	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RD	0.00(0.00,0.00)	NS
An, 2021	Low	Infection (Surgical Site Infection)	Postop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	9.70(1.11,84.54)	No Passive Smoking
An, 2021	Low	Infection (Surgical Site Infection)	1 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	7.28(0.78,68.19)	NS
An, 2021	Low	Infection (Surgical Site Infection)	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RD	0.02(-0.02,0.06)	NS
An, 2021	Low	Neuropathies	Postop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RD	0.00(0.00,0.00)	NS
An, 2021	Low	Neuropathies	1 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RD	0.00(0.00,0.00)	NS
An, 2021	Low	Neuropathies	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	2.43(0.15,37.98)	NS
An, 2021	Low	Cardiovascular Disease	Postop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	1.04(0.20,5.49)	NS
An, 2021	Low	Cardiovascular Disease	1 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	1.04(0.10,11.18)	NS
An, 2021	Low	Cardiovascular Disease	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RD	0.00(0.00,0.00)	NS
An, 2021	Low	Pulmonary Disease	Postop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	0.69(0.07,6.49)	NS
An, 2021	Low	Pulmonary Disease	1 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	4.15(0.38,44.74)	NS
An, 2021	Low	Pulmonary Disease	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RD	0.02(-0.02,0.05)	NS
An, 2021	Low	Deep Vein Thrombosis	Postop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	1.04(0.10,11.18)	NS
An, 2021	Low	Deep Vein Thrombosis	1 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RD	0.00(0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
An, 2021	Low	Deep Vein Thrombosis	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RD	0.00(0.00,0.00)	NS
An, 2021	Low	Infection (Surgical Site Infection)	Postop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	2.07(0.13,32.52)	NS
An, 2021	Low	Infection (Surgical Site Infection)	1 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RD	-0.01(-0.03,0.01)	NS
An, 2021	Low	Infection (Surgical Site Infection)	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RD	0.02(-0.02,0.05)	NS
An, 2021	Low	Neuropathies	Postop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RD	0.00(0.00,0.00)	NS
An, 2021	Low	Neuropathies	1 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RD	0.00(0.00,0.00)	NS
An, 2021	Low	Neuropathies	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	2.07(0.13,32.52)	NS

Table 8576: PICO 9- Risk Stratification: Smoking vs. Control- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
An, 2021	Low	HSS Total	Preop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	0.56 (-4.76, 5.88)	NS
An, 2021	Low	HSS Total	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	-3.81 (-5.79, -1.83)	No Passive Smoking
An, 2021	Low	HSS Total	Preop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	3.78 (-1.58, 9.14)	NS
An, 2021	Low	HSS Total	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	-3.69 (-5.54, -1.84)	No Passive Smoking

Table 8677: PICO 9- Risk Stratification: Smoking vs. Control- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
An, 2021	Low	ROM (deg)	Preop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	-4.68 (-8.48, -0.88)	No Passive Smoking
An, 2021	Low	SF-36 Physical	Preop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	-0.16 (-1.79, 1.47)	NS
An, 2021	Low	ROM (deg)	Postop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	-3.54 (-4.33, -2.75)	No Passive Smoking
An, 2021	Low	ROM (deg)	1 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	-8.07 (-9.30, -6.84)	No Passive Smoking
An, 2021	Low	ROM (deg)	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	-5.01 (-8.39, -1.63)	No Passive Smoking
An, 2021	Low	SF-36 Physical	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	-2.87 (-4.54, -1.20)	No Passive Smoking
An, 2021	Low	ROM (deg)	Preop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	-0.23 (-5.00, 4.54)	NS
An, 2021	Low	SF-36 Physical	Preop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	0.72 (-0.76, 2.20)	NS
An, 2021	Low	ROM (deg)	Postop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	-0.42 (-1.21, 0.37)	NS
An, 2021	Low	ROM (deg)	1 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	-5.02 (-6.26, -3.78)	No Passive Smoking
An, 2021	Low	ROM (deg)	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	-1.87 (-4.64, 0.90)	NS
An, 2021	Low	SF-36 Physical	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	-2.48 (-4.45, -0.51)	No Passive Smoking

Table 8778: PICO 9- Risk Stratification: Smoking vs. Control- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
An, 2021	Low	SF-36 Mental	Preop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	-0.58 (-3.69, 2.53)	NS
An, 2021	Low	SF-36 Mental	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	-9.8 (-14.04, -5.56)	No Passive Smoking
An, 2021	Low	Length of Stay (days)	Postop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	0.98 (-0.33, 2.29)	NS
An, 2021	Low	Operation Time (min)	Intraop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	2.34 (0.24, 4.44)	No Passive Smoking
An, 2021	Low	SF-36 Mental	Preop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	-1.25 (-4.30, 1.80)	NS
An, 2021	Low	SF-36 Mental	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	-5.63 (-9.42, -1.84)	No Passive Smoking
An, 2021	Low	Length of Stay (days)	Postop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	0.03 (-1.37, 1.43)	NS
An, 2021	Low	Operation Time (min)	Intraop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	0.1 (-2.47, 2.67)	NS

Table 8879: PICO 9- Risk Stratification: Smoking vs. Control- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
An, 2021	Low	VAS Pain	Preop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	-0.31 (-0.63, 0.01)	NS
An, 2021	Low	VAS Pain	Postop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	1.09 (0.56, 1.62)	No Passive Smoking
An, 2021	Low	VAS Pain	1 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	0.52 (0.19, 0.85)	No Passive Smoking
An, 2021	Low	VAS Pain	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	Mean Difference	0.46 (0.25, 0.67)	No Passive Smoking
An, 2021	Low	VAS Pain	Preop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	-0.16 (-0.47, 0.15)	NS
An, 2021	Low	VAS Pain	Postop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	0.42 (-0.02, 0.86)	NS
An, 2021	Low	VAS Pain	1 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	0.41 (0.02, 0.80)	No Passive Smoking
An, 2021	Low	VAS Pain	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	Mean Difference	0.27 (0.10, 0.44)	No Passive Smoking

Table 8980: PICO 9- Risk Stratification: Smoking vs. Control- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
An, 2021	Low	Hospital Anxiety and Depression Score (> 8)	Preop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	1.53(0.81,2.90)	NS
An, 2021	Low	Hospital Anxiety and Depression Score (> 8)	Postop.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	1.52(0.74,3.09)	NS
An, 2021	Low	Hospital Anxiety and Depression Score (> 8)	1 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	3.47(1.40,8.56)	No Passive Smoking
An, 2021	Low	Hospital Anxiety and Depression Score (> 8)	3 mos.	Heavy Passive Smoking: Exposure 3+ days per week	No Passive Smoking	RR	3.88(1.34,11.25)	No Passive Smoking
An, 2021	Low	Hospital Anxiety and Depression Score (> 8)	Preop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	1.20(0.61,2.34)	NS
An, 2021	Low	Hospital Anxiety and Depression Score (> 8)	Postop.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	1.17(0.55,2.47)	NS
An, 2021	Low	Hospital Anxiety and Depression Score (> 8)	1 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	2.96(1.19,7.36)	No Passive Smoking
An, 2021	Low	Hospital Anxiety and Depression Score (> 8)	3 mos.	Mild Passive Smoking: Exposure 1+ but < 3 days per week	No Passive Smoking	RR	2.90(0.96,8.73)	NS

Surgical Management of OA of the Knee (2020): Clinical Practice Guideline

-Summary of Findings and Data Tables

-PICO 9: Risk Factors (BMI)

Group Charges:

We ask that this sub-group review the evidence provided here for PICO 9: Risk Factors (BMI) and prepare 1. a preliminary recommendation statement and 2. a rationale describing the evidence and supporting the recommendation statement.

Each sub-group will then be tasked with representing the evidence for their assigned PICO as well as presenting their proposed recommendation and rationale to the full workgroup and leading the group discussion when finalizing the recommendation during our virtual meeting.

An instructional manual describing how to use the evidence documents and how to create the recommendations and rationales was attached to the original group email and can also be found in the main project folder on OneDrive.

We ask that all subgroups have their preliminary recommendations and rationales submitted before our virtual meeting, **by end of day Monday January 17th**, so that we can prepare the documents to be shared with the whole group for discussion.

PICO 9: (examples)

Are obese adult patients (using the WHO definition of BMI ≥ 30) with osteoarthritis undergoing TKA at higher risk for worse outcomes and/or increased complications as compared to non-obese patients (i.e. BMI < 30) undergoing TKA?

In obese (WHO definition, BMI ≥ 30) adult patients with osteoarthritis undergoing KA, are outcomes diminished (?) or complications increased compared with non-obese patients (WHO definition, BMI < 30) undergoing KA?

Table 9081: PICO 9- Risk Stratification: BMI (30-34.9 vs <18.5)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Total Revisions	Postop 30days	Obese I (BMI 30-34.9)	Underweight (BMI <18.5)	RR	1.58(0.22,11.19)	NS

Table 9182: PICO 9- Risk Stratification: BMI (30-34.9 vs <18.5)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Steinhaus, 2020	High	EQ-5D VAS	Baseline.	Obese I (BMI 30-34.9)	Underweight (BMI <18.5)	Mean Difference	-4.92 (-13.12, 3.28)	NS
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese I (BMI 30-34.9)	Underweight (BMI <18.5)	Mean Difference	2.89 (-19.58, 25.36)	NS
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese I (BMI 30-34.9)	Underweight (BMI <18.5)	Mean Difference	7.41 (-8.22, 23.04)	NS
Steinhaus, 2020	High	EQ-5D Total	Baseline.	Obese I (BMI 30-34.9)	Underweight (BMI <18.5)	Mean Difference	-0.04 (-0.16, 0.08)	NS
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese I (BMI 30-34.9)	Underweight (BMI <18.5)	Mean Difference	0.02 (-0.14, 0.18)	NS
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese I (BMI 30-34.9)	Underweight (BMI <18.5)	Mean Difference	0.07 (-0.09, 0.23)	NS

Table 9283: PICO 9- Risk Stratification: BMI (30-34.9 vs <18.5)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Readmissions	Postop 30days	Obese I (BMI 30-34.9)	Underweight (BMI <18.5)	RR	0.86(0.44,1.71)	NS

Table 9384: PICO 9- Risk Stratification: BMI (30-34.9 vs 18.5-24.9)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Total Revisions	Postop 30days	Obese I (BMI 30-34.9)	Normal Weight (BMI 18.5-24.9)	RR	0.66(0.53,0.83)	Obese I (BMI30-34.9)

Table 9485: PICO 9- Risk Stratification: BMI (30-34.9 vs 18.5-24.9)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Readmissions	Postop 30days	Obese I (BMI 30-34.9)	Normal Weight (BMI 18.5-24.9)	RR	0.93(0.83,1.05)	NS

Table 9586: PICO 9- Risk Stratification: BMI (30-34.9 vs <25)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Rassir, 2020	High	Total Revisions	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	1.08(0.97,1.22)	NS
Gurunathan, 2018	High	Cardiac Complications	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	0.74(0.58,0.95)	Obese I (BMI30-34.9)
Gurunathan, 2018	High	Surgical Complications	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.05(0.72,1.52)	NS
Gurunathan, 2018	High	Pulmonary Complications	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	0.73(0.33,1.61)	NS
Gurunathan, 2018	High	Renal Complications	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	3.05(0.40,23.45)	NS
Gurunathan, 2018	High	Thromboembolic Complications	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.94(0.45,8.45)	NS
Gurunathan, 2018	High	Infection	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.01(0.47,2.15)	NS
Gurunathan, 2018	High	Gastrointestinal Complications	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.03(0.55,1.96)	NS
Rassir, 2020	High	Septic Revision	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	1.02(0.80,1.29)	NS
Rassir, 2020	High	Aseptic Revision	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	1.12(0.98,1.28)	NS
Rassir, 2020	High	Secondary Patellar Resurfacing	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	1.52(1.12,2.08)	Obese
Rassir, 2020	High	Instability	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.15(0.93,1.42)	NS
Rassir, 2020	High	Infection (Infection)	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.06(0.86,1.32)	NS
Rassir, 2020	High	Loosening Tibial Component	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.40(1.04,1.87)	Normal Weight (BMI <25)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Rassir, 2020	High	Malalignment	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.21(0.89,1.65)	NS
Rassir, 2020	High	Arthrofibrosis	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	0.77(0.53,1.13)	NS
Rassir, 2020	High	Loosening Femoral Component	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	0.59(0.34,1.01)	NS
Rassir, 2020	High	Periprosthetic Fracture	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	0.67(0.35,1.28)	NS
Rassir, 2020	High	Patellar Dislocation	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	2.44(1.07,5.55)	Normal Weight (BMI <25)
Rassir, 2020	High	Revision after Removal	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.38(0.57,3.33)	NS
Rassir, 2020	High	Loosening Patellar Component	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	0.38(0.11,1.34)	NS
Rassir, 2020	High	Other Reason for Revision	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	0.87(0.62,1.22)	NS
Katakam, 2021	Low	Total Revisions	1 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.78(0.36,8.73)	NS

Table 9687: PICO 9- Risk Stratification: BMI (30-34.9 vs <25)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Basdelioglu, 2020	High	KOOS Total	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI <25	Mean Difference	-0.52 (-1.21, 0.17)	NS
Basdelioglu, 2020	High	Lysholm Score	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI <25	Mean Difference	-0.32 (-1.05, 0.41)	NS
Basdelioglu, 2020	High	KOOS Total	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI <25	Mean Difference	-2.782 (-3.54, -2.03)	BMI <25
Basdelioglu, 2020	High	Lysholm Score	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI <25	Mean Difference	-0.32 (-1.12, 0.48)	NS
Giesinger, 2018	High	Forgotten Joint Score	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Author Reported - Mann-Whitney's U-test	N/A	NS
Steinhaus, 2020	High	EQ-5D VAS	Baseline.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Mean Difference	-2.48 (-4.28, -0.68)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Mean Difference	-2.45 (-4.12, -0.78)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Mean Difference	-0.6 (-2.51, 1.31)	NS
Steinhaus, 2020	High	EQ-5D Total	Baseline.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Mean Difference	-0.05 (-0.08, -0.02)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Mean Difference	-0.03 (-0.06, -0.00)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Mean Difference	0.03 (0.00, 0.06)	Obese I (BMI30-34.9)

Table 9788: PICO 9- Risk Stratification: BMI (30-34.9 vs <25)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Basdelioglu, 2020	High	Flexion (deg)	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI <25	Mean Difference	-0.33 (-1.05, 0.39)	NS
Basdelioglu, 2020	High	Flexion (deg)	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI <25	Mean Difference	-4.84 (-5.85, -3.83)	BMI <25
Collins, 2017	High	WOMAC Function	Postop 3 mos.	BMI 30-34.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Function	Postop 6 mos.	BMI 30-34.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Function	Postop 24mos	BMI 30-34.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Katakam, 2021	Low	KOOS Function	Preop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Mean Difference	-5.5 (-8.07, -2.93)	Normal Weight (BMI <25)
Katakam, 2021	Low	KOOS Function	1 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Mean Difference	-6.3 (-9.16, -3.44)	Normal Weight (BMI <25)

Table 9889: PICO 9- Risk Stratification: BMI (30-34.9 vs <25)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Basdelioglu, 2020	High	Operation Time (min)	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI <25	Mean Difference	1.35 (0.39, 2.31)	BMI <25
Basdelioglu, 2020	High	Operation Time (min)	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI <25	Mean Difference	3.49 (2.26, 4.72)	BMI <25
Gurunathan, 2018	High	Total Adverse Events	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	0.92(0.78,1.09)	NS
Gurunathan, 2018	High	Neurological Complications	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.14(0.54,2.42)	NS
Gurunathan, 2018	High	Miscellaneous Complications	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	0.65(0.30,1.38)	NS
Gurunathan, 2018	High	LOS	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Author Reported - Fisher's Exact orX2	N/A	NS
Gurunathan, 2018	High	Operation Time (min)	Intraop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Author Reported - Fisher's Exact orX2	N/A	NS
Francois, 2019	High	ISR <0.8	Preop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	2.83(1.17,6.89)	Obese I (BMI30-34.9)
Francois, 2019	High	ISR <0.8	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.40(0.46,4.26)	NS
Katakam, 2021	Low	Length of Stay (days)	Postop.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	Mean Difference	0.3 (0.10, 0.50)	Normal Weight (BMI <25)
Katakam, 2021	Low	Readmissions	90 days	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.46(0.79,2.71)	NS

Table 9990: PICO 9- Risk Stratification: BMI (30-34.9 vs <25)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Collins, 2017	High	WOMAC Pain	Postop 3 mos.	BMI 30-34.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Pain	Postop 6 mos.	BMI 30-34.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Pain	Postop 24mos	BMI 30-34.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Rassir, 2020	High	Patellar Pain	3 yrs.	Obese I (BMI 30-34.9)	Normal Weight (BMI <25)	RR	1.29(1.04,1.60)	Normal Weight (BMI <25)

Table 10091: PICO 9- Risk Stratification: BMI (30-34.9 vs 25-29.9)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Total Revisions	Postop 30days	Obese I (BMI 30-34.9)	Overweight (BMI 25-<30)	RR	0.68(0.57,0.80)	Obese I (BMI30-34.9)
Gurunathan, 2018	High	Cardiac Complications	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	0.91(0.75,1.10)	NS
Gurunathan, 2018	High	Surgical Complications	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	1.21(0.93,1.57)	NS
Gurunathan, 2018	High	Pulmonary Complications	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	1.42(0.73,2.76)	NS
Gurunathan, 2018	High	Renal Complications	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	1.74(0.65,4.66)	NS
Gurunathan, 2018	High	Thromboembolic Complications	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	0.83(0.41,1.68)	NS
Gurunathan, 2018	High	Infection	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	0.98(0.59,1.62)	NS
Gurunathan, 2018	High	Gastrointestinal Complications	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	1.85(1.11,3.08)	Overweight (BMI25-29.9)
Katakam, 2021	Low	Total Revisions	1 yrs.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	0.80(0.29,2.22)	NS

Table 10192: PICO 9- Risk Stratification: BMI (30-34.9 vs 25-29.9)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Basdelioglu, 2020	High	KOOS Total	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI 25-29.9	Mean Difference	-2.262 (-2.92, -1.61)	BMI 25-29.9
Basdelioglu, 2020	High	Lysholm Score	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI 25-29.9	Mean Difference	0 (-0.68, 0.68)	NS
Basdelioglu, 2020	High	KOOS Total	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI 25-29.9	Mean Difference	-3.829 (-4.69, -2.97)	BMI 25-29.9
Basdelioglu, 2020	High	Lysholm Score	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI 25-29.9	Mean Difference	-4.47 (-5.39, -3.55)	BMI 25-29.9
Giesinger, 2018	High	Forgotten Joint Score	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Author Reported - Mann-Whitney's U-test	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Steinhaus, 2020	High	EQ-5D VAS	Baseline.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Mean Difference	-1.82 (-3.38, -0.26)	Overweight (BMI25-29.9)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Mean Difference	-1.43 (-2.89, 0.03)	NS
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Mean Difference	0.01 (-1.55, 1.57)	NS
Steinhaus, 2020	High	EQ-5D Total	Baseline.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Mean Difference	-0.03 (-0.06, -0.00)	Overweight (BMI25-29.9)
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Mean Difference	-0.02 (-0.05, 0.01)	NS
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Mean Difference	0.02 (-0.01, 0.05)	NS

Table 10293: PICO 9- Risk Stratification: BMI (30-34.9 vs 25-29.9)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Basdelioglu, 2020	High	Flexion (deg)	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI 25-29.9	Mean Difference	-4.51 (-5.45, -3.57)	BMI 25-29.9
Basdelioglu, 2020	High	Flexion (deg)	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI 25-29.9	Mean Difference	-10.7 (-11.84, -9.56)	BMI 25-29.9
Collins, 2017	High	WOMAC Function	Postop 3 mos.	BMI 30-34.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Function	Postop 6 mos.	BMI 30-34.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Function	Postop 24mos	BMI 30-34.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Function	Postop 3 mos.	BMI 35-39.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Function	Postop 6 mos.	BMI 35-39.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Function	Postop 24mos	BMI 35-39.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Katakam, 2021	Low	KOOS Function	Preop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Mean Difference	-2.1 (-4.12, -0.08)	Overweight (BMI25-29.9)
Katakam, 2021	Low	KOOS Function	1 yrs.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Mean Difference	-1.5 (-3.86, 0.86)	NS

Table 10394: PICO 9- Risk Stratification: BMI (30-34.9 vs 25-29.9)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Readmissions	Postop 30days	Obese I (BMI 30-34.9)	Overweight (BMI 25-<30)	RR	0.99(0.90,1.08)	NS
Basdelioglu, 2020	High	Operation Time (min)	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI 25-29.9	Mean Difference	2.14 (0.98, 3.30)	BMI 25-29.9
Basdelioglu, 2020	High	Operation Time (min)	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI 25-29.9	Mean Difference	3.86 (2.57, 5.15)	BMI 25-29.9
Gurunathan, 2018	High	Total Adverse Events	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	0.99(0.88,1.11)	NS
Gurunathan, 2018	High	Neurological Complications	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	0.76(0.49,1.18)	NS
Gurunathan, 2018	High	Miscellaneous Complications	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	0.60(0.35,1.03)	NS
Gurunathan, 2018	High	LOS	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Author Reported - Fisher's Exact orX2	N/A	NS
Gurunathan, 2018	High	Operation Time (min)	Intraop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Author Reported - Fisher's Exact orX2	N/A	NS
Francois, 2019	High	ISR <0.8	Preop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	2.83(1.17,6.89)	Obese I (BMI30-34.9)
Francois, 2019	High	ISR <0.8	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	1.75(0.53,5.79)	NS
Katakam, 2021	Low	Length of Stay (days)	Postop.	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	Mean Difference	0.1 (-0.10, 0.30)	NS
Katakam, 2021	Low	Readmissions	90 days	Obese I (BMI 30-34.9)	Overweight (BMI 25-29.9)	RR	0.83(0.55,1.27)	NS

Table 10495: PICO 9- Risk Stratification: BMI (30-34.9 vs 25-29.9)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Collins, 2017	High	WOMAC Pain	Postop 3 mos.	BMI 30-34.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Pain	Postop 6 mos.	BMI 30-34.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Pain	Postop 24mos	BMI 30-34.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Pain	Postop 3 mos.	BMI 35-39.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Pain	Postop 6 mos.	BMI 35-39.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Pain	Postop 24mos	BMI 35-39.9	BMI 25-29.9	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS

Table 10596: PICO 9- Risk Stratification: BMI (30-34.9 vs <30)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Polat, 2019	High	Total Revisions	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	RD	0.08(-0.01,0.16)	NS
Ogur, 2020	Low	Total Adverse Events	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	RR	1.24(0.51,3.01)	NS
Ogur, 2020	Low	Deep Vein Thrombosis	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	RR	1.35(0.23,8.00)	NS
Ogur, 2020	Low	Medial Collateral Laceration	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	RD	0.00(0.00,0.00)	NS
Ogur, 2020	Low	Pulmonary Embolism	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	RR	1.81(0.17,19.72)	NS
Ogur, 2020	Low	Infection (Deep Infection)	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	RR	0.90(0.06,14.32)	NS
Ogur, 2020	Low	Infection (Deep Superficial Infection)	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	RR	1.50(0.37,6.20)	NS
Ogur, 2020	Low	Total Adverse Events	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	RR	4.30(2.06,9.00)	Bilateral TKA BMI<30
Ogur, 2020	Low	Deep Vein Thrombosis	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	RR	3.54(0.75,16.80)	NS
Ogur, 2020	Low	Medial Collateral Laceration	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	RD	0.03(0.00,0.05)	Bilateral TKA BMI<30
Ogur, 2020	Low	Pulmonary Embolism	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	RR	4.05(0.46,35.84)	NS
Ogur, 2020	Low	Infection (Deep Infection)	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	RR	4.05(0.46,35.84)	NS
Ogur, 2020	Low	Infection (Deep Superficial Infection)	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	RR	3.38(0.95,12.04)	NS
Polat, 2019	High	Adverse Events	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	RD	0.10(0.01,0.19)	Non-Obese (BMI <30)

Table 10697: PICO 9- Risk Stratification: BMI (30-34.9 vs <30)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	High	WOMAC Total	Preop.	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	1.87 (-4.95, 8.69)	NS
Maniar, 2018	High	KSS Total (no scale provided)	Preop.	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	-4.66 (-12.16, 2.84)	NS
Maniar, 2018	High	WOMAC Total	Postop 3 mos.	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	-2.64 (-8.56, 3.28)	NS
Maniar, 2018	High	WOMAC Total	Postop 12mos	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	-4.13 (-8.43, 0.17)	NS
Maniar, 2018	High	KSS Total (no scale provided)	Postop 12mos	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	-0.29 (-6.33, 5.75)	NS
Ogur, 2020	Low	KSS Total	Preop.	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	Mean Difference	-8.3 (-9.26, -7.34)	Unilateral TKA BMI<30
Ogur, 2020	Low	KSS Total	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	Mean Difference	-8.5 (-9.06, -7.94)	Unilateral TKA BMI<30
Ogur, 2020	Low	WOMAC Total	Preop.	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	Mean Difference	-4.6 (-5.16, -4.04)	Unilateral TKA BMI30-34.9
Ogur, 2020	Low	WOMAC Total	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	Mean Difference	-2.9 (-3.36, -2.44)	Unilateral TKA BMI30-34.9
Ogur, 2020	Low	KSS Total	Preop.	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	Mean Difference	-3.2 (-3.87, -2.53)	Bilateral TKA BMI<30
Ogur, 2020	Low	KSS Total	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	Mean Difference	-8 (-9.13, -6.87)	Bilateral TKA BMI<30
Ogur, 2020	Low	WOMAC Total	Preop.	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	Mean Difference	-4.3 (-4.85, -3.75)	Bilateral TKA BMI30-34.9
Ogur, 2020	Low	WOMAC Total	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	Mean Difference	-2.8 (-3.73, -1.87)	Bilateral TKA BMI30-34.9
Torres-Claramunt,2016	High	SF-36 General Health	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-2.64 (-5.70, 0.42)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Torres-Claramunt,2016	High	SF-36 General Health	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	31.22 (29.54, 32.90)	Obese I (BMI30-34)
Torres-Claramunt,2016	High	KSS Total	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-0.6 (-3.80, 2.60)	NS
Torres-Claramunt,2016	High	KSS Global	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-2.41 (-6.71, 1.89)	NS
Torres-Claramunt,2016	High	KSS Total	5 yrs.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-2.8 (-4.81, -0.79)	Non-Obese (BMI <30)
Torres-Claramunt,2016	High	KSS Global	5 yrs.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-6.15 (-10.95, -1.35)	Non-Obese (BMI <30)
Polat, 2019	High	KSS Total	Preop.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	-1.9 (-5.91, 2.11)	NS
Polat, 2019	High	KSS Total	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	-7.5 (-11.59, -3.41)	Non-Obese (BMI <30)
Polat, 2019	High	KSS Total	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	-5.6 (-10.79, -0.41)	Non-Obese (BMI <30)
Polat, 2019	High	Oxford Knee Score	Preop.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	0 (-3.89, 3.89)	NS
Polat, 2019	High	Oxford Knee Score	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	-3.2 (-6.07, -0.33)	Non-Obese (BMI <30)
Polat, 2019	High	Oxford Knee Score	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	-3.2 (-7.80, 1.40)	NS

Table 10798: PICO 9- Risk Stratification: BMI (30-34.9 vs <30)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	High	SF-12 Physical	Preop.	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	-0.3 (-4.30, 3.70)	NS
Maniar, 2018	High	Flexion (deg)	Preop.	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	-4.6 (-11.95, 2.75)	NS
Maniar, 2018	High	SF-12 Physical	Postop 3 mos.	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	1.66 (-1.63, 4.95)	NS
Maniar, 2018	High	Flexion (deg)	Postop 3 mos.	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	-1.19 (-5.05, 2.67)	NS
Maniar, 2018	High	SF-12 Physical	Postop 12mos	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	2.01 (-1.55, 5.57)	NS
Maniar, 2018	High	Flexion (deg)	Postop 12mos	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	1.18 (-2.49, 4.85)	NS
Sveikata, 2017	High	WOMAC Stiffness	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Sveikata, 2017	High	WOMAC Function	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Sveikata, 2017	High	SF-12 Physical	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Sveikata, 2017	High	WOMAC Stiffness	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Sveikata, 2017	High	WOMAC Function	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Sveikata, 2017	High	SF-12 Physical	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Ogur, 2020	Low	ROM (deg)	Preop.	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	Mean Difference	-10.6 (-13.11, -8.09)	Unilateral TKA BMI<30
Ogur, 2020	Low	ROM (deg)	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	Mean Difference	-12.95 (-15.56, -10.34)	Unilateral TKA BMI<30

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ogur, 2020	Low	ROM (deg)	Preop.	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	Mean Difference	-7.3 (-10.55, -4.05)	Bilateral TKA BMI<30
Ogur, 2020	Low	ROM (deg)	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	Mean Difference	-7.9 (-10.58, -5.22)	Bilateral TKA BMI<30
Torres-Claramunt,2016	High	SF-36 Physical	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-2.47 (-5.53, 0.59)	NS
Torres-Claramunt,2016	High	SF-36 Role Physical	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-7.81 (-12.77, -2.85)	Non-Obese (BMI <30)
Torres-Claramunt,2016	High	SF-36 Physical	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-1.75 (-3.11, -0.39)	Non-Obese (BMI <30)
Torres-Claramunt,2016	High	SF-36 Physical	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-1.91 (-3.91, 0.09)	NS
Torres-Claramunt,2016	High	SF-36 Role Physical	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-1.96 (-4.09, 0.17)	NS
Torres-Claramunt,2016	High	SF-36 Physical	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-1.79 (-3.60, 0.02)	NS
Torres-Claramunt,2016	High	KSS Function	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-1.78 (-4.03, 0.47)	NS
Torres-Claramunt,2016	High	KSS Function	5 yrs.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-3.36 (-6.74, 0.02)	NS
Polat, 2019	High	KSS Function	Preop.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	-3.5 (-14.27, 7.27)	NS
Polat, 2019	High	KSS Function	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	-2.2 (-8.38, 3.98)	NS
Polat, 2019	High	KSS Function	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	1.3 (-9.82, 12.42)	NS
Polat, 2019	High	ROM (deg)	Preop.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	-9.4 (-15.17, -3.63)	Non-Obese (BMI <30)
Polat, 2019	High	ROM (deg)	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	-3.8 (-12.07, 4.47)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Polat, 2019	High	ROM (deg)	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	5.7 (-2.65, 14.05)	NS

Table 10899: PICO 9- Risk Stratification: BMI (30-34.9 vs <30)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	High	SF-12 Mental	Preop.	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	0.76 (-3.26, 4.78)	NS
Maniar, 2018	High	SF-12 Mental	Postop 3 mos.	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	2.12 (-1.46, 5.70)	NS
Maniar, 2018	High	SF-12 Mental	Postop 12mos	Obese I (BMI 30-34.9)	Not Obese	Mean Difference	-2.53 (-5.34, 0.28)	NS
Sveikata, 2017	High	SF-12 Mental	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Sveikata, 2017	High	SF-12 Mental	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Ogur, 2020	Low	Blood Loss (Volume (mL))	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	Mean Difference	6.3 (-33.05, 45.65)	NS
Ogur, 2020	Low	Blood Transfusions (Units)	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	Mean Difference	0.2 (-0.03, 0.43)	NS
Ogur, 2020	Low	Length of Stay	Postop 47mos	Unilateral TKA BMI 30-34.9	Unilateral TKA BMI <30	Mean Difference	-0.02 (-0.25, 0.21)	NS
Ogur, 2020	Low	Blood Loss (Volume (mL))	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	Mean Difference	7.4 (-47.34, 62.14)	NS
Ogur, 2020	Low	Blood Transfusions (Units)	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	Mean Difference	0.16 (-0.29, 0.61)	NS
Ogur, 2020	Low	Length of Stay	Postop 47mos	Bilateral TKA BMI 30-34.9	Bilateral TKA BMI <30	Mean Difference	0.07 (-0.15, 0.29)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Torres-Claramunt,2016	High	SF-36 Vitality	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-4.27 (-8.04, -0.50)	Non-Obese (BMI <30)
Torres-Claramunt,2016	High	SF-36 Social Function	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-3.93 (-8.74, 0.88)	NS
Torres-Claramunt,2016	High	SF-36 Role Emotional	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-3.95 (-9.88, 1.98)	NS
Torres-Claramunt,2016	High	SF-36 Mental	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-4.21 (-8.20, -0.22)	Non-Obese (BMI <30)
Torres-Claramunt,2016	High	SF-36 Mental	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-1.98 (-4.50, 0.54)	NS
Torres-Claramunt,2016	High	SF-36 Vitality	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-2.47 (-4.50, -0.44)	Non-Obese (BMI <30)
Torres-Claramunt,2016	High	SF-36 Social Function	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-3.52 (-5.65, -1.39)	Non-Obese (BMI <30)
Torres-Claramunt,2016	High	SF-36 Role Emotional	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-1.95 (-4.26, 0.36)	NS
Torres-Claramunt,2016	High	SF-36 Mental	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-1.86 (-4.14, 0.42)	NS
Torres-Claramunt,2016	High	SF-36 Mental	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-2.47 (-4.69, -0.25)	Non-Obese (BMI <30)
Tio, 2018	High	Hemoglobin (g/dL)	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-0.2 (-0.39, -0.01)	Non-Obese (BMI <30)
Tio, 2018	High	Hemoglobin (g/dL)	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	0.1 (-0.07, 0.27)	NS
Tio, 2018	High	Patients Received Blood Transfusion	Intraop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	RR	0.95(0.65,1.40)	NS
Tio, 2018	High	Patients Received Blood Transfusion (1 Unit)	Intraop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	RR	1.58(0.43,5.83)	NS
Tio, 2018	High	Patients Received Blood Transfusion (2 Units)	Intraop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	RR	0.88(0.57,1.37)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Tio, 2018	High	Patients Received Blood Transfusion (3-4 Units)	Intraop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	RR	1.05(0.32,3.42)	NS
Tio, 2018	High	Blood Loss	Intraop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-2.58 (-4.47, -0.69)	Obese I (BMI30-34)
Tio, 2018	High	Blood Loss (Volume (mL))	Intraop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-0.83 (-92.72, 91.06)	NS

Table 109100: PICO 9- Risk Stratification: BMI (30-34.9 vs <30)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sveikata, 2017	High	WOMAC Pain	Postop 1 yrs.	Obese I (BMI 30-34.9)	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Sveikata, 2017	High	WOMAC Pain	Postop 1 yrs.	Obese II (BMI 35-39.9)	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Torres-Claramunt,2016	High	SF-36 Bodily Pain	Preop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-4.64 (-7.90, -1.38)	Non-Obese (BMI <30)
Torres-Claramunt,2016	High	SF-36 Bodily Pain	Postop.	Obese I (BMI 30-34)	Non-Obese (BMI < 30)	Mean Difference	-1.79 (-4.71, 1.13)	NS
Polat, 2019	High	VAS Pain	Preop.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	0.3 (-0.16, 0.76)	NS
Polat, 2019	High	VAS Pain	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	0.7 (-0.34, 1.74)	NS
Polat, 2019	High	VAS Pain	2 yrs.	Obese (BMI 30-34.9)	Non-Obese (BMI < 30)	Mean Difference	0.4 (-0.73, 1.53)	NS

Table 110101: PICO 9- Risk Stratification: BMI (30-39.9 vs <18.5)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Willacy, 2020	Low	Infection (Surgical site infection)	Periop.	Obese (BMI 30-39.9)	Underweight (BMI <18.5)	RR	1.78(0.25,12.63)	NS
Willacy, 2020	Low	Respiratory Complications	Periop.	Obese (BMI 30-39.9)	Underweight (BMI <18.5)	RR	1.85(0.26,13.08)	NS
Willacy, 2020	Low	Cardiac Complications	Periop.	Obese (BMI 30-39.9)	Underweight (BMI <18.5)	RR	0.62(0.09,4.39)	NS
Willacy, 2020	Low	Renal Complications	Periop.	Obese (BMI 30-39.9)	Underweight (BMI <18.5)	RR	0.74(0.24,2.27)	NS
Willacy, 2020	Low	Deep Vein Thrombosis	Periop.	Obese (BMI 30-39.9)	Underweight (BMI <18.5)	RD	0.01(0.01,0.01)	Underweight (BMI<18.5)

Table 111102: PICO 9- Risk Stratification: BMI (30-39.9 vs 18.5-24.9)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
George, 2018	Low	Death/Mortality	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.10(0.63,1.91)	NS
George, 2018	Low	Infection (Superficial Infection)	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.25(0.96,1.62)	NS
George, 2018	Low	Infection (Periprosthetic Joint Infection)	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.14(0.80,1.61)	NS
George, 2018	Low	Wound Dehiscence	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.50(0.93,2.42)	NS
George, 2018	Low	Deep Vein Thrombosis	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.06(0.88,1.28)	NS
George, 2018	Low	Pulmonary Embolism	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.94(1.48,2.54)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Pneumonia	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	0.92(0.68,1.24)	NS
George, 2018	Low	Infection (Urinary Tract Infection)	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	0.92(0.76,1.10)	NS
George, 2018	Low	Renal Failure	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.50(0.64,3.52)	NS
George, 2018	Low	Reintubation	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.74(0.98,3.09)	NS
George, 2018	Low	Ventilator >48 hr.	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.28(0.58,2.85)	NS
George, 2018	Low	Renal Insufficiency	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	2.57(1.19,5.55)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Stroke	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	0.65(0.37,1.15)	NS
George, 2018	Low	Cardiac Arrest	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	0.87(0.46,1.63)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
George, 2018	Low	Myocardial Infarction or Stroke	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	0.71(0.50,1.00)	NS
George, 2018	Low	Sepsis	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.14(0.74,1.74)	NS
George, 2018	Low	Septic Shock	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	1.07(0.48,2.42)	NS
George, 2018	Low	Total Revisions	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	0.99(0.84,1.17)	NS
Willacy, 2020	Low	Infection (Surgical site infection)	Periop.	Obese (BMI 30-39.9)	Normal Weight (BMI 18.5-24.9)	RR	1.10(0.87,1.40)	NS
Willacy, 2020	Low	Respiratory Complications	Periop.	Obese (BMI 30-39.9)	Normal Weight (BMI 18.5-24.9)	RR	1.73(1.30,2.29)	Normal Weight (BMI 18.5-24.9)
Willacy, 2020	Low	Cardiac Complications	Periop.	Obese (BMI 30-39.9)	Normal Weight (BMI 18.5-24.9)	RR	0.73(0.52,1.02)	NS
Willacy, 2020	Low	Renal Complications	Periop.	Obese (BMI 30-39.9)	Normal Weight (BMI 18.5-24.9)	RR	1.03(0.84,1.27)	NS
Willacy, 2020	Low	Deep Vein Thrombosis	Periop.	Obese (BMI 30-39.9)	Normal Weight (BMI 18.5-24.9)	RR	1.16(0.92,1.47)	NS

Table 112103: PICO 9- Risk Stratification: BMI (30-39.9 vs 18.5-24.9)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
George, 2018	Low	Readmissions	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	0.91(0.83,1.00)	NS
George, 2018	Low	Patients Received Blood Transfusion	Postop 30days	BMI 30-40	Normal Weight (BMI 18.5-24.9)	RR	0.57(0.55,0.60)	BMI 30-40

Table 113104: PICO 9- Risk Stratification: BMI (30-39.9 vs <25)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Daniilidis, 2016	High	Total Revisions	18 mos.	Obese (BMI 30–40)	Normal Weight (BMI < 25)	RR	1.39(0.45,4.34)	NS
Daniilidis, 2016	High	Adverse Events	Postop.	Obese (BMI 30–40)	Normal Weight (BMI < 25)	RR	0.57(0.23,1.45)	NS
Daniilidis, 2016	High	Infection (Infection)	18 mos.	Obese (BMI 30–40)	Normal Weight (BMI < 25)	RR	0.77(0.17,3.48)	NS
Daniilidis, 2016	High	Instability	18 mos.	Obese (BMI 30–40)	Normal Weight (BMI < 25)	RD	0.06(0.01,0.10)	Normal Weight (BMI < 25)
Daniilidis, 2016	High	Limitation of Movement	18 mos.	Obese (BMI 30–40)	Normal Weight (BMI < 25)	RR	0.44(0.04,4.66)	NS
Daniilidis, 2016	High	Loosening	18 mos.	Obese (BMI 30–40)	Normal Weight (BMI < 25)	RD	0.02(-0.01,0.04)	NS
Daniilidis, 2016	High	Periprosthetic Fracture	18 mos.	Obese (BMI 30–40)	Normal Weight (BMI < 25)	RD	0.01(-0.01,0.03)	NS

Table 114105: PICO 9- Risk Stratification: BMI (30-39.9 vs <25)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Daniilidis, 2016	High	Persistent pain	18 mos.	Obese (BMI 30–40)	Normal Weight (BMI < 25)	RD	0.01(-0.01,0.03)	NS

Table 115106: PICO 9- Risk Stratification: BMI (30-39.9 vs 25-29.9)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
George, 2018	Low	Death/Mortality	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	1.11(0.76,1.61)	NS
George, 2018	Low	Infection (Superficial Infection)	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	1.45(1.20,1.74)	Overweight (BMI25-<30)
George, 2018	Low	Infection (Periprosthetic Joint Infection)	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	1.27(0.99,1.62)	NS
George, 2018	Low	Wound Dehiscence	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	1.18(0.88,1.59)	NS
George, 2018	Low	Deep Vein Thrombosis	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	0.96(0.85,1.09)	NS
George, 2018	Low	Pulmonary Embolism	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	1.27(1.09,1.48)	Overweight (BMI25-<30)
George, 2018	Low	Pneumonia	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	0.76(0.62,0.93)	BMI 30-40
George, 2018	Low	Infection (Urinary Tract Infection)	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	1.01(0.89,1.15)	NS
George, 2018	Low	Renal Failure	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	2.06(1.08,3.90)	Overweight (BMI25-<30)
George, 2018	Low	Reintubation	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	1.15(0.83,1.59)	NS
George, 2018	Low	Ventilator >48 hr.	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	0.85(0.53,1.36)	NS
George, 2018	Low	Renal Insufficiency	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	1.70(1.12,2.59)	Overweight (BMI25-<30)
George, 2018	Low	Stroke	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	0.70(0.46,1.06)	NS
George, 2018	Low	Cardiac Arrest	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	0.87(0.56,1.35)	NS
George, 2018	Low	Myocardial Infarction or Stroke	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	0.80(0.62,1.03)	NS
George, 2018	Low	Sepsis	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	1.12(0.84,1.49)	NS
George, 2018	Low	Septic Shock	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	0.56(0.35,0.88)	BMI 30-40
George, 2018	Low	Total Revisions	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	1.05(0.93,1.18)	NS
Daniilidis, 2016	High	Total Revisions	18 mos.	Obese (BMI 30–40)	Overweight (BMI 25-30)	RR	0.87(0.48,1.59)	NS
Daniilidis, 2016	High	Adverse Events	Postop.	Obese (BMI 30–40)	Overweight (BMI 25-30)	RR	0.87(0.41,1.84)	NS
Daniilidis, 2016	High	Infection (Infection)	18 mos.	Obese (BMI 30–40)	Overweight (BMI 25-30)	RR	1.03(0.34,3.12)	NS
Daniilidis, 2016	High	Instability	18 mos.	Obese (BMI 30–40)	Overweight (BMI 25-30)	RR	1.47(0.38,5.69)	NS
Daniilidis, 2016	High	Limitation of Movement	18 mos.	Obese (BMI 30–40)	Overweight (BMI 25-30)	RR	0.24(0.05,1.18)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Daniilidis, 2016	High	Loosening	18 mos.	Obese (BMI 30–40)	Overweight (BMI 25-30)	RR	0.73(0.11,5.10)	NS
Daniilidis, 2016	High	Periprosthetic Fracture	18 mos.	Obese (BMI 30–40)	Overweight (BMI 25-30)	RD	0.01(-0.01,0.03)	NS
Willacy, 2020	Low	Infection (Surgical site infection)	Periop.	Obese (BMI 30-39.9)	Overweight (BMI 25-29.9)	RR	1.38(1.16,1.65)	Overweight (BMI25-29.9)
Willacy, 2020	Low	Respiratory Complications	Periop.	Obese (BMI 30-39.9)	Overweight (BMI 25-29.9)	RR	1.26(1.07,1.49)	Overweight (BMI25-29.9)
Willacy, 2020	Low	Cardiac Complications	Periop.	Obese (BMI 30-39.9)	Overweight (BMI 25-29.9)	RR	0.85(0.66,1.10)	NS
Willacy, 2020	Low	Renal Complications	Periop.	Obese (BMI 30-39.9)	Overweight (BMI 25-29.9)	RR	1.12(0.97,1.30)	NS
Willacy, 2020	Low	Deep Vein Thrombosis	Periop.	Obese (BMI 30-39.9)	Overweight (BMI 25-29.9)	RR	0.94(0.81,1.09)	NS

Table 116107: PICO 9- Risk Stratification: BMI (30-39.9 vs 25-29.9)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
George, 2018	Low	Readmissions	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	0.97(0.91,1.04)	NS
George, 2018	Low	Patients Received Blood Transfusion	Postop 30days	BMI 30-40	Overweight (BMI 25-<30)	RR	0.78(0.75,0.81)	BMI 30-40

Table 117108: PICO 9- Risk Stratification: BMI (30-39.9 vs 25-29.9)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Daniilidis, 2016	High	Persistent pain	18 mos.	Obese (BMI 30–40)	Overweight (BMI 25-30)	RD	0.01(-0.01,0.03)	NS

Table 118109: PICO 9- Risk Stratification: BMI (30-39.9 vs <30)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Agarwala, 2020	High	Total Revisions	Postop 1 yrs.	BMI 30-40	Not Obese	RR	1.77(0.46,6.76)	NS
Hakim, 2020	High	Infection (Superficial Infection)	Postop 10.8yrs	BMI 30-40	BMI <30	RR	0.58(0.05,6.20)	NS
Hakim, 2020	High	Skin Necrosis	Postop 10.8yrs	BMI 30-40	BMI <30	RD	0.00(0.00,0.00)	NS
Hakim, 2020	High	Peroneal Palsy	Postop 10.8yrs	BMI 30-40	BMI <30	RD	0.00(0.00,0.00)	NS
Hakim, 2020	High	Thromboembolic Complications	Postop 10.8yrs	BMI 30-40	BMI <30	RD	0.01(-0.01,0.02)	NS
Hakim, 2020	High	Manipulation	Postop 10.8yrs	BMI 30-40	BMI <30	RR	0.29(0.02,4.51)	NS
Hakim, 2020	High	Patellar Clunk Syndrome	Postop 10.8yrs	BMI 30-40	BMI <30	RD	-0.03(-0.08,0.03)	NS
Hakim, 2020	High	Infection (Late Deep Infection)	Postop 10.8yrs	BMI 30-40	BMI <30	RD	0.00(0.00,0.00)	NS
Hakim, 2020	High	Aseptic Revision	Postop 10.8yrs	BMI 30-40	BMI <30	RD	-0.03(-0.08,0.03)	NS
Hakim, 2020	High	Septic Revision	Postop 10.8yrs	BMI 30-40	BMI <30	RD	0.01(-0.01,0.02)	NS
Hakim, 2020	High	Total Adverse Events	Postop 10.8yrs	BMI 30-40	BMI <30	RD	0.00(0.00,0.00)	NS
Agarwala, 2020	High	Infection (Superficial Infection)	Postop 1 yrs.	BMI 30-40	Not Obese	RR	1.52(0.58,3.97)	NS
Agarwala, 2020	High	Infection (Deep Infection)	Postop 1 yrs.	BMI 30-40	Not Obese	RR	0.76(0.11,5.34)	NS
Agarwala, 2020	High	Deep Vein Thrombosis	Postop 1 yrs.	BMI 30-40	Not Obese	RR	2.27(0.24,21.71)	NS
Kandil, 2015	High	Major Adverse Events	Postop 12 yrs.	BMI 30-39	BMI <30	RR	2.27(1.82,2.84)	BMI <30
Kandil, 2015	High	Minor Complications	Postop 12 yrs.	BMI 30-39	BMI <30	RR	2.39(2.03,2.81)	BMI <30
Kandil, 2015	High	Local Complications	Postop 12 yrs.	BMI 30-39	BMI <30	RR	1.10(0.85,1.41)	NS
Kandil, 2015	High	Deep Vein Thrombosis	Postop 12 yrs.	BMI 30-39	BMI <30	RR	2.75(1.90,3.99)	BMI <30
Kandil, 2015	High	Infection (Infection)	Postop 12 yrs.	BMI 30-39	BMI <30	RR	1.29(0.87,1.90)	NS
Kandil, 2015	High	Medical Adverse Events	Postop 12 yrs.	BMI 30-39	BMI <30	RR	3.93(3.22,4.80)	BMI <30
Kandil, 2015	High	Major Adverse Events	Postop 12 yrs.	BMI >40	BMI <30	RR	3.06(2.39,3.91)	BMI <30
Kandil, 2015	High	Minor Complications	Postop 12 yrs.	BMI >40	BMI <30	RR	3.15(2.63,3.77)	BMI <30
Kandil, 2015	High	Local Complications	Postop 12 yrs.	BMI >40	BMI <30	RR	1.97(1.53,2.52)	BMI <30

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kandil, 2015	High	Deep Vein Thrombosis	Postop 12 yrs.	BMI >40	BMI <30	RR	2.85(1.80,4.50)	BMI <30
Kandil, 2015	High	Infection (Infection)	Postop 12 yrs.	BMI >40	BMI <30	RR	3.09(2.19,4.36)	BMI <30
Kandil, 2015	High	Medical Adverse Events	Postop 12 yrs.	BMI >40	BMI <30	RR	5.25(4.23,6.53)	BMI <30
Woon, 2016	High	Deep Vein Thrombosis	Postop 30days	BMI 30-40	BMI <30	RR	1.38(0.74,2.59)	NS
Woon, 2016	High	Pulmonary Embolism	Postop 30days	BMI 30-40	BMI <30	RR	0.83(0.45,1.54)	NS
Woon, 2016	High	Infection (Postoperative Wound Infection)	Postop 30days	BMI 30-40	BMI <30	RD	0.00(0.00,0.00)	BMI <30
Woon, 2016	High	Death/Mortality	Postop 30days	BMI 30-40	BMI <30	RD	0.00(-0.00,0.00)	NS
Kandil, 2015	High	Total Revisions	Postop 12 yrs.	BMI 30-39	BMI <30	RR	1.73(1.37,2.18)	BMI <30
Kandil, 2015	High	Total Revisions	Postop 12 yrs.	BMI >40	BMI <30	RR	2.10(1.60,2.75)	BMI <30
Agarwala, 2020	High	Deep Vein Thrombosis	Postop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	RD	-0.04(-0.11,0.04)	NS
Agarwala, 2020	High	Urinary Retention	Postop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	RR	1.00(0.15,6.57)	NS
Agarwala, 2020	High	Wound Complications (Superficial)	Postop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	RR	2.00(0.19,20.72)	NS
Agarwala, 2020	High	Patella Resurfacing	Postop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	RR	1.00(0.07,15.15)	NS
Agarwala, 2020	High	Death/Mortality (Unrelated to TKA)	6 mos.	Obese (BMI 30-40)	Non-Obese (BMI <30)	RD	0.04(-0.04,0.11)	NS

Table 119110: PICO 9- Risk Stratification: BMI (30-39.9 vs <30)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hakim, 2020	High	KSS Total	Preop 10.8 yrs.	BMI 30-40	BMI <30	Mean Difference	1.89 (-0.40, 4.18)	NS
Hakim, 2020	High	KSS Total	Postop.	BMI 30-40	BMI <30	Mean Difference	-0.88 (-2.93, 1.17)	NS
Agarwala, 2020	High	KSS Total	Postop 1 yrs.	BMI 30-40	Not Obese	Mean Difference	2 (0.17, 3.83)	BMI 30-40

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Agarwala, 2020	High	KSS Total	Postop 1 yrs.	BMI 30-40	Not Obese	Mean Difference	-4 (-5.72, -2.28)	Not Obese
Agarwala, 2020	High	Oxford Knee Score	Preop.	Obese (BMI 30-40) Right Knee	Non-Obese (BMI <30) Right Knee	Mean Difference	-1.39 (-2.88, 0.10)	NS
Agarwala, 2020	High	Oxford Knee Score	6 wks.	Obese (BMI 30-40) Right Knee	Non-Obese (BMI <30) Right Knee	Mean Difference	-12.43 (-14.68, -10.18)	Non-Obese (BMI<30) Right Knee
Agarwala, 2020	High	Oxford Knee Score	3 mos.	Obese (BMI 30-40) Right Knee	Non-Obese (BMI <30) Right Knee	Mean Difference	0.17 (-0.91, 1.25)	NS
Agarwala, 2020	High	Oxford Knee Score	1 yrs.	Obese (BMI 30-40) Right Knee	Non-Obese (BMI <30) Right Knee	Mean Difference	-0.37 (-1.10, 0.36)	NS
Agarwala, 2020	High	Oxford Knee Score	2 yrs.	Obese (BMI 30-40) Right Knee	Non-Obese (BMI <30) Right Knee	Mean Difference	-0.12 (-0.91, 0.67)	NS
Agarwala, 2020	High	Oxford Knee Score	Preop.	Obese (BMI 30-40) Left Knee	Non-Obese (BMI <30) Left Knee	Mean Difference	-1.37 (-2.84, 0.10)	NS
Agarwala, 2020	High	Oxford Knee Score	6 wks.	Obese (BMI 30-40) Left Knee	Non-Obese (BMI <30) Left Knee	Mean Difference	-12.52 (-14.20, -10.84)	Non-Obese (BMI<30) Left Knee
Agarwala, 2020	High	Oxford Knee Score	3 mos.	Obese (BMI 30-40) Left Knee	Non-Obese (BMI <30) Left Knee	Mean Difference	-0.41 (-1.42, 0.60)	NS
Agarwala, 2020	High	Oxford Knee Score	1 yrs.	Obese (BMI 30-40) Left Knee	Non-Obese (BMI <30) Left Knee	Mean Difference	0.17 (-0.51, 0.85)	NS
Agarwala, 2020	High	Oxford Knee Score	2 yrs.	Obese (BMI 30-40) Left Knee	Non-Obese (BMI <30) Left Knee	Mean Difference	-0.18 (-0.83, 0.47)	NS

Table 120111: PICO 9- Risk Stratification: BMI (30-39.9 vs <30)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hakim, 2020	High	KSS Function	Preop 10.8 yrs.	BMI 30-40	BMI <30	Mean Difference	-3.53 (-5.89, -1.17)	BMI <30
Hakim, 2020	High	KSS Function	Postop.	BMI 30-40	BMI <30	Mean Difference	-4.56 (-6.63, -2.49)	BMI <30
Agarwala, 2020	High	KSS Function	Postop 1 yrs.	BMI 30-40	Not Obese	Mean Difference	-2 (-4.94, 0.94)	NS
Agarwala, 2020	High	KSS Function	Postop 1 yrs.	BMI 30-40	Not Obese	Mean Difference	-7 (-11.14, -2.86)	Not Obese
Kandil, 2015	High	Stiffness	Postop 12 yrs.	BMI 30-39	BMI <30	RR	0.76(0.55,1.04)	NS
Kandil, 2015	High	Stiffness	Postop 12 yrs.	BMI >40	BMI <30	RR	1.02(0.71,1.46)	NS
Agarwala, 2020	High	Time to Walk (d)	Postop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	Mean Difference	0.14 (-0.10, 0.38)	NS
Agarwala, 2020	High	Time to Climb Stairs (d)	Postop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	Mean Difference	0.36 (-0.19, 0.91)	NS

Table 121112: PICO 9- Risk Stratification: BMI (30-39.9 vs <30)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hakim, 2020	High	Tourniquet Time (min)	Postop 10.8yrs	BMI 30-40	BMI <30	Author Reported - Chi-Square test; Student's t-test; ANOVA;	N/A	NS
Woon, 2016	High	Length of Stay	Postop 30days	BMI 30-40	BMI <30	Author Reported - Chi-Squared test; Student's t-test; Tukey post-hoc analysis; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Woon, 2016	High	Patients Received Blood Transfusion	Postop 30days	BMI 30-40	BMI <30	RR	1.25(1.14,1.37)	BMI <30
Agarwala, 2020	High	Hemoglobin (g/dL)	Preop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	Mean Difference	-0.36 (-1.00, 0.28)	NS
Agarwala, 2020	High	Hemoglobin (g/dL)	Postop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	Mean Difference	-0.16 (-0.95, 0.63)	NS
Agarwala, 2020	High	Hemoglobin Drop (g/dL)	Postop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	Mean Difference	-0.19 (-0.52, 0.14)	NS
Agarwala, 2020	High	Length of Stay (days)	Postop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	Mean Difference	-0.08 (-0.46, 0.30)	NS
Agarwala, 2020	High	Tourniquet Time (min)	Postop.	Obese (BMI 30-40)	Non-Obese (BMI <30)	Mean Difference	0.63 (-3.11, 4.37)	NS

Table 121113: PICO 9- Risk Stratification: BMI (>30 vs <25)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Cao, 2020	High	Deep Vein Thrombosis	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RR	0.85(0.22,3.24)	NS
Cao, 2020	High	Myocardial Infarction or Stroke	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RD	-0.00(-0.01,0.00)	NS
Cao, 2020	High	Infection (Superficial Wound Infection)	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RR	0.99(0.09,10.85)	NS
Cao, 2020	High	Infection (Deep Infection)	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RD	0.00(0.00,0.00)	NS
Li, 2020	High	Deep Vein Thrombosis	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RR	1.10(0.07,17.15)	NS
Li, 2020	High	Pulmonary Embolism	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RD	0.00(0.00,0.00)	NS
Li, 2020	High	Calf Muscular Vein Thrombosis	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RR	1.32(0.43,4.06)	NS
Li, 2020	High	Wound Complications	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RR	3.31(0.95,11.52)	NS
Li, 2020	High	Infection (Superficial Wound Infection)	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RD	0.02(-0.02,0.06)	NS
Li, 2020	High	Infection (Deep Infection)	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RD	0.00(0.00,0.00)	NS

Table 123114: PICO 9- Risk Stratification: BMI (>30 vs <25)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yoo, 2018	High	KSS Total	Preop.	BMI >30	BMI <25	Mean Difference	-5.1 (-6.76, -3.44)	BMI <25
Yoo, 2018	High	KSS Total	Postop 3 mos.	BMI >30	BMI <25	Mean Difference	1.5 (0.23, 2.77)	BMI >30
Yoo, 2018	High	KSS Total	Postop 1 yrs.	BMI >30	BMI <25	Mean Difference	-1.6 (-2.73, -0.47)	BMI <25
Yoo, 2018	High	KSS Total	Postop 5 yrs.	BMI >30	BMI <25	Mean Difference	-0.5 (-2.21, 1.21)	NS

Table 124115: PICO 9- Risk Stratification: BMI (>30 vs <25)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yoo, 2018	High	ROM (deg)	Preop.	BMI >30	BMI <25	Mean Difference	-14 (-17.38, -10.62)	BMI <25
Yoo, 2018	High	ROM (deg)	Postop 3 mos.	BMI >30	BMI <25	Mean Difference	-7 (-10.15, -3.85)	BMI <25
Yoo, 2018	High	ROM (deg)	Postop 1 yrs.	BMI >30	BMI <25	Mean Difference	-5 (-7.35, -2.65)	BMI <25
Yoo, 2018	High	ROM (deg)	Postop 5 yrs.	BMI >30	BMI <25	Mean Difference	-3 (-5.49, -0.51)	BMI <25
Li, 2020	High	ROM (deg)	Preop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	-3.4 (-7.78, 0.98)	NS
Li, 2020	High	ROM (deg)	3 days	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	5.5 (2.14, 8.86)	Obese (BMI >30)
Li, 2020	High	ROM (deg)	15 days	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	0.8 (-2.71, 4.31)	NS
Li, 2020	High	ROM (deg)	30 days	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	-0.8 (-3.65, 2.05)	NS
Li, 2020	High	ROM (deg)	90 days	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	0.7 (-1.42, 2.82)	NS

Table 125116: PICO 9- Risk Stratification: BMI (>30 vs <25)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Cao, 2020	High	Operation Time (min)	Intraop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	6.5 (-2.09, 15.09)	NS
Cao, 2020	High	Blood Transfusions (Volume(mL))	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	15.1 (-15.80, 46.00)	NS
Cao, 2020	High	Patients Received Blood Transfusion	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RR	0.68(0.52,0.90)	Obese (BMI >30)
Cao, 2020	High	Hemoglobin Drop (g/dL)	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	4 (1.51, 6.49)	Normal Weight (BMI <25)
Cao, 2020	High	Hematocrit Drop	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	-0.012 (-0.02, -0.00)	Obese (BMI >30)
Cao, 2020	High	Hemoglobin (g/dL)	Preop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	5 (2.47, 7.53)	Obese (BMI >30)
Cao, 2020	High	Drain Use	Intraop.	Obese (BMI >30)	Normal Weight (BMI <25)	RR	1.08(0.94,1.24)	NS
Cao, 2020	High	Tourniquet Use	Intraop.	Obese (BMI >30)	Normal Weight (BMI <25)	RR	1.02(0.95,1.11)	NS
Cao, 2020	High	Hematocrit	Preop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	0.007 (-0.00, 0.01)	NS
Li, 2020	High	Operation Time (min)	Preop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	7.3 (2.22, 12.38)	Normal Weight (BMI <25)
Li, 2020	High	Length of Stay (days)	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	0.5 (0.15, 0.85)	Normal Weight (BMI <25)
Li, 2020	High	Central Analgesics	Postop.	Obese (BMI >30)	Normal Weight (BMI <25)	RR	0.64(0.28,1.50)	NS
Li, 2020	High	Readmissions	90 days	Obese (BMI >30)	Normal Weight (BMI <25)	RD	0.02(-0.02,0.06)	NS

Table 126117: PICO 9- Risk Stratification: BMI (>30 vs <25)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Li, 2020	High	VAS Pain at Rest	Preop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	0.1 (-0.18, 0.38)	NS
Li, 2020	High	VAS Pain on Motion	Preop.	Obese (BMI >30)	Normal Weight (BMI <25)	Mean Difference	-0.2 (-0.45, 0.05)	NS

Table 127118: PICO 9- Risk Stratification: BMI (>30 vs 25-29.9)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Cao, 2020	High	Deep Vein Thrombosis	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RR	0.58(0.17,2.01)	NS
Cao, 2020	High	Myocardial Infarction or Stroke	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RD	-0.00(-0.01,0.00)	NS
Cao, 2020	High	Infection (Superficial Wound Infection)	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RR	0.84(0.09,7.99)	NS
Cao, 2020	High	Infection (Deep Infection)	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RD	-0.00(-0.01,0.00)	NS
Li, 2020	High	Deep Vein Thrombosis	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RD	0.02(-0.02,0.06)	NS
Li, 2020	High	Pulmonary Embolism	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RD	0.00(0.00,0.00)	NS
Li, 2020	High	Calf Muscular Vein Thrombosis	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RR	1.32(0.43,4.06)	NS
Li, 2020	High	Wound Complications	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RR	1.65(0.63,4.31)	NS
Li, 2020	High	Infection (Superficial Wound Infection)	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RR	1.10(0.07,17.15)	NS
Li, 2020	High	Infection (Deep Infection)	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RD	0.00(0.00,0.00)	NS

Table 128119: PICO 9- Risk Stratification: BMI (>30 vs 25-29.9)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Li, 2020	High	ROM (deg)	Preop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	-3.6 (-7.92, 0.72)	NS
Li, 2020	High	ROM (deg)	3 days	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	6.7 (3.54, 9.86)	Obese (BMI >30)
Li, 2020	High	ROM (deg)	15 days	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	0.1 (-3.37, 3.57)	NS
Li, 2020	High	ROM (deg)	30 days	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	-1.3 (-4.16, 1.56)	NS
Li, 2020	High	ROM (deg)	90 days	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	0.6 (-1.58, 2.78)	NS

Table 129120: PICO 9- Risk Stratification: BMI (>30 vs 25-29.9)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Cao, 2020	High	Operation Time (min)	Intraop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	8.6 (0.82, 16.38)	Overweight (BMI25-29.9)
Cao, 2020	High	Blood Transfusions (Volume(mL))	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	4.1 (-26.92, 35.12)	NS
Cao, 2020	High	Patients Received Blood Transfusion	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RR	0.89(0.67,1.19)	NS
Cao, 2020	High	Hemoglobin Drop (g/dL)	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	3.4 (0.94, 5.86)	Overweight (BMI25-29.9)
Cao, 2020	High	Hematocrit Drop	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	-0.011 (-0.02, -0.00)	Obese (BMI >30)
Cao, 2020	High	Hemoglobin (g/dL)	Preop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	1.9 (-0.49, 4.29)	NS
Cao, 2020	High	Drain Use	Intraop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RR	0.97(0.85,1.10)	NS
Cao, 2020	High	Tourniquet Use	Intraop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RR	1.01(0.93,1.08)	NS
Cao, 2020	High	Hematocrit	Preop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	0.007 (0.00, 0.01)	Obese (BMI >30)
Li, 2020	High	Operation Time (min)	Preop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	6.3 (1.79, 10.81)	Overweight (BMI25-29.9)
Li, 2020	High	Length of Stay (days)	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	0.4 (0.03, 0.77)	Overweight (BMI25-29.9)
Li, 2020	High	Central Analgesics	Postop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	RR	0.77(0.32,1.87)	NS
Li, 2020	High	Readmissions	90 days	Obese (BMI >30)	Overweight (BMI 25-29.9)	RR	1.10(0.07,17.15)	NS

Table 130121: PICO 9- Risk Stratification: BMI (>30 vs 25-29.9)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Li, 2020	High	VAS Pain at Rest	Preop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	0.3 (0.01, 0.59)	Overweight (BMI25-29.9)
Li, 2020	High	VAS Pain on Motion	Preop.	Obese (BMI >30)	Overweight (BMI 25-29.9)	Mean Difference	0 (-0.24, 0.24)	NS

Table 131122: PICO 9- Risk Stratification: BMI (>30 vs <30)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zengerink, 2015	Low	Lateral Progression of OA	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	RR	1.30(0.81,2.10)	NS
Zengerink, 2015	Low	Patellofemoral Progression of OA	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	RR	3.87(1.55,9.69)	Not Obese
Zengerink, 2015	Low	Lucencies Femur	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	RR	3.23(0.35,30.07)	NS
Zengerink, 2015	Low	Lucencies Tibia	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	RR	1.79(0.45,7.14)	NS
Zengerink, 2015	Low	Migration	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	RR	1.61(0.28,9.28)	NS
Zengerink, 2015	Low	Subsidence	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	RR	3.23(0.35,30.07)	NS
Zengerink, 2015	Low	Heterotopic Ossifications	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	RR	0.72(0.21,2.40)	NS
Benjamin, 2001	High	Peroneal Palsy	Postop.	Obese Unilateral	Not Obese Unilateral	RD	0.00(0.00,0.00)	NS
Benjamin, 2001	High	Arthrofibrosis	Postop.	Obese Unilateral	Not Obese Unilateral	RD	-0.02(-0.05,0.00)	NS
Benjamin, 2001	High	Wound Dehiscence	Postop.	Obese Unilateral	Not Obese Unilateral	RR	3.04(0.28,33.08)	NS
Benjamin, 2001	High	Infection (Superficial Infection)	Postop.	Obese Unilateral	Not Obese Unilateral	RR	1.14(0.26,4.98)	NS
Benjamin, 2001	High	Infection (Deep Infection)	Postop.	Obese Unilateral	Not Obese Unilateral	RR	3.04(0.28,33.08)	NS
Benjamin, 2001	High	Medial Collateral Laceration	Postop.	Obese Unilateral	Not Obese Unilateral	RD	0.02(-0.01,0.05)	NS
Benjamin, 2001	High	Tibial Plateau Fracture	Postop.	Obese Unilateral	Not Obese Unilateral	RD	0.00(0.00,0.00)	NS
Benjamin, 2001	High	Total Adverse Events	Postop.	Obese Unilateral	Not Obese Unilateral	RR	1.52(0.63,3.69)	NS
Benjamin, 2001	High	Cardiac Complications	Postop.	Obese Unilateral	Not Obese Unilateral	RD	0.02(-0.01,0.05)	NS
Benjamin, 2001	High	Urologic/Renal Complications	Postop.	Obese Unilateral	Not Obese Unilateral	RR	0.76(0.07,8.27)	NS
Benjamin, 2001	High	Central Nervous System Complications	Postop.	Obese Unilateral	Not Obese Unilateral	RD	0.00(0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Benjamin, 2001	High	Heel Decubitus	Postop.	Obese Unilateral	Not Obese Unilateral	RD	-0.01(-0.02,0.01)	NS
Benjamin, 2001	High	Gastrointestinal Complications	Postop.	Obese Unilateral	Not Obese Unilateral	RR	3.04(0.28,33.08)	NS
Benjamin, 2001	High	Dermatologic	Postop.	Obese Unilateral	Not Obese Unilateral	RD	0.02(-0.01,0.05)	NS
Benjamin, 2001	High	Deep Vein Thrombosis	Postop.	Obese Unilateral	Not Obese Unilateral	RD	0.01(-0.01,0.03)	NS
Benjamin, 2001	High	Pneumonia	Postop.	Obese Unilateral	Not Obese Unilateral	RD	0.01(-0.01,0.03)	NS
Benjamin, 2001	High	Pulmonary Embolism	Postop.	Obese Unilateral	Not Obese Unilateral	RD	0.00(0.00,0.00)	NS
Benjamin, 2001	High	Total Systemic Complications	Postop.	Obese Unilateral	Not Obese Unilateral	RR	3.43(1.09,10.79)	Not Obese Unilateral
Benjamin, 2001	High	Peroneal Palsy	Postop.	Obese Lateral	Not Obese Lateral	RR	0.34(0.04,2.94)	NS
Benjamin, 2001	High	Arthrofibrosis	Postop.	Obese Lateral	Not Obese Lateral	RD	-0.02(-0.05,0.01)	NS
Benjamin, 2001	High	Wound Dehiscence	Postop.	Obese Lateral	Not Obese Lateral	RD	-0.01(-0.03,0.01)	NS
Benjamin, 2001	High	Infection (Superficial Infection)	Postop.	Obese Lateral	Not Obese Lateral	RR	0.67(0.06,7.27)	NS
Benjamin, 2001	High	Infection (Deep Infection)	Postop.	Obese Lateral	Not Obese Lateral	RD	0.03(-0.01,0.06)	NS
Benjamin, 2001	High	Medial Collateral Laceration	Postop.	Obese Lateral	Not Obese Lateral	RR	1.34(0.09,21.12)	NS
Benjamin, 2001	High	Tibial Plateau Fracture	Postop.	Obese Lateral	Not Obese Lateral	RD	-0.01(-0.03,0.01)	NS
Benjamin, 2001	High	Total Adverse Events	Postop.	Obese Lateral	Not Obese Lateral	RR	0.67(0.24,1.88)	NS
Benjamin, 2001	High	Cardiac Complications	Postop.	Obese Lateral	Not Obese Lateral	RR	1.34(0.09,20.78)	NS
Benjamin, 2001	High	Urologic/Renal Complications	Postop.	Obese Lateral	Not Obese Lateral	RR	0.67(0.06,7.13)	NS
Benjamin, 2001	High	Central Nervous System Complications	Postop.	Obese Lateral	Not Obese Lateral	RD	-0.04(-0.09,0.01)	NS
Benjamin, 2001	High	Heel Decubitus	Postop.	Obese Lateral	Not Obese Lateral	RD	0.00(0.00,0.00)	NS
Benjamin, 2001	High	Gastrointestinal Complications	Postop.	Obese Lateral	Not Obese Lateral	RD	0.00(0.00,0.00)	NS
Benjamin, 2001	High	Dermatologic	Postop.	Obese Lateral	Not Obese Lateral	RD	0.00(0.00,0.00)	NS
Benjamin, 2001	High	Deep Vein Thrombosis	Postop.	Obese Lateral	Not Obese Lateral	RD	0.00(0.00,0.00)	NS
Benjamin, 2001	High	Pneumonia	Postop.	Obese Lateral	Not Obese Lateral	RD	0.00(0.00,0.00)	NS
Benjamin, 2001	High	Pulmonary Embolism	Postop.	Obese Lateral	Not Obese Lateral	RD	0.03(-0.02,0.08)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Benjamin, 2001	High	Total Systemic Complications	Postop.	Obese Lateral	Not Obese Lateral	RR	0.81(0.20,3.16)	NS
Martinez-Cano, 2020	High	Adverse Events	Postop 12mos	BMI >30	BMI <30	RR	0.45(0.15,1.30)	NS
Martinez-Cano, 2020	High	Infection (Deep Infection)	Postop 12mos	BMI >30	BMI <30	RR	0.57(0.12,2.74)	NS
Martinez-Cano, 2020	High	Infection (Superficial Infection)	Postop 12mos	BMI >30	BMI <30	RD	-0.02(-0.03, -0.00)	BMI >30
Martinez-Cano, 2020	High	Pulmonary Embolism	Postop 12mos	BMI >30	BMI <30	RR	0.67(0.07,6.40)	NS
Martinez-Cano, 2020	High	Rigidity	Postop 12mos	BMI >30	BMI <30	RR	1.01(0.09,11.02)	NS
Martinez-Cano, 2020	High	Patellofemoral Disorder	Postop 12mos	BMI >30	BMI <30	RD	-0.00(-0.01,0.00)	NS
Martinez-Cano, 2020	High	Bleeding	Postop 12mos	BMI >30	BMI <30	RD	-0.00(-0.01,0.00)	NS
Ahmed, 2016	High	Infection (Infection)	1 mos.	Obese (BMI >30)	Non-Obese (BMI <30)	RD	0.04(-0.00,0.08)	NS

Table 132123: PICO 9- Risk Stratification: BMI (>30 vs <30)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Xu, 2018	High	KSS Total	Preop.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-3 (-9.63, 3.63)	NS
Xu, 2018	High	KSS Total	Postop 2 yrs.	Obese BMI >30	Not Obese BMI <30	Mean Difference	1 (-1.73, 3.73)	NS
Xu, 2018	High	KSS Total	Postop 10 yrs.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-3 (-8.51, 2.51)	NS
Xu, 2018	High	Oxford Knee Score	Preop.	Obese BMI >30	Not Obese BMI <30	Mean Difference	2 (-0.60, 4.60)	NS
Xu, 2018	High	Oxford Knee Score	Postop 2 yrs.	Obese BMI >30	Not Obese BMI <30	Mean Difference	1 (-0.30, 2.30)	NS
Xu, 2018	High	Oxford Knee Score	Postop 10 yrs.	Obese BMI >30	Not Obese BMI <30	Mean Difference	4 (0.49, 7.51)	Obese BMI >30
Xu, 2019	High	KSS Total	Preop.	Obese	Not Obese	Mean Difference	-3 (-9.73, 3.73)	NS
Xu, 2019	High	KSS Total	Postop 2 yrs.	Obese	Not Obese	Mean Difference	-3 (-7.83, 1.83)	NS
Xu, 2019	High	KSS Total	Postop 10 yrs.	Obese	Not Obese	Mean Difference	-4 (-10.76, 2.76)	NS
Xu, 2019	High	Oxford Knee Score	Preop.	Obese	Not Obese	Mean Difference	-1 (-3.68, 1.68)	NS
Xu, 2019	High	Oxford Knee Score	Postop 2 yrs.	Obese	Not Obese	Mean Difference	-2 (-3.59, -0.41)	Not Obese
Xu, 2019	High	Oxford Knee Score	Postop 10 yrs.	Obese	Not Obese	Mean Difference	-1 (-3.15, 1.15)	NS
Venkatesh, 2019	High	KSS Total	Postop 5.6 yrs.	BMI >30	BMI <30	Mean Difference	-1.2 (-2.95, 0.55)	NS
Venkatesh, 2019	High	KSS Total	Postop 5.6 yrs.	BMI >30	BMI <30	Mean Difference	0.8 (-1.83, 3.43)	NS
Martinez-Cano, 2020	High	Oxford Knee Score	Preop.	BMI >30	BMI <30	Author Reported - Shapiro-Wilk test; Mann-Whitney U-test; Fisher's Exact test;	N/A	Not Obese

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Martinez-Cano, 2020	High	Oxford Knee Score	Postop 3 mos.	BMI >30	BMI <30	Author Reported - Shapiro-Wilk test; Mann-Whitney U-test; Fisher's Exact test;	N/A	NS
Martinez-Cano, 2020	High	Oxford Knee Score	Postop 12mos	BMI >30	BMI <30	Author Reported - Shapiro-Wilk test; Mann-Whitney U-test; Fisher's Exact test;	N/A	NS
Martinez-Cano, 2020	High	Oxford Knee Score	Postop 5 yrs.	BMI >30	BMI <30	Author Reported - Shapiro-Wilk test; Mann-Whitney U-test; Fisher's Exact test;	N/A	Not Obese
Tanaka, 2020	Low	Japanese Knee OA Measure	Preop.	Obese (BMI >30)	Nonobese (BMI <30)	Mean Difference	-1.5 (-15.01, 12.01)	NS
Tanaka, 2020	Low	Japanese Knee OA Measure	Postop.	Obese (BMI >30)	Nonobese (BMI <30)	Mean Difference	8.2 (-3.27, 19.67)	NS

Table 133124: PICO 9- Risk Stratification: BMI (>30 vs <30)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zengerink, 2015	Low	KOOS Symptoms	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	Mean Difference	-0.9 (-7.93, 6.13)	NS
Zengerink, 2015	Low	KOOS ADL	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	Mean Difference	-3.6 (-12.24, 5.04)	NS
Xu, 2018	High	KSS Function	Preop.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-1 (-7.40, 5.40)	NS
Xu, 2018	High	KSS Function	Postop 2 yrs.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-7 (-12.85, -1.15)	Not Obese BMI<30
Xu, 2018	High	KSS Function	Postop 10 yrs.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-8 (-16.55, 0.55)	NS
Xu, 2019	High	KSS Function	Preop.	Obese	Not Obese	Mean Difference	0 (-5.07, 5.07)	NS
Xu, 2019	High	KSS Function	Postop 2 yrs.	Obese	Not Obese	Mean Difference	3 (-2.78, 8.78)	NS
Xu, 2019	High	KSS Function	Postop 10 yrs.	Obese	Not Obese	Mean Difference	-6 (-12.20, 0.20)	NS
Xu, 2019	High	SF-12 Physical	Preop.	Obese	Not Obese	Mean Difference	-4 (-7.79, -0.21)	Not Obese
Xu, 2019	High	SF-12 Physical	Postop 2 yrs.	Obese	Not Obese	Mean Difference	-30 (-32.75, -27.25)	Not Obese
Xu, 2019	High	SF-12 Physical	Postop 10 yrs.	Obese	Not Obese	Mean Difference	-3 (-6.79, 0.79)	NS
Xu, 2019	High	Extension (deg)	Preop.	Obese	Not Obese	Mean Difference	1 (-1.07, 3.07)	NS
Xu, 2019	High	Extension (deg)	Postop 2 yrs.	Obese	Not Obese	Mean Difference	1 (-0.38, 2.38)	NS
Xu, 2019	High	Extension (deg)	Postop 10 yrs.	Obese	Not Obese	Mean Difference	1 (-0.65, 2.65)	NS
Xu, 2019	High	Flexion (deg)	Preop.	Obese	Not Obese	Mean Difference	-6 (-10.39, -1.61)	Not Obese

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Xu, 2019	High	Flexion (deg)	Postop 2 yrs.	Obese	Not Obese	Mean Difference	-8 (-11.79, -4.21)	Not Obese
Xu, 2019	High	Flexion (deg)	Postop 10 yrs.	Obese	Not Obese	Mean Difference	-9 (-12.87, -5.13)	Not Obese
Xu, 2019	High	ROM (deg)	Preop.	Obese	Not Obese	Mean Difference	-7 (-12.33, -1.67)	Not Obese
Xu, 2019	High	ROM (deg)	Postop 2 yrs.	Obese	Not Obese	Mean Difference	-8 (-12.40, -3.60)	Not Obese
Xu, 2019	High	ROM (deg)	Postop 10 yrs.	Obese	Not Obese	Mean Difference	-11 (-15.48, -6.52)	Not Obese
Sveikata, 2017	High	WOMAC Stiffness	Postop 1 yrs.	BMI >40	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Sveikata, 2017	High	WOMAC Function	Postop 1 yrs.	BMI >40	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Sveikata, 2017	High	SF-12 Physical	Postop 1 yrs.	BMI >40	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Venkatesh, 2019	High	ROM (deg)	Postop 5.6 yrs.	BMI >30	BMI <30	Mean Difference	-2.6 (-5.96, 0.76)	NS
Venkatesh, 2019	High	ROM (deg)	Postop 5.6 yrs.	BMI >30	BMI <30	Mean Difference	-0.1 (-3.72, 3.52)	NS
Venkatesh, 2019	High	KSS Function	Postop 5.6 yrs.	BMI >30	BMI <30	Mean Difference	-0.4 (-1.86, 1.06)	NS
Venkatesh, 2019	High	KSS Function	Postop 5.6 yrs.	BMI >30	BMI <30	Mean Difference	1.1 (-2.02, 4.22)	NS
Bonnefoy-Mazure,2017	High	Gait Velocity (m/s)	Preop.	BMI >30	BMI <30	Mean Difference	-0.12 (-0.22, -0.02)	BMI <30
Bonnefoy-Mazure,2017	High	Gait Velocity (m/s)	Postop 1 yrs.	BMI >30	BMI <30	Mean Difference	-0.16 (-0.27, -0.05)	BMI <30
Bonnefoy-Mazure,2017	High	Flexion (deg)	Preop.	BMI >30	BMI <30	Mean Difference	-4.72 (-8.78, -0.66)	BMI <30

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Bonnefoy-Mazure,2017	High	Flexion (deg)	Postop 1 yrs.	BMI >30	BMI <30	Mean Difference	-4.43 (-7.50, -1.36)	BMI <30
Bonnefoy-Mazure,2017	High	WOMAC Function	Preop.	BMI >30	BMI <30	Mean Difference	-14 (-20.91, -7.09)	BMI >30
Bonnefoy-Mazure,2017	High	WOMAC Function	Postop 1 yrs.	BMI >30	BMI <30	Mean Difference	-4.5 (-12.28, 3.28)	NS
Bonnefoy-Mazure,2017	High	SF-12 Physical	Preop.	BMI >30	BMI <30	Mean Difference	-2.9 (-5.81, 0.01)	NS
Bonnefoy-Mazure,2017	High	SF-12 Physical	Postop 1 yrs.	BMI >30	BMI <30	Mean Difference	-4 (-7.97, -0.03)	BMI <30

Table 134125: PICO 9- Risk Stratification: BMI (>30 vs <30)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Xu, 2019	High	SF-12 Mental	Preop.	Obese	Not Obese	Mean Difference	-3 (-6.79, 0.79)	NS
Xu, 2019	High	SF-12 Mental	Postop 2 yrs.	Obese	Not Obese	Mean Difference	-3 (-6.58, 0.58)	NS
Xu, 2019	High	SF-12 Mental	Postop 10 yrs.	Obese	Not Obese	Mean Difference	-3 (-7.26, 1.26)	NS
Sveikata, 2017	High	SF-12 Mental	Postop 1 yrs.	BMI >40	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Bonnefoy-Mazure,2017	High	SF-12 Mental	Preop.	BMI >30	BMI <30	Mean Difference	-2.4 (-7.84, 3.04)	NS
Bonnefoy-Mazure,2017	High	SF-12 Mental	Postop 1 yrs.	BMI >30	BMI <30	Mean Difference	-3.2 (-8.26, 1.86)	NS

Table 135126: PICO 9- Risk Stratification: BMI (>30 vs <30)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zengerink, 2015	Low	VAS Pain	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	Mean Difference	-0.4 (-1.12, 0.32)	NS
Zengerink, 2015	Low	KOOS Pain	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	Mean Difference	-1.1 (-9.24, 7.04)	NS
Sveikata, 2017	High	WOMAC Pain	Postop 1 yrs.	BMI >40	BMI <30	Author Reported - Student t-test; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Bonnefoy-Mazure,2017	High	WOMAC Pain	Preop.	BMI >30	BMI <30	Mean Difference	-14.3 (-21.12, -7.48)	BMI >30
Bonnefoy-Mazure,2017	High	WOMAC Pain	Postop 1 yrs.	BMI >30	BMI <30	Mean Difference	-2 (-8.90, 4.90)	NS
Bonnefoy-Mazure,2017	High	VAS Pain	Preop.	BMI >30	BMI <30	Mean Difference	0.4 (-0.61, 1.41)	NS
Bonnefoy-Mazure,2017	High	VAS Pain	Postop 1 yrs.	BMI >30	BMI <30	Mean Difference	0.08 (-0.67, 0.83)	NS

Table 136127: PICO 9- Risk Stratification: BMI (>30 vs <30)- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zengerink, 2015	Low	KOOS QoL	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	Mean Difference	1.1 (-9.37, 11.57)	NS
Zengerink, 2015	Low	KSS Satisfaction	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	Mean Difference	-1.3 (-5.45, 2.85)	NS
Zengerink, 2015	Low	KSS Satisfaction (VAS)	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	Mean Difference	-0.1 (-0.94, 0.74)	NS
Xu, 2018	High	QOL Physical Score	Preop.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-3 (-7.72, 1.72)	NS
Xu, 2018	High	QOL Physical Score	Postop 2 yrs.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-3 (-6.83, 0.83)	NS
Xu, 2018	High	QOL Physical Score	Postop 10 yrs.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-3 (-7.22, 1.22)	NS
Xu, 2018	High	QOL Mental Score	Preop.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-4 (-8.91, 0.91)	NS
Xu, 2018	High	QOL Mental Score	Postop 2 yrs.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-3 (-7.82, 1.82)	NS
Xu, 2018	High	QOL Mental Score	Postop 10 yrs.	Obese BMI >30	Not Obese BMI <30	Mean Difference	-6 (-10.22, -1.78)	Not Obese BMI<30
Tanaka, 2020	Low	QOL Recovery	Postop.	Obese (BMI >30)	Nonobese (BMI <30)	Mean Difference	-9.7 (-27.48, 8.08)	NS

Table 137128: PICO 9- Risk Stratification: BMI (>30 vs <30)- Return to activity

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zengerink, 2015	Low	KOOS Sport	Postop 5 yrs.	Obese BMI >30: BMI >30 kg/m2	Not Obese: BMI <30 kg/m2	Mean Difference	-3.7 (-15.42, 8.02)	NS

Table 138129: PICO 9- Risk Stratification: BMI (35-39.9 vs 18.5-24.9)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Total Revisions	Postop 30days	Obese II (BMI 35-39.9)	Normal Weight (BMI 18.5-24.9)	RR	1.03(0.82,1.29)	NS

Table 139130: PICO 9- Risk Stratification: BMI (35-39.9 vs 18.5-24.9)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Readmissions	Postop 30days	Obese II (BMI 35-39.9)	Normal Weight (BMI 18.5-24.9)	RR	0.87(0.77,1.00)	Obese II (BMI35-39.9)

Table 140131: PICO 9- Risk Stratification: BMI (35-39.9 vs 25-29.9)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Total Revisions	Postop 30days	Obese II (BMI 35-39.9)	Overweight (BMI 25-<30)	RR	1.05(0.88,1.24)	NS
Gurunathan, 2018	High	Cardiac Complications	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	0.77(0.61,0.98)	Obese II (BMI35-39.9)
Gurunathan, 2018	High	Surgical Complications	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	1.10(0.82,1.49)	NS
Gurunathan, 2018	High	Pulmonary Complications	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	0.97(0.42,2.21)	NS
Gurunathan, 2018	High	Renal Complications	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	1.25(0.39,4.07)	NS
Gurunathan, 2018	High	Thromboembolic Complications	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	0.47(0.17,1.27)	NS
Gurunathan, 2018	High	Infection	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	0.64(0.33,1.25)	NS
Gurunathan, 2018	High	Gastrointestinal Complications	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	1.50(0.83,2.71)	NS
Katakam, 2021	Low	Total Revisions	1 yrs.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	0.97(0.33,2.84)	NS

Table 141132: PICO 9- Risk Stratification: BMI (35-39.9 vs 25-29.9)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Giesinger, 2018	High	Forgotten Joint Score	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Author Reported - Mann-Whitney's U-test	N/A	Overweight
Steinhaus, 2020	High	EQ-5D VAS	Baseline.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Mean Difference	-5.55 (-7.83, -3.27)	Overweight (BMI25-29.9)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Mean Difference	-4.13 (-6.39, -1.87)	Overweight (BMI25-29.9)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Mean Difference	1.61 (-0.83, 4.05)	NS
Steinhaus, 2020	High	EQ-5D Total	Baseline.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Mean Difference	-0.04 (-0.07, -0.01)	Overweight (BMI25-29.9)
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Mean Difference	-0.01 (-0.04, 0.02)	NS
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Mean Difference	0.03 (0.00, 0.06)	Obese II (BMI35-39.9)

Table 142133: PICO 9- Risk Stratification: BMI (35-39.9 vs 25-29.9)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Katakam, 2021	Low	KOOS Function	Preop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Mean Difference	-6.3 (-8.73, -3.87)	Overweight (BMI25-29.9)
Katakam, 2021	Low	KOOS Function	1 yrs.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Mean Difference	-3.6 (-6.46, -0.74)	Overweight (BMI25-29.9)

Table 143134: PICO 9- Risk Stratification: BMI (35-39.9 vs 25-29.9)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Readmissions	Postop 30days	Obese II (BMI 35-39.9)	Overweight (BMI 25-<30)	RR	0.93(0.84,1.02)	NS
Gurunathan, 2018	High	Total Adverse Events	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	0.84(0.72,0.97)	Obese II (BMI35-39.9)
Gurunathan, 2018	High	Neurological Complications	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	0.44(0.23,0.82)	Obese II (BMI35-39.9)
Gurunathan, 2018	High	Miscellaneous Complications	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	0.73(0.41,1.30)	NS
Gurunathan, 2018	High	LOS	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Author Reported - Fisher's Exact orX2	N/A	NS
Gurunathan, 2018	High	Operation Time (min)	Intraop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Author Reported - Fisher's Exact orX2	N/A	NS
Francois, 2019	High	ISR <0.8	Preop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	1.00(0.33,3.00)	NS
Francois, 2019	High	ISR <0.8	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	1.25(0.35,4.52)	NS
Katakam, 2021	Low	Length of Stay (days)	Postop.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	Mean Difference	0.3 (0.04, 0.56)	Overweight (BMI25-29.9)
Katakam, 2021	Low	Readmissions	90 days	Obese II (BMI 35-39.9)	Overweight (BMI 25-29.9)	RR	1.25(0.83,1.88)	NS

Table 144135: PICO 9- Risk Stratification: BMI (35-39.9 vs <18.5)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Total Revisions	Postop 30days	Obese II (BMI 35-39.9)	Underweight (BMI <18.5)	RR	2.44(0.34,17.34)	NS

Table 145136: PICO 9- Risk Stratification: BMI (35-39.9 vs <18.5)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Steinhaus, 2020	High	EQ-5D VAS	Baseline.	Obese II (BMI 35-39.9)	Underweight (BMI <18.5)	Mean Difference	-8.65 (-17.02, -0.28)	Underweight (BMI<18.5)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese II (BMI 35-39.9)	Underweight (BMI <18.5)	Mean Difference	0.19 (-22.35, 22.73)	NS
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese II (BMI 35-39.9)	Underweight (BMI <18.5)	Mean Difference	9.01 (-6.73, 24.75)	NS
Steinhaus, 2020	High	EQ-5D Total	Baseline.	Obese II (BMI 35-39.9)	Underweight (BMI <18.5)	Mean Difference	-0.05 (-0.17, 0.07)	NS
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese II (BMI 35-39.9)	Underweight (BMI <18.5)	Mean Difference	0.03 (-0.13, 0.19)	NS
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese II (BMI 35-39.9)	Underweight (BMI <18.5)	Mean Difference	0.08 (-0.08, 0.24)	NS

Table 146137: PICO 9- Risk Stratification: BMI (35-39.9 vs <18.5)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Readmissions	Postop 30days	Obese II (BMI 35-39.9)	Underweight (BMI <18.5)	RR	0.81(0.41,1.61)	NS

Table 147138: PICO 9- Risk Stratification: BMI (35-39.9 vs <25)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Rassir, 2020	High	Total Revisions	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	1.03(0.89,1.19)	NS
Gurunathan, 2018	High	Cardiac Complications	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.63(0.47,0.84)	Obese II (BMI35-39.9)
Gurunathan, 2018	High	Surgical Complications	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.96(0.64,1.43)	NS
Gurunathan, 2018	High	Pulmonary Complications	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.50(0.20,1.26)	NS
Gurunathan, 2018	High	Renal Complications	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	2.20(0.26,18.69)	NS
Gurunathan, 2018	High	Thromboembolic Complications	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	1.10(0.22,5.61)	NS
Gurunathan, 2018	High	Infection	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.66(0.28,1.58)	NS
Gurunathan, 2018	High	Gastrointestinal Complications	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.84(0.42,1.70)	NS
Rassir, 2020	High	Septic Revision	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	0.98(0.73,1.33)	NS
Rassir, 2020	High	Aseptic Revision	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	1.09(0.92,1.29)	NS
Rassir, 2020	High	Secondary Patellar Resurfacing	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	1.46(1.00,2.13)	NS
Rassir, 2020	High	Instability	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	1.02(0.78,1.34)	NS
Rassir, 2020	High	Infection (Infection)	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	1.04(0.79,1.37)	NS
Rassir, 2020	High	Loosening Tibial Component	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	1.66(1.18,2.34)	Normal Weight (BMI <25)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Rassir, 2020	High	Malalignment	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	1.12(0.76,1.65)	NS
Rassir, 2020	High	Arthrofibrosis	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.54(0.31,0.94)	Obese II (BMI35-39.9)
Rassir, 2020	High	Loosening Femoral Component	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.86(0.46,1.63)	NS
Rassir, 2020	High	Periprosthetic Fracture	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.53(0.21,1.34)	NS
Rassir, 2020	High	Patellar Dislocation	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	4.71(2.01,11.01)	Normal Weight (BMI <25)
Rassir, 2020	High	Revision after Removal	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	1.71(0.62,4.72)	NS
Rassir, 2020	High	Loosening Patellar Component	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	1.25(0.38,4.09)	NS
Rassir, 2020	High	Other Reason for Revision	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.78(0.50,1.21)	NS
Katakam, 2021	Low	Total Revisions	1 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	2.15(0.42,10.95)	NS

Table 148139: PICO 9- Risk Stratification: BMI (35-39.9 vs <25)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
O'Neill, 2016	High	WOMAC Total	6 mos.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29)	Author Reported - Tukey HSD	N/A	Overweight
O'Neill, 2016	High	SF-36 Total	6 mos.	Obese II (BMI 35-39.9)	Overweight (BMI 25-29)	Author Reported - Tukey HSD	N/A	Overweight
Giesinger, 2018	High	Forgotten Joint Score	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Author Reported - Mann-Whitney's U-test	N/A	NS
Steinhaus, 2020	High	EQ-5D VAS	Baseline.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Mean Difference	-6.21 (-8.66, -3.76)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Mean Difference	-5.15 (-7.55, -2.75)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Mean Difference	1 (-1.67, 3.67)	NS
Steinhaus, 2020	High	EQ-5D Total	Baseline.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Mean Difference	-0.06 (-0.09, -0.03)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Mean Difference	-0.02 (-0.05, 0.01)	NS
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Mean Difference	0.04 (0.01, 0.07)	Obese II (BMI35-39.9)

Table 149140: PICO 9- Risk Stratification: BMI (35-39.9 vs <25)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Collins, 2017	High	WOMAC Function	Postop 3 mos.	BMI 35-39.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Function	Postop 6 mos.	BMI 35-39.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Function	Postop 24mos	BMI 35-39.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Katakam, 2021	Low	KOOS Function	Preop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Mean Difference	-9.7 (-12.60, -6.80)	Normal Weight (BMI <25)
Katakam, 2021	Low	KOOS Function	1 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Mean Difference	-8.4 (-11.68, -5.12)	Normal Weight (BMI <25)

Table 150141: PICO 9- Risk Stratification: BMI (35-39.9 vs <25)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Gurunathan, 2018	High	Total Adverse Events	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.78(0.65,0.95)	Obese II (BMI35-39.9)
Gurunathan, 2018	High	Neurological Complications	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.66(0.28,1.58)	NS
Gurunathan, 2018	High	Miscellaneous Complications	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	0.78(0.35,1.73)	NS
Gurunathan, 2018	High	LOS	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Author Reported - Fisher's Exact orX2	N/A	NS
Gurunathan, 2018	High	Operation Time (min)	Intraop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Author Reported - Fisher's Exact orX2	N/A	NS
Francois, 2019	High	ISR <0.8	Preop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	1.00(0.33,3.00)	NS
Francois, 2019	High	ISR <0.8	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	1.00(0.30,3.35)	NS
Katakam, 2021	Low	Length of Stay (days)	Postop.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	Mean Difference	0.5 (0.24, 0.76)	Normal Weight (BMI <25)
Katakam, 2021	Low	Readmissions	90 days	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	2.19(1.19,4.01)	Normal Weight (BMI <25)

Table 151142: PICO 9- Risk Stratification: BMI (35-39.9 vs <25)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Collins, 2017	High	WOMAC Pain	Postop 3 mos.	BMI 35-39.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Pain	Postop 6 mos.	BMI 35-39.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Collins, 2017	High	WOMAC Pain	Postop 24mos	BMI 35-39.9	BMI <25	Author Reported - Piecewise Linear mixed-effects model;	N/A	NS
Rassir, 2020	High	Patellar Pain	3 yrs.	Obese II (BMI 35-39.9)	Normal Weight (BMI <25)	RR	1.27(0.98,1.66)	NS

Table 152143: PICO 9- Risk Stratification: BMI (35-39.9 vs <30)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	High	WOMAC Total	Preop.	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	3.45 (-3.73, 10.63)	NS
Maniar, 2018	High	KSS Total (no scale provided)	Preop.	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-0.42 (-12.26, 11.42)	NS
Maniar, 2018	High	WOMAC Total	Postop 3 mos.	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-3.29 (-10.68, 4.10)	NS
Maniar, 2018	High	WOMAC Total	Postop 12mos	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	6.11 (0.50, 11.72)	Not Obese
Maniar, 2018	High	KSS Total (no scale provided)	Postop 12mos	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	2.79 (-5.88, 11.46)	NS

Table 153144: PICO 9- Risk Stratification: BMI (35-39.9 vs <30)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	High	SF-12 Physical	Preop.	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-1.66 (-5.37, 2.05)	NS
Maniar, 2018	High	Flexion (deg)	Preop.	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-7.37 (-15.59, 0.85)	NS
Maniar, 2018	High	SF-12 Physical	Postop 3 mos.	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-7.23 (-20.89, 6.43)	NS
Maniar, 2018	High	Flexion (deg)	Postop 3 mos.	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-0.27 (-4.67, 4.13)	NS
Maniar, 2018	High	SF-12 Physical	Postop 12mos	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-3.95 (-7.77, -0.13)	Not Obese
Maniar, 2018	High	Flexion (deg)	Postop 12mos	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-2.37 (-6.39, 1.65)	NS

Table 154145: PICO 9- Risk Stratification: BMI (35-39.9 vs <30)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	High	SF-12 Mental	Preop.	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-1.98 (-6.39, 2.43)	NS
Maniar, 2018	High	SF-12 Mental	Postop 3 mos.	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-3.35 (-7.08, 0.38)	NS
Maniar, 2018	High	SF-12 Mental	Postop 12mos	Obese II (BMI 35-39.9)	Not Obese	Mean Difference	-5.22 (-8.92, -1.52)	Not Obese

Table 155146: PICO 9- Risk Stratification: BMI (>35 vs <30)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Polat, 2019	High	Total Revisions	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	RD	0.21(0.08,0.34)	Non-Obese (BMI<30)
Ogur, 2020	Low	Total Adverse Events	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	RR	4.30(2.06,9.00)	Unilateral TKA BMI<30
Ogur, 2020	Low	Deep Vein Thrombosis	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	RR	3.54(0.75,16.80)	NS
Ogur, 2020	Low	Medial Collateral Laceration	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	RD	0.03(0.00,0.05)	Unilateral TKA BMI<30
Ogur, 2020	Low	Pulmonary Embolism	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	RR	4.05(0.46,35.84)	NS
Ogur, 2020	Low	Infection (Deep Infection)	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	RR	4.05(0.46,35.84)	NS
Ogur, 2020	Low	Infection (Deep Superficial Infection)	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	RR	3.38(0.95,12.04)	NS
Ogur, 2020	Low	Total Adverse Events	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	RR	4.30(2.06,9.00)	Bilateral TKA BMI<30
Ogur, 2020	Low	Deep Vein Thrombosis	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	RR	3.54(0.75,16.80)	NS
Ogur, 2020	Low	Medial Collateral Laceration	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	RD	0.03(0.00,0.05)	Bilateral TKA BMI<30
Ogur, 2020	Low	Pulmonary Embolism	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	RR	4.05(0.46,35.84)	NS
Ogur, 2020	Low	Infection (Deep Infection)	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	RR	4.05(0.46,35.84)	NS
Ogur, 2020	Low	Infection (Deep Superficial Infection)	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	RR	3.38(0.95,12.04)	NS
Polat, 2019	High	Adverse Events	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	RD	0.16(0.04,0.27)	Non-Obese (BMI<30)

Table 156147: PICO 9- Risk Stratification: BMI (>35 vs <30)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ogur, 2020	Low	KSS Total	Preop.	Unilateral TKA BMI >35	Unilateral TKA BMI <30	Mean Difference	-6.9 (-8.08, -5.72)	Unilateral TKA BMI<30
Ogur, 2020	Low	KSS Total	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	Mean Difference	-5.9 (-6.99, -4.81)	Unilateral TKA BMI<30
Ogur, 2020	Low	WOMAC Total	Preop.	Unilateral TKA BMI >35	Unilateral TKA BMI <30	Mean Difference	0.3 (-0.41, 1.01)	NS
Ogur, 2020	Low	WOMAC Total	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	Mean Difference	-4.3 (-4.79, -3.81)	Unilateral TKA BMI>35
Ogur, 2020	Low	KSS Total	Preop.	Bilateral TKA BMI >35	Bilateral TKA BMI <30	Mean Difference	-6.2 (-6.88, -5.52)	Bilateral TKA BMI<30
Ogur, 2020	Low	KSS Total	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	Mean Difference	-11.1 (-12.08, -10.12)	Bilateral TKA BMI<30
Ogur, 2020	Low	WOMAC Total	Preop.	Bilateral TKA BMI >35	Bilateral TKA BMI <30	Mean Difference	-4.9 (-5.51, -4.29)	Bilateral TKA BMI>35
Ogur, 2020	Low	WOMAC Total	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	Mean Difference	-7.1 (-8.19, -6.01)	Bilateral TKA BMI>35
Torres-Claramunt,2016	High	SF-36 General Health	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-2.95 (-6.19, 0.29)	NS
Torres-Claramunt,2016	High	SF-36 General Health	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	31.1 (29.15, 33.05)	Obese (BMI ?35)
Torres-Claramunt,2016	High	KSS Total	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-1.82 (-5.28, 1.64)	NS
Torres-Claramunt,2016	High	KSS Global	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-3.83 (-8.70, 1.04)	NS
Torres-Claramunt,2016	High	KSS Total	5 yrs.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-1.29 (-3.39, 0.81)	NS
Torres-Claramunt,2016	High	KSS Global	5 yrs.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-9.23 (-14.48, -3.98)	Non-Obese (BMI<30)
Polat, 2019	High	KSS Total	Preop.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-0.1 (-3.63, 3.43)	NS
Polat, 2019	High	KSS Total	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-21.1 (-30.06, -12.14)	Non-Obese (BMI<30)
Polat, 2019	High	KSS Total	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-21.1 (-30.45, -11.75)	Non-Obese (BMI<30)
Polat, 2019	High	Oxford Knee Score	Preop.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	3.7 (-0.03, 7.43)	NS
Polat, 2019	High	Oxford Knee Score	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-9.4 (-14.09, -4.71)	Non-Obese (BMI<30)
Polat, 2019	High	Oxford Knee Score	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-13.1 (-19.38, -6.82)	Non-Obese (BMI<30)

Table 157148: PICO 9- Risk Stratification: BMI (>35 vs <30)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ogur, 2020	Low	ROM (deg)	Preop.	Unilateral TKA BMI >35	Unilateral TKA BMI <30	Mean Difference	-16.7 (-18.88, -14.52)	Unilateral TKA BMI<30
Ogur, 2020	Low	ROM (deg)	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	Mean Difference	-17.25 (-19.41, -15.09)	Unilateral TKA BMI<30
Ogur, 2020	Low	ROM (deg)	Preop.	Bilateral TKA BMI >35	Bilateral TKA BMI <30	Mean Difference	-8.9 (-12.43, -5.37)	Bilateral TKA BMI<30
Ogur, 2020	Low	ROM (deg)	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	Mean Difference	-11.4 (-13.96, -8.84)	Bilateral TKA BMI<30
Torres-Claramunt,2016	High	SF-36 Physical	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-5.01 (-8.00, -2.02)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	SF-36 Role Physical	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-6.74 (-12.23, -1.25)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	SF-36 Physical	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-2.48 (-3.94, -1.02)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	SF-36 Physical	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-4.2 (-6.53, -1.87)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	SF-36 Role Physical	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-3.27 (-5.64, -0.90)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	SF-36 Physical	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-3.06 (-5.12, -1.00)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	KSS Function	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-1.98 (-4.68, 0.72)	NS
Torres-Claramunt,2016	High	KSS Function	5 yrs.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-7.46 (-11.44, -3.48)	Non-Obese (BMI<30)
Polat, 2019	High	KSS Function	Preop.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	0.8 (-8.75, 10.35)	NS
Polat, 2019	High	KSS Function	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-19.5 (-31.35, -7.65)	Non-Obese (BMI<30)
Polat, 2019	High	KSS Function	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-20.3 (-33.62, -6.98)	Non-Obese (BMI<30)
Polat, 2019	High	ROM (deg)	Preop.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-3.1 (-9.19, 2.99)	NS
Polat, 2019	High	ROM (deg)	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-10.9 (-20.33, -1.47)	Non-Obese (BMI<30)
Polat, 2019	High	ROM (deg)	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-7.7 (-16.20, 0.80)	NS

Table 158149: PICO 9- Risk Stratification: BMI (>35 vs <30)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ogur, 2020	Low	Blood Loss (Volume (mL))	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	Mean Difference	12.53 (-28.73, 53.79)	NS
Ogur, 2020	Low	Blood Transfusions (Units)	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	Mean Difference	0.5 (0.29, 0.71)	Unilateral TKA BMI<30
Ogur, 2020	Low	Length of Stay	Postop 47mos	Unilateral TKA BMI >35	Unilateral TKA BMI <30	Mean Difference	0.41 (0.08, 0.74)	Unilateral TKA BMI<30
Ogur, 2020	Low	Blood Loss (Volume (mL))	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	Mean Difference	15.4 (-46.66, 77.46)	NS
Ogur, 2020	Low	Blood Transfusions (Units)	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	Mean Difference	0.36 (-0.09, 0.81)	NS
Ogur, 2020	Low	Length of Stay	Postop 47mos	Bilateral TKA BMI >35	Bilateral TKA BMI <30	Mean Difference	0.46 (0.23, 0.69)	Bilateral TKA BMI<30
Torres-Claramunt,2016	High	SF-36 Vitality	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-5.59 (-9.95, -1.23)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	SF-36 Social Function	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-4.3 (-9.82, 1.22)	NS
Torres-Claramunt,2016	High	SF-36 Role Emotional	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-1.72 (-7.92, 4.48)	NS
Torres-Claramunt,2016	High	SF-36 Mental	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-4.39 (-9.16, 0.38)	NS
Torres-Claramunt,2016	High	SF-36 Mental	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-1.6 (-4.52, 1.32)	NS
Torres-Claramunt,2016	High	SF-36 Vitality	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-3.85 (-6.14, -1.56)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	SF-36 Social Function	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-4.48 (-6.85, -2.11)	Non-Obese (BMI<30)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Torres-Claramunt,2016	High	SF-36 Role Emotional	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-4.09 (-6.75, -1.43)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	SF-36 Mental	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-4.03 (-6.65, -1.41)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	SF-36 Mental	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-3.78 (-6.37, -1.19)	Non-Obese (BMI<30)
Tio, 2018	High	Hemoglobin (g/dL)	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-0.3 (-0.52, -0.08)	Non-Obese (BMI<30)
Tio, 2018	High	Hemoglobin (g/dL)	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	0 (-0.21, 0.21)	NS
Tio, 2018	High	Patients Received Blood Transfusion (Number of patients)	Intraop.	Obese (BMI ?35)	Non-Obese (BMI <30)	RR	0.50(0.27,0.94)	Obese (BMI ?35)
Tio, 2018	High	Patients Received Blood Transfusion (1 Unit)	Intraop.	Obese (BMI ?35)	Non-Obese (BMI <30)	RR	0.60(0.07,5.37)	NS
Tio, 2018	High	Patients Received Blood Transfusion (2 Units)	Intraop.	Obese (BMI ?35)	Non-Obese (BMI <30)	RR	0.45(0.22,0.94)	Obese (BMI ?35)
Tio, 2018	High	Patients Received Blood Transfusion (3-4 Units)	Intraop.	Obese (BMI ?35)	Non-Obese (BMI <30)	RR	0.81(0.16,3.95)	NS
Tio, 2018	High	Blood Loss	Intraop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-3.9 (-6.13, -1.67)	Obese (BMI ?35)
Tio, 2018	High	Blood Loss (Volume (mL))	Intraop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	22.79 (-90.27, 135.85)	NS

Table 159150: PICO 9- Risk Stratification: BMI (>35 vs <30)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Torres-Claramunt,2016	High	SF-36 Bodily Pain	Preop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-7.01 (-10.44, -3.58)	Non-Obese (BMI<30)
Torres-Claramunt,2016	High	SF-36 Bodily Pain	Postop.	Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-4.27 (-6.45, -2.09)	Non-Obese (BMI<30)
Polat, 2019	High	VAS Pain	Preop.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	-0.1 (-0.62, 0.42)	NS
Polat, 2019	High	VAS Pain	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	2.1 (0.69, 3.51)	Non-Obese (BMI<30)
Polat, 2019	High	VAS Pain	2 yrs.	Morbidly Obese (BMI ?35)	Non-Obese (BMI <30)	Mean Difference	2.1 (0.58, 3.62)	Non-Obese (BMI<30)

Table 160151: PICO 9- Risk Stratification: BMI (>40 vs <18.5)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Total Revisions	Postop 30days	Obese III (BMI >40)	Underweight (BMI <18.5)	RR	3.63(0.51,25.73)	NS
Willacy, 2020	Low	Infection (Surgical site infection)	Periop.	Morbidly Obese (BMI >40)	Underweight (BMI <18.5)	RR	2.73(0.39,19.41)	NS
Willacy, 2020	Low	Respiratory Complications	Periop.	Morbidly Obese (BMI >40)	Underweight (BMI <18.5)	RR	1.87(0.26,13.28)	NS
Willacy, 2020	Low	Cardiac Complications	Periop.	Morbidly Obese (BMI >40)	Underweight (BMI <18.5)	RR	0.51(0.07,3.71)	NS
Willacy, 2020	Low	Renal Complications	Periop.	Morbidly Obese (BMI >40)	Underweight (BMI <18.5)	RR	0.98(0.32,3.04)	NS
Willacy, 2020	Low	Deep Vein Thrombosis	Periop.	Morbidly Obese (BMI >40)	Underweight (BMI <18.5)	RD	0.01(0.01,0.01)	Underweight (BMI<18.5)

Table 161152: PICO 9- Risk Stratification: BMI (>40 vs <18.5)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Steinhaus, 2020	High	EQ-5D VAS	Baseline.	Obese III (BMI >40)	Underweight (BMI <18.5)	Mean Difference	-9.77 (-18.30, -1.24)	Underweight (BMI<18.5)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese III (BMI >40)	Underweight (BMI <18.5)	Mean Difference	-2.13 (-24.71, 20.45)	NS
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese III (BMI >40)	Underweight (BMI <18.5)	Mean Difference	7.08 (-8.76, 22.92)	NS
Steinhaus, 2020	High	EQ-5D Total	Baseline.	Obese III (BMI >40)	Underweight (BMI <18.5)	Mean Difference	-0.11 (-0.23, 0.01)	NS
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese III (BMI >40)	Underweight (BMI <18.5)	Mean Difference	-0.03 (-0.19, 0.13)	NS
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese III (BMI >40)	Underweight (BMI <18.5)	Mean Difference	0.08 (-0.08, 0.24)	NS

Table 162153: PICO 9- Risk Stratification: BMI (>40 vs <18.5)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Readmissions	Postop 30days	Obese III (BMI >40)	Underweight (BMI <18.5)	RR	1.08(0.55,2.14)	NS

Table 163154: PICO 9- Risk Stratification: BMI (>40 vs 18.5-24.9)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Total Revisions	Postop 30days	Obese III (BMI >40)	Normal Weight (BMI 18.5-24.9)	RR	1.53(1.23,1.90)	Normal Weight (BMI 18.5-24.9)
Hanly, 2017	High	Infection (Superficial Infection)	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.87(0.50,7.05)	NS
Hanly, 2017	High	Infection (Deep Infection)	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RD	0.02(-0.01,0.04)	NS
Hanly, 2017	High	Wound Irrigation, Erythema	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	0.80(0.05,12.68)	NS
Hanly, 2017	High	Deep Vein Thrombosis	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RD	0.02(-0.01,0.04)	NS
Hanly, 2017	High	Pulmonary Embolism	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RD	0.01(-0.01,0.03)	NS
Hanly, 2017	High	Hemarthrosis	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	0.80(0.12,5.60)	NS
Hanly, 2017	High	Total Adverse Events	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.71(0.77,3.78)	NS
George, 2018	Low	Death/Mortality	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.30(0.70,2.41)	NS
George, 2018	Low	Infection (Superficial Infection)	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	2.02(1.53,2.66)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Infection (Periprosthetic Joint Infection)	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	2.14(1.48,3.09)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Wound Dehiscence	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	2.77(1.68,4.56)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Deep Vein Thrombosis	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	0.82(0.65,1.03)	NS
George, 2018	Low	Pulmonary Embolism	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.94(1.44,2.61)	Normal Weight (BMI 18.5-24.9)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
George, 2018	Low	Pneumonia	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.10(0.78,1.55)	NS
George, 2018	Low	Infection (Urinary Tract Infection)	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.12(0.91,1.38)	NS
George, 2018	Low	Renal Failure	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	2.71(1.11,6.59)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Reintubation	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	2.55(1.39,4.68)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Ventilator >48 hr.	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	2.60(1.13,5.95)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Renal Insufficiency	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	6.03(2.77,13.15)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Stroke	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	0.65(0.32,1.30)	NS
George, 2018	Low	Cardiac Arrest	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.73(0.89,3.36)	NS
George, 2018	Low	Myocardial Infarction or Stroke	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	0.54(0.35,0.85)	BMI >40
George, 2018	Low	Sepsis	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.69(1.07,2.68)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Septic Shock	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.30(0.52,3.22)	NS
George, 2018	Low	Total Revisions	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.49(1.25,1.78)	Normal Weight (BMI 18.5-24.9)
Willacy, 2020	Low	Infection (Surgical site infection)	Periop.	Morbidly Obese (BMI >40)	Normal Weight (BMI 18.5-24.9)	RR	1.69(1.31,2.19)	Normal Weight (BMI 18.5-24.9)
Willacy, 2020	Low	Respiratory Complications	Periop.	Morbidly Obese (BMI >40)	Normal Weight (BMI 18.5-24.9)	RR	1.75(1.27,2.39)	Normal Weight (BMI 18.5-24.9)
Willacy, 2020	Low	Cardiac Complications	Periop.	Morbidly Obese (BMI >40)	Normal Weight (BMI 18.5-24.9)	RR	0.60(0.39,0.93)	Morbidly Obese (BMI >40)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Willacy, 2020	Low	Renal Complications	Periop.	Morbidly Obese (BMI >40)	Normal Weight (BMI 18.5-24.9)	RR	1.38(1.09,1.73)	Normal Weight (BMI 18.5-24.9)
Willacy, 2020	Low	Deep Vein Thrombosis	Periop.	Morbidly Obese (BMI >40)	Normal Weight (BMI 18.5-24.9)	RR	0.92(0.70,1.22)	NS

Table 164155: PICO 9- Risk Stratification: BMI (>40 vs 18.5-24.9)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Readmissions	Postop 30days	Obese III (BMI >40)	Normal Weight (BMI 18.5-24.9)	RR	1.17(1.03,1.33)	Normal Weight (BMI 18.5-24.9)
Hanly, 2017	High	Total Surgical Readmissions	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	2.01(0.65,6.20)	NS
Hanly, 2017	High	Total Medical Readmissions	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.41(0.42,4.66)	NS
George, 2018	Low	Readmissions	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	1.19(1.08,1.32)	Normal Weight (BMI 18.5-24.9)
George, 2018	Low	Patients Received Blood Transfusion	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	0.49(0.46,0.53)	BMI >40

Table 165156: PICO 9- Risk Stratification: BMI (>40 vs 18.5-24.9)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hanly, 2017	High	Pain	Postop 30days	BMI >40	Normal Weight (BMI 18.5-24.9)	RR	0.80(0.12,5.60)	NS

Table 166157: PICO 9- Risk Stratification: BMI (>40 vs <25)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Rassir, 2020	High	Total Revisions	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	1.08(0.88,1.32)	NS
Daniilidis, 2016	High	Total Revisions	18 mos.	Morbidly Obese (BMI >40)	Normal Weight (BMI <25)	RR	0.47(0.05,4.15)	NS
Gurunathan, 2018	High	Cardiac Complications	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.45(0.32,0.65)	Obese III (BMI >40)
Gurunathan, 2018	High	Surgical Complications	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.16(0.77,1.75)	NS
Gurunathan, 2018	High	Pulmonary Complications	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.08(0.46,2.53)	NS
Gurunathan, 2018	High	Renal Complications	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	3.97(0.48,32.64)	NS
Gurunathan, 2018	High	Thromboembolic Complications	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.33(0.03,3.62)	NS
Gurunathan, 2018	High	Infection	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.99(0.42,2.37)	NS
Gurunathan, 2018	High	Gastrointestinal Complications	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.24(0.08,0.74)	Obese III (BMI >40)
Daniilidis, 2016	High	Adverse Events	Postop.	Morbidly Obese (BMI >40)	Normal Weight (BMI <25)	RR	0.56(0.12,2.58)	NS
Daniilidis, 2016	High	Infection (Infection)	18 mos.	Morbidly Obese (BMI >40)	Normal Weight (BMI <25)	RR	0.71(0.07,7.17)	NS
Daniilidis, 2016	High	Instability	18 mos.	Morbidly Obese (BMI >40)	Normal Weight (BMI <25)	RD	0.00(0.00,0.00)	NS
Daniilidis, 2016	High	Limitation of Movement	18 mos.	Morbidly Obese (BMI >40)	Normal Weight (BMI <25)	RD	-0.04(-0.12,0.04)	NS
Daniilidis, 2016	High	Loosening	18 mos.	Morbidly Obese (BMI >40)	Normal Weight (BMI <25)	RD	0.00(0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Daniilidis, 2016	High	Periprosthetic Fracture	18 mos.	Morbidly Obese (BMI >40)	Normal Weight (BMI <25)	RD	0.00(0.00,0.00)	NS
Rassir, 2020	High	Septic Revision	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	1.53(1.06,2.22)	Obese III
Rassir, 2020	High	Aseptic Revision	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	0.95(0.74,1.22)	NS
Rassir, 2020	High	Secondary Patellar Resurfacing	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	Author Reported - Multivariable Cox Proportional Hazard Analysis	1.00(0.55,1.83)	NS
Rassir, 2020	High	Instability	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.24(0.86,1.78)	NS
Rassir, 2020	High	Infection (Infection)	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.69(1.22,2.34)	Normal Weight (BMI <25)
Rassir, 2020	High	Loosening Tibial Component	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.50(0.93,2.41)	NS
Rassir, 2020	High	Malalignment	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.89(0.49,1.62)	NS
Rassir, 2020	High	Arthrofibrosis	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.52(0.22,1.23)	NS
Rassir, 2020	High	Loosening Femoral Component	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.47(0.14,1.56)	NS
Rassir, 2020	High	Periprosthetic Fracture	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.72(0.21,2.47)	NS
Rassir, 2020	High	Patellar Dislocation	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	5.86(2.23,15.40)	Normal Weight (BMI <25)
Rassir, 2020	High	Revision after Removal	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.76(0.46,6.80)	NS
Rassir, 2020	High	Loosening Patellar Component	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.37(0.28,6.78)	NS
Rassir, 2020	High	Other Reason for Revision	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.17(0.67,2.04)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Katakam, 2021	Low	Total Revisions	1 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.04(0.10,11.34)	NS

Table 167158: PICO 9- Risk Stratification: BMI (>40 vs <25)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Basdelioglu, 2020	High	KOOS Total	Postop 1 yrs.	Obese III (BMI >40)	BMI <25	Mean Difference	-4.349 (-5.29, -3.41)	BMI <25
Basdelioglu, 2020	High	Lysholm Score	Postop 1 yrs.	Obese III (BMI >40)	BMI <25	Mean Difference	-4.79 (-5.80, -3.78)	BMI <25
Basdelioglu, 2020	High	KOOS Total	Postop 1 yrs.	BMI >40	BMI <25	Mean Difference	-8.084 (-9.54, -6.62)	BMI <25
Basdelioglu, 2020	High	Lysholm Score	Postop 1 yrs.	BMI >40	BMI <25	Mean Difference	-7.75 (-9.35, -6.15)	BMI <25
Giesinger, 2018	High	Forgotten Joint Score	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	Author Reported - Mann-Whitney's U-test	N/A	Normal Weight
Steinhaus, 2020	High	EQ-5D VAS	Baseline.	Obese III (BMI >40)	Normal Weight (BMI <25)	Mean Difference	-7.33 (-10.29, -4.37)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	Mean Difference	-7.47 (-10.25, -4.69)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	Mean Difference	-0.93 (-4.11, 2.25)	NS
Steinhaus, 2020	High	EQ-5D Total	Baseline.	Obese III (BMI >40)	Normal Weight (BMI <25)	Mean Difference	-0.12 (-0.16, -0.08)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	Mean Difference	-0.08 (-0.11, -0.05)	Normal Weight (BMI <25)
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	Mean Difference	0.04 (-0.00, 0.08)	NS

Table 168159: PICO 9- Risk Stratification: BMI (>40 vs <25)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Basdelioglu, 2020	High	Flexion (deg)	Postop 1 yrs.	Obese III (BMI >40)	BMI <25	Mean Difference	-11.03 (-12.23, -9.83)	BMI <25
Basdelioglu, 2020	High	Flexion (deg)	Postop 1 yrs.	BMI >40	BMI <25	Mean Difference	-17.87 (-19.59, -16.15)	BMI <25
Katakam, 2021	Low	KOOS Function	Preop.	Obese III (BMI >40)	Normal Weight (BMI <25)	Mean Difference	-11.5 (-14.82, -8.18)	Normal Weight (BMI <25)
Katakam, 2021	Low	KOOS Function	1 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	Mean Difference	-11.9 (-16.15, -7.65)	Normal Weight (BMI <25)

Table 169160: PICO 9- Risk Stratification: BMI (>40 vs <25)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Basdelioglu, 2020	High	Operation Time (min)	Postop 1 yrs.	Obese III (BMI >40)	BMI <25	Mean Difference	5.21 (3.86, 6.56)	BMI <25
Basdelioglu, 2020	High	Operation Time (min)	Postop 1 yrs.	BMI >40	BMI <25	Mean Difference	6.33 (4.47, 8.19)	BMI <25
Gurunathan, 2018	High	Total Adverse Events	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.87(0.71,1.06)	NS
Gurunathan, 2018	High	Neurological Complications	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.66(0.25,1.72)	NS
Gurunathan, 2018	High	Miscellaneous Complications	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.81(0.34,1.90)	NS
Gurunathan, 2018	High	LOS	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	Author Reported - Fisher's Exact orX2	N/A	NS
Gurunathan, 2018	High	Operation Time (min)	Intraop.	Obese III (BMI >40)	Normal Weight (BMI <25)	Author Reported - Fisher's Exact orX2	N/A	Normal Weight
Francois, 2019	High	ISR <0.8	Preop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.83(0.71,4.77)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Francois, 2019	High	ISR <0.8	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	1.00(0.30,3.35)	NS
Katakam, 2021	Low	Length of Stay (days)	Postop.	Obese III (BMI >40)	Normal Weight (BMI <25)	Mean Difference	0.5 (0.24, 0.76)	Normal Weight (BMI <25)
Katakam, 2021	Low	Readmissions	90 days	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	2.73(1.40,5.34)	Normal Weight (BMI <25)

Table 170161: PICO 9- Risk Stratification: BMI (>40 vs <25)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Daniilidis, 2016	High	Persistent pain	18 mos.	Morbidly Obese (BMI >40)	Normal Weight (BMI <25)	RD	0.00(0.00,0.00)	NS
Rassir, 2020	High	Patellar Pain	3 yrs.	Obese III (BMI >40)	Normal Weight (BMI <25)	RR	0.81(0.53,1.26)	NS

Table 171162: PICO 9- Risk Stratification: BMI (>40 vs 25-29.9)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Total Revisions	Postop 30days	Obese III (BMI >40)	Overweight (BMI 25-<30)	RR	1.56(1.33,1.83)	Overweight (BMI25-<30)
George, 2018	Low	Death/Mortality	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	1.30(0.81,2.09)	NS
George, 2018	Low	Infection (Superficial Infection)	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	2.34(1.90,2.88)	Overweight (BMI25-<30)
George, 2018	Low	Infection (Periprosthetic Joint Infection)	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	2.39(1.82,3.13)	Overweight (BMI25-<30)
George, 2018	Low	Wound Dehiscence	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	2.19(1.58,3.03)	Overweight (BMI25-<30)
George, 2018	Low	Deep Vein Thrombosis	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	0.74(0.62,0.89)	BMI >40
George, 2018	Low	Pulmonary Embolism	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	1.27(1.05,1.54)	Overweight (BMI25-<30)
George, 2018	Low	Pneumonia	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	0.91(0.70,1.17)	NS
George, 2018	Low	Infection (Urinary Tract Infection)	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	1.24(1.05,1.46)	Overweight (BMI25-<30)
George, 2018	Low	Renal Failure	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	3.71(1.87,7.39)	Overweight (BMI25-<30)
George, 2018	Low	Reintubation	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	1.68(1.15,2.47)	Overweight (BMI25-<30)
George, 2018	Low	Ventilator >48 hr.	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	1.72(1.02,2.89)	Overweight (BMI25-<30)
George, 2018	Low	Renal Insufficiency	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	4.00(2.58,6.19)	Overweight (BMI25-<30)
George, 2018	Low	Stroke	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	0.70(0.39,1.24)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
George, 2018	Low	Cardiac Arrest	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	1.73(1.06,2.81)	Overweight (BMI25-<30)
George, 2018	Low	Myocardial Infarction or Stroke	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	0.61(0.41,0.89)	BMI >40
George, 2018	Low	Sepsis	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	1.66(1.18,2.32)	Overweight (BMI25-<30)
George, 2018	Low	Septic Shock	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	0.67(0.36,1.25)	NS
George, 2018	Low	Total Revisions	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	1.57(1.37,1.80)	Overweight (BMI25-<30)
Daniilidis, 2016	High	Total Revisions	18 mos.	Morbidly Obese (BMI >40)	Overweight (BMI 25-30)	RR	0.29(0.04,2.07)	NS
Gurunathan, 2018	High	Cardiac Complications	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	0.56(0.40,0.77)	Obese III (BMI >40)
Gurunathan, 2018	High	Surgical Complications	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	1.33(0.97,1.83)	NS
Gurunathan, 2018	High	Pulmonary Complications	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	2.10(1.00,4.38)	Overweight (BMI25-29.9)
Gurunathan, 2018	High	Renal Complications	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	2.26(0.74,6.92)	NS
Gurunathan, 2018	High	Thromboembolic Complications	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	0.14(0.02,1.06)	NS
Gurunathan, 2018	High	Infection	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	0.97(0.50,1.87)	NS
Gurunathan, 2018	High	Gastrointestinal Complications	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	0.43(0.15,1.24)	NS
Daniilidis, 2016	High	Adverse Events	Postop.	Morbidly Obese (BMI >40)	Overweight (BMI 25-30)	RR	0.86(0.21,3.51)	NS
Daniilidis, 2016	High	Infection (Infection)	18 mos.	Morbidly Obese (BMI >40)	Overweight (BMI 25-30)	RR	0.94(0.12,7.55)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Daniilidis, 2016	High	Instability	18 mos.	Morbidly Obese (BMI >40)	Overweight (BMI 25-30)	RD	-0.04(-0.08,0.00)	NS
Daniilidis, 2016	High	Limitation of Movement	18 mos.	Morbidly Obese (BMI >40)	Overweight (BMI 25-30)	RD	-0.08(-0.13, -0.02)	Morbidly Obese (BMI >40)
Daniilidis, 2016	High	Loosening	18 mos.	Morbidly Obese (BMI >40)	Overweight (BMI 25-30)	RD	-0.03(-0.06,0.01)	NS
Daniilidis, 2016	High	Periprosthetic Fracture	18 mos.	Morbidly Obese (BMI >40)	Overweight (BMI 25-30)	RD	0.00(0.00,0.00)	NS
Katakam, 2021	Low	Total Revisions	1 yrs.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	0.47(0.06,3.64)	NS
Willacy, 2020	Low	Infection (Surgical site infection)	Periop.	Morbidly Obese (BMI >40)	Overweight (BMI 25-29.9)	RR	2.12(1.74,2.59)	Overweight (BMI25-29.9)
Willacy, 2020	Low	Respiratory Complications	Periop.	Morbidly Obese (BMI >40)	Overweight (BMI 25-29.9)	RR	1.27(1.03,1.58)	Overweight (BMI25-29.9)
Willacy, 2020	Low	Cardiac Complications	Periop.	Morbidly Obese (BMI >40)	Overweight (BMI 25-29.9)	RR	0.71(0.49,1.03)	NS
Willacy, 2020	Low	Renal Complications	Periop.	Morbidly Obese (BMI >40)	Overweight (BMI 25-29.9)	RR	1.50(1.25,1.78)	Overweight (BMI25-29.9)
Willacy, 2020	Low	Deep Vein Thrombosis	Periop.	Morbidly Obese (BMI >40)	Overweight (BMI 25-29.9)	RR	0.74(0.60,0.92)	Morbidly Obese (BMI >40)

Table 172163: PICO 9- Risk Stratification: BMI (>40 vs 25-29.9)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Basdelioglu, 2020	High	KOOS Total	Postop 1 yrs.	Obese III (BMI >40)	BMI 25-29.9	Mean Difference	-7.564 (-8.97, -6.16)	BMI 25-29.9
Basdelioglu, 2020	High	Lysholm Score	Postop 1 yrs.	Obese III (BMI >40)	BMI 25-29.9	Mean Difference	-7.43 (-8.98, -5.88)	BMI 25-29.9
Giesinger, 2018	High	Forgotten Joint Score	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Author Reported - Mann-Whitney's U-test	N/A	Overweight
Steinhaus, 2020	High	EQ-5D VAS	Baseline.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Mean Difference	-6.67 (-9.49, -3.85)	Overweight (BMI25-29.9)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Mean Difference	-6.45 (-9.11, -3.79)	Overweight (BMI25-29.9)
Steinhaus, 2020	High	EQ-5D VAS	2 yrs.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Mean Difference	-0.32 (-3.31, 2.67)	NS
Steinhaus, 2020	High	EQ-5D Total	Baseline.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Mean Difference	-0.1 (-0.14, -0.06)	Overweight (BMI25-29.9)
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Mean Difference	-0.07 (-0.10, -0.04)	Overweight (BMI25-29.9)
Steinhaus, 2020	High	EQ-5D Total	2 yrs.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Mean Difference	0.03 (-0.01, 0.07)	NS

Table 173164: PICO 9- Risk Stratification: BMI (>40 vs 25-29.9)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Basdelioglu, 2020	High	Flexion (deg)	Postop 1 yrs.	Obese III (BMI >40)	BMI 25-29.9	Mean Difference	-17.54 (-19.22, -15.86)	BMI 25-29.9
Katakam, 2021	Low	KOOS Function	Preop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Mean Difference	-8.1 (-11.01, -5.19)	Overweight (BMI25-29.9)
Katakam, 2021	Low	KOOS Function	1 yrs.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Mean Difference	-7.1 (-11.03, -3.17)	Overweight (BMI25-29.9)

Table 174165: PICO 9- Risk Stratification: BMI (>40 vs 25-29.9)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sloan, 2020	High	Readmissions	Postop 30days	Obese III (BMI >40)	Overweight (BMI 25-<30)	RR	1.24(1.12,1.36)	Overweight (BMI25-<30)
Basdelioglu, 2020	High	Operation Time (min)	Postop 1 yrs.	Obese III (BMI >40)	BMI 25-29.9	Mean Difference	4.98 (3.16, 6.80)	BMI 25-29.9
George, 2018	Low	Readmissions	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	1.27(1.18,1.38)	Overweight (BMI25-<30)
George, 2018	Low	Patients Received Blood Transfusion	Postop 30days	BMI >40	Overweight (BMI 25-<30)	RR	0.67(0.63,0.71)	BMI >40
Gurunathan, 2018	High	Total Adverse Events	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	0.93(0.79,1.09)	NS
Gurunathan, 2018	High	Neurological Complications	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	0.44(0.21,0.92)	Obese III (BMI >40)
Gurunathan, 2018	High	Miscellaneous Complications	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	0.75(0.39,1.46)	NS
Gurunathan, 2018	High	LOS	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Author Reported - Fisher's Exact orX2	N/A	NS
Gurunathan, 2018	High	Operation Time (min)	Intraop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Author Reported - Fisher's Exact orX2	N/A	Overweight
Francois, 2019	High	ISR <0.8	Preop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	1.83(0.71,4.77)	NS
Francois, 2019	High	ISR <0.8	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	1.25(0.35,4.52)	NS
Katakam, 2021	Low	Length of Stay (days)	Postop.	Obese III (BMI >40)	Overweight (BMI 25-29.9)	Mean Difference	0.3 (0.05, 0.55)	Overweight (BMI25-29.9)
Katakam, 2021	Low	Readmissions	90 days	Obese III (BMI >40)	Overweight (BMI 25-29.9)	RR	1.56(0.94,2.57)	NS

Table 175166: PICO 9- Risk Stratification: BMI (>40 vs 25-29.9)- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Daniilidis, 2016	High	Persistent pain	18 mos.	Morbidly Obese (BMI >40)	Overweight (BMI 25-30)	RD	0.00(0.00,0.00)	NS

Table 176167: PICO 9- Risk Stratification: BMI (>40 vs <30)- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hakim, 2020	High	Infection (Superficial Infection)	Postop 10.8yrs	BMI >40	BMI <30	RR	1.17(0.13,10.11)	NS
Hakim, 2020	High	Skin Necrosis	Postop 10.8yrs	BMI >40	BMI <30	RD	0.01(-0.01,0.02)	NS
Hakim, 2020	High	Peroneal Palsy	Postop 10.8yrs	BMI >40	BMI <30	RD	0.01(-0.01,0.02)	NS
Hakim, 2020	High	Thromboembolic Complications	Postop 10.8yrs	BMI >40	BMI <30	RD	0.02(-0.00,0.05)	NS
Hakim, 2020	High	Manipulation	Postop 10.8yrs	BMI >40	BMI <30	RR	0.29(0.02,4.55)	NS
Hakim, 2020	High	Patellar Clunk Syndrome	Postop 10.8yrs	BMI >40	BMI <30	RR	0.58(0.05,6.25)	NS
Hakim, 2020	High	Infection (Late Deep Infection)	Postop 10.8yrs	BMI >40	BMI <30	RD	0.01(-0.01,0.02)	NS
Hakim, 2020	High	Aseptic Revision	Postop 10.8yrs	BMI >40	BMI <30	RR	0.58(0.05,6.25)	NS
Hakim, 2020	High	Septic Revision	Postop 10.8yrs	BMI >40	BMI <30	RD	0.01(-0.01,0.02)	NS
Hakim, 2020	High	Total Adverse Events	Postop 10.8yrs	BMI >40	BMI <30	RD	0.00(0.00,0.00)	NS
Woon, 2016	High	Deep Vein Thrombosis	Postop 30days	BMI >40	BMI <30	RR	0.58(0.14,2.35)	NS
Woon, 2016	High	Pulmonary Embolism	Postop 30days	BMI >40	BMI <30	RR	0.17(0.02,1.24)	NS
Woon, 2016	High	Infection (Postoperative Wound Infection)	Postop 30days	BMI >40	BMI <30	RD	0.00(-0.00,0.00)	NS
Woon, 2016	High	Death/Mortality	Postop 30days	BMI >40	BMI <30	RD	0.00(0.00,0.00)	NS

Table 177168: PICO 9- Risk Stratification: BMI (>40 vs <30)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	High	WOMAC Total	Preop.	Obese III (BMI >40)	Not Obese	Mean Difference	13.82 (6.79, 20.85)	Not Obese
Maniar, 2018	High	KSS Total (no scale provided)	Preop.	Obese III (BMI >40)	Not Obese	Mean Difference	-13 (-25.70, -0.30)	Not Obese
Maniar, 2018	High	WOMAC Total	Postop 3 mos.	Obese III (BMI >40)	Not Obese	Mean Difference	9.71 (3.13, 16.29)	Not Obese
Maniar, 2018	High	WOMAC Total	Postop 12mos	Obese III (BMI >40)	Not Obese	Mean Difference	7.55 (2.97, 12.13)	Not Obese
Maniar, 2018	High	KSS Total (no scale provided)	Postop 12mos	Obese III (BMI >40)	Not Obese	Mean Difference	-14.5 (-23.61, -5.39)	Not Obese
Hakim, 2020	High	KSS Total	Preop 10.8 yrs.	BMI >40	BMI <30	Mean Difference	2.44 (0.25, 4.63)	BMI >40
Hakim, 2020	High	KSS Total	Postop.	BMI >40	BMI <30	Mean Difference	-1.98 (-4.16, 0.20)	NS

Table 178169: PICO 9- Risk Stratification: BMI (>40 vs <30)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	High	SF-12 Physical	Preop.	Obese III (BMI >40)	Not Obese	Mean Difference	-3.02 (-5.96, -0.08)	Not Obese
Maniar, 2018	High	Flexion (deg)	Preop.	Obese III (BMI >40)	Not Obese	Mean Difference	-17.64 (-27.28, -8.00)	Not Obese
Maniar, 2018	High	SF-12 Physical	Postop 3 mos.	Obese III (BMI >40)	Not Obese	Mean Difference	-4.78 (-15.76, 6.20)	NS
Maniar, 2018	High	Flexion (deg)	Postop 3 mos.	Obese III (BMI >40)	Not Obese	Mean Difference	-8.42 (-13.44, -3.40)	Not Obese
Maniar, 2018	High	SF-12 Physical	Postop 12mos	Obese III (BMI >40)	Not Obese	Mean Difference	-1.8 (-5.69, 2.09)	NS
Maniar, 2018	High	Flexion (deg)	Postop 12mos	Obese III (BMI >40)	Not Obese	Mean Difference	-7.24 (-46.80, 32.32)	NS
Hakim, 2020	High	KSS Function	Preop 10.8 yrs.	BMI >40	BMI <30	Mean Difference	-2.47 (-4.77, -0.17)	BMI <30
Hakim, 2020	High	KSS Function	Postop.	BMI >40	BMI <30	Mean Difference	-8.15 (-10.19, -6.11)	BMI <30

Table 179170: PICO 9- Risk Stratification: BMI (>40 vs <30)- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Maniar, 2018	High	SF-12 Mental	Preop.	Obese III (BMI >40)	Not Obese	Mean Difference	-4.11 (-8.47, 0.25)	NS
Maniar, 2018	High	SF-12 Mental	Postop 3 mos.	Obese III (BMI >40)	Not Obese	Mean Difference	-4.7 (-21.63, 12.23)	NS
Maniar, 2018	High	SF-12 Mental	Postop 12mos	Obese III (BMI >40)	Not Obese	Mean Difference	-2.39 (-19.02, 14.24)	NS
Hakim, 2020	High	Blood Transfusions (Units)	Postop 10.8yrs	BMI >40	BMI <30	Mean Difference	0.14 (-0.20, 0.48)	NS
Hakim, 2020	High	Tourniquet Time (min)	Postop 10.8yrs	BMI >40	BMI <30	Mean Difference	0.78 (-4.44, 6.00)	NS
Woon, 2016	High	Length of Stay	Postop 30days	BMI >40	BMI <30	Author Reported - Chi-Squared test; Student's t-test; Tukey post hoc analysis; Mann-Whitney U-test; Kruskal-Wallis test;	N/A	NS
Woon, 2016	High	Patients Received Blood Transfusion	Postop 30days	BMI >40	BMI <30	RR	0.94(0.81,1.11)	NS

Table 180171: PICO 9- Risk Stratification: BMI (>50 vs <30)- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hakim, 2020	High	KSS Total	Preop 10.8 yrs.	BMI >50	BMI <30	Mean Difference	5.34 (2.73, 7.95)	BMI >50
Hakim, 2020	High	KSS Total	Postop.	BMI >50	BMI <30	Mean Difference	-1.38 (-3.99, 1.23)	NS

Table 181172: PICO 9- Risk Stratification: BMI (>50 vs <30)- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hakim, 2020	High	KSS Function	Preop 10.8 yrs.	BMI >50	BMI <30	Mean Difference	4.59 (1.92, 7.26)	BMI >50
Hakim, 2020	High	KSS Function	Postop 10.8yrs	BMI >50	BMI <30	Mean Difference	-10.33 (-12.66, -8.00)	BMI <30

Table 182173: PICO 10- Tourniquet vs. Control/Placebo- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goel, 2019	High	Total Revisions	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	RR	0.99(0.20,4.79)	NS
Goel, 2019	High	Deep Vein Thrombosis	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	RD	-0.01(-0.03,0.01)	NS
Goel, 2019	High	Wound Complications	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	RR	1.98(0.18,21.49)	NS
Goel, 2019	High	Emergency Department Visit	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	RR	0.25(0.03,2.18)	NS
Mori, 2016	High	Deep Vein Thrombosis (Distal)	7 days	Inflated at beginning of procedure: Pressure250mmHg	No Tourniquet used	RR	2.29(1.31,4.01)	No Tourniquet used
Mori, 2016	High	Deep Vein Thrombosis (Proximal)	7 days	Inflated at beginning of procedure: Pressure250mmHg	No Tourniquet used	RR	1.53(0.27,8.78)	NS
Mori, 2016	High	Deep Vein Thrombosis (Total)	7 days	Inflated at beginning of procedure: Pressure250mmHg	No Tourniquet used	RR	2.20(1.29,3.74)	No Tourniquet used
Liu, 2017	High	Wound Complications (Ooze)	Postop.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	RR	2.36(1.44,3.86)	No Tourniquet used
Liu, 2017	High	Erythema/Ecchymosis	Postop.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	RR	1.93(1.18,3.16)	No Tourniquet used
Liu, 2017	High	Skin Blisters	Postop.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	RR	4.50(1.02,19.83)	No Tourniquet used
Liu, 2017	High	Ecchymosis	Postop.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	RR	3.00(1.18,7.65)	No Tourniquet used
Liu, 2017	High	Skin Necrosis	Postop.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	RD	0.02(-0.02,0.06)	NS
Liu, 2017	High	Deep Vein Thrombosis	Postop.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	RR	1.00(0.26,3.79)	NS
Yi, 2021	High	Calf Muscular Vein Thrombosis	Postop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	RD	0.02(-0.02,0.06)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yi, 2021	High	Infection (Superficial Wound Infection)	Postop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	RD	0.02(-0.02,0.06)	NS
Yi, 2021	High	Calf Muscular Vein Thrombosis	Postop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	RD	0.02(-0.02,0.06)	NS
Hamawanadi, 2021	High	Deep Vein Thrombosis	Postop.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	RR	4.08(0.47,35.25)	NS
Farhan-Alenia, 2021	Low	Total Revisions	10 yrs.	Inflated prior to skin incision	No Tourniquet used	RR	0.86(0.60,1.23)	NS

Table 183174: PICO 10- Tourniquet vs. Control/Placebo- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ayik, 2019	High	KSS Total	Preop.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	1 (-3.14, 5.14)	NS
Ayik, 2019	High	KSS Total	1 mos.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	1 (-11.71, 13.71)	NS
Ayik, 2019	High	KSS Total	3 mos.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	3 (-3.09, 9.09)	NS
Jawhar, 2020	High	Oxford Knee Score	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Oxford Knee Score	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Oxford Knee Score	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Mancuso Score	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Mancuso Score	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Mancuso Score	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	EQ-5D VAS	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	EQ-5D VAS	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	EQ-5D VAS	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	EQ-5D Total	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	EQ-5D Total	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jawhar, 2020	High	EQ-5D Total	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Ozkunt, 2018	High	KSS Total	Preop.	Inflated prior to skin incision	No Tourniquet used	Mean Difference	1 (-3.55, 5.55)	NS
Ozkunt, 2018	High	KSS Total	Postop.	Inflated prior to skin incision	No Tourniquet used	Mean Difference	-19 (-22.33, -15.67)	No Tourniquet used
Ozkunt, 2018	High	KSS Total	Preop.	Inflated during cementing procedure	No Tourniquet used	Mean Difference	2 (-2.57, 6.57)	NS
Ozkunt, 2018	High	KSS Total	Postop.	Inflated during cementing procedure	No Tourniquet used	Mean Difference	-3 (-6.43, 0.43)	NS
Liu, 2017	High	KSS Total	Preop.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	-0.1 (-1.98, 1.78)	NS
Liu, 2017	High	KSS Total	3 mos.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.1 (-1.46, 1.66)	NS
Liu, 2017	High	KSS Total	1 yrs.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	-0.1 (-0.97, 0.77)	NS
Guler, 2016	Low	WOMAC Total	Preop.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	2.38 (-1.03, 5.79)	NS
Guler, 2016	Low	WOMAC Total	1 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	4.2 (2.19, 6.21)	No Tourniquet used
Guler, 2016	Low	WOMAC Total	3 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	15.17 (13.46, 16.88)	No Tourniquet used
Guler, 2016	Low	WOMAC Total	6 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	2.81 (1.68, 3.94)	No Tourniquet used
Guler, 2016	Low	WOMAC Total	12 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.14 (-0.50, 0.78)	NS
Guler, 2016	Low	KSS Total	Preop.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.13 (-1.17, 1.43)	NS
Guler, 2016	Low	KSS Total	1 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	-3.55 (-5.93, -1.17)	No Tourniquet used

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Guler, 2016	Low	KSS Total	3 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	-11.44 (-13.90, -8.98)	No Tourniquet used
Guler, 2016	Low	KSS Total	6 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	-4.12 (-6.31, -1.93)	No Tourniquet used
Guler, 2016	Low	KSS Total	12 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	1.65 (-0.50, 3.80)	NS
Yi, 2021	High	HSS Total	Preop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	1.54 (-0.20, 3.28)	NS
Yi, 2021	High	HSS Total	Postop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	-0.2 (-1.41, 1.01)	NS
Yi, 2021	High	HSS Total	Preop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	1.64 (-0.06, 3.34)	NS
Yi, 2021	High	HSS Total	Postop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	-0.22 (-1.53, 1.09)	NS
Hamawanadi, 2021	High	KSS Total	2 wks.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-2.46 (-3.92, -1.00)	No Tourniquet used
Hamawanadi, 2021	High	KSS Total	6 wks.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-1.69 (-2.88, -0.50)	No Tourniquet used
Hamawanadi, 2021	High	KSS Total	3 mos.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-0.93 (-1.79, -0.07)	No Tourniquet used
Hamawanadi, 2021	High	KSS Total	6 mos.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-0.42 (-1.08, 0.24)	NS
Hamawanadi, 2021	High	KSS Total	1 yrs.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-0.18 (-0.81, 0.45)	NS
Hamawanadi, 2021	High	KSS Total	3 yrs.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	0.17 (-0.29, 0.63)	NS
Hamawanadi, 2021	High	KSS Total	5 yrs.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-0.05 (-0.44, 0.34)	NS
Hamawanadi, 2021	High	KOOS Total	2 wks.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-1.48 (-2.31, -0.65)	No Tourniquet used

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hamawanadi, 2021	High	KOOS Total	6 wks.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-1.72 (-2.22, -1.22)	No Tourniquet used
Hamawanadi, 2021	High	KOOS Total	3 mos.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-1.21 (-2.17, -0.25)	No Tourniquet used
Hamawanadi, 2021	High	KOOS Total	6 mos.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-0.17 (-0.52, 0.18)	NS
Hamawanadi, 2021	High	KOOS Total	1 yrs.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-0.04 (-0.38, 0.30)	NS
Hamawanadi, 2021	High	KOOS Total	3 yrs.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-0.1 (-0.44, 0.24)	NS
Hamawanadi, 2021	High	KOOS Total	5 yrs.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	0.18 (-0.02, 0.38)	NS

Table 184175: PICO 10- Tourniquet vs. Control/Placebo- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goel, 2019	High	Flexion (deg)	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	1 (-2.28, 4.28)	NS
Goel, 2019	High	Extension (deg)	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.1 (-1.58, 1.78)	NS
Goel, 2019	High	Timed Up and Go Test (s)	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0 (-1.00, 1.00)	NS
Goel, 2019	High	Stair Climb Test (s)	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.8 (-1.80, 3.40)	NS
Goel, 2019	High	KOOS Symptoms	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	1.15 (-3.42, 5.72)	NS
Goel, 2019	High	KOOS ADL	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.1 (-5.07, 5.27)	NS
Goel, 2019	High	SF-12 Physical	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.37 (-2.32, 3.06)	NS
Goel, 2019	High	KOOS Symptoms	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-3.5 (-10.85, 3.85)	NS
Goel, 2019	High	KOOS ADL	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.09 (-4.78, 4.96)	NS
Goel, 2019	High	SF-12 Physical	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	1.5 (-1.09, 4.09)	NS
Goel, 2019	High	KOOS Symptoms	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.59 (-5.27, 6.45)	NS
Goel, 2019	High	KOOS ADL	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-1.61 (-7.01, 3.79)	NS
Goel, 2019	High	SF-12 Physical	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-0.54 (-3.34, 2.26)	NS
Goel, 2019	High	Flexion (deg)	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-1.4 (-5.97, 3.17)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goel, 2019	High	Extension (deg)	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	3.4 (-1.21, 8.01)	NS
Goel, 2019	High	Timed Up and Go Test (s)	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-2.5 (-10.27, 5.27)	NS
Goel, 2019	High	Stair Climb Test (s)	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-4.2 (-16.52, 8.12)	NS
Goel, 2019	High	Flexion (deg)	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.7 (-3.09, 4.49)	NS
Goel, 2019	High	Extension (deg)	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	2.4 (0.19, 4.61)	Inflated at beginning of procedure
Goel, 2019	High	Timed Up and Go Test (s)	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-0.8 (-2.01, 0.41)	NS
Goel, 2019	High	Stair Climb Test (s)	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-2.2 (-4.84, 0.44)	NS
Goel, 2019	High	Flexion (deg)	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.3 (-2.88, 3.48)	NS
Goel, 2019	High	Extension (deg)	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	1.3 (-0.09, 2.69)	NS
Goel, 2019	High	Timed Up and Go Test (s)	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.2 (-0.48, 0.88)	NS
Goel, 2019	High	Stair Climb Test (s)	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	2.8 (-0.33, 5.93)	NS
Ayik, 2019	High	KSS Function	Preop.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	-1 (-8.54, 6.54)	NS
Ayik, 2019	High	KSS Function	1 mos.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	2 (-4.08, 8.08)	NS
Ayik, 2019	High	KSS Function	3 mos.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	3 (-6.48, 12.48)	NS
Ayik, 2019	High	ROM (deg)	Preop.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	-3 (-8.84, 2.84)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ayik, 2019	High	ROM (deg)	1 mos.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	-3 (-7.88, 1.88)	NS
Ayik, 2019	High	ROM (deg)	3 mos.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	3 (-2.63, 8.63)	NS
Harsten, 2015	High	Knee-extension Strength(N/kg)	Preop.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Author Reported - Mann-Whitney's	N/A	NS
Harsten, 2015	High	Knee-extension Strength(N/kg)	48 hrs	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Author Reported - Mann-Whitney's	N/A	NS
Harsten, 2015	High	Knee-extension Strength Loss (N/kg)	Postop.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Author Reported - Mann-Whitney's	1.50(1.30,1.60)	NS
Alexandersson, 2019	High	Flexion (deg)	1 days	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - ANOVA	3.20(-1.00,7.40)	NS
Alexandersson, 2019	High	Extension (deg)	1 days	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - ANOVA	-0.70(-2.60,1.30)	NS
Alexandersson, 2019	High	Straight Leg Raise	1 days	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	RR	1.65(0.95,2.88)	NS
Alexandersson, 2019	High	Flexion (deg)	3 mos.	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - ANOVA	2.30(-3.00,7.50)	NS
Alexandersson, 2019	High	Extension (deg)	3 mos.	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - ANOVA	-3.00(-2.60,2.00)	NS
Alexandersson, 2019	High	Straight Leg Raise	3 mos.	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	RR	0.13(0.02,0.23)	Inflated at beginning of procedure
Alexandersson, 2019	High	Timed Up and Go Test (s)	3 mos.	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - ANOVA	-1.10(-2.10, -0.10)	No Tourniquet
Jawhar, 2020	High	WOMAC Stiffness	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	WOMAC Stiffness	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	WOMAC Stiffness	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jawhar, 2020	High	WOMAC Function	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	WOMAC Function	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	WOMAC Function	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Peak Force - Concentric (N)	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	15 (11.43, 18.57)	Inflated prior to skin incision
Jawhar, 2020	High	Peak Force - Concentric (N)	1 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	4 (1.04, 6.96)	Inflated prior to skin incision
Jawhar, 2020	High	Peak Force - Concentric (N)	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	15 (11.51, 18.49)	Inflated prior to skin incision
Jawhar, 2020	High	Peak Force - Concentric (N)	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	13 (10.02, 15.98)	Inflated prior to skin incision
Jawhar, 2020	High	Peak Force - Eccentric (N)	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	43 (38.46, 47.54)	Inflated prior to skin incision
Jawhar, 2020	High	Peak Force - Eccentric (N)	1 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	8 (4.04, 11.96)	Inflated prior to skin incision
Jawhar, 2020	High	Peak Force - Eccentric (N)	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	29 (25.11, 32.89)	Inflated prior to skin incision
Jawhar, 2020	High	Peak Force - Eccentric (N)	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	14 (9.53, 18.47)	Inflated prior to skin incision
Jawhar, 2020	High	Workload - Concentric (J)	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	-7 (-8.18, -5.82)	No Tourniquet used
Jawhar, 2020	High	Workload - Concentric (J)	1 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	-1 (-1.79, -0.21)	No Tourniquet used
Jawhar, 2020	High	Workload - Concentric (J)	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	4 (2.77, 5.23)	Inflated prior to skin incision
Jawhar, 2020	High	Workload - Concentric (J)	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	4 (2.72, 5.28)	Inflated prior to skin incision

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jawhar, 2020	High	Workload - Eccentric (J)	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	10 (8.22, 11.78)	Inflated prior to skin incision
Jawhar, 2020	High	Workload - Eccentric (J)	1 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	-2 (-3.01, -0.99)	No Tourniquet used
Jawhar, 2020	High	Workload - Eccentric (J)	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	7 (4.75, 9.25)	Inflated prior to skin incision
Jawhar, 2020	High	Workload - Eccentric (J)	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	-14 (-18.56, -9.44)	No Tourniquet used
Jawhar, 2020	High	Total Workload - Concentric(J)	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	31 (14.65, 47.35)	Inflated prior to skin incision
Jawhar, 2020	High	Total Workload - Concentric(J)	1 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	-4 (-15.46, 7.46)	NS
Jawhar, 2020	High	Total Workload - Concentric(J)	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	66 (46.50, 85.50)	Inflated prior to skin incision
Jawhar, 2020	High	Total Workload - Concentric(J)	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	48 (25.46, 70.54)	Inflated prior to skin incision
Jawhar, 2020	High	Total Workload - Eccentric (J)	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	26 (5.16, 46.84)	Inflated prior to skin incision
Jawhar, 2020	High	Total Workload - Eccentric (J)	1 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	-4 (-14.26, 6.26)	NS
Jawhar, 2020	High	Total Workload - Eccentric (J)	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	98 (72.30, 123.70)	Inflated prior to skin incision
Jawhar, 2020	High	Total Workload - Eccentric (J)	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	-23 (-41.51, -4.49)	No Tourniquet used
Jawhar, 2020	High	Muscle Power - Concentric(W)	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	2 (1.21, 2.79)	Inflated prior to skin incision
Jawhar, 2020	High	Muscle Power - Concentric(W)	1 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	0 (-0.39, 0.39)	NS
Jawhar, 2020	High	Muscle Power - Concentric(W)	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	4 (2.77, 5.23)	Inflated prior to skin incision

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jawhar, 2020	High	Muscle Power - Concentric(W)	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	5 (3.49, 6.51)	Inflated prior to skin incision
Jawhar, 2020	High	Muscle Power - Eccentric (W)	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	2 (1.12, 2.88)	Inflated prior to skin incision
Jawhar, 2020	High	Muscle Power - Eccentric (W)	1 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	0 (-0.39, 0.39)	NS
Jawhar, 2020	High	Muscle Power - Eccentric (W)	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	0 (-0.91, 0.91)	NS
Jawhar, 2020	High	Muscle Power - Eccentric (W)	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	0 (-0.43, 0.43)	NS
Liu, 2017	High	ROM (deg)	Preop.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	-0.2 (-3.36, 2.96)	NS
Liu, 2017	High	ROM (deg)	7 days	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	-1.1 (-3.25, 1.05)	NS
Liu, 2017	High	ROM (deg)	14 days	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	-0.7 (-2.18, 0.78)	NS
Liu, 2017	High	ROM (deg)	30 days	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	-0.2 (-2.59, 2.19)	NS
Liu, 2017	High	ROM (deg)	90 days	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	-0.1 (-2.62, 2.42)	NS
Barker, 2018	Low	Knee Outcome Survey (First PT Visit)	33 days	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	1.2 (-5.34, 7.74)	NS
Barker, 2018	Low	Knee Outcome Survey (Last PT Visit)	3 mos.	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	1.3 (-5.51, 8.11)	NS
Barker, 2018	Low	Knee Outcome Survey (?)	Post-discharge.	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	-0.1 (-6.98, 6.78)	NS
Nicolaiciuc, 2019	Low	ROM (deg)	Preop.	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	NS
Nicolaiciuc, 2019	Low	ROM (deg)	1 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	No Tourniquet

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Nicolaiciuc, 2019	Low	ROM (deg)	2 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	Tourniquet
Nicolaiciuc, 2019	Low	ROM (deg)	3 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	Tourniquet
Nicolaiciuc, 2019	Low	ROM (deg)	4 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	Tourniquet
Nicolaiciuc, 2019	Low	ROM (deg)	5 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	Tourniquet
Nicolaiciuc, 2019	Low	ROM (deg)	6 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	Tourniquet
Guler, 2016	Low	WOMAC Stiffness	Preop.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.26 (-0.23, 0.75)	NS
Guler, 2016	Low	WOMAC Stiffness	1 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.25 (-0.11, 0.61)	NS
Guler, 2016	Low	WOMAC Stiffness	3 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.99 (0.72, 1.26)	No Tourniquet used
Guler, 2016	Low	WOMAC Stiffness	6 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.09 (-0.16, 0.34)	NS
Guler, 2016	Low	WOMAC Stiffness	12 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	-0.1 (-0.33, 0.13)	NS
Guler, 2016	Low	WOMAC Function	Preop.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	1.25 (-1.08, 3.58)	NS
Guler, 2016	Low	WOMAC Function	1 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	3.25 (1.59, 4.91)	No Tourniquet used
Guler, 2016	Low	WOMAC Function	3 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	12.1 (10.65, 13.55)	No Tourniquet used
Guler, 2016	Low	WOMAC Function	6 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	2.08 (1.17, 2.99)	No Tourniquet used
Guler, 2016	Low	WOMAC Function	12 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.15 (-0.39, 0.69)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Guler, 2016	Low	KSS Function	Preop.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	-2.07 (-6.49, 2.35)	NS
Guler, 2016	Low	KSS Function	1 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	-17.18 (-21.12, -13.24)	No Tourniquet used
Guler, 2016	Low	KSS Function	3 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	-19.18 (-22.14, -16.22)	No Tourniquet used
Guler, 2016	Low	KSS Function	6 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	-9.36 (-11.98, -6.74)	No Tourniquet used
Guler, 2016	Low	KSS Function	12 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.03 (-2.82, 2.88)	NS
Yi, 2021	High	ROM (deg)	Preop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	-3 (-10.10, 4.10)	NS
Yi, 2021	High	ROM (deg)	3 days	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	-4 (-6.16, -1.84)	No Tourniquet used
Yi, 2021	High	ROM (deg)	3 mos.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	0 (-3.34, 3.34)	NS
Yi, 2021	High	ROM (deg)	Preop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	-2 (-8.77, 4.77)	NS
Yi, 2021	High	ROM (deg)	3 days	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	-1 (-3.35, 1.35)	NS
Yi, 2021	High	ROM (deg)	3 mos.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	1 (-2.34, 4.34)	NS

Table 185176: PICO 10- Tourniquet vs. Control/Placebo- Opioid Use

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Nicolaiciuc, 2019	Low	Opioid Use (mg)(Oxycodone)	1 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	No Tourniquet
Nicolaiciuc, 2019	Low	Opioid Use (mg)(Oxycodone)	2 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	No Tourniquet
Nicolaiciuc, 2019	Low	Opioid Use (mg)(Oxycodone)	3 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	No Tourniquet
Nicolaiciuc, 2019	Low	Opioid Use (mg)(Oxycodone)	4 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	No Tourniquet
Nicolaiciuc, 2019	Low	Opioid Use (mg)(Oxycodone)	5 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	No Tourniquet
Nicolaiciuc, 2019	Low	Opioid Use (mg)(Oxycodone)	6 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	No Tourniquet
Nicolaiciuc, 2019	Low	Non-Opioid Use	1 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	NS
Nicolaiciuc, 2019	Low	Non-Opioid Use	2 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	Tourniquet
Nicolaiciuc, 2019	Low	Non-Opioid Use	3 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	Tourniquet
Nicolaiciuc, 2019	Low	Non-Opioid Use	4 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	Tourniquet
Nicolaiciuc, 2019	Low	Non-Opioid Use	5 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	Tourniquet
Nicolaiciuc, 2019	Low	Non-Opioid Use	6 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	Tourniquet
Kheir, 2018	Low	Opioid Use (Female - time to first use)	Postop.	Inflated prior to skin incision: Pressure 250mmHg	No Tourniquet used	Author Reported - MW U	N/A	NS
Kheir, 2018	Low	Opioid Use (Male - time to first use)	Postop.	Inflated prior to skin incision: Pressure 250mmHg	No Tourniquet used	Author Reported - MW U	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kheir, 2018	Low	Opioid Use (Female - amount in 24hrs)	1 days	Inflated prior to skin incision: Pressure 250mmHg	No Tourniquet used	Author Reported - MW U	N/A	No Tourniquet
Kheir, 2018	Low	Opioid Use (Male - amount in24hrs)	1 days	Inflated prior to skin incision: Pressure 250mmHg	No Tourniquet used	Author Reported - MW U	N/A	NS
Hamawanadi, 2021	High	Ampules of Tramadol (One)	Postop.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	RD	-0.43(-0.57, -0.30)	Inflated prior to skin incision
Hamawanadi, 2021	High	Ampules of Tramadol (Two)	Postop.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	RR	1.27(0.94,1.70)	NS
Hamawanadi, 2021	High	Ampules of Tramadol (Three)	Postop.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	RD	0.28(0.16,0.40)	No Tourniquet used

Table 186177: PICO 10- Tourniquet vs. Control/Placebo- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kizilkurt, 2021	Low	Blood Loss (Volume (mL))	Periop.	Tourniquet	Control	Mean Difference	-280 (-549.07, -10.93)	Tourniquet
Kizilkurt, 2021	Low	Blood Loss (Volume (mL))	Postop 6 wks.	Tourniquet	Control	Mean Difference	-159 (-1589.37, 1271.37)	NS
Kizilkurt, 2021	Low	Blood Loss (Volume (mL))	Periop.	Tourniquet: 20 mg/kg TKA IV with Tourniquet	Control: 20 mg/kg TKA IV without Tourniquet	Mean Difference	-120 (-285.53, 45.53)	NS
Kizilkurt, 2021	Low	Blood Loss (Volume (mL))	Postop 6 wks.	Tourniquet: 20 mg/kg TKA IV with Tourniquet	Control: 20 mg/kg TKA IV without Tourniquet	Mean Difference	33 (-300.60, 366.60)	NS
Goel, 2019	High	SF-12 Mental	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	2.52 (-0.32, 5.36)	NS
Goel, 2019	High	SF-12 Mental	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	2.58 (-0.16, 5.32)	NS
Goel, 2019	High	SF-12 Mental	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	1.53 (-1.08, 4.14)	NS
Goel, 2019	High	Blood Transfusions (Units)	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	RD	-0.02(-0.05,0.01)	NS
Goel, 2019	High	Readmissions	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	RD	-0.03(-0.06,0.00)	NS
Goel, 2019	High	Blood Loss	Intraop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Author Reported - t-test	N/A	Tourniquet
Harsten, 2015	High	Blood Loss	Intraop.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Author Reported - Mann-Whitney's	N/A	Tourniquet
Harsten, 2015	High	Discharge from Ward (8am, first day following day of surgery)	1 days	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	RR	3.00(0.33,27.33)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Harsten, 2015	High	Discharge from Ward (2pm, first day following day of surgery)	1 days	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	RR	0.92(0.50,1.70)	NS
Harsten, 2015	High	Discharge from Ward (8am, second day following day of surgery)	2 days	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	RR	0.80(0.45,1.43)	NS
Harsten, 2015	High	Discharge from Ward (2pm, second day following day of surgery)	2 days	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	RR	1.33(0.32,5.49)	NS
Mori, 2016	High	Blood Loss (Volume (mL))	Postop.	Inflated at beginning of procedure: Pressure250mmHg	No Tourniquet used	Mean Difference	-301 (-382.96, -219.04)	Inflated at beginning of procedure
Alexandersson, 2019	High	Hemoglobin (g/dL)	1 days	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - ANOVA	-2.60(-6.60,1.50)	NS
Alexandersson, 2019	High	Hemoglobin (g/dL)	3 days	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - ANOVA	0.40(-4.40,5.30)	NS
Alexandersson, 2019	High	Length of Stay (days)	Postop.	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - t-test	N/A	NS
Pfitzner, 2014	High	Blood Loss (Volume (L))	Postop.	Inflated prior to skin incision: Pressure 350mmHg	No Tourniquet used	Author Reported - Mann-Whitney's	N/A	No Tourniquet
Xu, 2020	Low	Blood Loss (Volume (mL))	Intraop.	Inflated prior to skin incision (N=4531), Inflated before prothesis (N=371): Pressure 125mmHg above systolic bp	No Tourniquet used	Mean Difference	-1.88 (-7.78, 4.02)	NS
Xu, 2020	Low	Patients Received Blood Transfusion	Intraop.	Inflated prior to skin incision (N=4531), Inflated before prothesis (N=371): Pressure 125mmHg above systolic bp	No Tourniquet used	RR	2.25(1.00,1.00)	NS
Xu, 2020	Low	Length of Stay (days)	Postop.	Inflated prior to skin incision (N=4531), Inflated before prothesis (N=371): Pressure 125mmHg above systolic bp	No Tourniquet used	Mean Difference	1.28 (1.07, 1.49)	No Tourniquet used
Barker, 2018	Low	Hemoglobin (g/dL)	Preop.	Inflated prior to skin incision (N=4531), Inflated before prothesis (N=371): Pressure 125mmHg above systolic bp	No Tourniquet used	Mean Difference	0 (-0.60, 0.60)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Barker, 2018	Low	Hemoglobin (g/dL)	1 days	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	0.2 (-0.36, 0.76)	NS
Barker, 2018	Low	Hemoglobin (g/dL)	2 days	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	0.3 (-0.20, 0.80)	NS
Barker, 2018	Low	Hematocrit Levels (%)	Preop.	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	0 (-2.34, 2.34)	NS
Barker, 2018	Low	Hematocrit Levels (%)	1 days	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	0.1 (-1.51, 1.71)	NS
Barker, 2018	Low	Hematocrit Levels (%)	2 days	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	0.4 (-1.04, 1.84)	NS
Barker, 2018	Low	Length of Stay (days)	Postop.	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	-0.08 (-0.21, 0.05)	NS
Barker, 2018	Low	Blood Transfusions (Units)	Postop.	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	RD	0.04(-0.01,0.09)	NS
Yi, 2021	High	Hemoglobin (g/dL)	Preop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	2.66 (-2.73, 8.05)	NS
Yi, 2021	High	Hematocrit (L/L)	Preop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	0 (-0.02, 0.02)	NS
Yi, 2021	High	Operation Time (min)	Intraop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	-2.7 (-6.02, 0.62)	NS
Yi, 2021	High	Blood Loss (Volume (mL))	Intraop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	-89.6 (-102.43, -76.77)	Inflated prior to skin incision
Yi, 2021	High	Drain Volume (ml)	Postop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	140.46 (111.18, 169.74)	No Tourniquet used
Yi, 2021	High	Total Blood Loss (Volume(mL))	Postop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	-84.08 (-208.26, 40.10)	NS
Yi, 2021	High	Hemoglobin (g/dL)	Postop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	5.26 (-0.62, 11.14)	NS
Yi, 2021	High	Hematocrit (L/L)	Postop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.01 (-0.01, 0.03)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yi, 2021	High	Length of Stay (days)	Postop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.92 (0.55, 1.29)	No Tourniquet used
Yi, 2021	High	Hemoglobin (g/dL)	Preop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	-2.68 (-8.58, 3.22)	NS
Yi, 2021	High	Hematocrit (L/L)	Preop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	-0.01 (-0.03, 0.01)	NS
Yi, 2021	High	Operation Time (min)	Intraop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	1.4 (-2.22, 5.02)	NS
Yi, 2021	High	Blood Loss (Volume (mL))	Intraop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	-22.4 (-35.57, -9.23)	Inflated before prosthesis, deflated after cement
Yi, 2021	High	Drain Volume (ml)	Postop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	23.6 (11.30, 35.90)	No Tourniquet used
Yi, 2021	High	Total Blood Loss (Volume(mL))	Postop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	-28.22 (-191.37, 134.93)	NS
Yi, 2021	High	Hemoglobin (g/dL)	Postop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	0.78 (-4.90, 6.46)	NS
Yi, 2021	High	Hematocrit (L/L)	Postop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	0 (-0.02, 0.02)	NS
Yi, 2021	High	Length of Stay (days)	Postop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	0.2 (-0.09, 0.49)	NS
Farhan-Alenia, 2021	Low	Time to Outcome	10 yrs.	Inflated prior to skin incision	No Tourniquet used	Author Reported - t-test	12.20(.,.)	NS
Hamawanadi, 2021	High	Operation Time (min)	Intraop.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-8.48 (-10.81, -6.15)	Inflated prior to skin incision

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hamawanadi, 2021	High	Blood Loss (Volume (mL))	Intraop.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-124.07 (-127.82, -120.32)	Inflated prior to skin incision
Hamawanadi, 2021	High	Blood Loss (Volume (mL))	Postop.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	29.98 (22.18, 37.78)	No Tourniquet used
Hamawanadi, 2021	High	Total Blood Loss (Volume(mL))	Postop.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	-96.29 (-104.34, -88.24)	Inflated prior to skin incision
Hamawanadi, 2021	High	Length of Stay (days)	Postop.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	0.94 (0.82, 1.06)	No Tourniquet used
Hamawanadi, 2021	High	Patients Received Blood Transfusion	Postop.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	RR	1.84(0.66,5.10)	NS

Table 187178: PICO 10- Tourniquet vs. Control/Placebo- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kizilkurt, 2021	Low	VAS Pain	Postop 6 wks.	Tourniquet	Control	Mean Difference	1.2 (-1.77, 4.17)	NS
Kizilkurt, 2021	Low	VAS Pain	Postop 6 wks.	Tourniquet: 20 mg/kg TKA IV with Tourniquet	Control: 20 mg/kg TKA IV without Tourniquet	Mean Difference	1 (-2.74, 4.74)	NS
Goel, 2019	High	VAS Pain (Knee)	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-5.5 (-12.46, 1.46)	NS
Goel, 2019	High	VAS Pain (Thigh)	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-0.3 (-6.10, 5.50)	NS
Goel, 2019	High	VAS Pain (Thigh Numbness)	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-4.5 (-9.27, 0.27)	NS
Goel, 2019	High	KOOS Pain	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	1.35 (-2.81, 5.51)	NS
Goel, 2019	High	KOOS Pain	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	2.18 (-5.95, 10.31)	NS
Goel, 2019	High	KOOS Pain	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-2.54 (-8.51, 3.43)	NS
Goel, 2019	High	VAS Pain (Knee)	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-6.4 (-15.07, 2.27)	NS
Goel, 2019	High	VAS Pain (Thigh)	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	1.7 (-5.43, 8.83)	NS
Goel, 2019	High	VAS Pain (Thigh Numbness)	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-1.2 (-6.86, 4.46)	NS
Goel, 2019	High	VAS Pain (Knee)	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-1.9 (-6.12, 2.32)	NS
Goel, 2019	High	VAS Pain (Thigh)	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-2.2 (-6.69, 2.29)	NS
Goel, 2019	High	VAS Pain (Thigh Numbness)	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	-1.4 (-5.96, 3.16)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goel, 2019	High	Thigh Pain, Burning, or Numbness	Postop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	RR	0.76(0.39,1.47)	NS
Ayik, 2019	High	VAS Pain	Preop.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	-1 (-1.38, -0.62)	Inflated at beginning of procedure
Ayik, 2019	High	VAS Pain	1 mos.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	0 (-0.49, 0.49)	NS
Ayik, 2019	High	VAS Pain	3 mos.	Inflated at beginning of procedure: Pressure100mmHg above systolic bp	No Tourniquet used	Mean Difference	0 (-0.63, 0.63)	NS
Alexandersson, 2019	High	VAS Pain	24 hrs	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - ANOVA	16.60(5.20,27.90)	Tourniquet
Alexandersson, 2019	High	VAS Pain	72 hrs	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - ANOVA	4.10(-6.50,14.80)	NS
Alexandersson, 2019	High	VAS Pain	3 mos.	Inflated at beginning of procedure: Pressure300mmHg	No Tourniquet used	Author Reported - ANOVA	1.80(-3.40,7.00)	NS
Jawhar, 2020	High	WOMAC Pain	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	WOMAC Pain	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	WOMAC Pain	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	VAS Pain	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	-0.5 (-0.64, -0.36)	Inflated prior to skin incision
Jawhar, 2020	High	VAS Pain	1 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	0.2 (0.06, 0.34)	No Tourniquet used
Jawhar, 2020	High	VAS Pain	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	-0.6 (-0.74, -0.46)	Inflated prior to skin incision
Jawhar, 2020	High	VAS Pain	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Mean Difference	-0.3 (-0.41, -0.19)	Inflated prior to skin incision
Pfitzner, 2014	High	VAS Pain at Rest	Preop.	Inflated prior to skin incision: Pressure 350mmHg	No Tourniquet used	Author Reported - Mann-Whitney's	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Pfitzner, 2014	High	VAS Pain at Rest	2 days	Inflated prior to skin incision: Pressure 350mmHg	No Tourniquet used	Author Reported - Mann-Whitney's	N/A	NS
Pfitzner, 2014	High	VAS Pain at Rest	4 days	Inflated prior to skin incision: Pressure 350mmHg	No Tourniquet used	Author Reported - Mann-Whitney's	N/A	No Tourniquet
Pfitzner, 2014	High	VAS Pain on Motion	4 days	Inflated prior to skin incision: Pressure 350mmHg	No Tourniquet used	Author Reported - Mann-Whitney's	N/A	No Tourniquet
Ozkunt, 2018	High	VAS Pain	Postop.	Inflated prior to skin incision	No Tourniquet used	Mean Difference	2.06 (1.85, 2.27)	No Tourniquet used
Ozkunt, 2018	High	VAS Pain	Postop.	Inflated during cementing procedure	No Tourniquet used	Mean Difference	0.03 (-0.22, 0.28)	NS
Liu, 2017	High	VAS Pain	Preop.	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	-0.01 (-0.30, 0.28)	NS
Liu, 2017	High	VAS Pain	1 days	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.85 (0.52, 1.18)	No Tourniquet used
Liu, 2017	High	VAS Pain	3 days	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.81 (0.59, 1.03)	No Tourniquet used
Liu, 2017	High	VAS Pain	5 days	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.38 (0.16, 0.60)	No Tourniquet used
Liu, 2017	High	VAS Pain	7 days	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.5 (0.28, 0.72)	No Tourniquet used
Liu, 2017	High	VAS Pain	14 days	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.04 (-0.14, 0.22)	NS
Liu, 2017	High	VAS Pain	30 days	Inflated prior to skin incision: Pressure 125mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.06 (-0.14, 0.26)	NS
Barker, 2018	Low	Pain at PT (First Visit)	33 days	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	-0.43 (-1.29, 0.43)	NS
Barker, 2018	Low	Pain at PT (Last Visit)	3 mos.	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	-0.86 (-1.74, 0.02)	NS
Barker, 2018	Low	Pain at PT (?)	Post-discharge.	Inflated prior to skin incision: Pressure 300mmHg	No Tourniquet used	Mean Difference	0.48 (-0.54, 1.50)	NS
Nicolaiciuc, 2019	Low	VAS Pain	1 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Nicolaiciuc, 2019	Low	VAS Pain	2 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	NS
Nicolaiciuc, 2019	Low	VAS Pain	3 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	NS
Nicolaiciuc, 2019	Low	VAS Pain	4 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	No Tourniquet
Nicolaiciuc, 2019	Low	VAS Pain	5 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	No Tourniquet
Nicolaiciuc, 2019	Low	VAS Pain	6 days	Inflation time not specified: Pressure unknown	No Tourniquet used	Author Reported - t-test or MW U	N/A	No Tourniquet
Guler, 2016	Low	WOMAC Pain	Preop.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.8 (-0.05, 1.65)	NS
Guler, 2016	Low	WOMAC Pain	1 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.7 (0.19, 1.21)	No Tourniquet used
Guler, 2016	Low	WOMAC Pain	3 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	2.1 (1.75, 2.45)	No Tourniquet used
Guler, 2016	Low	WOMAC Pain	6 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0.7 (0.42, 0.98)	No Tourniquet used
Guler, 2016	Low	WOMAC Pain	12 mos.	Inflated prior to skin incision: Pressure 2x arterial pressure	No Tourniquet used	Mean Difference	0 (-0.23, 0.23)	NS
Yi, 2021	High	VAS Pain	Preop.	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	-0.04 (-0.42, 0.34)	NS
Yi, 2021	High	VAS Pain	1 days	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.62 (0.18, 1.06)	No Tourniquet used
Yi, 2021	High	VAS Pain	3 days	Inflated prior to skin incision: Pressure 100mmHgabove systolic bp	No Tourniquet used	Mean Difference	0.48 (0.26, 0.70)	No Tourniquet used
Yi, 2021	High	VAS Pain	Preop.	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	-0.16 (-0.52, 0.20)	NS
Yi, 2021	High	VAS Pain	1 days	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	0.36 (-0.06, 0.78)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yi, 2021	High	VAS Pain	3 days	Inflated before prosthesis, deflated after cement: Pressure 100mmHg above systolic bp	No Tourniquet used	Mean Difference	0.06 (-0.18, 0.30)	NS
Hamawanadi, 2021	High	VAS Pain	2 wks.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	5.14 (4.85, 5.43)	No Tourniquet used
Hamawanadi, 2021	High	VAS Pain	6 wks.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	3.57 (3.32, 3.82)	No Tourniquet used
Hamawanadi, 2021	High	VAS Pain	3 mos.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	1.35 (1.12, 1.58)	No Tourniquet used
Hamawanadi, 2021	High	VAS Pain	6 mos.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	0.88 (0.65, 1.11)	No Tourniquet used
Hamawanadi, 2021	High	VAS Pain	1 yrs.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	0.09 (-0.10, 0.28)	NS
Hamawanadi, 2021	High	VAS Pain	3 yrs.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	0.03 (-0.14, 0.20)	NS
Hamawanadi, 2021	High	VAS Pain	5 yrs.	Inflated prior to skin incision: 100mm Hg above the systolic pressure or 250mm Hg	No Tourniquet used	Mean Difference	0.02 (-0.10, 0.14)	NS

Table 188179: PICO 10- Tourniquet vs. Control/Placebo- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goel, 2019	High	KOOS QoL	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	4.58 (-0.36, 9.52)	NS
Goel, 2019	High	KOOS QoL	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	7.11 (0.92, 13.30)	Inflated at beginning of procedure
Goel, 2019	High	KOOS QoL	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.62 (-6.90, 8.14)	NS
Goel, 2019	High	Satisfaction	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	0.8 (-4.68, 6.28)	NS
Goel, 2019	High	Satisfaction	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	2.5 (-3.22, 8.22)	NS
Jawhar, 2020	High	Anxiety Score	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Anxiety Score	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Anxiety Score	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Depression Score	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Depression Score	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Depression Score	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Hospital Anxiety and Depression Score	Preop.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Hospital Anxiety and Depression Score	6 wks.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS
Jawhar, 2020	High	Hospital Anxiety and Depression Score	6 mos.	Inflated prior to skin incision: Pressure 360mmHg	No Tourniquet used	Author Reported - chi sq	N/A	NS

Table 189180: PICO 10- Tourniquet vs. Control/Placebo- Return to activity

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Goel, 2019	High	KOOS Sport	Preop.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	4.15 (-2.09, 10.39)	NS
Goel, 2019	High	KOOS Sport	6 wks.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	7.67 (-0.41, 15.75)	NS
Goel, 2019	High	KOOS Sport	8 mos.	Inflated at beginning of procedure: Pressure 300 or225 mmHg	No Tourniquet used	Mean Difference	5.19 (-4.46, 14.84)	NS

Table 190181: PICO 11- Patellar Resurfacing- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Thiengwittayaporn,2019	High	Patellar Crepitus	Postop.	Patellar Resurfacing	Control	RR	0.32(0.09,1.09)	NS
Koh, 2019	High	Crepitus	Postop 5 yrs.	Patellar Resurfacing	Control	RR	0.69(0.33,1.47)	NS
Dong, 2018	High	Adverse Events	Postop 2 yrs.	Patellar Resurfacing	Control	RD	-0.02(-0.06,0.02)	NS
Chang, 2018	Low	Patellar Displacement (mm)	Postop 10 yrs.	Patellar Resurfacing	Control	Mean Difference	0.2 (-0.90, 1.30)	NS
Roberts, 2015	High	Death/Mortality	Preop.	Patellar Resurfacing	Control	RR	1.02(0.69,1.49)	NS
Roberts, 2015	High	Effusion	Preop.	Patellar Resurfacing	Control	RR	0.98(0.69,1.38)	NS
Roberts, 2015	High	Effusion	Postop 1 yrs.	Patellar Resurfacing	Control	RD	.(.,.)	Control
Roberts, 2015	High	Effusion	Postop 10 yrs.	Patellar Resurfacing	Control	RR	3.20(0.37,27.61)	NS
Dong, 2018	High	Total Revisions	Postop 2 yrs.	Patellar Resurfacing	Control	RD	-0.02(-0.06,0.02)	NS
Aunan, 2016	High	Patellar Fracture with Minimal Displacement	Postop 3 yrs.	Patellar Resurfacing	Control	RD	-0.02(-0.04,0.01)	NS
Aunan, 2016	High	Partial Quadriceps Tendon Rupture	Postop 3 yrs.	Patellar Resurfacing	Control	RD	-0.02(-0.04,0.01)	NS
Aunan, 2016	High	Infection (Hematogenous Infection 2 Years After the Index Operation)	Postop 3 yrs.	Patellar Resurfacing	Control	RD	0.02(-0.01,0.05)	NS

Table 191182: PICO 11- Patellar Resurfacing- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Raaij, 2020	High	HSS Total (Insall Knee Score Total)	Preop.	Patellar Resurfacing	Control	Mean Difference	1.7 (-9.21, 12.61)	NS
Raaij, 2020	High	HSS Total (Insall Knee Score Total)	Postop 6 wks.	Patellar Resurfacing	Control	Mean Difference	1.1 (-10.95, 13.15)	NS
Raaij, 2020	High	HSS Total	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	4.9 (-5.99, 15.79)	NS
Raaij, 2020	High	HSS Total	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	-3.5 (-14.18, 7.18)	NS
Raaij, 2020	High	KOOS Total	Preop.	Patellar Resurfacing	Control	Mean Difference	-3 (-12.55, 6.55)	NS
Raaij, 2020	High	KOOS Total	Postop 6 wks.	Patellar Resurfacing	Control	Mean Difference	-6.4 (-15.95, 3.15)	NS
Raaij, 2020	High	KOOS Total	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	-1.1 (-10.65, 8.45)	NS
Raaij, 2020	High	KOOS Total	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	4.7 (-4.99, 14.39)	NS
Raaij, 2020	High	KSS Total	Preop.	Patellar Resurfacing	Control	Mean Difference	-3 (-12.33, 6.33)	NS
Raaij, 2020	High	KSS Total	Postop 6 wks.	Patellar Resurfacing	Control	Mean Difference	-0.4 (-9.73, 8.93)	NS
Raaij, 2020	High	KSS Total	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	0.7 (-9.06, 10.46)	NS
Raaij, 2020	High	KSS Total	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	-1 (-10.62, 8.62)	NS
Kaseb, 2019	Moderate	KOOS Total	Postop 8.68mos	Patellar Resurfacing	Control	Mean Difference	1.53 (-8.28, 11.34)	NS
Kaseb, 2019	Moderate	KSS Total	Postop 8.68mos	Patellar Resurfacing	Control	Mean Difference	0.83 (-4.09, 5.75)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
KASEB, 2018	High	KSS Total	Preop.	Patellar Resurfacing	Control	Mean Difference	1.24 (-6.22, 8.70)	NS
KASEB, 2018	High	KSS Total	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	1.29 (-2.87, 5.45)	NS
KASEB, 2018	High	SF-36 Total	Preop.	Patellar Resurfacing	Control	Mean Difference	12.55 (3.44, 21.66)	Patellar Resurfacing
KASEB, 2018	High	SF-36 Total	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	9.76 (0.37, 19.15)	Patellar Resurfacing
KASEB, 2018	High	WOMAC Total	Preop.	Patellar Resurfacing	Control	Mean Difference	1.62 (-6.45, 9.69)	NS
KASEB, 2018	High	WOMAC Total	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	5.01 (-3.99, 14.01)	NS
Thiengwittayaporn,2019	High	KSS Total	Preop.	Patellar Resurfacing	Control	Mean Difference	-6 (-13.89, 1.89)	NS
Thiengwittayaporn,2019	High	KSS Total	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	0.3 (-12.43, 13.03)	NS
Thiengwittayaporn,2019	High	KSS Total	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	0.1 (-10.30, 10.50)	NS
Thiengwittayaporn,2019	High	KSS Total	Postop 9 mos.	Patellar Resurfacing	Control	Mean Difference	1.2 (-8.71, 11.11)	NS
Thiengwittayaporn,2019	High	KSS Total	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	3.5 (-6.25, 13.25)	NS
Thiengwittayaporn,2019	High	Oxford Knee Score	Preop.	Patellar Resurfacing	Control	Mean Difference	-2.1 (-5.51, 1.31)	NS
Thiengwittayaporn,2019	High	Oxford Knee Score	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	2.7 (-1.12, 6.52)	NS
Thiengwittayaporn,2019	High	Oxford Knee Score	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	1.5 (-1.17, 4.17)	NS
Thiengwittayaporn,2019	High	Oxford Knee Score	Postop 9 mos.	Patellar Resurfacing	Control	Mean Difference	3.3 (0.75, 5.85)	Patellar Resurfacing

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Thiengwittayaporn,2019	High	Oxford Knee Score	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	3.2 (0.40, 6.00)	Patellar Resurfacing
Ha, 2019	High	KSS Total	Preop.	Patellar Resurfacing	Control	Mean Difference	0.35 (-0.76, 1.46)	NS
Ha, 2019	High	KSS Total	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	1.05 (0.02, 2.08)	Patellar Resurfacing
Ha, 2019	High	KSS Total	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	1.04 (-0.15, 2.23)	NS
Ha, 2019	High	KSS Total	Postop 2 yrs.	Patellar Resurfacing	Control	Mean Difference	1.04 (0.05, 2.03)	Patellar Resurfacing
Ha, 2019	High	KSS Total	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	0.87 (0.06, 1.68)	Patellar Resurfacing
Ha, 2019	High	KSS Total	Postop 4 yrs.	Patellar Resurfacing	Control	Mean Difference	1.18 (0.49, 1.87)	Patellar Resurfacing
Ha, 2019	High	KSS Total	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	1.09 (0.40, 1.78)	Patellar Resurfacing
Chun, 2017	Low	HSS Total	Preop.	Patellar Resurfacing	Control	Author Reported - Paired t-test; Student's t-test;	N/A	NS
Chun, 2017	Low	HSS Total	Postop 14 yrs.	Patellar Resurfacing	Control	Author Reported - Paired t-test; Student's t-test;	N/A	NS
Chun, 2017	Low	KSS Total	Preop.	Patellar Resurfacing	Control	Author Reported - Paired t-test; Student's t-test;	N/A	NS
Chun, 2017	Low	KSS Total	Postop 14 yrs.	Patellar Resurfacing	Control	Author Reported - Paired t-test; Student's t-test;	N/A	NS
Chun, 2017	Low	WOMAC Total	Preop.	Patellar Resurfacing	Control	Author Reported - Paired t-test; Student's t-test;	N/A	NS
Chun, 2017	Low	WOMAC Total	Postop 14 yrs.	Patellar Resurfacing	Control	Author Reported - Paired t-test; Student's t-test;	N/A	NS
Koh, 2019	High	Feller Patellofemoral Score - Total	Preop.	Patellar Resurfacing	Control	Mean Difference	0.3 (-2.59, 3.19)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Koh, 2019	High	Feller Patellofemoral Score - Total	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	-0.7 (-1.95, 0.55)	NS
Dong, 2018	High	Feller Patellofemoral Score - Total	Preop.	Patellar Resurfacing	Control	Mean Difference	-1.18 (-2.61, 0.25)	NS
Dong, 2018	High	Feller Patellofemoral Score - Total	Postop 2 yrs.	Patellar Resurfacing	Control	Mean Difference	0.39 (-0.99, 1.77)	NS
Dong, 2018	High	KSS Total (Insall Knee Score Total)	Preop.	Patellar Resurfacing	Control	Mean Difference	-0.02 (-0.07, 0.03)	NS
Dong, 2018	High	KSS Total (Insall Knee Score Total)	Postop 2 yrs.	Patellar Resurfacing	Control	Mean Difference	-0.07 (-0.11, -0.03)	Patellar Resurfacing
Dong, 2018	High	KSS Total	Preop.	Patellar Resurfacing	Control	Mean Difference	1.97 (-3.09, 7.03)	NS
Dong, 2018	High	KSS Total	Postop 2 yrs.	Patellar Resurfacing	Control	Mean Difference	0.15 (-2.18, 2.48)	NS
Chang, 2018	Low	KSS Total	Postop 10 yrs.	Patellar Resurfacing	Control	Mean Difference	2 (0.26, 3.74)	Patellar Resurfacing
Aunan, 2016	High	KSS Total	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	5 (0.32, 9.68)	Patellar Resurfacing
Aunan, 2016	High	KSS Total	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	2 (-2.04, 6.04)	NS
Aunan, 2016	High	KSS Total	Preop.	Patellar Resurfacing	Control	Mean Difference	-1 (-6.73, 4.73)	NS
Aunan, 2016	High	Oxford Knee Score	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-2.25, 2.25)	NS
Aunan, 2016	High	Oxford Knee Score	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	-2 (-4.25, 0.25)	NS
Aunan, 2016	High	Oxford Knee Score	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	-1 (-3.25, 1.25)	NS
Roberts, 2015	High	KSS Total (Insall Knee Score Total)	Preop.	Patellar Resurfacing	Control	Mean Difference	-0.02 (-0.06, 0.02)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Roberts, 2015	High	KSS Total (Insall Knee Score Total)	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	-0.02 (-0.06, 0.02)	NS
Roberts, 2015	High	KSS Total (Insall Knee Score Total)	Postop 10 yrs.	Patellar Resurfacing	Control	Mean Difference	-0.02 (-0.09, 0.05)	NS
Roberts, 2015	High	KSS Total	Preop.	Patellar Resurfacing	Control	Mean Difference	0.7 (-3.23, 4.63)	NS
Roberts, 2015	High	KSS Total	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	-0.3 (-3.33, 2.73)	NS
Roberts, 2015	High	KSS Total	Postop 10 yrs.	Patellar Resurfacing	Control	Mean Difference	1.4 (-2.93, 5.73)	NS
Chawla, 2019	High	KSS - Excellent	Postop 5 yrs.	Patellar Resurfacing	Control	RR	0.95(0.80,1.13)	NS
Chawla, 2019	High	KSS - Fair	Postop 5 yrs.	Patellar Resurfacing	Control	RD	0.04(-0.01,0.09)	NS
Chawla, 2019	High	KSS - Good	Postop 5 yrs.	Patellar Resurfacing	Control	RR	0.80(0.23,2.81)	NS
Chawla, 2019	High	KSS - Poor	Postop 5 yrs.	Patellar Resurfacing	Control	RR	1.50(0.26,8.60)	NS
Albrecht, 2016	Low	KSS Total	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	-3 (-7.91, 1.91)	NS
Albrecht, 2016	Low	KSS Total	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	-2.9 (-13.16, 7.36)	NS
Aunan, 2016	High	KSS Total	Preop.	Patellar Resurfacing	Control	Mean Difference	-1 (-6.73, 4.73)	NS
Aunan, 2016	High	KSS Total	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	5 (0.32, 9.68)	Patellar Resurfacing
Aunan, 2016	High	KSS Total	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	2 (-2.04, 6.04)	NS
Aunan, 2016	High	Oxford Knee Score	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-2.25, 2.25)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Aunan, 2016	High	Oxford Knee Score	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	-2 (-4.25, 0.25)	NS
Aunan, 2016	High	Oxford Knee Score	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	-1 (-3.25, 1.25)	NS

Table 192183: PICO 11- Patellar Resurfacing- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Raaij, 2020	High	KOOS ADL	Preop.	Patellar Resurfacing	Control	Mean Difference	-7.7 (-17.81, 2.41)	NS
Raaij, 2020	High	KOOS ADL	Postop 6 wks.	Patellar Resurfacing	Control	Mean Difference	-0.3 (-10.55, 9.95)	NS
Raaij, 2020	High	KOOS ADL	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	2.1 (-8.01, 12.21)	NS
Raaij, 2020	High	KOOS ADL	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	5.5 (-4.54, 15.54)	NS
Raaij, 2020	High	KSS Function	Preop.	Patellar Resurfacing	Control	Mean Difference	-6.3 (-19.95, 7.35)	NS
Raaij, 2020	High	KSS Function	Postop 6 wks.	Patellar Resurfacing	Control	Mean Difference	-0.6 (-15.32, 14.12)	NS
Raaij, 2020	High	KSS Function	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	-7.9 (-21.98, 6.18)	NS
Raaij, 2020	High	KSS Function	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	-5.5 (-19.15, 8.15)	NS
Kaseb, 2019	Moderate	KSS Function	Postop 8.68mos	Patellar Resurfacing	Control	Mean Difference	-0.65 (-11.40, 10.10)	NS
KASEB, 2018	High	KSS Function	Preop.	Patellar Resurfacing	Control	Mean Difference	6.79 (-4.51, 18.09)	NS
KASEB, 2018	High	KSS Function	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	-3.98 (-13.10, 5.14)	NS
KASEB, 2018	High	ROM (deg)	Preop.	Patellar Resurfacing	Control	Mean Difference	-0.21 (-21.91, 21.49)	NS
KASEB, 2018	High	ROM (deg)	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	-0.26 (-30.82, 30.30)	NS
Thiengwittayaporn,2019	High	ROM (deg)	Preop.	Patellar Resurfacing	Control	Mean Difference	-0.3 (-6.23, 5.63)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Thiengwittayaporn,2019	High	ROM (deg)	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	3.7 (-1.76, 9.16)	NS
Thiengwittayaporn,2019	High	ROM (deg)	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	3.3 (-1.71, 8.31)	NS
Thiengwittayaporn,2019	High	ROM (deg)	Postop 9 mos.	Patellar Resurfacing	Control	Mean Difference	2.7 (-2.24, 7.64)	NS
Thiengwittayaporn,2019	High	ROM (deg)	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	2.7 (-2.18, 7.58)	NS
Ha, 2019	High	KSS Function	Preop.	Patellar Resurfacing	Control	Mean Difference	-0.57 (-2.09, 0.95)	NS
Ha, 2019	High	KSS Function	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	1.02 (-0.34, 2.38)	NS
Ha, 2019	High	KSS Function	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	1.6 (-0.05, 3.25)	NS
Ha, 2019	High	KSS Function	Postop 2 yrs.	Patellar Resurfacing	Control	Mean Difference	1.5 (0.33, 2.67)	Patellar Resurfacing
Ha, 2019	High	KSS Function	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	1.7 (0.53, 2.87)	Patellar Resurfacing
Ha, 2019	High	KSS Function	Postop 4 yrs.	Patellar Resurfacing	Control	Mean Difference	2.24 (0.98, 3.50)	Patellar Resurfacing
Ha, 2019	High	KSS Function	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	2.27 (1.15, 3.39)	Patellar Resurfacing
Chun, 2017	Low	ROM (deg)	Preop.	Patellar Resurfacing	Control	Author Reported - Paired t-test; Student's t-test;	N/A	NS
Chun, 2017	Low	ROM (deg)	Postop 14 yrs.	Patellar Resurfacing	Control	Author Reported - Paired t-test; Student's t-test;	N/A	NS
Koh, 2019	High	Feller Patellofemoral Score -Ability to Rise from Chair	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-0.50, 0.50)	NS
Koh, 2019	High	Feller Patellofemoral Score -Ability to Rise from Chair	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0 (-0.38, 0.38)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Koh, 2019	High	Feller Patellofemoral Score - Quadriceps Strength	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-0.46, 0.46)	NS
Koh, 2019	High	Feller Patellofemoral Score - Quadriceps Strength	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0 (-0.38, 0.38)	NS
Koh, 2019	High	Feller Patellofemoral Score -Stair Climbing	Preop.	Patellar Resurfacing	Control	Mean Difference	-0.1 (-0.42, 0.22)	NS
Koh, 2019	High	Feller Patellofemoral Score -Stair Climbing	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0.1 (-0.36, 0.56)	NS
Dong, 2018	High	KSS Function	Preop.	Patellar Resurfacing	Control	Mean Difference	0.3 (-9.00, 9.60)	NS
Dong, 2018	High	KSS Function	Postop 2 yrs.	Patellar Resurfacing	Control	Mean Difference	0.91 (-4.38, 6.20)	NS
Chang, 2018	Low	KSS Function	Postop 10 yrs.	Patellar Resurfacing	Control	Mean Difference	-6 (-13.40, 1.40)	NS
Aunan, 2016	High	KOOS ADL	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-5.78, 5.78)	NS
Aunan, 2016	High	KOOS ADL	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	5 (-0.21, 10.21)	NS
Aunan, 2016	High	KOOS ADL	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	5 (-0.71, 10.71)	NS
Aunan, 2016	High	KOOS Symptoms	Preop.	Patellar Resurfacing	Control	Mean Difference	2 (-4.22, 8.22)	NS
Aunan, 2016	High	KOOS Symptoms	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	4 (-1.02, 9.02)	NS
Aunan, 2016	High	KOOS Symptoms	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	4 (-0.15, 8.15)	NS
Aunan, 2016	High	KSS Function	Preop.	Patellar Resurfacing	Control	Mean Difference	4 (-2.74, 10.74)	NS
Aunan, 2016	High	KSS Function	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	1 (-4.70, 6.70)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Aunan, 2016	High	KSS Function	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	0 (-7.25, 7.25)	NS
Roberts, 2015	High	KSS Function	Preop.	Patellar Resurfacing	Control	Mean Difference	1 (-2.73, 4.73)	NS
Roberts, 2015	High	KSS Function	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	3 (-3.10, 9.10)	NS
Roberts, 2015	High	KSS Function	Postop 10 yrs.	Patellar Resurfacing	Control	Mean Difference	5.8 (-4.27, 15.87)	NS
Roberts, 2015	High	KSS Stair	Preop.	Patellar Resurfacing	Control	Mean Difference	0.68 (-0.89, 2.25)	NS
Roberts, 2015	High	KSS Stair	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	0.6 (-2.07, 3.27)	NS
Roberts, 2015	High	KSS Stair	Postop 10 yrs.	Patellar Resurfacing	Control	Mean Difference	1.3 (-2.72, 5.32)	NS
Roberts, 2015	High	ROM Active	Preop.	Patellar Resurfacing	Control	Mean Difference	-1.3 (-4.80, 2.20)	NS
Roberts, 2015	High	ROM Active	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	49.6 (46.87, 52.33)	Patellar Resurfacing
Roberts, 2015	High	ROM Active	Postop 10 yrs.	Patellar Resurfacing	Control	Mean Difference	1.3 (-2.91, 5.51)	NS
Roberts, 2015	High	ROM Passive	Preop.	Patellar Resurfacing	Control	Mean Difference	-2.5 (-5.87, 0.87)	NS
Roberts, 2015	High	ROM Passive	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	-1.1 (-3.79, 1.59)	NS
Roberts, 2015	High	ROM Passive	Postop 10 yrs.	Patellar Resurfacing	Control	Mean Difference	-0.7 (-4.95, 3.55)	NS
Albrecht, 2016	Low	A1 Difficulty Descending Stairs	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0.17 (-0.20, 0.54)	NS
Albrecht, 2016	Low	A2 Difficulty Ascending Stairs	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0.17 (-0.10, 0.44)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Albrecht, 2016	Low	A6 Difficulty Walking	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	-0.02 (-0.19, 0.15)	NS
Albrecht, 2016	Low	KSS Function	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0.2 (-9.31, 9.71)	NS
Albrecht, 2016	Low	KSS Walking Aids	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0.57 (-1.33, 2.47)	NS
Albrecht, 2016	Low	SP5 Difficulty Kneeling	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0.77 (-0.04, 1.58)	NS
Ali, 2016	High	Chair Rising Time (s)	Preop.	Patellar Resurfacing	Control	Mean Difference	1 (-1.96, 3.96)	NS
Ali, 2016	High	Chair Rising Time (s)	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	0 (-1.37, 1.37)	NS
Ali, 2016	High	20-m Walk Test (s)	Preop.	Patellar Resurfacing	Control	Mean Difference	1 (-1.93, 3.93)	NS
Ali, 2016	High	20-m Walk Test (steps)	Preop.	Patellar Resurfacing	Control	Mean Difference	1 (-2.37, 4.37)	NS
Ali, 2016	High	20-m Walk Test (s)	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	0 (-1.47, 1.47)	NS
Ali, 2016	High	20-m Walk Test (steps)	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	-2 (-3.63, -0.37)	Patellar Resurfacing
Ali, 2016	High	No. of Knee Bendings in 30 s	Preop.	Patellar Resurfacing	Control	Mean Difference	-1 (-4.44, 2.44)	NS
Ali, 2016	High	No. of Knee Bendings in 30 s	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	0 (-3.42, 3.42)	NS
Ali, 2016	High	Extension Strength, kg	Preop.	Patellar Resurfacing	Control	Mean Difference	-1 (-3.74, 1.74)	NS
Ali, 2016	High	Extension Strength, kg	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	0 (-2.51, 2.51)	NS
Ali, 2016	High	KOOS Symptoms	Preop.	Patellar Resurfacing	Control	Mean Difference	2 (-4.95, 8.95)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ali, 2016	High	KOOS ADL	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-6.78, 6.78)	NS
Ali, 2016	High	KOOS Symptoms	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	-6 (-12.61, 0.61)	NS
Ali, 2016	High	KOOS ADL	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	-4 (-10.18, 2.18)	NS
Ali, 2016	High	KOOS Symptoms	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	-1 (-8.09, 6.09)	NS
Ali, 2016	High	KOOS ADL	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	-4 (-10.69, 2.69)	NS
Ali, 2016	High	KOOS Symptoms	Postop 6 yrs.	Patellar Resurfacing	Control	Mean Difference	-1 (-6.47, 4.47)	NS
Ali, 2016	High	KOOS ADL	Postop 6 yrs.	Patellar Resurfacing	Control	Mean Difference	-2 (-8.95, 4.95)	NS
Aunan, 2016	High	KOOS Symptoms	Preop.	Patellar Resurfacing	Control	Mean Difference	2 (-4.22, 8.22)	NS
Aunan, 2016	High	KOOS Symptoms	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	4 (-1.02, 9.02)	NS
Aunan, 2016	High	KOOS Symptoms	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	4 (-0.15, 8.15)	NS
Aunan, 2016	High	KOOS ADL	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-5.78, 5.78)	NS
Aunan, 2016	High	KOOS ADL	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	5 (-0.21, 10.21)	NS
Aunan, 2016	High	KOOS ADL	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	5 (-0.71, 10.71)	NS
Aunan, 2016	High	KSS Function	Preop.	Patellar Resurfacing	Control	Mean Difference	4 (-2.74, 10.74)	NS
Aunan, 2016	High	KSS Function	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	1 (-4.70, 6.70)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Aunan, 2016	High	KSS Function	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	0 (-7.25, 7.25)	NS
Aunan, 2016	High	Stiffness	Postop 3 yrs.	Patellar Resurfacing	Control	RR	1.05(0.07,16.39)	NS
Aunan, 2016	High	Lateral Knee Pain and Stiffness	Postop 3 yrs.	Patellar Resurfacing	Control	RD	0.02(-0.01,0.05)	NS

Table 193184: PICO 11- Patellar Resurfacing- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Thiengwittayaporn,2019	High	Patellar Score	Preop.	Patellar Resurfacing	Control	Mean Difference	-1.1 (-3.54, 1.34)	NS
Thiengwittayaporn,2019	High	Patellar Score	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	0.8 (-0.50, 2.10)	NS
Thiengwittayaporn,2019	High	Patellar Score	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	0.9 (-0.53, 2.33)	NS
Thiengwittayaporn,2019	High	Patellar Score	Postop 9 mos.	Patellar Resurfacing	Control	Mean Difference	2.1 (0.95, 3.25)	Patellar Resurfacing
Thiengwittayaporn,2019	High	Patellar Score	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	1.2 (0.01, 2.39)	Patellar Resurfacing
Chun, 2017	Low	Patellar Score	Preop.	Patellar Resurfacing	Control	Author Reported - Paired t-test; Student’s t-test;	N/A	NS
Chun, 2017	Low	Patellar Score	Postop 14 yrs.	Patellar Resurfacing	Control	Author Reported - Paired t-test; Student’s t-test;	N/A	NS
Dong, 2018	High	Total Blood Loss	Postop.	Patellar Resurfacing	Control	Mean Difference	20.7 (5.35, 36.05)	Control

Table 194185: PICO 11- Patellar Resurfacing- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Raaij, 2020	High	KOOS Pain	Preop.	Patellar Resurfacing	Control	Mean Difference	-2.8 (-14.26, 8.66)	NS
Raaij, 2020	High	KOOS Pain	Postop 6 wks.	Patellar Resurfacing	Control	Mean Difference	-546.4 (-1079.36, -13.44)	Control
Raaij, 2020	High	KOOS Pain	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	0.5 (-10.96, 11.96)	NS
Raaij, 2020	High	KOOS Pain	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	5.7 (-5.90, 17.30)	NS
KASEB, 2018	High	Kujala Anterior Knee Pain Scale	Preop.	Patellar Resurfacing	Control	Mean Difference	5.09 (-1.40, 11.58)	NS
KASEB, 2018	High	Kujala Anterior Knee Pain Scale	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	2.48 (-3.81, 8.77)	NS
KASEB, 2018	High	VAS Pain	Preop.	Patellar Resurfacing	Control	Mean Difference	5.52 (4.90, 6.14)	Control
KASEB, 2018	High	VAS Pain	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	-0.1 (-0.55, 0.35)	NS
Thiengwittayaporn,2019	High	Anterior Knee Pain	Postop.	Patellar Resurfacing	Control	RD	-0.05(-0.12,0.02)	NS
Koh, 2019	High	Anterior Knee Pain	Preop.	Patellar Resurfacing	Control	RR	0.93(0.67,1.30)	NS
Koh, 2019	High	Continued Pain	Postop 5 yrs.	Patellar Resurfacing	Control	RR	1.50(0.26,8.59)	NS
Koh, 2019	High	Feller Patellofemoral Score -Anterior Knee Pain	Preop.	Patellar Resurfacing	Control	Mean Difference	0.5 (-1.84, 2.84)	NS
Koh, 2019	High	Feller Patellofemoral Score -Anterior Knee Pain	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	-0.6 (-1.53, 0.33)	NS
Koh, 2019	High	Newly Developed Pain	Postop 5 yrs.	Patellar Resurfacing	Control	RD	0.02(-0.02,0.06)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Koh, 2019	High	No Pain Since Preoperative	Postop 5 yrs.	Patellar Resurfacing	Control	RR	1.05(0.65,1.71)	NS
Koh, 2019	High	Pain Subsided	Postop 5 yrs.	Patellar Resurfacing	Control	RR	0.89(0.62,1.29)	NS
Koh, 2019	High	VAS Pain	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	-0.1 (-0.56, 0.36)	NS
Dong, 2018	High	Anterior Knee Pain	Postop 2 yrs.	Patellar Resurfacing	Control	RR	0.89(0.37,2.11)	NS
Aunan, 2016	High	KOOS Pain	Preop.	Patellar Resurfacing	Control	Mean Difference	-2 (-7.58, 3.58)	NS
Aunan, 2016	High	KOOS Pain	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	6 (0.60, 11.40)	Patellar Resurfacing
Aunan, 2016	High	KOOS Pain	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	6 (0.45, 11.55)	Patellar Resurfacing
Roberts, 2015	High	Anterior Pain at Rest	Preop.	Patellar Resurfacing	Control	RR	0.91(0.49,1.71)	NS
Roberts, 2015	High	Anterior Pain at Rest	Postop 1 yrs.	Patellar Resurfacing	Control	RD	.(.,.)	Control
Roberts, 2015	High	Anterior Pain at Rest	Postop 10 yrs.	Patellar Resurfacing	Control	RD	0.03(-0.01,0.07)	NS
Roberts, 2015	High	Anterior Pain While Walking	Preop.	Patellar Resurfacing	Control	RR	1.00(0.63,1.58)	NS
Roberts, 2015	High	Anterior Pain While Walking	Postop 1 yrs.	Patellar Resurfacing	Control	RD	.(.,.)	Control
Roberts, 2015	High	Anterior Pain While Walking	Postop 10 yrs.	Patellar Resurfacing	Control	RR	1.42(0.13,15.25)	NS
Roberts, 2015	High	Pain at Rest	Preop.	Patellar Resurfacing	Control	RR	1.02(0.91,1.14)	NS
Roberts, 2015	High	Pain at Rest	Postop 1 yrs.	Patellar Resurfacing	Control	RD	.(.,.)	Control

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Roberts, 2015	High	Pain at Rest	Postop 10 yrs.	Patellar Resurfacing	Control	RR	0.71(0.22,2.32)	NS
Roberts, 2015	High	Pain While Walking	Preop.	Patellar Resurfacing	Control	RR	0.98(0.96,1.01)	NS
Roberts, 2015	High	Pain While Walking	Postop 1 yrs.	Patellar Resurfacing	Control	RD	.(.,.)	Control
Roberts, 2015	High	Pain While Walking	Postop 10 yrs.	Patellar Resurfacing	Control	RR	0.59(0.19,1.83)	NS
Albrecht, 2016	Low	P1 Pain Frequency	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0.37 (-0.22, 0.96)	NS
Albrecht, 2016	Low	P5 Pain Walking	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0.06 (-0.13, 0.25)	NS
Albrecht, 2016	Low	P6 Pain Stairs Up or Down	Postop 5 yrs.	Patellar Resurfacing	Control	Mean Difference	0.31 (-0.03, 0.65)	NS
Ali, 2016	High	VAS Pain	Preop.	Patellar Resurfacing	Control	Mean Difference	3 (-4.76, 10.76)	NS
Ali, 2016	High	VAS Pain	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	-2 (-10.20, 6.20)	NS
Ali, 2016	High	VAS Pain	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	1 (-6.86, 8.86)	NS
Ali, 2016	High	VAS Pain	Postop 6 yrs.	Patellar Resurfacing	Control	Mean Difference	1 (-5.61, 7.61)	NS
Ali, 2016	High	KOOS Pain	Preop.	Patellar Resurfacing	Control	Mean Difference	-4 (-9.78, 1.78)	NS
Ali, 2016	High	KOOS Pain	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	-5 (-11.63, 1.63)	NS
Ali, 2016	High	KOOS Pain	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	-6 (-12.33, 0.33)	NS
Ali, 2016	High	KOOS Pain	Postop 6 yrs.	Patellar Resurfacing	Control	Mean Difference	-3 (-8.02, 2.02)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Aunan, 2016	High	KOOS Pain	Preop.	Patellar Resurfacing	Control	Mean Difference	-2 (-7.58, 3.58)	NS
Aunan, 2016	High	KOOS Pain	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	6 (0.60, 11.40)	Patellar Resurfacing
Aunan, 2016	High	KOOS Pain	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	6 (0.45, 11.55)	Patellar Resurfacing

Table 195186: PICO 11- Patellar Resurfacing- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Raaij, 2020	High	KOOS QoL	Preop.	Patellar Resurfacing	Control	Mean Difference	-5.3 (-17.60, 7.00)	NS
Raaij, 2020	High	KOOS QoL	Postop 6 wks.	Patellar Resurfacing	Control	Mean Difference	-2.3 (-14.46, 9.86)	NS
Raaij, 2020	High	KOOS QoL	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	-2.1 (-14.26, 10.06)	NS
Raaij, 2020	High	KOOS QoL	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	-1.8 (-14.25, 10.65)	NS
Aunan, 2016	High	KOOS QoL	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-4.32, 4.32)	NS
Aunan, 2016	High	KOOS QoL	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	7 (0.04, 13.96)	Patellar Resurfacing
Aunan, 2016	High	KOOS QoL	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	8 (0.73, 15.27)	Patellar Resurfacing
Ali, 2016	High	KOOS QoL	Preop.	Patellar Resurfacing	Control	Mean Difference	-4 (-9.72, 1.72)	NS
Ali, 2016	High	KOOS QoL	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	-6 (-14.43, 2.43)	NS
Ali, 2016	High	KOOS QoL	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	-8 (-18.33, 2.33)	NS
Ali, 2016	High	KOOS QoL	Postop 6 yrs.	Patellar Resurfacing	Control	Mean Difference	-4 (-13.57, 5.57)	NS
Aunan, 2016	High	KOOS QoL	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-4.32, 4.32)	NS
Aunan, 2016	High	KOOS QoL	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	7 (0.04, 13.96)	Patellar Resurfacing
Aunan, 2016	High	KOOS QoL	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	8 (0.73, 15.27)	Patellar Resurfacing

Table 196187: PICO 11- Patellar Resurfacing- Return to activity

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Raaij, 2020	High	KOOS Sport	Preop.	Patellar Resurfacing	Control	Mean Difference	-9.8 (-28.26, 8.66)	NS
Raaij, 2020	High	KOOS Sport	Postop 6 wks.	Patellar Resurfacing	Control	Mean Difference	-2.8 (-27.01, 21.41)	NS
Raaij, 2020	High	KOOS Sport	Postop 6 mos.	Patellar Resurfacing	Control	Mean Difference	7.4 (-11.55, 26.35)	NS
Raaij, 2020	High	KOOS Sport	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	7.8 (-11.87, 27.47)	NS
Aunan, 2016	High	KOOS Sport	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-4.85, 4.85)	NS
Aunan, 2016	High	KOOS Sport	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	9 (0.88, 17.12)	Patellar Resurfacing
Aunan, 2016	High	KOOS Sport	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	10 (0.68, 19.32)	Patellar Resurfacing
Ali, 2016	High	KOOS Sport	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-5.70, 5.70)	NS
Ali, 2016	High	KOOS Sport	Postop 3 mos.	Patellar Resurfacing	Control	Mean Difference	0 (-10.74, 10.74)	NS
Ali, 2016	High	KOOS Sport	Postop 12mos	Patellar Resurfacing	Control	Mean Difference	-7 (-19.31, 5.31)	NS
Ali, 2016	High	KOOS Sport	Postop 6 yrs.	Patellar Resurfacing	Control	Mean Difference	-7 (-18.85, 4.85)	NS
Aunan, 2016	High	KOOS Sport	Preop.	Patellar Resurfacing	Control	Mean Difference	0 (-4.85, 4.85)	NS
Aunan, 2016	High	KOOS Sport	Postop 1 yrs.	Patellar Resurfacing	Control	Mean Difference	9 (0.88, 17.12)	Patellar Resurfacing
Aunan, 2016	High	KOOS Sport	Postop 3 yrs.	Patellar Resurfacing	Control	Mean Difference	10 (0.68, 19.32)	Patellar Resurfacing

Table 197188: PICO 12- Bicruciate Retaining TKA vs. Posterior Stabilizing TKA- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Scarvell, 2017	High	Infection (Deep Infection >6wk)	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.03(0.00,0.07)	Posterior Stabilizing TKA
Scarvell, 2017	High	Impingement	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	1.07(0.07,16.89)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Scarvell, 2017	High	Implant Loosening: Tibial Base	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.01(-0.01,0.03)	NS
Scarvell, 2017	High	Implant Loosening: Tibial Insert	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	-0.02(-0.04,0.01)	NS
Scarvell, 2017	High	Manipulation: Closed	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	1.07(0.39,2.95)	NS
Scarvell, 2017	High	Manipulation: Open	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.01(-0.01,0.03)	NS
Scarvell, 2017	High	Mild Adverse Events	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	1.34(0.37,4.86)	NS
Scarvell, 2017	High	Moderate Adverse Events	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	0.97(0.43,2.20)	NS
Scarvell, 2017	High	Patellar Revision	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.01(-0.01,0.03)	NS
Scarvell, 2017	High	Patellar Tendinitis	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	-0.01(-0.02,0.01)	NS
Scarvell, 2017	High	Revisions - Insert and Tibial Baseplate	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.01(-0.01,0.03)	NS
Scarvell, 2017	High	Revisions - Insert Exchange	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	-0.02(-0.04,0.01)	NS
Scarvell, 2017	High	Severe Adverse Events	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	2.49(0.66,9.42)	NS
Scarvell, 2017	High	Swelling	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	0.36(0.04,3.38)	NS
Scarvell, 2017	High	Tenderness	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	-0.01(-0.02,0.01)	NS
Scarvell, 2017	High	Total Adverse Events	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	1.31(0.74,2.31)	NS
Schimmel, 2014	High	Arthrofibrosis	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.02(-0.02,0.05)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Schimmel, 2014	High	Dislocation Insert	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	-0.02(-0.05,0.02)	NS
Schimmel, 2014	High	Effusion	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	4.00(0.46,34.78)	NS
Schimmel, 2014	High	Extension Deficit	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.03(-0.01,0.08)	NS
Schimmel, 2014	High	Hematoma, Wound Dehiscence, or Delayed Wound-Healing	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	0.67(0.12,3.85)	NS
Schimmel, 2014	High	Insert Exchange	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	3.00(0.32,28.06)	NS
Schimmel, 2014	High	Instability	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.03(-0.01,0.08)	NS
Schimmel, 2014	High	Laxity	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.03(-0.01,0.08)	NS
Schimmel, 2014	High	Manipulation Under Anesthesia	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	2.33(0.96,5.68)	NS
Schimmel, 2014	High	Patellar Prosthesis	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	1.00(0.15,6.88)	NS
Schimmel, 2014	High	Total Adverse Events	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	2.53(1.56,4.11)	Posterior Stabilizing TKA
Scarvell, 2017	High	Total Revisions	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	1.43(0.33,6.23)	NS
Scarvell, 2017	High	Total Revisions	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	2.14(0.20,23.27)	NS
Schimmel, 2014	High	Total Revisions	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.05(-0.01,0.10)	NS

Table 198189: PICO 12- Bicruciate Retaining TKA vs. Posterior Stabilizing TKA- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Scarvell, 2017	High	KSS Total	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.7 (-5.30, 1.90)	NS
Scarvell, 2017	High	KSS Total	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.65 (-5.38, 2.08)	NS
Scarvell, 2017	High	Oxford Knee Score	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.77 (-2.59, 1.05)	NS
Scarvell, 2017	High	Oxford Knee Score	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.39 (-1.50, 2.28)	NS
Scarvell, 2017	High	Patellar Score	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.14 (-1.33, 1.05)	NS
Scarvell, 2017	High	Patellar Score	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.38 (-1.61, 0.85)	NS
Takubo, 2017	High	KSS Total	Postop 12mos	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.1 (-4.64, 4.44)	NS
Takubo, 2017	High	KSS Total	Postop 12mos	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.5 (-2.22, 1.22)	NS
Schimmel, 2014	High	KSS Clinical	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS
Schimmel, 2014	High	KSS Total	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS

Table 199190: PICO 12- Bicruciate Retaining TKA vs. Posterior Stabilizing TKA- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Scarvell, 2017	High	EQ-5D Utility	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.02 (-0.05, 0.01)	NS
Scarvell, 2017	High	EQ-5D Utility	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.01 (-0.04, 0.02)	NS
Scarvell, 2017	High	Flexion (deg)	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.92 (-2.32, 4.16)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Scarvell, 2017	High	Flexion (deg)	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.87 (-2.46, 4.20)	NS
Scarvell, 2017	High	KSS Function	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.09 (-4.88, 4.70)	NS
Scarvell, 2017	High	KSS Function	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.3 (-2.69, 7.29)	NS
Scarvell, 2017	High	Stiffness	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.03(0.00,0.07)	Posterior Stabilizing TKA
Scarvell, 2017	High	UCLA Activity Score	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.12 (-0.54, 0.30)	NS
Scarvell, 2017	High	UCLA Activity Score	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.12 (-0.31, 0.55)	NS
Baumann, 2017	Low	Extension (deg)	Preop.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.9 (-3.99, 0.19)	NS
Baumann, 2017	Low	Extension (deg)	Postop 9 mos.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.2 (0.28, 2.12)	Bicruciate Retaining TKA
Baumann, 2017	Low	Flexion (deg)	Preop.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	5.6 (-3.50, 14.70)	NS
Baumann, 2017	Low	Flexion (deg)	Postop 9 mos.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-9.3 (-18.58, -0.02)	Posterior Stabilizing TKA
Takubo, 2017	High	Extension (deg)	Postop 12mos	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.5 (-1.40, 4.40)	NS
Takubo, 2017	High	Extension (deg)	Postop 12mos	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.1 (-0.85, 1.05)	NS
Takubo, 2017	High	Flexion (deg)	Postop 12mos	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-4.67, 6.07)	NS
Takubo, 2017	High	Flexion (deg)	Postop 12mos	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	6.2 (1.59, 10.81)	Bicruciate Retaining TKA
Takubo, 2017	High	KSS Function	Postop 12mos	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.7 (-5.78, 9.18)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Takubo, 2017	High	KSS Function	Postop 12mos	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.3 (-1.69, 6.29)	NS
Schimmel, 2014	High	KOOS ADL	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS
Schimmel, 2014	High	KOOS Symptoms	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS
Schimmel, 2014	High	KSS Function	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS
Schimmel, 2014	High	KSS ROM	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS
Schimmel, 2014	High	UCLA Activity Score	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS

Table 200191: PICO 12- Bicruciate Retaining TKA vs. Posterior Stabilizing TKA- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Schimmel, 2014	High	Patellar Score	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS

Table 201192: PICO 12- Bicruciate Retaining TKA vs. Posterior Stabilizing TKA- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Scarvell, 2017	High	Pain at Operation Site	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	1.07(0.07,16.89)	NS
Scarvell, 2017	High	Pain, specifically in the tibial tuberosity region	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.01(-0.01,0.03)	NS
Scarvell, 2017	High	Patellofemoral Pain	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	0.53(0.05,5.82)	NS
Scarvell, 2017	High	VAS Pain at Rest (no scale provided)	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.12 (-0.43, 0.67)	NS
Scarvell, 2017	High	VAS Pain at Rest (no scale provided)	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.33 (-0.24, 0.90)	NS
Scarvell, 2017	High	VAS Pain Walking (no scale provided)	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.07 (-0.48, 0.62)	NS
Scarvell, 2017	High	VAS Pain Walking (no scale provided)	Postop 2 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.18 (-0.39, 0.75)	NS
Schimmel, 2014	High	KOOS Pain	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS
Schimmel, 2014	High	Pain Clinic	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.05(-0.01,0.10)	NS
Schimmel, 2014	High	Persistent Pain	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	RR	3.00(0.63,14.29)	NS

Table 202193: PICO 12- Bicruciate Retaining TKA vs. Posterior Stabilizing TKA- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Schimmel, 2014	High	KOOS QoL	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS

Table 203194: PICO 12- Bicruciate Retaining TKA vs. Posterior Stabilizing TKA- Return to activity

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Schimmel, 2014	High	KOOS Sport	Postop 1 yrs.	Bicruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - One-sided t-test; ANOVA;	N/A	NS

Table 204195: PICO 12- Cruciate Retaining TKA vs Posterior Stabilizing TKA- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yacovelli, 2020	Low	Total Revisions	Postop 43mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	RR	1.45(0.66,3.19)	NS
Yacovelli, 2020	Low	Revision Due to Instability	Postop 43mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.00(0.00,0.00)	Posterior Stabilizing TKA
Yacovelli, 2020	Low	Revision Due to Pain	Postop 43mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.00(-0.00,0.00)	NS
Yacovelli, 2020	Low	Reason for Revision -Patellar Component Fracture	Postop 43mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	RD	-0.00(-0.00,0.00)	NS
Yacovelli, 2020	Low	Revision due to Aseptic Loosening of the Patellar Component	Postop 43mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	RR	0.90(0.13,6.42)	NS
Yacovelli, 2020	Low	Revision Due to Periprosthetic Fracture	Postop 43mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	RD	-0.00(-0.00,0.00)	NS
Yacovelli, 2020	Low	Infection (Reason for Revision - Periprosthetic Joint Infection)	Postop 43mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	RR	1.21(0.42,3.47)	NS
Yacovelli, 2020	Low	Revision due to Aseptic Loosening of the Tibial Component	Postop 43mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	RD	0.00(-0.00,0.00)	NS
Yacovelli, 2020	Low	Revisions for Mechanical Failure	Postop 43mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	RR	1.81(0.55,6.00)	NS
Spekenbrink-Spooren,2018	Low	Tibial Loosening	Postop 9 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	RR	0.81(0.80,0.81)	Cruciate Retaining TKA

Table 205196: PICO 12- Cruciate Retaining TKA vs Posterior Stabilizing TKA- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yacovelli, 2020	Low	KOOS Total	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.3 (-2.54, -0.06)	Posterior Stabilizing TKA
Yacovelli, 2020	Low	KOOS Total	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-3.1 (-4.20, -2.00)	Posterior Stabilizing TKA
Yacovelli, 2020	Low	KOOS Total	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.5 (-0.61, 1.61)	NS
van den Boom, 2020	High	KSS Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	5.4 (-0.69, 11.49)	NS
van den Boom, 2020	High	KSS Total	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.3 (-4.15, 6.75)	NS
van den Boom, 2020	High	KSS Total	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3.7 (-1.14, 8.54)	NS
van den Boom, 2020	High	KSS Total	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.5 (-4.10, 5.10)	NS
van den Boom, 2020	High	KSS Total	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.3 (-7.19, 4.59)	NS
van den Boom, 2020	High	KSS Total (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2 (-1.82, 5.82)	NS
van den Boom, 2020	High	SF-36 General Health	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-6.00, 7.40)	NS
van den Boom, 2020	High	SF-36 General Health	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.6 (-5.47, 8.67)	NS
van den Boom, 2020	High	SF-36 General Health	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0 (-7.12, 7.12)	NS
van den Boom, 2020	High	SF-36 General Health	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.4 (-5.33, 10.13)	NS
van den Boom, 2020	High	SF-36 General Health	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.5 (-6.79, 7.79)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
van den Boom, 2020	High	SF-36 General Health (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1 (-4.76, 6.76)	NS
van den Boom, 2020	High	WOMAC Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.4 (-7.43, 6.63)	NS
van den Boom, 2020	High	WOMAC Total	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.6 (-6.98, 3.78)	NS
van den Boom, 2020	High	WOMAC Total	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-25.04, 26.44)	NS
van den Boom, 2020	High	WOMAC Total	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.4 (-6.93, 4.13)	NS
van den Boom, 2020	High	WOMAC Total	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-3.6 (-10.02, 2.82)	NS
van den Boom, 2020	High	WOMAC Total (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.3 (-5.64, 3.04)	NS
Dowsey, 2020	High	KSS Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-8.39, 9.79)	NS
Dowsey, 2020	High	KSS Total	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.8 (-12.50, 10.90)	NS
Dowsey, 2020	High	KSS Total	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-5.7 (-17.25, 5.85)	NS
Dowsey, 2020	High	Oxford Knee Score	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.7 (-1.44, 6.84)	NS
Dowsey, 2020	High	Oxford Knee Score	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.9 (-4.48, 6.28)	NS
Dowsey, 2020	High	Oxford Knee Score	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.8 (-8.29, 6.69)	NS
Dowsey, 2020	High	WOMAC Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.8 (-11.83, 6.23)	NS
Dowsey, 2020	High	WOMAC Total	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-5.9 (-16.39, 4.59)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Dowsey, 2020	High	WOMAC Total	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	5.3 (-5.27, 15.87)	NS
Broberg, 2020	Low	KSS Total	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2 (-14.32, 10.32)	NS
Broberg, 2020	Low	KSS Total	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-7.4 (-24.46, 9.66)	NS
Broberg, 2020	Low	WOMAC Total	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3.1 (-7.82, 14.02)	NS
Broberg, 2020	Low	WOMAC Total	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.3 (-12.97, 13.57)	NS
Singleton, 2019	Low	Oxford Knee Score	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.07 (-1.97, -0.17)	Posterior Stabilizing TKA
Singleton, 2019	Low	Oxford Knee Score	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.31 (-2.21, -0.41)	Posterior Stabilizing TKA
Singleton, 2019	Low	Oxford Knee Score	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.16 (-2.03, -0.29)	Posterior Stabilizing TKA
Singleton, 2019	Low	Oxford Knee Score	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.17 (-1.08, 0.74)	NS
Singleton, 2019	Low	WOMAC Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.84 (0.72, 4.96)	Posterior Stabilizing TKA
Singleton, 2019	Low	WOMAC Total	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3.53 (1.77, 5.29)	Posterior Stabilizing TKA
Singleton, 2019	Low	WOMAC Total	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.94 (0.21, 3.67)	Posterior Stabilizing TKA
Singleton, 2019	Low	WOMAC Total	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.3 (-3.11, 0.51)	NS
Ozturk, 2016	High	KSS Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	4.05 (-0.88, 8.98)	NS
Ozturk, 2016	High	KSS Total	Postop 1 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.1 (-6.84, 2.64)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ozturk, 2016	High	KSS Total	Postop 2 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.1 (-6.22, 2.02)	NS
Ozturk, 2016	High	KSS Total	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-3.6 (-6.72, -0.48)	Posterior Stabilizing TKA
Ozturk, 2016	High	KSS Total	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.9 (-5.44, -0.36)	Posterior Stabilizing TKA
Ozturk, 2016	High	KSS Total	Postop 7 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.7 (-0.27, 3.67)	NS
Ozturk, 2016	High	Patellar Score	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.3 (-1.09, 1.69)	NS
Ozturk, 2016	High	Patellar Score	Postop 1 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.1 (-1.30, 1.10)	NS
Ozturk, 2016	High	Patellar Score	Postop 2 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.3 (-1.64, 1.04)	NS
Ozturk, 2016	High	Patellar Score	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.3 (-1.46, 0.86)	NS
Ozturk, 2016	High	Patellar Score	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.2 (-1.08, 0.68)	NS
Ozturk, 2016	High	Patellar Score	Postop 7 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.3 (-1.86, 2.46)	NS
van de Groes, 2015	High	Feller Patellofemoral Score - Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.7 (-4.80, 1.40)	NS
van de Groes, 2015	High	Feller Patellofemoral Score - Total	Postop 17.5mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.1 (-2.53, 2.73)	NS
Kawakami, 2015	High	KSS Symptoms	Postop 8 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.9 (-0.75, 6.55)	NS
Serna-Berna, 2018	Low	KSS Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.5 (-3.19, 2.19)	NS
Serna-Berna, 2018	Low	KSS Total	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.6 (-0.61, 1.81)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Serna-Berna, 2018	Low	KSS Total	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.2 (-0.13, 2.53)	NS
Serna-Berna, 2018	Low	WOMAC Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.8 (-0.81, 2.41)	NS
Serna-Berna, 2018	Low	WOMAC Total	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.3 (-5.87, 1.27)	NS
Serna-Berna, 2018	Low	WOMAC Total	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.1 (-4.68, 2.48)	NS
Cho, 2016	Low	KSS Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	5 (-0.63, 10.63)	NS
Cho, 2016	Low	KSS Total	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0 (-1.55, 1.55)	NS
Cho, 2016	Low	KSS Total	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2 (-4.53, 0.53)	NS
Cho, 2016	Low	KSS Total	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0 (-1.16, 1.16)	NS
Beaupre, 2016	High	SF-36 General Health	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-3.6 (-12.69, 5.49)	NS
Beaupre, 2016	High	SF-36 General Health	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.3 (-10.10, 10.70)	NS
Beaupre, 2016	High	SF-36 General Health	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4.2 (-15.21, 6.81)	NS
Thuysbaert, 2020	Low	Forgotten Joint Score	Postop 4.1mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	10.84 (0.06, 21.62)	Cruciate Retaining TKA
Thuysbaert, 2020	Low	Oxford Knee Score	Postop 4.1mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.3 (-1.68, 4.28)	NS
Kim, 2021	Low	HSS Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.8 (-4.17, 2.57)	NS
Kim, 2021	Low	WOMAC Total	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.3 (-6.14, 3.54)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2021	Low	HSS Total	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0 (-2.98, 2.98)	NS
Kim, 2021	Low	WOMAC Total	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.6 (-4.80, 1.60)	NS

Table 206197: PICO 12- Cruciate Retaining TKA vs Posterior Stabilizing TKA- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yacovelli, 2020	Low	SF-12 Physical	Postop 43mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.1 (-0.26, 0.46)	NS
Yacovelli, 2020	Low	SF-12 Physical	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.4 (-0.87, 0.07)	NS
Yacovelli, 2020	Low	SF-12 Physical	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.5 (-1.02, 0.02)	NS
van den Boom, 2020	High	Extension (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - Two-sided test;	N/A	NS
van den Boom, 2020	High	Extension (deg)	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - Two-sided test;	N/A	NS
van den Boom, 2020	High	Extension (deg)	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - Two-sided test;	N/A	Cruciate Retaining Arthroplasty
van den Boom, 2020	High	Extension (deg)	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - Two-sided test;	N/A	NS
van den Boom, 2020	High	Extension (deg)	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - Two-sided test;	N/A	NS
van den Boom, 2020	High	Extension (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported - Two-sided test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
van den Boom, 2020	High	Flexion (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.3 (-6.46, 3.86)	NS
van den Boom, 2020	High	Flexion (deg)	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.2 (-6.43, 4.03)	NS
van den Boom, 2020	High	Flexion (deg)	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1 (-5.67, 3.67)	NS
van den Boom, 2020	High	Flexion (deg)	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4 (-8.04, 0.04)	NS
van den Boom, 2020	High	Flexion (deg)	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.1 (-5.22, 1.02)	NS
van den Boom, 2020	High	Flexion (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.9 (-5.30, 1.50)	NS
van den Boom, 2020	High	ROM (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.8 (-8.74, 3.14)	NS
van den Boom, 2020	High	ROM (deg)	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.2 (-5.95, 6.35)	NS
van den Boom, 2020	High	ROM (deg)	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.4 (-3.76, 6.56)	NS
van den Boom, 2020	High	ROM (deg)	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.6 (-7.06, 1.86)	NS
van den Boom, 2020	High	ROM (deg)	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.6 (-5.02, 1.82)	NS
van den Boom, 2020	High	ROM (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1 (-4.61, 2.61)	NS
van den Boom, 2020	High	SF-36 Physical	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	4.3 (-4.50, 13.10)	NS
van den Boom, 2020	High	SF-36 Physical	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-6.69, 8.09)	NS
van den Boom, 2020	High	SF-36 Physical	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	5.6 (-2.61, 13.81)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
van den Boom, 2020	High	SF-36 Physical	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.4 (-6.72, 11.52)	NS
van den Boom, 2020	High	SF-36 Physical	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-3.1 (-12.68, 6.48)	NS
van den Boom, 2020	High	SF-36 Physical (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.9 (-3.84, 7.64)	NS
van den Boom, 2020	High	SF-36 Role Physical	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	4.1 (-11.51, 19.71)	NS
van den Boom, 2020	High	SF-36 Role Physical	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	10.1 (-2.81, 23.01)	NS
van den Boom, 2020	High	SF-36 Role Physical	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-10.4 (-26.17, 5.37)	NS
van den Boom, 2020	High	SF-36 Role Physical	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-10.4 (-26.17, 5.37)	NS
van den Boom, 2020	High	SF-36 Role Physical	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.6 (-16.58, 17.78)	NS
van den Boom, 2020	High	SF-36 Role Physical (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.2 (-8.98, 11.38)	NS
van den Boom, 2020	High	WOMAC Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.4 (-6.69, 7.49)	NS
van den Boom, 2020	High	WOMAC Function	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.8 (-7.03, 3.43)	NS
van den Boom, 2020	High	WOMAC Function	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.9 (-6.98, 5.18)	NS
van den Boom, 2020	High	WOMAC Function	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.2 (-6.74, 4.34)	NS
van den Boom, 2020	High	WOMAC Function	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4.2 (-10.84, 2.44)	NS
van den Boom, 2020	High	WOMAC Function (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.5 (-5.90, 2.90)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Dowsey, 2020	High	6-Minute Walk Test ((m))	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-28 (-91.07, 35.07)	NS
Dowsey, 2020	High	6-Minute Walk Test ((m))	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-30.8 (-78.08, 16.48)	NS
Dowsey, 2020	High	6-Minute Walk Test ((m))	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-24.8 (-75.01, 25.41)	NS
Dowsey, 2020	High	KSS Advanced Activities	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.5 (-1.88, 2.88)	NS
Dowsey, 2020	High	KSS Advanced Activities	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.5 (-3.66, 2.66)	NS
Dowsey, 2020	High	KSS Advanced Activities	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.6 (-5.20, 2.00)	NS
Dowsey, 2020	High	KSS Discretionary Activities	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.3 (-1.30, 1.90)	NS
Dowsey, 2020	High	KSS Discretionary Activities	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.3 (-1.11, 3.71)	NS
Dowsey, 2020	High	KSS Discretionary Activities	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.6 (-3.85, 0.65)	NS
Dowsey, 2020	High	KSS Standard Activities	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.7 (-1.31, 4.71)	NS
Dowsey, 2020	High	KSS Standard Activities	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1 (-2.80, 4.80)	NS
Dowsey, 2020	High	KSS Standard Activities	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.4 (-4.93, 2.13)	NS
Dowsey, 2020	High	KSS Symptoms	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.6 (-0.69, 3.89)	NS
Dowsey, 2020	High	KSS Symptoms	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3.2 (-0.51, 6.91)	NS
Dowsey, 2020	High	KSS Symptoms	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.4 (-3.44, 2.64)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Dowsey, 2020	High	KSS Walking	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.9 (-4.54, 2.74)	NS
Dowsey, 2020	High	KSS Walking	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.7 (-7.50, 2.10)	NS
Dowsey, 2020	High	KSS Walking	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.5 (-5.62, 2.62)	NS
Dowsey, 2020	High	Oxford Knee Score (Function)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1 (-0.86, 2.86)	NS
Dowsey, 2020	High	Oxford Knee Score (Function)	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.4 (-1.76, 2.56)	NS
Dowsey, 2020	High	Oxford Knee Score (Function)	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.2 (-3.24, 2.84)	NS
Dowsey, 2020	High	Timed Up and Go Test (s)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.6 (-0.78, 3.98)	NS
Dowsey, 2020	High	Timed Up and Go Test (s)	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.3 (-0.86, 1.46)	NS
Dowsey, 2020	High	Timed Up and Go Test (s)	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.3 (-0.83, 1.43)	NS
Dowsey, 2020	High	VR-12 Physical	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-2.99, 4.39)	NS
Dowsey, 2020	High	VR-12 Physical	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3.9 (-1.73, 9.53)	NS
Dowsey, 2020	High	VR-12 Physical	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-3.5 (-9.21, 2.21)	NS
Dowsey, 2020	High	WOMAC Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.1 (-9.15, 8.95)	NS
Dowsey, 2020	High	WOMAC Function	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-6.2 (-16.51, 4.11)	NS
Dowsey, 2020	High	WOMAC Function	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	6.7 (-4.43, 17.83)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Dowsey, 2020	High	WOMAC Stiffness	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0 (-12.57, 12.57)	NS
Dowsey, 2020	High	WOMAC Stiffness	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.9 (-15.42, 11.62)	NS
Dowsey, 2020	High	WOMAC Stiffness	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3.6 (-7.87, 15.07)	NS
Broberg, 2020	Low	SF-12 Physical	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.1 (-5.03, 2.83)	NS
Broberg, 2020	Low	SF-12 Physical	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2 (-9.14, 5.14)	NS
Singleton, 2019	Low	WOMAC Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.99 (0.45, 3.53)	Posterior Stabilizing TKA
Singleton, 2019	Low	WOMAC Function	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.73 (1.41, 4.05)	Posterior Stabilizing TKA
Singleton, 2019	Low	WOMAC Function	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.34 (0.01, 2.67)	Posterior Stabilizing TKA
Singleton, 2019	Low	WOMAC Function	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.14 (-2.51, 0.23)	NS
Singleton, 2019	Low	WOMAC Stiffness	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.09 (-0.10, 0.28)	NS
Singleton, 2019	Low	WOMAC Stiffness	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.41 (0.24, 0.58)	Posterior Stabilizing TKA
Singleton, 2019	Low	WOMAC Stiffness	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.15 (-0.02, 0.32)	NS
Singleton, 2019	Low	WOMAC Stiffness	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.03 (-0.14, 0.20)	NS
Ozturk, 2016	High	KSS Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.9 (-2.63, 6.43)	NS
Ozturk, 2016	High	KSS Function	Postop 1 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.5 (-5.17, 2.17)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ozturk, 2016	High	KSS Function	Postop 2 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.8 (-6.23, 0.63)	NS
Ozturk, 2016	High	KSS Function	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-3 (-6.18, 0.18)	NS
Ozturk, 2016	High	KSS Function	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.5 (-4.01, 1.01)	NS
Ozturk, 2016	High	KSS Function	Postop 7 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.2 (-2.32, 1.92)	NS
Hino, 2016	Low	Extension (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.7 (-5.67, 2.27)	NS
Hino, 2016	Low	Extension (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3.2 (-4.31, 10.71)	NS
Hino, 2016	Low	Flexion (deg)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.5 (-3.15, 2.15)	NS
Hino, 2016	Low	Flexion (deg)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.5 (-6.82, 5.82)	NS
Gotz, 2016	Low	WOMAC Function (Ascending Stairs)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Bending to the Floor)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Descending Stairs)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Getting in and out of a car, or on or off a bus)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Getting in or out of the bath)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Gotz, 2016	Low	WOMAC Function (Getting on or off the toilet)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Going shopping)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Lying in bed)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Performing heavy domestic duties)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Performing light domestic duties)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Putting on your socks or stockings)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Rising from sitting)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Rising from the bed)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Sitting)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Standing)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Function (Taking off your socks or stockings)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Gotz, 2016	Low	WOMAC Function (Walking on flat surfaces)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Stiffness (How severe is your stiffness after first awakening in the morning?)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Stiffness (How severe is your stiffness after sitting, lying, or resting in the day?)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
van de Groes, 2015	High	Active Flexion (deg)	Postop 17.5mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4.9 (-11.64, 1.84)	NS
van de Groes, 2015	High	Passive Flexion (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-6.12, 7.52)	NS
van de Groes, 2015	High	Passive Flexion (deg)	Postop 17.5mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-8.8 (-14.46, -3.14)	Posterior Stabilizing TKA
Kawakami, 2015	High	Coronal Mechanical Axis	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.6 (-6.68, 1.48)	NS
Kawakami, 2015	High	Coronal Mechanical Axis	Postop 8 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2 (-3.45, -0.55)	Posterior Stabilizing TKA
Kawakami, 2015	High	Extension (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-15.4 (-20.02, -10.78)	Posterior Stabilizing TKA
Kawakami, 2015	High	Extension (deg)	Postop 8 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.1 (-2.97, 0.77)	NS
Kawakami, 2015	High	Flexion (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.8 (-6.48, 12.08)	NS
Kawakami, 2015	High	Flexion (deg)	Postop 8 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2 (-4.50, 8.50)	NS
Kawakami, 2015	High	KSS Advanced Activities	Postop 8 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.4 (-2.12, 4.92)	NS
Kawakami, 2015	High	KSS Discretionary Activities	Postop 8 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1 (-4.93, 2.93)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kawakami, 2015	High	KSS Standard Activities	Postop 8 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.3 (-1.27, 5.87)	NS
Kawakami, 2015	High	KSS Walking/Standing	Postop 8 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.3 (-4.71, 5.31)	NS
Kawakami, 2015	High	ROM (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3.3 (-8.11, 14.71)	NS
Kawakami, 2015	High	ROM (deg)	Postop 8 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.9 (-5.66, 7.46)	NS
Serna-Berna, 2018	Low	Extension (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.1 (-0.74, 0.54)	NS
Serna-Berna, 2018	Low	Extension (deg)	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.3 (-0.57, -0.03)	Posterior Stabilizing TKA
Serna-Berna, 2018	Low	Extension (deg)	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.2 (-0.13, 0.53)	NS
Serna-Berna, 2018	Low	Flexion (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.8 (-0.19, 3.79)	NS
Serna-Berna, 2018	Low	Flexion (deg)	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.1 (0.08, 4.12)	Cruciate Retaining TKA
Serna-Berna, 2018	Low	Flexion (deg)	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.9 (-0.96, 2.76)	NS
Serna-Berna, 2018	Low	KSS Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.9 (-4.65, 0.85)	NS
Serna-Berna, 2018	Low	KSS Function	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.2 (-1.41, 1.81)	NS
Serna-Berna, 2018	Low	KSS Function	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.2 (-2.91, 0.51)	NS
Serna-Berna, 2018	Low	ROM (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.8 (-1.55, 3.15)	NS
Serna-Berna, 2018	Low	ROM (deg)	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.4 (-0.39, 3.19)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Serna-Berna, 2018	Low	ROM (deg)	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.5 (-1.41, 2.41)	NS
Serna-Berna, 2018	Low	SF-12 Physical	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-0.37, 1.77)	NS
Serna-Berna, 2018	Low	SF-12 Physical	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.2 (-2.59, 0.19)	NS
Serna-Berna, 2018	Low	SF-12 Physical	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.3 (-0.24, 2.84)	NS
Cho, 2016	Low	KSS Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3 (-1.89, 7.89)	NS
Cho, 2016	Low	KSS Function	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	4 (-1.04, 9.04)	NS
Cho, 2016	Low	KSS Function	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4 (-9.05, 1.05)	NS
Cho, 2016	Low	KSS Function	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1 (-5.08, 3.08)	NS
Cho, 2016	Low	ROM (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	6 (1.53, 10.47)	Cruciate Retaining TKA
Cho, 2016	Low	ROM (deg)	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0 (-3.69, 3.69)	NS
Cho, 2016	Low	ROM (deg)	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3 (-0.51, 6.51)	NS
Cho, 2016	Low	ROM (deg)	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2 (-5.13, 1.13)	NS
Beaupre, 2016	High	SF-36 Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.5 (-8.23, 9.23)	NS
Beaupre, 2016	High	SF-36 Function	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	11.2 (-3.57, 25.97)	NS
Beaupre, 2016	High	SF-36 Function	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	7.9 (-7.32, 23.12)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Beaupre, 2016	High	SF-36 Role Physical	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4.4 (-20.26, 11.46)	NS
Beaupre, 2016	High	SF-36 Role Physical	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	7 (-14.86, 28.86)	NS
Beaupre, 2016	High	SF-36 Role Physical	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.7 (-23.47, 26.87)	NS
Beaupre, 2016	High	WOMAC Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.9 (-8.11, 6.31)	NS
Beaupre, 2016	High	WOMAC Function	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.1 (-8.56, 8.36)	NS
Beaupre, 2016	High	WOMAC Function	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	4.8 (-8.10, 17.70)	NS
Beaupre, 2016	High	WOMAC Stiffness (no scale provided)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.1 (-10.35, 12.55)	NS
Beaupre, 2016	High	WOMAC Stiffness (no scale provided)	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	8.1 (-1.21, 17.41)	NS
Beaupre, 2016	High	WOMAC Stiffness (no scale provided)	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.7 (-9.03, 14.43)	NS
Chaudhary, 2008	High	Extension (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-2.16, 3.56)	NS
Chaudhary, 2008	High	Extension (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.6 (-2.69, 3.89)	NS
Chaudhary, 2008	High	Extension (deg)	Post-discharge.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.9 (-5.81, 0.01)	NS
Chaudhary, 2008	High	Extension (deg)	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.4 (-0.44, 3.24)	NS
Chaudhary, 2008	High	Extension (deg)	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1 (-0.36, 2.36)	NS
Chaudhary, 2008	High	Flexion (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.7 (-2.91, 8.31)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Chaudhary, 2008	High	Flexion (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	4.9 (-1.58, 11.38)	NS
Chaudhary, 2008	High	Flexion (deg)	Post-discharge.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.2 (-7.06, 6.66)	NS
Chaudhary, 2008	High	Flexion (deg)	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.6 (-7.30, 4.10)	NS
Chaudhary, 2008	High	Flexion (deg)	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.1 (-5.79, 5.99)	NS
Chaudhary, 2008	High	WOMAC Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-3.5 (-9.56, 2.56)	NS
Chaudhary, 2008	High	WOMAC Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4.2 (-10.77, 2.37)	NS
Chaudhary, 2008	High	WOMAC Function	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.3 (-6.63, 6.03)	NS
Chaudhary, 2008	High	WOMAC Function	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.3 (-9.17, 6.57)	NS
Kinoshita, 2021	Low	Extension (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-6.2 (-8.88, -3.52)	Posterior Stabilizing TKA
Kinoshita, 2021	Low	Extension (deg)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.3 (-3.90, -0.70)	Posterior Stabilizing TKA
Kinoshita, 2021	Low	Flexion (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	18.8 (14.07, 23.53)	Cruciate Retaining TKA
Kinoshita, 2021	Low	Flexion (deg)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	6.1 (0.79, 11.41)	Cruciate Retaining TKA
Kim, 2021	Low	ROM (deg)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.1 (-3.10, 5.30)	NS
Kim, 2021	Low	KSS Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.8 (-2.35, 5.95)	NS
Kim, 2021	Low	ROM (deg)	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.6 (-2.62, 5.82)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2021	Low	KSS Function	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3.5 (-1.11, 8.11)	NS

Table 207198: PICO 12- Cruciate Retaining TKA vs Posterior Stabilizing TKA- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Dowsey, 2020	High	VR-12 Mental	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.1 (-6.93, 7.13)	NS
Dowsey, 2020	High	VR-12 Mental	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.3 (-8.31, 3.71)	NS
Dowsey, 2020	High	VR-12 Mental	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-9 (-15.09, -2.91)	Cruciate Retaining TKA
Broberg, 2020	Low	SF-12 Mental	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.5 (-6.07, 5.07)	NS
Broberg, 2020	Low	SF-12 Mental	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.8 (-4.86, 6.46)	NS
Serna-Berna, 2018	Low	SF-12 Mental	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.8 (-0.95, 2.55)	NS
Serna-Berna, 2018	Low	SF-12 Mental	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.6 (-0.79, 1.99)	NS
Serna-Berna, 2018	Low	SF-12 Mental	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-0.89, 2.29)	NS
Beaupre, 2016	High	SF-36 Mental	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1 (-10.05, 12.05)	NS
Beaupre, 2016	High	SF-36 Mental	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4.7 (-12.87, 3.47)	NS
Beaupre, 2016	High	SF-36 Mental	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.5 (-9.59, 4.59)	NS
Beaupre, 2016	High	SF-36 Role Emotional	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-15.1 (-36.52, 6.32)	NS
Beaupre, 2016	High	SF-36 Role Emotional	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-5 (-23.71, 13.71)	NS
Beaupre, 2016	High	SF-36 Role Emotional	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-5.6 (-26.05, 14.85)	NS
Beaupre, 2016	High	SF-36 Social Function	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-7.2 (-19.51, 5.11)	NS
Beaupre, 2016	High	SF-36 Social Function	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4.3 (-17.99, 9.39)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Beaupre, 2016	High	SF-36 Social Function	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-7 (-23.15, 9.15)	NS
Beaupre, 2016	High	SF-36 Vitality	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.7 (-12.68, 9.28)	NS
Beaupre, 2016	High	SF-36 Vitality	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.5 (-11.32, 10.32)	NS
Beaupre, 2016	High	SF-36 Vitality	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4.4 (-17.11, 8.31)	NS

Table 208199: PICO 12- Cruciate Retaining TKA vs Posterior Stabilizing TKA- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
van den Boom, 2020	High	SF-36 Bodily Pain	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.9 (-6.80, 10.60)	NS
van den Boom, 2020	High	SF-36 Bodily Pain	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	4.6 (-3.60, 12.80)	NS
van den Boom, 2020	High	SF-36 Bodily Pain	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	5.2 (-3.00, 13.40)	NS
van den Boom, 2020	High	SF-36 Bodily Pain	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.6 (-10.54, 5.34)	NS
van den Boom, 2020	High	SF-36 Bodily Pain	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-5.4 (-14.30, 3.50)	NS
van den Boom, 2020	High	SF-36 Bodily Pain (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.7 (-5.24, 6.64)	NS
van den Boom, 2020	High	WOMAC Pain	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.6 (-9.21, 6.01)	NS
van den Boom, 2020	High	WOMAC Pain	Postop 6 wks.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.9 (-8.62, 4.82)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
van den Boom, 2020	High	WOMAC Pain	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	4.4 (-2.68, 11.48)	NS
van den Boom, 2020	High	WOMAC Pain	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-2.7 (-8.37, 2.97)	NS
van den Boom, 2020	High	WOMAC Pain	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-4.3 (-10.76, 2.16)	NS
van den Boom, 2020	High	WOMAC Pain (Overall)	Postop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.2 (-5.76, 3.36)	NS
Dowsey, 2020	High	Oxford Knee Score (Pain)	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.7 (-0.81, 4.21)	NS
Dowsey, 2020	High	Oxford Knee Score (Pain)	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.5 (-2.84, 3.84)	NS
Dowsey, 2020	High	Oxford Knee Score (Pain)	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.6 (-5.20, 4.00)	NS
Dowsey, 2020	High	WOMAC Pain	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-8.9 (-18.37, 0.57)	NS
Dowsey, 2020	High	WOMAC Pain	Postop 6 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-6.2 (-18.02, 5.62)	NS
Dowsey, 2020	High	WOMAC Pain	Postop 12mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.3 (-9.85, 12.45)	NS
Singleton, 2019	Low	WOMAC Pain	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.59 (0.15, 1.03)	Posterior Stabilizing TKA
Singleton, 2019	Low	WOMAC Pain	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.52 (0.15, 0.89)	Posterior Stabilizing TKA
Singleton, 2019	Low	WOMAC Pain	Postop 5 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.41 (0.06, 0.76)	Posterior Stabilizing TKA
Singleton, 2019	Low	WOMAC Pain	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.24 (-0.62, 0.14)	NS
Ozturk, 2016	High	VAS Pain	Postop 1 days	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.2 (-0.89, 0.49)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ozturk, 2016	High	VAS Pain	Postop 2 days	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.2 (-0.83, 0.43)	NS
Ozturk, 2016	High	VAS Pain	Postop 3 days	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.2 (-0.78, 0.38)	NS
Ozturk, 2016	High	VAS Pain	Postop 4 days	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-0.4 (-0.95, 0.15)	NS
Ozturk, 2016	High	VAS Pain	Postop 1 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.4 (-0.20, 1.00)	NS
Ozturk, 2016	High	VAS Pain	Postop 2 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.3 (-0.16, 0.76)	NS
Ozturk, 2016	High	VAS Pain	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.2 (-0.20, 0.60)	NS
Ozturk, 2016	High	VAS Pain	Postop 1 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.1 (-0.18, 0.38)	NS
Ozturk, 2016	High	VAS Pain	Postop 7 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0 (-0.16, 0.16)	NS
Gotz, 2016	Low	WOMAC Pain (At night while in bed, pain disturbs your sleep)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Pain (Going up and down stairs)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Pain (Sitting or lying)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Pain (Standing upright)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
Gotz, 2016	Low	WOMAC Pain (Walking on a flat surface)	Postop 5.3mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Author Reported -Kolmogorov-Smirnov test; Wilcoxon test; Mann-Whitney U-test;	N/A	NS
van de Groes, 2015	High	VAS Pain	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-1.5 (-14.55, 11.55)	NS
van de Groes, 2015	High	VAS Pain	Postop 17.5mos	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.5 (-12.49, 13.49)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Beaupre, 2016	High	SF-36 Bodily Pain	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	4 (-4.70, 12.70)	NS
Beaupre, 2016	High	SF-36 Bodily Pain	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	12.9 (1.47, 24.33)	Cruciate Retaining TKA
Beaupre, 2016	High	SF-36 Bodily Pain	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.6 (-12.81, 16.01)	NS
Beaupre, 2016	High	WOMAC Pain	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	4.9 (-4.00, 13.80)	NS
Beaupre, 2016	High	WOMAC Pain	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.7 (-5.22, 10.62)	NS
Beaupre, 2016	High	WOMAC Pain	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	-5.7 (-17.31, 5.91)	NS
Chaudhary, 2008	High	WOMAC Pain	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	2.9 (-3.71, 9.51)	NS
Chaudhary, 2008	High	WOMAC Pain	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	3.6 (-3.51, 10.71)	NS
Chaudhary, 2008	High	WOMAC Pain	Postop 3 mos.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.6 (-5.28, 6.48)	NS
Chaudhary, 2008	High	WOMAC Pain	Postop 2 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.8 (-5.25, 8.85)	NS
Kim, 2021	Low	KSS Pain	Preop.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	1.3 (-1.24, 3.84)	NS
Kim, 2021	Low	KSS Pain	Postop 10 yrs.	Cruciate Retaining TKA	Posterior Stabilizing TKA	Mean Difference	0.6 (-1.82, 3.02)	NS

Table 209200: PICO 12- Medial Pivot vs. Posterior Stabilizing TKA- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Batra, 2020	High	Oxford Knee Score	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.1 (-1.21, 1.01)	NS
Batra, 2020	High	Oxford Knee Score	Postop 3 mos.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.1 (-0.99, 1.19)	NS
Batra, 2020	High	Oxford Knee Score	Postop 6 mos.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0 (-1.03, 1.03)	NS
Batra, 2020	High	Oxford Knee Score	Postop 4 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.3 (-0.55, 1.15)	NS
Yuan, 2020	Low	HSS Total	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.65 (-4.01, 5.31)	NS
Yuan, 2020	Low	HSS Total	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-1.52 (-5.20, 2.16)	NS
Yuan, 2020	Low	WOMAC Total	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	1.66 (-4.86, 8.18)	NS
Yuan, 2020	Low	WOMAC Total	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-2.14 (-6.62, 2.34)	NS

Table 210201: PICO 12- Medial Pivot vs. Posterior Stabilizing TKA- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Batra, 2020	High	ROM (deg)	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-3 (-7.80, 1.80)	NS
Batra, 2020	High	ROM (deg)	Postop 4 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	2 (-1.41, 5.41)	NS
Yuan, 2020	Low	HSS Activity Score	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.3 (-1.45, 0.85)	NS
Yuan, 2020	Low	HSS Activity Score	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.22 (-0.93, 1.37)	NS
Yuan, 2020	Low	HSS Flexion Deformity Score	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.51 (-0.72, 1.74)	NS
Yuan, 2020	Low	HSS Flexion Deformity Score	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.52 (-1.74, 0.70)	NS
Yuan, 2020	Low	HSS Function Score	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.18 (-0.72, 1.08)	NS
Yuan, 2020	Low	HSS Function Score	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.8 (-2.28, 0.68)	NS
Yuan, 2020	Low	HSS Muscle Strength Score	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.05 (-0.44, 0.34)	NS
Yuan, 2020	Low	HSS Muscle Strength Score	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.09 (-0.30, 0.48)	NS
Yuan, 2020	Low	HSS Stability Score	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.22 (-1.00, 0.56)	NS
Yuan, 2020	Low	HSS Stability Score	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.21 (-0.54, 0.96)	NS
Yuan, 2020	Low	WOMAC Function	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.17 (-4.00, 4.34)	NS
Yuan, 2020	Low	WOMAC Function	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.79 (-2.77, 1.19)	NS
Yuan, 2020	Low	WOMAC Stiffness	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.38 (-0.52, 1.28)	NS
Yuan, 2020	Low	WOMAC Stiffness	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.8 (-3.09, 1.49)	NS

Table 211202: PICO 12- Medial Pivot vs. Posterior Stabilizing TKA- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yuan, 2020	Low	HSS Activity Pain Score	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.52 (-1.48, 0.44)	NS
Yuan, 2020	Low	HSS Activity Pain Score	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.11 (-1.10, 0.88)	NS
Yuan, 2020	Low	HSS Static Pain Score	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	0.44 (-1.52, 2.40)	NS
Yuan, 2020	Low	HSS Static Pain Score	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-0.35 (-2.23, 1.53)	NS
Yuan, 2020	Low	WOMAC Pain	Preop.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	1.1 (-1.00, 3.20)	NS
Yuan, 2020	Low	WOMAC Pain	Postop 5 yrs.	Medial Pivot	Posterior Stabilizing TKA	Mean Difference	-1.14 (-2.00, -0.28)	Medial Pivot

Table 212203: PICO 12- Ultracongruent vs. Cruciate Retaining TKA- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Song, 2017	Low	HSS Total	Preop.	Ultracongruent	Cruciate Retaining TKA	Mean Difference	-0.5 (-3.99, 2.99)	NS
Song, 2017	Low	HSS Total	Postop 3 yrs.	Ultracongruent	Cruciate Retaining TKA	Mean Difference	1.3 (-1.41, 4.01)	NS
Song, 2017	Low	KSS Total	Preop.	Ultracongruent	Cruciate Retaining TKA	Mean Difference	1.6 (-1.23, 4.43)	NS
Song, 2017	Low	KSS Total	Postop 3 yrs.	Ultracongruent	Cruciate Retaining TKA	Mean Difference	2.7 (-1.35, 6.75)	NS
Song, 2017	Low	WOMAC Total	Preop.	Ultracongruent	Cruciate Retaining TKA	Mean Difference	-4 (-9.38, 1.38)	NS
Song, 2017	Low	WOMAC Total	Postop 3 yrs.	Ultracongruent	Cruciate Retaining TKA	Mean Difference	1.2 (-3.63, 6.03)	NS

Table 213204: PICO 12- Ultracongruent vs. Cruciate Retaining TKA- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Song, 2017	Low	ROM (deg)	Preop.	Ultracongruent	Cruciate Retaining TKA	Mean Difference	0.2 (-7.55, 7.95)	NS
Song, 2017	Low	ROM (deg)	Postop 3 yrs.	Ultracongruent	Cruciate Retaining TKA	Mean Difference	-97.9 (-102.47, -93.33)	Cruciate Retaining TKA

Table 214205: PICO 12- Ultracongruent vs. Posterior Stabilizing TKA- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2016	Low	HSS Total	Preop.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	-2 (-7.16, 3.16)	NS
Kim, 2016	Low	HSS Total	Postop 3 yrs.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	-0.4 (-1.67, 0.87)	NS
Kim, 2016	Low	KSS Total	Preop.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	-4.7 (-13.17, 3.77)	NS
Kim, 2016	Low	KSS Total	Postop 3 yrs.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	-2.7 (-11.23, 5.83)	NS
Kim, 2016	Low	WOMAC Total	Preop.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	4.6 (-3.17, 12.37)	NS
Kim, 2016	Low	WOMAC Total	Postop 3 yrs.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	0.5 (-0.35, 1.35)	NS

Table 215206: PICO 12- Ultracongruent vs. Posterior Stabilizing TKA- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2016	Low	Active Maximal Flexion	Postop 3 yrs.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	-0.9 (-5.83, 4.03)	NS
Kim, 2016	Low	Flexion Contracture	Postop 3 yrs.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	-1.3 (-5.97, 3.37)	NS
Kim, 2016	Low	KSS Function	Preop.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	-1.9 (-8.54, 4.74)	NS
Kim, 2016	Low	KSS Function	Postop 3 yrs.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	0.4 (-3.20, 4.00)	NS
Kim, 2016	Low	ROM (deg)	Preop.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	1.7 (-6.37, 9.77)	NS
Kim, 2016	Low	ROM (deg)	Postop 3 yrs.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	-0.4 (-1.24, 0.44)	NS
Kim, 2016	Low	Total ROM	Postop 3 yrs.	Ultracongruent	Posterior Stabilizing TKA	Mean Difference	-2.7 (-7.37, 1.97)	NS

Table 216207: PICO 13- Patient Specific Technology vs. Standard Technology- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Schotanus, 2019	High	Total Revisions	5 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	RD	.(.,.)	NS
Turgeon, 2019	High	Total Adverse Events	Postop.	Visionaire System	Conventional Instrumentation	RR	2.32(0.65,8.33)	NS
Teeter, 2019	High	Tibial Component Migration (X translation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	0 (-0.08, 0.08)	NS
Teeter, 2019	High	Tibial Component Migration (Y translation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.043 (-0.11, 0.02)	NS
Teeter, 2019	High	Tibial Component Migration (Z translation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.06 (-0.16, 0.04)	NS
Teeter, 2019	High	Tibial Component Migration (X rotation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.03 (-0.25, 0.19)	NS
Teeter, 2019	High	Tibial Component Migration (Y rotation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	0.04 (-0.25, 0.33)	NS
Teeter, 2019	High	Tibial Component Migration (Z rotation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.08 (-0.24, 0.08)	NS
Teeter, 2019	High	Femoral Component Migration (X translation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	0.04 (-0.11, 0.19)	NS
Teeter, 2019	High	Femoral Component Migration (Y translation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.06 (-0.17, 0.05)	NS
Teeter, 2019	High	Femoral Component Migration (Z translation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	0.14 (-0.08, 0.36)	NS
Teeter, 2019	High	Femoral Component Migration (X rotation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	0 (-0.28, 0.28)	NS
Teeter, 2019	High	Femoral Component Migration (Y rotation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	0.03 (-0.13, 0.19)	NS
Teeter, 2019	High	Femoral Component Migration (Z rotation)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.08 (-0.30, 0.14)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Huijbregts, 2016	High	Infection (Superficial Infection/delayed healing)	3 mos.	Visionaire System	Conventional Instrumentation	RR	0.93(0.34,2.50)	NS
Huijbregts, 2016	High	Manipulation Under Anesthesia	3 mos.	Visionaire System	Conventional Instrumentation	RR	0.19(0.02,1.55)	NS
Huijbregts, 2016	High	Deep Vein Thrombosis/Pulmonary Embolism	3 mos.	Visionaire System	Conventional Instrumentation	RD	-0.02(-0.05,0.01)	NS
Huijbregts, 2016	High	Blisters	3 mos.	Visionaire System	Conventional Instrumentation	RD	-0.02(-0.05,0.01)	NS
Huijbregts, 2016	High	Cellulitis	3 mos.	Visionaire System	Conventional Instrumentation	RD	-0.02(-0.05,0.01)	NS
Huijbregts, 2016	High	Geniculate artery pseudo-aneurysm	3 mos.	Visionaire System	Conventional Instrumentation	RD	-0.02(-0.05,0.01)	NS
Huijbregts, 2016	High	Hemarthrosis	3 mos.	Visionaire System	Conventional Instrumentation	RD	0.01(-0.01,0.04)	NS
Huijbregts, 2016	High	Myocardial Infarction or Stroke	3 mos.	Visionaire System	Conventional Instrumentation	RD	-0.02(-0.05,0.01)	NS
Huijbregts, 2016	High	Pneumonia	3 mos.	Visionaire System	Conventional Instrumentation	RD	0.01(-0.01,0.04)	NS
Huijbregts, 2016	High	Pressure Sore	3 mos.	Visionaire System	Conventional Instrumentation	RD	0.01(-0.01,0.04)	NS
Huijbregts, 2016	High	Pyelonephritis	3 mos.	Visionaire System	Conventional Instrumentation	RD	0.01(-0.01,0.04)	NS
Huijbregts, 2016	High	Urologic/Renal Complications	3 mos.	Visionaire System	Conventional Instrumentation	RD	-0.02(-0.05,0.01)	NS
Silva, 2020	High	Infection (Superficial infection)	Postop.	TruMatch Personal Solutions	Conventional Instrumentation	RR	0.50(0.05,5.32)	NS
Boonen, 2016	High	Hematoma	Postop.	Materialise NV	Conventional Instrumentation	RD	0.02(-0.01,0.06)	NS
Boonen, 2016	High	Manipulation Under Anesthesia	Postop.	Materialise NV	Conventional Instrumentation	RR	1.98(0.37,10.49)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Boonen, 2016	High	Effusion	Postop.	Materialise NV	Conventional Instrumentation	RD	0.01(-0.01,0.04)	NS
Boonen, 2016	High	Infection (Deep Infection)	Postop.	Materialise NV	Conventional Instrumentation	RD	-0.01(-0.04,0.01)	NS
Boonen, 2016	High	Pulmonary Embolism	Postop.	Materialise NV	Conventional Instrumentation	RD	0.01(-0.01,0.04)	NS
Boonen, 2016	High	Total Revisions	Postop.	Materialise NV	Conventional Instrumentation	RD	-0.02(-0.06,0.01)	NS

Table 217208: PICO 13- Patient Specific Technology vs. Standard Technology- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yan, 2015	High	KSS Total	Preop.	Patient Specific Technology	Control	Mean Difference	1.9 (-5.78, 9.58)	NS
Yan, 2015	High	KSS Total	Postop 3 mos.	Patient Specific Technology	Control	Mean Difference	0.73 (-2.22, 3.68)	NS
Yan, 2015	High	Oxford Knee Score	Preop.	Patient Specific Technology	Control	Mean Difference	-2 (-5.29, 1.29)	NS
Yan, 2015	High	Oxford Knee Score	Postop 3 mos.	Patient Specific Technology	Control	Mean Difference	0.1 (-2.37, 2.57)	NS
Turgeon, 2019	High	EQ-5D-3L	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	0.016 (-0.02, 0.05)	NS
Turgeon, 2019	High	EQ-5D-3L (Improvement)	1 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.009 (-0.06, 0.04)	NS
Turgeon, 2019	High	EQ-5D-3L (Improvement)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.008 (-0.06, 0.05)	NS
Turgeon, 2019	High	EQ-5D VAS	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	10.5 (1.26, 19.74)	Visionaire System
Turgeon, 2019	High	EQ-5D VAS (Improvement)	1 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-13.2 (-23.62, -2.78)	Conventional Instrumentation
Turgeon, 2019	High	EQ-5D VAS (Improvement)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-5.2 (-15.19, 4.79)	NS
Turgeon, 2019	High	Oxford Knee Score	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	3.2 (-0.73, 7.13)	NS
Turgeon, 2019	High	Oxford Knee Score (Improvement)	1 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-4.6 (-9.87, 0.67)	NS
Turgeon, 2019	High	Oxford Knee Score (Improvement)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	0.5 (-5.34, 6.34)	NS
Teeter, 2019	High	WOMAC Total	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	-1.4 (-9.82, 7.02)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Teeter, 2019	High	WOMAC Total	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	-1.1 (-9.57, 7.37)	NS
Teeter, 2019	High	EQ-5D VAS	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	0 (-7.81, 7.81)	NS
Teeter, 2019	High	EQ-5D VAS	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	-1 (-9.02, 7.02)	NS
Abane, 2018	High	KSS Total	3 mos.	MyKnee System - Medacta	Conventional Instrumentation	Mean Difference	-3.1 (-7.24, 1.04)	NS
Abane, 2018	High	KSS Global	3 mos.	MyKnee System - Medacta	Conventional Instrumentation	Mean Difference	-3.2 (-10.13, 3.73)	NS
Abane, 2018	High	Oxford Knee Score	3 mos.	MyKnee System - Medacta	Conventional Instrumentation	Mean Difference	-1.6 (-3.50, 0.30)	NS
Abane, 2018	High	KSS Total	3 mos.	Single Use MyKnee System	Conventional Instrumentation	Mean Difference	-3.6 (-6.84, -0.36)	Conventional Instrumentation
Abane, 2018	High	KSS Global	3 mos.	Single Use MyKnee System	Conventional Instrumentation	Mean Difference	-5.6 (-12.54, 1.34)	NS
Abane, 2018	High	Oxford Knee Score	3 mos.	Single Use MyKnee System	Conventional Instrumentation	Mean Difference	1.5 (-0.21, 3.21)	NS
Abane, 2018	High	KSS Global	Preop.	MyKnee System - Medacta	Conventional Instrumentation	Mean Difference	2 (-5.76, 9.76)	NS
Abane, 2018	High	Oxford Knee Score	Preop.	MyKnee System - Medacta	Conventional Instrumentation	Mean Difference	1 (-0.86, 2.86)	NS
Abane, 2018	High	KSS Global	Preop.	Single Use MyKnee System	Conventional Instrumentation	Mean Difference	2.9 (-3.91, 9.71)	NS
Abane, 2018	High	Oxford Knee Score	Preop.	Single Use MyKnee System	Conventional Instrumentation	Mean Difference	2 (0.49, 3.51)	Single Use MyKnee System
Van Leeuwen, 2017	High	EQ-5D VAS	Preop.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Linear Mixed Model	N/A	NS
Van Leeuwen, 2017	High	EQ-5D VAS	3 mos.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Linear Mixed Model	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Van Leeuwen, 2017	High	EQ-5D VAS	1 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Linear Mixed Model	N/A	NS
Van Leeuwen, 2017	High	EQ-5D VAS	2 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Linear Mixed Model	N/A	NS
Abane, 2015	High	KSS Total	Preop.	Visionaire System	Conventional Instrumentation	Author Reported - Fisher's Exact	N/A	NS
Abane, 2015	High	Oxford Knee Score	Preop.	Visionaire System	Conventional Instrumentation	Author Reported - Fisher's Exact	N/A	NS
Abane, 2015	High	KSS Total	3 mos.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Abane, 2015	High	KSS Total	3 mos.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Abane, 2015	High	Oxford Knee Score	3 mos.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Huijbregts, 2016	High	Oxford Knee Score	Preop.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Huijbregts, 2016	High	Oxford Knee Score	3 mos.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Huijbregts, 2016	High	Oxford Knee Score	1 yrs.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Sun, 2020	High	HSS Total	Preop.	MIMICS/SIEMENS NX	Conventional Instrumentation	Mean Difference	-1.4 (-3.62, 0.82)	NS
Sun, 2020	High	HSS Total	Postop.	MIMICS/SIEMENS NX	Conventional Instrumentation	Mean Difference	1.1 (-2.36, 4.56)	NS
Sun, 2020	High	KSS Total	Preop.	MIMICS/SIEMENS NX	Conventional Instrumentation	Mean Difference	-1 (-3.81, 1.81)	NS
Sun, 2020	High	KSS Total	Postop.	MIMICS/SIEMENS NX	Conventional Instrumentation	Mean Difference	1.6 (-1.90, 5.10)	NS
Boonen, 2016	High	KSS Total	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-1.3 (-5.56, 2.96)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Boonen, 2016	High	KSS Total	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.8 (-5.90, 4.30)	NS
Boonen, 2016	High	KSS Total	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.6 (-5.16, 3.96)	NS
Boonen, 2016	High	KSS Total	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.3 (-4.98, 4.38)	NS
Boonen, 2016	High	Oxford Knee Score	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	0.7 (-1.89, 3.29)	NS
Boonen, 2016	High	Oxford Knee Score	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	2.1 (-0.88, 5.08)	NS
Boonen, 2016	High	Oxford Knee Score	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	1 (-1.52, 3.52)	NS
Boonen, 2016	High	Oxford Knee Score	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	0.1 (-2.54, 2.74)	NS
Boonen, 2016	High	WOMAC Total	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-4.3 (-9.40, 0.80)	NS
Boonen, 2016	High	WOMAC Total	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	-1.3 (-6.08, 3.48)	NS
Boonen, 2016	High	WOMAC Total	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-5.4 (-10.39, -0.41)	Conventional Instrumentation
Boonen, 2016	High	WOMAC Total	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-5.9 (-11.33, -0.47)	Conventional Instrumentation
Boonen, 2016	High	EQ-5D Total	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.03 (-0.05, -0.01)	Conventional Instrumentation
Boonen, 2016	High	EQ-5D Total	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.01 (-0.04, 0.02)	NS
Boonen, 2016	High	EQ-5D Total	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.01 (-0.04, 0.02)	NS
Boonen, 2016	High	EQ-5D Total	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.01 (-0.05, 0.03)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Boonen, 2016	High	EQ-5D VAS	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-8.7 (-13.48, -3.92)	Materialise NV
Boonen, 2016	High	EQ-5D VAS	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	-3.2 (-7.16, 0.76)	NS
Boonen, 2016	High	EQ-5D VAS	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-3.5 (-7.78, 0.78)	NS
Boonen, 2016	High	EQ-5D VAS	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-3.7 (-9.20, 1.80)	NS
Ollivier, 2016	High	KSS Objective	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-1 (-6.16, 4.16)	NS
Ollivier, 2016	High	KSS Objective	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	3 (-1.05, 7.05)	NS
Ollivier, 2016	High	KSS Objective	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	4 (1.21, 6.79)	Materialise NV
Maus, 2018	High	KSS Total	Preop.	Imprint	Conventional Instrumentation	Mean Difference	-1.2 (-7.65, 5.25)	NS
Maus, 2018	High	KSS Total	Postop.	Imprint	Conventional Instrumentation	Mean Difference	-5.9 (-12.77, 0.97)	NS
Maus, 2018	High	KSS Total	Preop.	Imprint	Conventional Instrumentation	Mean Difference	1.1 (-8.98, 11.18)	NS
Maus, 2018	High	KSS Total	Postop.	Imprint	Conventional Instrumentation	Mean Difference	-41.3 (-53.79, -28.81)	Conventional Instrumentation
Stolarczyk, 2018	High	KSS Total	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.1 (-6.79, 6.59)	NS
Stolarczyk, 2018	High	KSS Total	12 wks.	Visionaire System	Conventional Instrumentation	Mean Difference	4.6 (-5.04, 14.24)	NS
Kosse, 2018	High	KSS Total	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	KSS Total	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kosse, 2018	High	KSS Total	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	KSS Total	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kotela, 2015	High	KSS Total	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-5.2 (-11.37, 0.97)	NS
Kotela, 2015	High	KSS Total	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-8.6 (-19.58, 2.38)	NS
Kotela, 2015	High	WOMAC Total	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	1.2 (-4.08, 6.48)	NS
Kotela, 2015	High	KSS Total	Postop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-5.6 (-11.79, 0.59)	NS
Kotela, 2015	High	KSS Total	Postop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-13.6 (-24.89, -2.31)	Conventional Instrumentation
Kotela, 2015	High	WOMAC Total	Postop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	0.8 (-5.23, 6.83)	NS
Schotanus, 2019	High	Oxford Knee Score	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	0.7 (-1.89, 3.29)	NS
Schotanus, 2019	High	Oxford Knee Score	3 mos.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	3.1 (0.12, 6.08)	Conventional Instrumentation
Schotanus, 2019	High	Oxford Knee Score	1 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	1 (-1.52, 3.52)	NS
Schotanus, 2019	High	Oxford Knee Score	2 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	0.1 (-2.54, 2.74)	NS
Schotanus, 2019	High	Oxford Knee Score	5 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	1.9 (-0.83, 4.63)	NS
Schotanus, 2019	High	WOMAC Total	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-4.3 (-9.40, 0.80)	NS
Schotanus, 2019	High	WOMAC Total	3 mos.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-1.3 (-6.08, 3.48)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Schotanus, 2019	High	WOMAC Total	1 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-5.4 (-10.38, -0.42)	Conventional Instrumentation
Schotanus, 2019	High	WOMAC Total	2 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-5.9 (-11.32, -0.48)	Conventional Instrumentation
Schotanus, 2019	High	WOMAC Total	5 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-6.3 (-11.76, -0.84)	Conventional Instrumentation
Schotanus, 2019	High	EQ-5D Total	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.03 (-0.05, -0.01)	Conventional Instrumentation
Schotanus, 2019	High	EQ-5D Total	3 mos.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.01 (-0.04, 0.02)	NS
Schotanus, 2019	High	EQ-5D Total	1 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.01 (-0.04, 0.02)	NS
Schotanus, 2019	High	EQ-5D Total	2 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.01 (-0.05, 0.03)	NS
Schotanus, 2019	High	EQ-5D Total	5 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.01 (-0.05, 0.03)	NS
Schotanus, 2019	High	EQ-5D VAS	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-8.7 (-13.47, -3.93)	Signature Personalized Patient Care System
Schotanus, 2019	High	EQ-5D VAS	3 mos.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-3.2 (-7.15, 0.75)	NS
Schotanus, 2019	High	EQ-5D VAS	1 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-3.5 (-7.78, 0.78)	NS
Schotanus, 2019	High	EQ-5D VAS	2 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-3.7 (-9.20, 1.80)	NS
Schotanus, 2019	High	EQ-5D VAS	5 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-3.3 (-8.21, 1.61)	NS
Schotanus, 2019	High	KSS Total	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-1.3 (-5.56, 2.96)	NS
Schotanus, 2019	High	KSS Total	3 mos.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.8 (-5.89, 4.29)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Schotanus, 2019	High	KSS Total	1 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.6 (-5.16, 3.96)	NS
Schotanus, 2019	High	KSS Total	2 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.3 (-4.98, 4.38)	NS
Schotanus, 2019	High	KSS Total	5 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	0.1 (-3.02, 3.22)	NS

Table 218209: PICO 13- Patient Specific Technology vs. Standard Technology- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yan, 2015	High	KSS Function	Preop.	Patient Specific Technology	Control	Mean Difference	-0.3 (-7.93, 7.33)	NS
Yan, 2015	High	KSS Function	Postop 3 mos.	Patient Specific Technology	Control	Mean Difference	-0.7 (-6.75, 5.35)	NS
Yan, 2015	High	ROM (deg)	Preop.	Patient Specific Technology	Control	Mean Difference	5 (-3.84, 13.84)	NS
Yan, 2015	High	ROM (deg)	Postop 3 mos.	Patient Specific Technology	Control	Mean Difference	-0.9 (-8.01, 6.21)	NS
Turgeon, 2019	High	UCLA Activity Score	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	1 (0.19, 1.81)	Visionaire System
Turgeon, 2019	High	UCLA Activity Score (Improvement)	1 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.8 (-1.75, 0.15)	NS
Turgeon, 2019	High	UCLA Activity Score (Improvement)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.6 (-1.60, 0.40)	NS
Teeter, 2019	High	Maximum Total Point Motion (Tibial component)	6 mos.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.03 (-0.16, 0.10)	NS
Teeter, 2019	High	Maximum Total Point Motion (Tibial component)	1 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.09 (-0.22, 0.04)	NS
Teeter, 2019	High	Maximum Total Point Motion (Tibial component)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.13 (-0.28, 0.02)	NS
Teeter, 2019	High	Maximum Total Point Motion (Tibial component)	1 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.09 (-0.24, 0.06)	NS
Teeter, 2019	High	Maximum Total Point Motion (Tibial component)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.07 (-0.18, 0.04)	NS
Teeter, 2019	High	Maximum Total Point Motion (Femoral Component)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.02 (-0.32, 0.28)	NS
Teeter, 2019	High	SF-12 Physical	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	-1.6 (-6.85, 3.65)	NS
Teeter, 2019	High	SF-12 Physical	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	-2.1 (-7.93, 3.73)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Teeter, 2019	High	KSS Function	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	0.2 (-5.21, 5.61)	NS
Teeter, 2019	High	KSS Function	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	0.6 (-9.29, 10.49)	NS
Teeter, 2019	High	UCLA Activity Score	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	0 (-0.89, 0.89)	NS
Teeter, 2019	High	UCLA Activity Score	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.7 (-1.62, 0.22)	NS
Abane, 2018	High	KSS Function	3 mos.	MyKnee System - Medacta	Conventional Instrumentation	Mean Difference	-0.1 (-4.37, 4.17)	NS
Abane, 2018	High	KSS Function	3 mos.	Single Use MyKnee System	Conventional Instrumentation	Mean Difference	-2 (-6.44, 2.44)	NS
Van Leeuwen, 2017	High	KOOS Symptoms	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	5 (-1.89, 11.89)	NS
Van Leeuwen, 2017	High	KOOS Symptoms	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	7 (-0.33, 14.33)	NS
Van Leeuwen, 2017	High	KOOS Symptoms	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	2 (-5.33, 9.33)	NS
Van Leeuwen, 2017	High	KOOS Symptoms	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	4 (-2.30, 10.30)	NS
Van Leeuwen, 2017	High	KOOS ADL	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	2 (-4.30, 8.30)	NS
Van Leeuwen, 2017	High	KOOS ADL	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	3 (-4.48, 10.48)	NS
Van Leeuwen, 2017	High	KOOS ADL	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	1 (-6.88, 8.88)	NS
Van Leeuwen, 2017	High	KOOS ADL	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	7 (-0.90, 14.90)	NS
Van Leeuwen, 2017	High	Extension (deg)	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-1 (-3.04, 1.04)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Van Leeuwen, 2017	High	Extension (deg)	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	1 (-1.44, 3.44)	NS
Van Leeuwen, 2017	High	Extension (deg)	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-1 (-2.45, 0.45)	NS
Van Leeuwen, 2017	High	Extension (deg)	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	1 (-0.26, 2.26)	NS
Van Leeuwen, 2017	High	Flexion (deg)	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-2 (-8.06, 4.06)	NS
Van Leeuwen, 2017	High	Flexion (deg)	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	5 (-0.66, 10.66)	NS
Van Leeuwen, 2017	High	Flexion (deg)	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	1 (-3.90, 5.90)	NS
Van Leeuwen, 2017	High	Flexion (deg)	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	4 (-0.68, 8.68)	NS
Van Leeuwen, 2017	High	EQ-5D-3L Mobility	Preop.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Mobility	3 mos.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Mobility	1 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Mobility	2 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Self-Care	Preop.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Self-Care	3 mos.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Van Leeuwen, 2017	High	EQ-5D-3L Self-Care	1 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Self-Care	2 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Abane, 2015	High	KSS Function	3 mos.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Huijbregts, 2016	High	SF-12 Physical	Preop.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Huijbregts, 2016	High	SF-12 Physical	3 mos.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Huijbregts, 2016	High	SF-12 Physical	1 yrs.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Sun, 2020	High	ROM (deg)	Postop.	MIMICS/SIEMENS NX	Conventional Instrumentation	Mean Difference	0.8 (-4.99, 6.59)	NS
Boonen, 2016	High	Poor ROM (deg)	Postop.	Materialise NV	Conventional Instrumentation	RR	0.99(0.39,2.51)	NS
Ollivier, 2016	High	KSS Function	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	3 (-2.83, 8.83)	NS
Ollivier, 2016	High	KSS Function	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	-2 (-7.83, 3.83)	NS
Ollivier, 2016	High	KSS Function	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-1 (-4.30, 2.30)	NS
Ollivier, 2016	High	KOOS Symptoms	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-2 (-6.08, 2.08)	NS
Ollivier, 2016	High	KOOS Symptoms	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	3 (-1.81, 7.81)	NS
Ollivier, 2016	High	KOOS Symptoms	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-2 (-6.08, 2.08)	NS
Ollivier, 2016	High	KOOS ADL	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	1 (-4.37, 6.37)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ollivier, 2016	High	KOOS ADL	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	3 (-3.60, 9.60)	NS
Ollivier, 2016	High	KOOS ADL	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	3 (-2.09, 8.09)	NS
Ollivier, 2016	High	SF-12 Physical	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-3 (-6.08, 0.08)	NS
Ollivier, 2016	High	SF-12 Physical	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	0 (-3.54, 3.54)	NS
Ollivier, 2016	High	SF-12 Physical	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-3 (-8.83, 2.83)	NS
Maus, 2018	High	KSS Function	Preop.	Imprint	Conventional Instrumentation	Mean Difference	2.2 (-3.70, 8.10)	NS
Maus, 2018	High	KSS Function	Postop.	Imprint	Conventional Instrumentation	Mean Difference	-5.4 (-13.60, 2.80)	NS
Maus, 2018	High	KSS ROM	Preop.	Imprint	Conventional Instrumentation	Mean Difference	3.9 (-2.85, 10.65)	NS
Maus, 2018	High	KSS ROM	Postop.	Imprint	Conventional Instrumentation	Mean Difference	-2.1 (-7.08, 2.88)	NS
Stolarczyk, 2018	High	KSS Function	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	-1.7 (-11.32, 7.92)	NS
Stolarczyk, 2018	High	KSS Function	12 wks.	Visionaire System	Conventional Instrumentation	Mean Difference	1.1 (-7.16, 9.36)	NS
Kosse, 2018	High	KSS Function	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	UCLA Activity Score	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	KOOS Symptoms	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	KOOS ADL	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kosse, 2018	High	KSS Function	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	UCLA Activity Score	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	KOOS Symptoms	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	KOOS ADL	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kotela, 2015	High	KSS Function	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-3.4 (-10.88, 4.08)	NS
Kotela, 2015	High	WOMAC Stiffness	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	0.7 (-0.02, 1.42)	NS
Kotela, 2015	High	WOMAC Function	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	0.9 (-2.98, 4.78)	NS
Kotela, 2015	High	KSS Function	Postop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-7.9 (-14.96, -0.84)	Conventional Instrumentation
Kotela, 2015	High	WOMAC Stiffness	Postop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.2 (-0.86, 0.46)	NS
Kotela, 2015	High	WOMAC Function	Postop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	0.8 (-3.91, 5.51)	NS

Table 219210: PICO 13- Patient Specific Technology vs. Standard Technology- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Turgeon, 2019	High	HKA Angle (deg)	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	1.5 (-2.08, 5.08)	NS
Turgeon, 2019	High	HKA Angle (deg)	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	0.2 (-1.39, 1.79)	NS
Turgeon, 2019	High	Operation Time (min)	Intraop.	Visionaire System	Conventional Instrumentation	Mean Difference	7.2 (-1.03, 15.43)	NS
Turgeon, 2019	High	Length of Stay (days)	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.2 (-1.31, 0.91)	NS
Teeter, 2019	High	Operation Time (min)	Intraop.	Visionaire System	Conventional Instrumentation	Mean Difference	6.1 (0.55, 11.65)	Conventional Instrumentation
Teeter, 2019	High	Operating Theatre-Total (min)	Intraop.	Visionaire System	Conventional Instrumentation	Mean Difference	10.8 (1.01, 20.59)	Conventional Instrumentation
Teeter, 2019	High	SF-12 Mental	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	7.5 (2.44, 12.56)	Visionaire System
Teeter, 2019	High	SF-12 Mental	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	1.7 (-2.38, 5.78)	NS
Teeter, 2019	High	Procedure and Inpatient Stay (CAD$)	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	1787.38 (972.16, 2602.60)	Conventional Instrumentation
Van Leeuwen, 2017	High	Hemoglobin (g/dL)	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.1 (-0.65, 0.45)	NS
Van Leeuwen, 2017	High	Hemoglobin (g/dL)	Postop.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.4 (-0.95, 0.15)	NS
Van Leeuwen, 2017	High	Operation Time (min)	Periop.	Materialise NV	Conventional Instrumentation	Mean Difference	-5 (-15.12, 5.12)	NS
Van Leeuwen, 2017	High	Length of Stay (days)	Periop.	Materialise NV	Conventional Instrumentation	Mean Difference	0 (-1.42, 1.42)	NS
Huijbregts, 2016	High	SF-12 Mental	Preop.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Huijbregts, 2016	High	SF-12 Mental	3 mos.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Huijbregts, 2016	High	SF-12 Mental	1 yrs.	Visionaire System	Conventional Instrumentation	Author Reported - Mann-Whitney's	N/A	NS
Huijbregts, 2016	High	Operation Time (min)	Intraop.	Visionaire System	Conventional Instrumentation	Mean Difference	-3.4 (-8.69, 1.89)	NS
Sun, 2020	High	Operation Time (min)	Intraop.	MIMICS/SIEMENS NX	Conventional Instrumentation	Mean Difference	13.7 (11.96, 15.44)	Conventional Instrumentation
Sun, 2020	High	Blood Loss (Volume (mL))	Postop.	MIMICS/SIEMENS NX	Conventional Instrumentation	Mean Difference	-46.9 (-51.86, -41.94)	MIMICS/SIEMENSNX
Vide, 2017	High	Operation Time (min)	Intraop.	Visionaire System	Conventional Instrumentation	Mean Difference	-18 (-25.20, -10.80)	Visionaire System
Vide, 2017	High	Length of Stay (days)	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.7 (-1.20, -0.20)	Visionaire System
Vide, 2017	High	Blood Transfusions (Units)	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	-0.18 (-0.33, -0.03)	Visionaire System
Vide, 2017	High	Patients Received Blood Transfusion	Postop.	Visionaire System	Conventional Instrumentation	Author Reported - chi-sq test	N/A	PT Specific Technology
Vide, 2017	High	Hemoglobin Drop (g/dL)	24 hrs	Visionaire System	Conventional Instrumentation	Mean Difference	-0.3 (-0.76, 0.16)	NS
Vide, 2017	High	Hematocrit Drop	24 hrs	Visionaire System	Conventional Instrumentation	Mean Difference	-1 (-2.33, 0.33)	NS
Silva, 2020	High	Operation Time (min)	Intraop.	TruMatch Personal Solutions	Conventional Instrumentation	Mean Difference	-12.9 (-34.82, 9.02)	NS
Silva, 2020	High	Hemoglobin (g/dL)	Postop.	TruMatch Personal Solutions	Conventional Instrumentation	Mean Difference	-0.6 (-1.12, -0.08)	Conventional Instrumentation
Silva, 2020	High	Hemoglobin Drop (g/dL)	Postop.	TruMatch Personal Solutions	Conventional Instrumentation	Mean Difference	0.6 (0.15, 1.05)	Conventional Instrumentation
Silva, 2020	High	Patients Received Blood Transfusion	Postop.	TruMatch Personal Solutions	Conventional Instrumentation	RR	5.00(0.61,41.08)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Silva, 2020	High	Length of Stay (days)	Postop.	TruMatch Personal Solutions	Conventional Instrumentation	Mean Difference	0.5 (-1.49, 2.49)	NS
Ollivier, 2016	High	SF-12 Mental	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-2 (-4.79, 0.79)	NS
Ollivier, 2016	High	SF-12 Mental	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	0 (-4.58, 4.58)	NS
Ollivier, 2016	High	SF-12 Mental	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	1 (-3.55, 5.55)	NS
Maus, 2018	High	Operation Time (min)	Intraop.	Imprint	Conventional Instrumentation	Mean Difference	-5.7 (-14.05, 2.65)	NS
Maus, 2018	High	Blood Loss (Volume (mL))	Intraop.	Imprint	Conventional Instrumentation	Mean Difference	-38 (-94.58, 18.58)	NS
Maus, 2018	High	Length of Stay (days)	Intraop.	Imprint	Conventional Instrumentation	Mean Difference	0.1 (-0.55, 0.75)	NS
Maus, 2018	High	Follow-up Time	Postop.	Imprint	Conventional Instrumentation	Mean Difference	-11.9 (-25.23, 1.43)	NS
Stolarczyk, 2018	High	Operation Time (min)	Intraop.	Visionaire System	Conventional Instrumentation	Mean Difference	32 (24.66, 39.34)	Conventional Instrumentation
Stolarczyk, 2018	High	Length of Stay (days)	Postop.	Visionaire System	Conventional Instrumentation	Mean Difference	2.2 (0.36, 4.04)	Conventional Instrumentation
Kotela, 2015	High	Blood Loss (Volume (mL))	Periop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-150 (-342.26, 42.26)	NS
Kotela, 2015	High	Length of Stay (days)	Periop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	0 (-1.15, 1.15)	NS
Kotela, 2015	High	Blood Transfusions (Units)	Periop.	Signature Personalized Patient Care System	Conventional Instrumentation	RR	0.19(0.02,1.55)	NS

Table 220211: PICO 13- Patient Specific Technology vs. Standard Technology- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Turgeon, 2019	High	Pain Catastrophizing Scale	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	-3.4 (-9.88, 3.08)	NS
Turgeon, 2019	High	Pain Catastrophizing Scale (Improvement)	1 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	-1.4 (-8.52, 5.72)	NS
Turgeon, 2019	High	Pain Catastrophizing Scale (Improvement)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	1.6 (-6.03, 9.23)	NS
Turgeon, 2019	High	VAS Pain	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	-5.8 (-17.65, 6.05)	NS
Turgeon, 2019	High	VAS Pain (Improvement)	1 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	1.7 (-16.33, 19.73)	NS
Turgeon, 2019	High	VAS Pain (Improvement)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	5.5 (-12.52, 23.52)	NS
Van Leeuwen, 2017	High	EQ-5D-3L Pain/Discomfort	Preop.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Pain/Discomfort	3 mos.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Pain/Discomfort	1 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Pain/Discomfort	2 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	VAS Pain	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	0 (-0.98, 0.98)	NS
Van Leeuwen, 2017	High	VAS Pain	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.6 (-1.45, 0.25)	NS
Van Leeuwen, 2017	High	VAS Pain	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.2 (-1.03, 0.63)	NS
Van Leeuwen, 2017	High	VAS Pain	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-1.1 (-1.95, -0.25)	Materialise NV

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Boonen, 2016	High	VAS Pain	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-3.1 (-9.17, 2.97)	NS
Boonen, 2016	High	VAS Pain	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	-0.6 (-7.50, 6.30)	NS
Boonen, 2016	High	VAS Pain	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	2.6 (-4.45, 9.65)	NS
Boonen, 2016	High	VAS Pain	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	3 (-4.17, 10.17)	NS
Boonen, 2016	High	Persistent Pain	Postop.	Materialise NV	Conventional Instrumentation	RD	0.02(-0.01,0.06)	NS
Ollivier, 2016	High	KOOS Pain	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	1 (-4.09, 6.09)	NS
Ollivier, 2016	High	KOOS Pain	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	4 (-2.07, 10.07)	NS
Ollivier, 2016	High	KOOS Pain	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	1 (-3.81, 5.81)	NS
Stolarczyk, 2018	High	VAS Pain	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	0 (-0.84, 0.84)	NS
Stolarczyk, 2018	High	VAS Pain	12 wks.	Visionaire System	Conventional Instrumentation	Mean Difference	0.2 (-0.63, 1.03)	NS
Kosse, 2018	High	Kujala Anterior Knee Pain Scale	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	KOOS Pain	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	VAS Pain	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	Kujala Anterior Knee Pain Scale	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	VAS Pain	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kosse, 2018	High	KOOS Pain	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kotela, 2015	High	WOMAC Pain	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.4 (-1.63, 0.83)	NS
Kotela, 2015	High	VAS Pain	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.2 (-6.99, 6.59)	NS
Kotela, 2015	High	WOMAC Pain	Postop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	0.2 (-0.85, 1.25)	NS
Kotela, 2015	High	VAS Pain	Postop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-2.3 (-9.12, 4.52)	NS
Schotanus, 2019	High	VAS Pain	Preop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.7 (-6.39, 4.99)	NS
Schotanus, 2019	High	VAS Pain	3 mos.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	-0.6 (-7.51, 6.31)	NS
Schotanus, 2019	High	VAS Pain	1 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	2.6 (-4.45, 9.65)	NS
Schotanus, 2019	High	VAS Pain	2 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	3 (-4.16, 10.16)	NS
Schotanus, 2019	High	VAS Pain	5 yrs.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	1.3 (-3.99, 6.59)	NS

Table 221212: PICO 13- Patient Specific Technology vs. Standard Technology- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Turgeon, 2019	High	VAS Satisfaction	Preop.	Visionaire System	Conventional Instrumentation	Mean Difference	-2.6 (-15.86, 10.66)	NS
Turgeon, 2019	High	VAS Satisfaction (Improvement)	1 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	1.7 (-14.46, 17.86)	NS
Turgeon, 2019	High	VAS Satisfaction (Improvement)	2 yrs.	Visionaire System	Conventional Instrumentation	Mean Difference	6 (-10.33, 22.33)	NS
Van Leeuwen, 2017	High	KOOS QOL	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-3 (-9.30, 3.30)	NS
Van Leeuwen, 2017	High	KOOS QOL	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	7 (-2.92, 16.92)	NS
Van Leeuwen, 2017	High	KOOS QOL	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	6 (-4.57, 16.57)	NS
Van Leeuwen, 2017	High	KOOS QOL	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	10 (0.90, 19.10)	Materialise NV
Van Leeuwen, 2017	High	EQ-5D-3LAnxiety/Depression	Preop.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3LAnxiety/Depression	3 mos.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3LAnxiety/Depression	1 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3LAnxiety/Depression	2 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Ollivier, 2016	High	KSS Satisfaction	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-2 (-4.58, 0.58)	NS
Ollivier, 2016	High	KSS Satisfaction	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	-1 (-4.08, 2.08)	NS
Ollivier, 2016	High	KSS Satisfaction	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-2 (-4.02, 0.02)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ollivier, 2016	High	KSS Expectation	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	-1 (-2.60, 0.60)	NS
Ollivier, 2016	High	KSS Expectation	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	-1 (-2.29, 0.29)	NS
Ollivier, 2016	High	KSS Expectation	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	0 (-1.29, 1.29)	NS
Ollivier, 2016	High	KOOS QoL	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	2 (-2.31, 6.31)	NS
Ollivier, 2016	High	KOOS QoL	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	4 (-1.87, 9.87)	NS
Ollivier, 2016	High	KOOS QoL	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	3 (-3.09, 9.09)	NS
Kosse, 2018	High	KOOS QoL	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	VAS Satisfaction	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	KOOS QoL	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kotela, 2015	High	VAS Satisfaction	Postop.	Signature Personalized Patient Care System	Conventional Instrumentation	Mean Difference	0.9 (-3.63, 5.43)	NS

Table 222213: PICO 13- Patient Specific Technology vs. Standard Technology- Return to activity

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Van Leeuwen, 2017	High	KOOS Sport	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	3 (-1.90, 7.90)	NS
Van Leeuwen, 2017	High	KOOS Sport	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	9 (-0.58, 18.58)	NS
Van Leeuwen, 2017	High	KOOS Sport	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	5 (-5.35, 15.35)	NS
Van Leeuwen, 2017	High	KOOS Sport	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	6 (-4.72, 16.72)	NS
Van Leeuwen, 2017	High	EQ-5D-3L Usual Activities	Preop.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Usual Activities	3 mos.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Usual Activities	1 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Van Leeuwen, 2017	High	EQ-5D-3L Usual Activities	2 yrs.	Materialise NV	Conventional Instrumentation	Author Reported - Multilevel Logistic Regression	N/A	NS
Ollivier, 2016	High	KOOS Sport	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	2 (-3.59, 7.59)	NS
Ollivier, 2016	High	KOOS Sport	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	-19 (-27.86, -10.14)	Conventional Instrumentation
Ollivier, 2016	High	KOOS Sport	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	-2 (-11.87, 7.87)	NS
Kosse, 2018	High	KOOS Sport	Baseline.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS
Kosse, 2018	High	KOOS Sport	12 mos.	Genesis II PS	Conventional Instrumentation	Author Reported - t-test or MW U	N/A	NS

Table 223214: PICO 13- Patient Specific Technology vs. Standard Technology- pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Van Leeuwen, 2017	High	KOOS Pain	Preop.	Materialise NV	Conventional Instrumentation	Mean Difference	4 (-3.33, 11.33)	NS
Van Leeuwen, 2017	High	KOOS Pain	3 mos.	Materialise NV	Conventional Instrumentation	Mean Difference	4 (-4.29, 12.29)	NS
Van Leeuwen, 2017	High	KOOS Pain	1 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	2 (-6.49, 10.49)	NS
Van Leeuwen, 2017	High	KOOS Pain	2 yrs.	Materialise NV	Conventional Instrumentation	Mean Difference	9 (1.50, 16.50)	Materialise NV

Table 224215: PICO 14- Peri-articular Local Infiltration vs. Control- Opioid Use

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ikeuchi, 2013	High	Fentanyl Use	Postop.	Peri-articular Local Infiltration: 20 mL of 0.75%Ropivacaine, 6.6 mg of dexamethasone, and 400mg of isepamicin	Control: Saline	Author Reported - Mann--test; ANOVA;	N/A	NS
Fitz, 2021	High	Opioid Use	Postop 8 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS
Fitz, 2021	High	Opioid Use	Postop 16 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS
Fitz, 2021	High	Opioid Use	Postop 24 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS
Fitz, 2021	High	Opioid Use	Postop 32 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS
Fitz, 2021	High	Opioid Use	Postop 40 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS
Fitz, 2021	High	Opioid Use	Postop 48 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS

Table 225216: PICO 14- Peri-articular Local Infiltration vs. Control- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ikeuchi, 2013	High	C-Reactive Protein	Postop.	Peri-articular Local Infiltration: 20 mL of 0.75%Ropivacaine, 6.6 mg of dexamethasone, and 400 mg of isepamicin	Control: Saline	Author Reported - Mann--test; ANOVA;	N/A	Peri-articular Infiltration
Ikeuchi, 2013	High	C-Reactive Protein	Postop 3 days	Peri-articular Local Infiltration: 20 mL of 0.75%Ropivacaine, 6.6 mg of dexamethasone, and 400 mg of isepamicin	Control: Saline	Author Reported - Mann--test; ANOVA;	N/A	Peri-articular Infiltration
Ikeuchi, 2013	High	C-Reactive Protein	Postop 7 days	Peri-articular Local Infiltration: 20 mL of 0.75%Ropivacaine, 6.6 mg of dexamethasone, and 400 mg of isepamicin	Control: Saline	Author Reported - Mann--test; ANOVA;	N/A	Peri-articular Infiltration

Table 226217: PICO 14- Peri-articular Local Infiltration vs. Control- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ikeuchi, 2013	High	VAS Pain	Postop.	Peri-articular Local Infiltration: 20 mL of 0.75%Ropivacaine, 6.6 mg of dexamethasone, and 400 mg of isepamicin	Control: Saline	Author Reported - Mann--test; ANOVA;	N/A	Peri-articular Infiltration
Ikeuchi, 2013	High	VAS Pain	Postop 1 days	Peri-articular Local Infiltration: 20 mL of 0.75%Ropivacaine, 6.6 mg of dexamethasone, and 400 mg of isepamicin	Control: Saline	Author Reported - Mann--test; ANOVA;	N/A	Peri-articular Infiltration
Ikeuchi, 2013	High	VAS Pain	Postop 3 days	Peri-articular Local Infiltration: 20 mL of 0.75%Ropivacaine, 6.6 mg of dexamethasone, and 400 mg of isepamicin	Control: Saline	Author Reported - Mann--test; ANOVA;	N/A	Peri-articular Infiltration
Fitz, 2021	High	VAS Pain	Postop 8 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS
Fitz, 2021	High	VAS Pain	Postop 16 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS
Fitz, 2021	High	VAS Pain	Postop 24 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS
Fitz, 2021	High	VAS Pain	Postop 32 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS
Fitz, 2021	High	VAS Pain	Postop 40 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS
Fitz, 2021	High	VAS Pain	Postop 48 hrs	Peri-articular Local Infiltration	Control	Author Reported - 2-Sample t-test; Wilcoxon Rank-sum test;	N/A	NS

Table 227218: PICO 16- Post-op Discharge to Nursing Facility/Acute Rehab vs. Discharge to Home with Services- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Christensen, 2020	Low	Stair Climb Test (s)	Baseline.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Mean Difference	-3.4 (-6.77, -0.03)	OPT 2-3x weekly TX for 1 month
Christensen, 2020	Low	Timed Up and Go Test (s)	Baseline.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Mean Difference	-0.3 (-1.20, 0.60)	NS
Christensen, 2020	Low	6-Minute Walk Test ((m))	Baseline.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Mean Difference	18.1 (-14.18, 50.38)	NS
Christensen, 2020	Low	Quadriceps Strength	Baseline.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Mean Difference	-0.11 (-0.26, 0.04)	NS
Christensen, 2020	Low	Quadriceps Activation	Baseline.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Mean Difference	-1.4 (-6.67, 3.87)	NS
Christensen, 2020	Low	Hamstring Strength	Baseline.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Mean Difference	-0.03 (-0.11, 0.05)	NS
Christensen, 2020	Low	Stair Climb Test (s)	1 mos.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Author Reported - Covariance Model	-10.30(-14.10, -6.55)	Directly to OPT
Christensen, 2020	Low	Timed Up and Go Test (s)	1 mos.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Author Reported - Covariance Model	-2.01(-2.97, -1.04)	Directly to OPT
Christensen, 2020	Low	6-Minute Walk Test ((m))	1 mos.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Author Reported - Covariance Model	53.80(29.40,78.20)	Directly to OPT
Christensen, 2020	Low	Quadriceps Strength	1 mos.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Author Reported - Covariance Model	0.10(0.02,0.18)	Directly to OPT
Christensen, 2020	Low	Quadriceps Activation	1 mos.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Author Reported - Covariance Model	2.57(-3.23,8.36)	NS
Christensen, 2020	Low	Hamstring Strength	1 mos.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Author Reported - Covariance Model	0.08(0.03,0.13)	Directly to OPT

Table 228219: PICO 16- Post-op Discharge to Nursing Facility/Acute Rehab vs. Discharge to Home with Services- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Christensen, 2020	Low	VAS Pain	1 mos.	OPT 2-3x weekly tx for 1 month	2-3x weekly tx at home for 2 weeks then OPT for 2 weeks	Author Reported - Covariance Model	-0.53(-1.03, -0.04)	Directly to OPT

Table 229220: PICO 16- Post-op Discharge to Nursing Facility/Acute Rehab vs. Discharge to Home Without Services- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
McLawhorn, 2017	Low	Total Adverse Events	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - Multivariable Logistic Regression	1.25(1.16,1.35)	Discharge to Home
McLawhorn, 2017	Low	Total Major Adverse Events	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - Multivariable Logistic Regression	1.25(1.13,1.37)	Discharge to Home
McLawhorn, 2017	Low	Wound Complications	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - Multivariable Logistic Regression	1.01(0.87,1.18)	NS
McLawhorn, 2017	Low	Septic Complications	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - Multivariable Logistic Regression	1.71(1.26,2.33)	Discharge to Home
McLawhorn, 2017	Low	Cardiac Complications	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - Multivariable Logistic Regression	1.14(0.75,1.75)	NS
McLawhorn, 2017	Low	Respiratory Complications	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - Multivariable Logistic Regression	1.80(1.29,2.51)	Discharge to Home
McLawhorn, 2017	Low	Deep Vein Thrombosis/Pulmonary Embolism	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - Multivariable Logistic Regression	1.58(1.34,1.85)	Discharge to Home
McLawhorn, 2017	Low	Urologic/Renal Complications	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - Multivariable Logistic Regression	1.34(1.13,1.58)	Discharge to Home
McLawhorn, 2017	Low	Death/Mortality	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - Multivariable Logistic Regression	1.61(0.99,2.60)	NS
McLawhorn, 2017	Low	Total Adverse Events	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - chi-sq test	N/A	Discharge to Home
McLawhorn, 2017	Low	Total Major Adverse Events	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - chi-sq test	N/A	Discharge to Home
McLawhorn, 2017	Low	Wound Complications	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - chi-sq test	N/A	Discharge to Home
McLawhorn, 2017	Low	Septic Complications	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - chi-sq test	N/A	Discharge to Home

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
McLawhorn, 2017	Low	Cardiac Complications	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - chi-sq test	N/A	NS
McLawhorn, 2017	Low	Respiratory Complications	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - chi-sq test	N/A	Discharge to Home
McLawhorn, 2017	Low	Deep Vein Thrombosis/Pulmonary Embolism	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - chi-sq test	N/A	Discharge to Home
McLawhorn, 2017	Low	Urologic/Renal Complications	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - chi-sq test	N/A	Discharge to Home
McLawhorn, 2017	Low	Death/Mortality	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - chi-sq test	N/A	Discharge to Home
Padgett, 2018	Low	Manipulation	Postop.	Inpatient Rehab	Discharge to Home	RR	1.02(0.69,1.51)	NS
Padgett, 2018	Low	Pulmonary Embolism	6 mos.	Inpatient Rehab	Discharge to Home	RR	0.90(0.37,2.21)	NS
Padgett, 2018	Low	Deep Vein Thrombosis	6 mos.	Inpatient Rehab	Discharge to Home	RR	0.69(0.32,1.48)	NS
Padgett, 2018	Low	Infection (Infection)	6 mos.	Inpatient Rehab	Discharge to Home	RR	0.86(0.46,1.60)	NS
Padgett, 2018	Low	Bleeding	6 mos.	Inpatient Rehab	Discharge to Home	RR	1.89(0.85,4.22)	NS
Padgett, 2018	Low	Pneumonia	6 mos.	Inpatient Rehab	Discharge to Home	RR	1.00(0.42,2.39)	NS
Padgett, 2018	Low	Stroke	6 mos.	Inpatient Rehab	Discharge to Home	RR	3.00(0.31,28.80)	NS
Padgett, 2018	Low	Myocardial Infarction or Stroke	6 mos.	Inpatient Rehab	Discharge to Home	RR	0.67(0.11,3.98)	NS
Padgett, 2018	Low	Dislocation	6 mos.	Inpatient Rehab	Discharge to Home	RR	0.43(0.11,1.65)	NS
Padgett, 2018	Low	Fracture	6 mos.	Inpatient Rehab	Discharge to Home	RR	7.00(0.86,56.81)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Padgett, 2018	Low	Manipulation	Postop.	Discharge to Skilled Nursing Facility	Discharge to Home	RR	1.13(0.69,1.85)	NS
Padgett, 2018	Low	Pulmonary Embolism	6 mos.	Discharge to Skilled Nursing Facility	Discharge to Home	RR	0.99(0.31,3.13)	NS
Padgett, 2018	Low	Deep Vein Thrombosis	6 mos.	Discharge to Skilled Nursing Facility	Discharge to Home	RR	1.23(0.53,2.86)	NS
Padgett, 2018	Low	Infection (Infection)	6 mos.	Discharge to Skilled Nursing Facility	Discharge to Home	RR	1.53(0.77,3.02)	NS
Padgett, 2018	Low	Bleeding	6 mos.	Discharge to Skilled Nursing Facility	Discharge to Home	RR	2.47(0.98,6.17)	NS
Padgett, 2018	Low	Pneumonia	6 mos.	Discharge to Skilled Nursing Facility	Discharge to Home	RR	2.22(0.91,5.43)	NS
Padgett, 2018	Low	Stroke	6 mos.	Discharge to Skilled Nursing Facility	Discharge to Home	RR	4.93(0.45,54.26)	NS
Padgett, 2018	Low	Myocardial Infarction or Stroke	6 mos.	Discharge to Skilled Nursing Facility	Discharge to Home	RR	4.11(0.99,17.13)	NS
Padgett, 2018	Low	Dislocation	6 mos.	Discharge to Skilled Nursing Facility	Discharge to Home	RD	-0.01(-0.01, -0.00)	Discharge to Skilled Nursing Facility
Padgett, 2018	Low	Fracture	6 mos.	Discharge to Skilled Nursing Facility	Discharge to Home	RR	4.93(0.45,54.26)	NS
Padgett, 2018	Low	Total Revisions	6 mos.	Inpatient Rehab	Discharge to Home	RR	1.04(0.59,1.84)	NS
Padgett, 2018	Low	Total Revisions	6 mos.	Discharge to Skilled Nursing Facility	Discharge to Home	RR	1.50(0.78,2.89)	NS

Table 230221: PICO 16- Post-op Discharge to Nursing Facility/Acute Rehab vs. Discharge to Home Without Services- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Naylor, 2017	Low	Oxford Knee Score	90 days	Inpatient Rehab	Discharge to Home	Author Reported - Median Difference	N/A	NS
Naylor, 2017	Low	Oxford Knee Score	365 days	Inpatient Rehab	Discharge to Home	Author Reported - Median Difference	N/A	NS
Naylor, 2017	Low	EQ-5D VAS	35 days	Inpatient Rehab	Discharge to Home	Author Reported - Median Difference	N/A	Discharge to Home
Naylor, 2017	Low	EQ-5D VAS	90 days	Inpatient Rehab	Discharge to Home	Author Reported - Median Difference	N/A	NS
Naylor, 2017	Low	EQ-5D VAS	365 days	Inpatient Rehab	Discharge to Home	Author Reported - Median Difference	N/A	NS

Table 231222: PICO 16- Post-op Discharge to Nursing Facility/Acute Rehab vs. Discharge to Home Without Services- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
McLawhorn, 2017	Low	Readmissions	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - Multivariable Logistic Regression	1.81(1.50,2.18)	Discharge to Home
McLawhorn, 2017	Low	Readmissions	Post-discharge.	Discharge to Care facility	Discharge to Home	Author Reported - chi-sq test	N/A	Discharge to Home
Padgett, 2018	Low	Length of Stay (days)	Postop.	Inpatient Rehab	Discharge to Home	Mean Difference	-0.4 (-0.53, -0.27)	Inpatient Rehab
Padgett, 2018	Low	Length of Stay (days)	Postop.	Discharge to Skilled Nursing Facility	Discharge to Home	Mean Difference	-0.3 (-0.49, -0.11)	Discharge to Skilled Nursing Facility
Naylor, 2017	Low	Rehabilitation Costs	90 days	Inpatient Rehab	Discharge to Home	Author Reported - Median Difference	N/A	Discharge to Home
Naylor, 2017	Low	Patient time off work (>6wks)	90 days	Inpatient Rehab	Discharge to Home	Author Reported - Median Difference	-2.50(-12.60,7.60)	NS

Table 232223: PICO 16- Post-op Discharge to Nursing Facility/Acute Rehab vs. Discharge to Home Without Services- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Padgett, 2018	Low	WOMAC Pain	Preop.	Inpatient Rehab	Discharge to Home	Author Reported - t-test	N/A	Inpatient Rehab
Padgett, 2018	Low	WOMAC Pain	2 yrs.	Inpatient Rehab	Discharge to Home	Author Reported - t-test	N/A	NS
Padgett, 2018	Low	WOMAC Pain	.	Inpatient Rehab	Discharge to Home	Author Reported - t-test	N/A	NS

Table 233224: PICO 17- Robotics vs. Control- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Song, 2019	High	Total Revisions (MCL needling puncturing)	Postop.	Sensor-Assisted, VERASENSE	Manually balanced	RR	2.33(0.64,8.51)	NS
Song, 2019	High	Total Revisions (MCL distal attachment release)	Postop.	Sensor-Assisted, VERASENSE	Manually balanced	RR	3.00(0.86,10.43)	NS
Song, 2019	High	Total Revisions (Modification of tibial cut surface)	Postop.	Sensor-Assisted, VERASENSE	Manually balanced	RR	1.50(0.26,8.60)	NS
Song, 2019	High	Total Revisions (Posterior capsule release)	Postop.	Sensor-Assisted, VERASENSE	Manually balanced	RR	1.00(0.26,3.78)	NS
Kayani, 2018	Moderate	Wound Complications (Dehiscence)	Postop.	Robotic-guided	Conventional Jig-based	RR	1.00(0.06,15.44)	NS
Kim, 2020	High	Infection (Superficial Infection)	13 yrs.	ROBODOC	Conventional Jig-based	RR	1.00(0.25,3.98)	NS
Liow, 2017	High	Total Revisions	Postop.	ROBODOC	Conventional Jig-based	RD	0.06(-0.02,0.15)	NS
Song, 2013	High	Infection (Superficial Infection)	41 mos.	ROBODOC	Conventional Jig-based	RR	1.00(0.15,6.82)	NS
Song, 2013	High	Seroma at pin site	41 mos.	ROBODOC	Conventional Jig-based	RD	0.02(-0.02,0.06)	NS
Song, 2013	High	Patellar tendon abrasion	41 mos.	ROBODOC	Conventional Jig-based	RD	0.04(-0.01,0.09)	NS
Song, 2013	High	Skin Rash	41 mos.	ROBODOC	Conventional Jig-based	RD	0.02(-0.02,0.06)	NS
Song, 2013	High	Lymphatic Edema	41 mos.	ROBODOC	Conventional Jig-based	RD	0.02(-0.02,0.06)	NS
Song, 2013	High	Crepitus	41 mos.	ROBODOC	Conventional Jig-based	RD	0.02(-0.02,0.06)	NS
Song, 2013	High	Arrhythmia	41 mos.	ROBODOC	Conventional Jig-based	RD	0.04(-0.01,0.09)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Song, 2013	High	Pleural Effusion	41 mos.	ROBODOC	Conventional Jig-based	RR	0.33(0.04,3.10)	NS
Song, 2013	High	Incisional Skin Sloughing	41 mos.	ROBODOC	Conventional Jig-based	RD	-0.02(-0.06,0.02)	NS
Song, 2013	High	Gastrointestinal Complications	41 mos.	ROBODOC	Conventional Jig-based	RD	-0.04(-0.09,0.01)	NS
Song, 2013	High	Stroke	41 mos.	ROBODOC	Conventional Jig-based	RD	-0.02(-0.06,0.02)	NS
Song, 2013	High	Foot Numbness	41 mos.	ROBODOC	Conventional Jig-based	RD	-0.04(-0.09,0.01)	NS
Barrett, 2011	Moderate	Infection (Superficial Infection)	Postop.	Computer-Assisted Surgery	Conventional Jig-based	RD	0.01(-0.01,0.04)	NS
Barrett, 2011	Moderate	Injury to Extensor Mechanism	Postop.	Computer-Assisted Surgery	Conventional Jig-based	RD	0.01(-0.01,0.04)	NS
Barrett, 2011	Moderate	Wound Complications	Postop.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.05(0.15,7.27)	NS
Barrett, 2011	Moderate	Patellar Fracture	Postop.	Computer-Assisted Surgery	Conventional Jig-based	RD	-0.01(-0.03,0.01)	NS
Barrett, 2011	Moderate	Systemic adverse events (Mild to severe)	Postop.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.07(0.85,1.35)	NS
Liow, 2017	High	Infection (Superficial Infection)	Postop.	ROBODOC	Conventional Jig-based	RD	0.03(-0.03,0.09)	NS
Liow, 2017	High	Deep Vein Thrombosis/Pulmonary Embolism	Postop.	ROBODOC	Conventional Jig-based	RR	1.87(0.18,19.55)	NS
Liow, 2017	High	Delirium	Postop.	ROBODOC	Conventional Jig-based	RD	-0.03(-0.10,0.03)	NS
Liow, 2014	Moderate	Deep Vein Thrombosis/Pulmonary Embolism	6 mos.	ROBODOC	Conventional Jig-based	RR	0.94(0.06,14.28)	NS
Liow, 2014	Moderate	Infection (Superficial Infection)	6 mos.	ROBODOC	Conventional Jig-based	RD	0.03(-0.03,0.09)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liow, 2014	Moderate	Delirium	6 mos.	ROBODOC	Conventional Jig-based	RD	-0.03(-0.10,0.03)	NS
King, 2020	Low	Gastrointestinal Complications (Bleed)	90 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RR	1.44(0.09,22.82)	NS
King, 2020	Low	Stroke	90 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RD	-0.00(-0.01,0.00)	NS
King, 2020	Low	Deep Vein Thrombosis/Pulmonary Embolism	90 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RD	0.00(-0.00,0.01)	NS
King, 2020	Low	Femoral Neck Fracture	90 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RD	-0.00(-0.01,0.00)	NS
King, 2020	Low	Urinary Retention	90 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RD	-0.00(-0.01,0.00)	NS
King, 2020	Low	Disc Herniation	90 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RD	0.00(0.00,0.00)	NS
King, 2020	Low	Manipulation Under Anesthesia	30 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RD	-0.02(-0.04, -0.00)	Robotic Arm-Assisted: MAKO
King, 2020	Low	Infection (Superficial Infection)	30 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RD	-0.00(-0.01,0.00)	NS
King, 2020	Low	Emergency Department Visit	30 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RR	0.68(0.33,1.42)	NS
King, 2020	Low	Syncope and Collapse	30 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RR	0.48(0.05,4.57)	NS
King, 2020	Low	Swelling	30 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RR	0.21(0.03,1.65)	NS
King, 2020	Low	Dressing Problem	30 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RD	0.01(-0.00,0.02)	NS
King, 2020	Low	Chest Pain/Shortness of Breath	30 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RR	0.29(0.03,2.44)	NS
King, 2020	Low	Fall	30 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RR	0.72(0.07,7.86)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jeon, 2019	Low	Periprosthetic Fracture	9 yrs.	ROBODOC	Conventional Jig-based	RD	-0.05(-0.10, -0.00)	ROBODOC
Jeon, 2019	Low	Infection (Periprosthetic Joint Infection)	9 yrs.	ROBODOC	Conventional Jig-based	RD	-0.01(-0.04,0.01)	NS
Jeon, 2019	Low	Aseptic Loosening	9 yrs.	ROBODOC	Conventional Jig-based	RR	0.47(0.04,5.08)	NS
Jeon, 2019	Low	Tendon Rupture	9 yrs.	ROBODOC	Conventional Jig-based	RD	0.04(-0.00,0.08)	NS
Yang, 2017	Low	Infection (Infection)	10 yrs.	ROBODOC	Conventional Jig-based	RR	0.59(0.09,4.05)	NS
Yang, 2017	Low	Instability	10 yrs.	ROBODOC	Conventional Jig-based	RD	-0.02(-0.07,0.02)	NS
Yang, 2017	Low	Implant Survival	10 yrs.	ROBODOC	Conventional Jig-based	Author Reported - Log-Rank Test	N/A	NS
Yang, 2017	Low	Total Revisions	10 yrs.	ROBODOC	Conventional Jig-based	RR	0.39(0.07,2.27)	NS
Cho, 2019	High	Total Revisions (Infection)	11 yrs.	ROBODOC	Conventional Jig-based	RR	2.88(0.26,31.44)	NS
Cho, 2019	High	Total Revisions (Aseptic loosening)	11 yrs.	ROBODOC	Conventional Jig-based	RD	-0.01(-0.02,0.00)	NS
Cho, 2019	High	Total Revisions (Instability)	11 yrs.	ROBODOC	Conventional Jig-based	RD	-0.00(-0.01,0.00)	NS
Cho, 2019	High	Total Revisions (PE wears)	11 yrs.	ROBODOC	Conventional Jig-based	RD	-0.01(-0.02,0.00)	NS
Barrett, 2011	Moderate	Total Revisions	Postop.	Computer-Assisted Surgery	Conventional Jig-based	RR	3.15(0.33,29.65)	NS
Marchand, 2021	Low	Total Revisions	13 mos.	MAKO Robotic Arm–Assisted	Conventional Jig-based	RR	0.25(0.03,2.19)	NS
Mitchell, 2021	Low	Total Revisions	Postop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Mitchell, 2021	Low	Patellar Resurfacing rates	Postop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Mitchell, 2021	Low	Home Discharge Rates	Postop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Mitchell, 2021	Low	Manipulation	Postop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Mitchell, 2021	Low	Tibial Fracture	Intraop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	RD	-0.01(-0.03,0.01)	NS
Mitchell, 2021	Low	Infection (Infection)	Postop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	RD	-0.01(-0.03,0.01)	NS
Marchand, 2021	Low	Deep Vein Thrombosis/Pulmonary Embolism	2 mos.	MAKO Robotic Arm–Assisted	Conventional Jig-based	RR	1.00(0.06,15.71)	NS
Marchand, 2021	Low	Hemarthrosis	6 wks.	MAKO Robotic Arm–Assisted	Conventional Jig-based	RD	-0.01(-0.04,0.01)	NS
Marchand, 2021	Low	Patellar Fracture	12 mos.	MAKO Robotic Arm–Assisted	Conventional Jig-based	RD	-0.01(-0.04,0.01)	NS
Marchand, 2021	Low	Manipulation Under Anesthesia	4 mos.	MAKO Robotic Arm–Assisted	Conventional Jig-based	RR	1.00(0.06,15.71)	NS
Shaw, 2021	Low	Emergency Department Visit	90 days	MAKO Robotic Arm–Assisted	Conventional Jig-based	RR	1.04(0.70,1.55)	NS
Shaw, 2021	Low	Unplanned Procedure	90 days	MAKO Robotic Arm–Assisted	Conventional Jig-based	RR	0.49(0.21,1.15)	NS
Shaw, 2021	Low	Total Revisions	90 days	MAKO Robotic Arm–Assisted	Conventional Jig-based	RD	-0.01(-0.02, -0.01)	MAKO Robotic Arm–Assisted
Held, 2021	Low	Total Adverse Events	Postop.	NAVIO	Conventional Jig-based	RR	0.89(0.49,1.61)	NS
Held, 2021	Low	Surgical Site Complications	Postop.	NAVIO	Conventional Jig-based	RR	0.76(0.35,1.66)	NS
Held, 2021	Low	Patellar Tendon Rupture	Postop.	NAVIO	Conventional Jig-based	RR	0.99(0.06,15.65)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Held, 2021	Low	Fracture, No Reoperation	Postop.	NAVIO	Conventional Jig-based	RD	0.01(-0.01,0.03)	NS
Held, 2021	Low	Manipulation Under Anesthesia	Postop.	NAVIO	Conventional Jig-based	RR	0.33(0.03,3.13)	NS
Held, 2021	Low	Irrigation and Debridement, Polyethylene Exchange	Postop.	NAVIO	Conventional Jig-based	RD	0.02(-0.01,0.04)	NS
Held, 2021	Low	Revision for PJI	Postop.	NAVIO	Conventional Jig-based	RD	-0.01(-0.03,0.01)	NS
Held, 2021	Low	ORIF for Periprosthetic fracture	Postop.	NAVIO	Conventional Jig-based	RD	0.01(-0.01,0.03)	NS
Held, 2021	Low	Aseptic Loosening	Postop.	NAVIO	Conventional Jig-based	RR	0.99(0.06,15.65)	NS
Held, 2021	Low	Total Revisions	Postop.	NAVIO	Conventional Jig-based	RR	1.19(0.37,3.78)	NS

Table 234225: PICO 17- Robotics vs. Control- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ollivier, 2018	High	KSS Subjective	10 yrs.	Computer Based Navigation	Conventional Jig-based	Mean Difference	-2 (-7.35, 3.35)	NS
Ollivier, 2018	High	KSS Objective	10 yrs.	Computer Based Navigation	Conventional Jig-based	Mean Difference	3 (-2.82, 8.82)	NS
Ollivier, 2018	High	Forgotten Joint Score	10 yrs.	Computer Based Navigation	Conventional Jig-based	Mean Difference	1 (-1.10, 3.10)	NS
Kim, 2020	High	WOMAC Total	13 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-1 (-2.55, 0.55)	NS
Cho, 2019	High	HSS Total	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	1.5 (-1.04, 4.04)	NS
Cho, 2019	High	HSS Total	11 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	1.8 (1.06, 2.54)	ROBODOC
Cho, 2019	High	WOMAC Total	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	0.5 (-2.84, 3.84)	NS
Cho, 2019	High	WOMAC Total	11 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-2.9 (-5.79, -0.01)	ROBODOC
Song, 2013	High	HSS Total	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	6.8 (2.82, 10.78)	ROBODOC
Song, 2013	High	HSS Total	Postop.	ROBODOC	Conventional Jig-based	Mean Difference	1 (-1.16, 3.16)	NS
Song, 2013	High	WOMAC Total	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	-9.6 (-13.78, -5.42)	ROBODOC
Song, 2013	High	WOMAC Total	Postop.	ROBODOC	Conventional Jig-based	Mean Difference	-1.1 (-3.51, 1.31)	NS
Park, 2007	High	KSS Total	49 mos.	ROBODOC	Conventional Jig-based	Mean Difference	0.7 (-1.32, 2.72)	NS
Barrett, 2011	Moderate	KSS Total	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-2.6 (-8.06, 2.86)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Barrett, 2011	Moderate	KSS Total	12 mos.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	0.9 (-2.12, 3.92)	NS
Barrett, 2011	Moderate	WOMAC Total	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	0.2 (-4.74, 5.14)	NS
Barrett, 2011	Moderate	WOMAC Total	12 mos.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-0.6 (-3.62, 2.42)	NS
Liow, 2017	High	Oxford Knee Score	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	-4.6 (-9.02, -0.18)	Conventional Jig-based
Liow, 2017	High	Oxford Knee Score	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	0.3 (-3.42, 4.02)	NS
Liow, 2017	High	Oxford Knee Score	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	0.6 (-2.30, 3.50)	NS
Liow, 2017	High	KSS Total	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	0.3 (-7.77, 8.37)	NS
Liow, 2017	High	KSS Total	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	-4.3 (-12.59, 3.99)	NS
Liow, 2017	High	KSS Total	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-6.1 (-12.61, 0.41)	NS
Liow, 2017	High	SF-36 General Health	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	7.8 (-2.95, 18.55)	NS
Liow, 2017	High	SF-36 General Health	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	10.3 (0.59, 20.01)	ROBODOC
Liow, 2017	High	SF-36 General Health	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	6.9 (-3.71, 17.51)	NS
Petursson, 2018	High	KSS Total	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-3.6 (-8.32, 1.12)	NS
Petursson, 2018	High	KSS Total	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	0.5 (-4.94, 5.94)	NS
Petursson, 2018	High	KSS Total	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	4.1 (-2.48, 10.68)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Petursson, 2018	High	KSS Total (Highest score (N))	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RD	0.00(0.00,0.00)	NS
Petursson, 2018	High	EQ-5D VAS	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-1.7 (-7.46, 4.06)	NS
Petursson, 2018	High	EQ-5D VAS	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	2.1 (-2.61, 6.81)	NS
Petursson, 2018	High	EQ-5D VAS	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	3.3 (-3.68, 10.28)	NS
Petursson, 2018	High	EQ-5D VAS (Highest score(N))	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.11(0.82,1.49)	NS
Song, 2019	High	KSS Total	Preop.	Sensor-Assisted, VERASENSE	Manually balanced	Mean Difference	3.8 (0.15, 7.45)	Sensor-Assisted, VERASENSE
Song, 2019	High	KSS Total	Postop.	Sensor-Assisted, VERASENSE	Manually balanced	Mean Difference	1.6 (-0.11, 3.31)	NS
Song, 2019	High	WOMAC Total	Preop.	Sensor-Assisted, VERASENSE	Manually balanced	Mean Difference	2.4 (1.18, 3.62)	Manually balanced
Song, 2019	High	WOMAC Total	Postop.	Sensor-Assisted, VERASENSE	Manually balanced	Mean Difference	-1 (-1.95, -0.05)	Sensor-Assisted, VERASENSE
Liow, 2014	Moderate	Oxford Knee Score	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	-3 (-7.19, 1.19)	NS
Liow, 2014	Moderate	KSS Total	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	0.2 (-7.87, 8.27)	NS
Liow, 2014	Moderate	SF-36 General Health	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	7.8 (-2.95, 18.55)	NS
Liow, 2014	Moderate	Oxford Knee Score	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	-0.8 (-3.99, 2.39)	NS
Liow, 2014	Moderate	KSS Total	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	-1.8 (-9.85, 6.25)	NS
Liow, 2014	Moderate	SF-36 General Health	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	10.4 (0.48, 20.32)	ROBODOC

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ouanezar, 2016	Low	KSS Total	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	8 (-1.08, 17.08)	NS
Ouanezar, 2016	Low	KSS Total	Postop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	1 (-5.70, 7.70)	NS
Ouanezar, 2016	Low	KSS Total	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	1 (-3.37, 5.37)	NS
Ouanezar, 2016	Low	KSS Total	Postop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-1 (-3.35, 1.35)	NS
Marchand, 2017	Low	WOMAC Total	6 mos.	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Mean Difference	-7 (-11.96, -2.04)	Robotic Arm-Assisted: MAKO
Marchand, 2019	Low	WOMAC Total	Preop.	Robotic Arm-Assisted	Conventional Jig-based	Mean Difference	-2 (-5.05, 1.05)	NS
Marchand, 2019	Low	WOMAC Total	1 yrs.	Robotic Arm-Assisted	Conventional Jig-based	Mean Difference	-3 (-5.69, -0.31)	Robotic Arm-Assisted
Yim, 2013	Moderate	HSS Total	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-1.6 (-4.09, 0.89)	NS
Yim, 2013	Moderate	WOMAC Total	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-1.1 (-3.88, 1.68)	NS
Jeon, 2019	Low	KSS Total	Baseline.	ROBODOC	Conventional Jig-based	Mean Difference	-3.4 (-8.67, 1.87)	NS
Jeon, 2019	Low	KSS Total	9 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-2.2 (-6.64, 2.24)	NS
Yang, 2017	Low	HSS Total	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	0.3 (-2.43, 3.03)	NS
Yang, 2017	Low	WOMAC Total	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	5.5 (0.77, 10.23)	Conventional Jig-based
Yang, 2017	Low	HSS Total	10 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	1.5 (-2.57, 5.57)	NS
Yang, 2017	Low	WOMAC Total	10 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-3.9 (-8.80, 1.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Mitchell, 2021	Low	KOOS Total	1 yrs.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	3.567 (-11.71, 18.85)	NS
Marchand, 2021	Low	WOMAC Total	Preop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	0 (-2.33, 2.33)	NS
Marchand, 2021	Low	WOMAC Total	2 yrs.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	-2 (-3.89, -0.11)	MAKO Robotic Arm–Assisted
Shaw, 2021	Low	KOOS Total	Preop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	0.22 (-1.61, 2.05)	NS
Shaw, 2021	Low	KOOS Total	4 wks.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Shaw, 2021	Low	KOOS Total	8 mos.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS

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Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kayani, 2018	Moderate	Time to Straight Leg Raise	Postop.	Robotic-guided	Conventional Jig-based	Author Reported - Mann-Whitney's	N/A	Robotic Assistance
Kayani, 2018	Moderate	Extension (deg)	Postop.	Robotic-guided	Conventional Jig-based	Author Reported - Mann-Whitney's	N/A	NS
Kayani, 2018	Moderate	Flexion (deg)	Postop.	Robotic-guided	Conventional Jig-based	Author Reported - t-test	N/A	Robotic Assistance
Kayani, 2018	Moderate	Physiotherapy Sessions	Postop.	Robotic-guided	Conventional Jig-based	Author Reported - Mann-Whitney's	N/A	Robotic Assistance
Kayani, 2018	Moderate	CPM Sessions	Postop.	Robotic-guided	Conventional Jig-based	RR	0.40(0.08,1.94)	NS
Ollivier, 2018	High	KOOS Symptoms	10 yrs.	Computer Based Navigation	Conventional Jig-based	Mean Difference	-1 (-4.72, 2.72)	NS
Ollivier, 2018	High	KOOS ADL	10 yrs.	Computer Based Navigation	Conventional Jig-based	Mean Difference	0 (-1.92, 1.92)	NS
Ollivier, 2018	High	SF-12 Physical	10 yrs.	Computer Based Navigation	Conventional Jig-based	Mean Difference	-1 (-6.82, 4.82)	NS
Kim, 2020	High	ROM (deg)	13 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-1 (-1.75, -0.25)	Conventional Jig-based
Kim, 2020	High	UCLA Activity Score	13 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	0 (-4.24, 4.24)	NS
Kim, 2020	High	Motion Limitation	13 yrs.	ROBODOC	Conventional Jig-based	RD	-0.01(-0.01, -0.00)	Conventional Jig-based
Cho, 2019	High	ROM (deg)	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	5 (3.50, 6.50)	ROBODOC
Cho, 2019	High	ROM (deg)	11 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	0.7 (-0.50, 1.90)	NS
Cho, 2019	High	KSS Function	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	0 (-3.23, 3.23)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Cho, 2019	High	KSS Function	11 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-0.6 (-1.94, 0.74)	NS
Cho, 2019	High	SF-12 Physical	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	0.5 (-0.46, 1.46)	NS
Cho, 2019	High	SF-12 Physical	11 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	0.7 (-0.88, 2.28)	NS
Song, 2013	High	ROM (deg)	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	2 (-2.01, 6.01)	NS
Song, 2013	High	ROM (deg)	Postop.	ROBODOC	Conventional Jig-based	Mean Difference	-1 (-4.72, 2.72)	NS
Park, 2007	High	KSS Function	49 mos.	ROBODOC	Conventional Jig-based	Mean Difference	-0.6 (-2.78, 1.58)	NS
Park, 2007	High	ROM (deg)	Postop.	ROBODOC	Conventional Jig-based	Mean Difference	-4 (-10.81, 2.81)	NS
Barrett, 2011	Moderate	KSS Function	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-2.3 (-5.67, 1.07)	NS
Barrett, 2011	Moderate	KSS Function	12 mos.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	1.3 (-3.16, 5.76)	NS
Barrett, 2011	Moderate	6-Minute Walk Test ((ft))	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	130 (-343.54, 603.54)	NS
Barrett, 2011	Moderate	6-Minute Walk Test ((ft))	12 wks.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-142 (-705.04, 421.04)	NS
Barrett, 2011	Moderate	6-Minute Walk Test ((ft))	6 mos.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-218 (-590.60, 154.60)	NS
Liow, 2017	High	Extension (deg)	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	-1.1 (-4.53, 2.33)	NS
Liow, 2017	High	Extension (deg)	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	0.7 (-1.64, 3.04)	NS
Liow, 2017	High	Extension (deg)	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-0.2 (-2.11, 1.71)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liow, 2017	High	Flexion (deg)	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	1.2 (-7.74, 10.14)	NS
Liow, 2017	High	Flexion (deg)	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	-8.4 (-16.48, -0.32)	Conventional Jig-based
Liow, 2017	High	Flexion (deg)	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-6.9 (-13.55, -0.25)	Conventional Jig-based
Liow, 2017	High	KSS Function	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	4.4 (-5.11, 13.91)	NS
Liow, 2017	High	KSS Function	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	0.5 (-8.63, 9.63)	NS
Liow, 2017	High	KSS Function	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	3.1 (-6.23, 12.43)	NS
Liow, 2017	High	SF-36 Physical	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	8.7 (-2.80, 20.20)	NS
Liow, 2017	High	SF-36 Physical	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	6 (-6.05, 18.05)	NS
Liow, 2017	High	SF-36 Physical	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	12.6 (-0.08, 25.28)	NS
Liow, 2017	High	SF-36 Role Physical	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	11.5 (-4.13, 27.13)	NS
Liow, 2017	High	SF-36 Role Physical	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	2.9 (-17.57, 23.37)	NS
Liow, 2017	High	SF-36 Role Physical	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	12.3 (-7.69, 32.29)	NS
Liow, 2017	High	SF-36 Physical	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	3.3 (-1.46, 8.06)	NS
Liow, 2017	High	SF-36 Physical	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	-0.5 (-5.80, 4.80)	NS
Liow, 2017	High	SF-36 Physical	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	4.1 (-1.53, 9.73)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Petursson, 2018	High	OMERACT-OARSI Function High Responder	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.30(1.02,1.67)	Computer-Assisted Surgery
Petursson, 2018	High	KOOS Symptoms	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-3.3 (-9.29, 2.69)	NS
Petursson, 2018	High	KOOS Symptoms	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	4.1 (-0.08, 8.28)	NS
Petursson, 2018	High	KOOS Symptoms	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	7.4 (1.46, 13.34)	Computer-Assisted Surgery
Petursson, 2018	High	KOOS Symptoms (Highest score (N))	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.49(0.65,3.42)	NS
Petursson, 2018	High	KOOS ADL	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-1.6 (-6.27, 3.07)	NS
Petursson, 2018	High	KOOS ADL	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	2.9 (-2.13, 7.93)	NS
Petursson, 2018	High	KOOS ADL	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	0.5 (-5.44, 6.44)	NS
Petursson, 2018	High	KOOS ADL (Highest score(N))	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	2.15(1.04,4.41)	Computer-Assisted Surgery
Petursson, 2018	High	WOMAC Stiffness	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-6.9 (-13.41, -0.39)	Computer-Assisted Surgery
Petursson, 2018	High	WOMAC Stiffness	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	2.3 (-3.38, 7.98)	NS
Petursson, 2018	High	WOMAC Stiffness	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	9.2 (1.67, 16.73)	Conventional Jig-based
Petursson, 2018	High	WOMAC Stiffness (Highest score (N))	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.20(0.76,1.88)	NS
Petursson, 2018	High	WOMAC Function	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-1.6 (-6.27, 3.07)	NS
Petursson, 2018	High	WOMAC Function	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	4 (-1.03, 9.03)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Petursson, 2018	High	WOMAC Function	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	5.5 (-0.44, 11.44)	NS
Petursson, 2018	High	WOMAC Function	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	2.15(1.04,4.41)	Conventional Jig-based
Petursson, 2018	High	KSS Function	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	1.7 (-2.98, 6.38)	NS
Petursson, 2018	High	KSS Function	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	4.3 (-1.17, 9.77)	NS
Petursson, 2018	High	KSS Function	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	2.8 (-2.76, 8.36)	NS
Petursson, 2018	High	KSS Function (Highest score(N))	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.34(0.97,1.85)	NS
Song, 2019	High	KSS Function	Preop.	Sensor-Assisted, VERASENSE	Manually balanced	Mean Difference	-2.8 (-5.19, -0.41)	Manually balanced
Song, 2019	High	KSS Function	Postop.	Sensor-Assisted, VERASENSE	Manually balanced	Mean Difference	1.6 (-0.75, 3.95)	NS
Song, 2019	High	Flexion Contracture (deg)	Preop.	Sensor-Assisted, VERASENSE	Manually balanced	Mean Difference	-0.8 (-3.58, 1.98)	NS
Song, 2019	High	Flexion Contracture (deg)	Postop.	Sensor-Assisted, VERASENSE	Manually balanced	Mean Difference	0.4 (-0.96, 1.76)	NS
Song, 2019	High	Maximum Flexion (deg)	Preop.	Sensor-Assisted, VERASENSE	Manually balanced	Mean Difference	3.9 (-2.07, 9.87)	NS
Song, 2019	High	Maximum Flexion (deg)	Postop.	Sensor-Assisted, VERASENSE	Manually balanced	Mean Difference	0.8 (-1.63, 3.23)	NS
Liow, 2014	Moderate	Extension (deg)	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	-1.1 (-4.53, 2.33)	NS
Liow, 2014	Moderate	Flexion (deg)	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	1.2 (-7.74, 10.14)	NS
Liow, 2014	Moderate	KSS Function	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	4.9 (-4.61, 14.41)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liow, 2014	Moderate	SF-36 Physical	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	8.7 (-2.80, 20.20)	NS
Liow, 2014	Moderate	SF-36 Role Physical	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	11.5 (-4.13, 27.13)	NS
Liow, 2014	Moderate	Extension (deg)	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	0.8 (-1.43, 3.03)	NS
Liow, 2014	Moderate	Flexion (deg)	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	-6.4 (-13.78, 0.98)	NS
Liow, 2014	Moderate	KSS Function	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	1.3 (-7.34, 9.94)	NS
Liow, 2014	Moderate	SF-36 Physical	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	9.2 (-2.56, 20.96)	NS
Liow, 2014	Moderate	SF-36 Role Physical	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	12.1 (-7.44, 31.64)	NS
Ouanezar, 2016	Low	KSS Function	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	6 (-1.02, 13.02)	NS
Ouanezar, 2016	Low	KSS Function	Postop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	2 (-4.32, 8.32)	NS
Ouanezar, 2016	Low	Flexion (deg)	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	0 (-5.63, 5.63)	NS
Ouanezar, 2016	Low	Flexion (deg)	Postop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	0 (-3.24, 3.24)	NS
Marchand, 2017	Low	WOMAC Function	6 mos.	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Mean Difference	-5 (-8.10, -1.90)	Robotic Arm-Assisted: MAKO
Marchand, 2019	Low	WOMAC Function	Preop.	Robotic Arm-Assisted	Conventional Jig-based	Mean Difference	-1 (-2.90, 0.90)	NS
Marchand, 2019	Low	WOMAC Function	1 yrs.	Robotic Arm-Assisted	Conventional Jig-based	Mean Difference	-2 (-3.72, -0.28)	Robotic Arm-Assisted
Yim, 2013	Moderate	ROM (deg)	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-4 (-8.17, 0.17)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jeon, 2019	Low	ROM (deg)	Baseline.	ROBODOC	Conventional Jig-based	Mean Difference	0.3 (-2.09, 2.69)	NS
Jeon, 2019	Low	KSS Function	Baseline.	ROBODOC	Conventional Jig-based	Mean Difference	-1.9 (-5.63, 1.83)	NS
Jeon, 2019	Low	SF-36 Physical	Baseline.	ROBODOC	Conventional Jig-based	Mean Difference	-2.6 (-5.04, -0.16)	Conventional Jig-based
Jeon, 2019	Low	ROM (deg)	9 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	2.7 (-0.50, 5.90)	NS
Jeon, 2019	Low	KSS Function	9 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-4.1 (-8.20, 0.00)	NS
Jeon, 2019	Low	SF-36 Physical	9 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	0.3 (-2.31, 2.91)	NS
Jeon, 2019	Low	Stiffness	9 yrs.	ROBODOC	Conventional Jig-based	RR	0.94(0.20,4.52)	NS
Yang, 2017	Low	ROM (deg)	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	-0.3 (-6.01, 5.41)	NS
Yang, 2017	Low	ROM (deg)	10 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	1.6 (-5.04, 8.24)	NS
Mitchell, 2021	Low	SF-12 Physical	Preop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	9.9 (3.14, 16.66)	MAKO Robotic Arm–Assisted
Mitchell, 2021	Low	UCLA Activity Score	Preop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	-0.16 (-1.28, 0.96)	NS
Mitchell, 2021	Low	SF-12 Physical	1 yrs.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	1.3 (-6.84, 9.44)	NS
Mitchell, 2021	Low	UCLA Activity Score	1 yrs.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	0.52 (-0.61, 1.65)	NS
Marchand, 2021	Low	WOMAC Function	Preop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	0 (-1.40, 1.40)	NS
Marchand, 2021	Low	WOMAC Function	2 yrs.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	-2 (-3.28, -0.72)	MAKO Robotic Arm–Assisted

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Shaw, 2021	Low	PROMIS-PH	Preop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	-0.62 (-1.56, 0.32)	NS
Shaw, 2021	Low	PROMIS-PH	4 wks.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Shaw, 2021	Low	PROMIS-PH	8 mos.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	ROM (deg) (1-month follow-up vs. Preop)	1 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	ROM (deg) (3-month follow-up vs. Preop)	3 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	ROM (deg) (12-month follow-up vs. Preop)	12 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	ROM (deg) (24-month follow-up vs. Preop)	24 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	ROM (deg)	1 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	ROM (deg)	3 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	ROM (deg)	12 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	ROM (deg)	24 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	KSS Function	Preop.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	KSS Function	3 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	KSS Function	12 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	KSS Function	24 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Held, 2021	Low	WOMAC Function	Preop.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	WOMAC Function	3 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	WOMAC Function	12 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	WOMAC Function	24 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	WOMAC Stiffness	Preop.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	WOMAC Stiffness	3 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	WOMAC Stiffness	12 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	WOMAC Stiffness	24 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	SF-12 Physical	Preop.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	SF-12 Physical	3 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	SF-12 Physical	12 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	SF-12 Physical	24 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS

Table 236227: PICO 17- Robotics vs. Control- Opioid Use

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kayani, 2018	Moderate	Analgesic (mg)	Postop.	Robotic-guided	Conventional Jig-based	Author Reported - Mann-Whitney's	N/A	Robotic Assistance
Kayani, 2018	Moderate	Analgesic (mg)	1 days	Robotic-guided	Conventional Jig-based	Author Reported - Mann-Whitney's	N/A	Robotic Assistance
Kayani, 2018	Moderate	Analgesic (mg)	2 days	Robotic-guided	Conventional Jig-based	Author Reported - Mann-Whitney's	N/A	Robotic Assistance
Kayani, 2018	Moderate	Analgesic (mg)	3 days	Robotic-guided	Conventional Jig-based	Author Reported - Mann-Whitney's	N/A	Robotic Assistance
King, 2020	Low	Average Morphine milligram equivalent	Postop.	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Author Reported - t-test	N/A	Robotic Assistance
Hamilton, 2021	Low	Opioid Use	Postop.	Robotic Arm-Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS

Table 237228: PICO 17- Robotics vs. Control- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kayani, 2018	Moderate	Operation Time (min)	Intraop.	Robotic-guided	Conventional Jig-based	Author Reported - t-test	N/A	NS
Kayani, 2018	Moderate	Hemoglobin Drop (g/dL)	Intraop.	Robotic-guided	Conventional Jig-based	Author Reported - t-test	N/A	Robotic Assistance
Kayani, 2018	Moderate	Hemoglobin (g/dL)	Postop.	Robotic-guided	Conventional Jig-based	Author Reported - t-test	N/A	Robotic Assistance
Kayani, 2018	Moderate	Length of Stay (hours)	Postop.	Robotic-guided	Conventional Jig-based	Author Reported - Mann-Whitney's	N/A	Robotic Assistance
Kayani, 2018	Moderate	Blood Transfusions (Units)	Postop.	Robotic-guided	Conventional Jig-based	RR	0.50(0.10,2.58)	NS
Singla, 2015	High	Total Blood Loss (Volume(mL))	Postop.	Orthopilot Navigation Systems	Conventional Jig-based	Author Reported - Wilcoxon Rank	N/A	NS
Singla, 2015	High	Total Blood Loss (Volume(mL))	Postop.	Orthopilot Navigation Systems	Conventional Jig-based	Mean Difference	-30 (-64.59, 4.59)	NS
Singla, 2015	High	Hidden Blood Loss (Volume(mL))	Postop.	Orthopilot Navigation Systems	Conventional Jig-based	Author Reported - Wilcoxon Rank	N/A	NS
Singla, 2015	High	Blood Loss (Volume (mL))	Intraop.	Orthopilot Navigation Systems	Conventional Jig-based	Mean Difference	-14 (-46.59, 18.59)	NS
Singla, 2015	High	Drainage (mL)	Postop.	Orthopilot Navigation Systems	Conventional Jig-based	Author Reported - Wilcoxon Rank	N/A	NS
Singla, 2015	High	Blood Transfusions (Volume(mL))	Postop.	Orthopilot Navigation Systems	Conventional Jig-based	Author Reported - Wilcoxon Rank	N/A	NS
Singla, 2015	High	Blood Transfusions (Volume(mL))	Postop.	Orthopilot Navigation Systems	Conventional Jig-based	Author Reported - Wilcoxon Rank	N/A	NS
Ollivier, 2018	High	SF-12 Mental	10 yrs.	Computer Based Navigation	Conventional Jig-based	Mean Difference	2 (-2.21, 6.21)	NS
Ollivier, 2018	High	Survivorship Free from Aseptic Loosening	10 yrs.	Computer Based Navigation	Conventional Jig-based	Author Reported - t-test	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2020	High	Operation Time (min)	Intraop.	ROBODOC	Conventional Jig-based	Author Reported - t-test	N/A	Conventional Tech
Kim, 2020	High	Blood Loss (Volume (mL))	Intraop.	ROBODOC	Conventional Jig-based	Author Reported - t-test	N/A	NS
Kim, 2020	High	Drainage (mL)	Postop.	ROBODOC	Conventional Jig-based	Author Reported - t-test	N/A	NS
Kim, 2020	High	Drainage (days)	Postop.	ROBODOC	Conventional Jig-based	Author Reported - t-test	N/A	NS
Kim, 2020	High	Blood Transfusions (Volume(mL))	Postop.	ROBODOC	Conventional Jig-based	Author Reported - t-test	N/A	NS
Kim, 2020	High	Blood Transfusions (Volume(mL))	13 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	1 (0.41, 1.59)	Conventional Jig-based
Kim, 2020	High	Implant Survival	15 yrs.	ROBODOC	Conventional Jig-based	Author Reported - t-test	N/A	NS
Cho, 2019	High	SF-12 Mental	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	0.4 (-1.01, 1.81)	NS
Cho, 2019	High	SF-12 Mental	11 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	0.7 (-0.76, 2.16)	NS
Cho, 2019	High	Survival Rate of TKA	11 yrs.	ROBODOC	Conventional Jig-based	Author Reported - t-test	N/A	NS
Song, 2013	High	Extension Gap (mm)	Intraop.	ROBODOC	Conventional Jig-based	Mean Difference	-0.4 (-1.03, 0.23)	NS
Song, 2013	High	Flexion Gap (mm)	Intraop.	ROBODOC	Conventional Jig-based	Mean Difference	0.6 (-0.15, 1.35)	NS
Song, 2013	High	Suboptimal cases	Postop.	ROBODOC	Conventional Jig-based	RR	2.00(0.38,10.43)	NS
Song, 2013	High	Drainage (mL)	Intraop.	ROBODOC	Conventional Jig-based	Mean Difference	-320 (-476.61, -163.39)	ROBODOC
Song, 2013	High	Operation Time (min)	Intraop.	ROBODOC	Conventional Jig-based	Mean Difference	25 (20.88, 29.12)	Conventional Jig-based

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Barrett, 2011	Moderate	Operation Time (min)	Intraop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	21 (15.50, 26.50)	Conventional Jig-based
Liow, 2017	High	SF-36 Vitality	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	5.5 (-5.26, 16.26)	NS
Liow, 2017	High	SF-36 Vitality	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	9.7 (0.06, 19.34)	ROBODOC
Liow, 2017	High	SF-36 Vitality	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	11.8 (1.94, 21.66)	ROBODOC
Liow, 2017	High	SF-36 Social Function	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	6.5 (-11.75, 24.75)	NS
Liow, 2017	High	SF-36 Social Function	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	-4.4 (-17.03, 8.23)	NS
Liow, 2017	High	SF-36 Social Function	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	6 (-5.14, 17.14)	NS
Liow, 2017	High	SF-36 Role Emotional	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	11.2 (-7.70, 30.10)	NS
Liow, 2017	High	SF-36 Role Emotional	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	8 (-1.54, 17.54)	NS
Liow, 2017	High	SF-36 Role Emotional	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	17.4 (2.83, 31.97)	ROBODOC
Liow, 2017	High	SF-36 Mental	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	6.8 (-2.56, 16.16)	NS
Liow, 2017	High	SF-36 Mental	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	6.5 (-0.68, 13.68)	NS
Liow, 2017	High	SF-36 Mental	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	6.6 (-2.11, 15.31)	NS
Liow, 2017	High	SF-36 Mental	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	3.9 (-1.52, 9.32)	NS
Liow, 2017	High	SF-36 Mental	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	4.4 (-0.30, 9.10)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liow, 2017	High	SF-36 Mental	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	4.6 (-0.49, 9.69)	NS
Liow, 2017	High	Expectations fulfilled	6 mos.	ROBODOC	Conventional Jig-based	Author Reported - Fisher's Exact	N/A	NS
Liow, 2017	High	Expectations fulfilled	2 yrs.	ROBODOC	Conventional Jig-based	Author Reported - Fisher's Exact	N/A	NS
Liow, 2017	High	Expectations not fulfilled	6 mos.	ROBODOC	Conventional Jig-based	Author Reported - Fisher's Exact	N/A	NS
Liow, 2017	High	Expectations not fulfilled	2 yrs.	ROBODOC	Conventional Jig-based	Author Reported - Fisher's Exact	N/A	NS
Liow, 2014	Moderate	Length of Stay (days)	Postop.	ROBODOC	Conventional Jig-based	Mean Difference	-0.6 (-2.20, 1.00)	NS
Liow, 2014	Moderate	Operation Time (min)	Intraop.	ROBODOC	Conventional Jig-based	Mean Difference	-2 (-8.19, 4.19)	NS
Liow, 2014	Moderate	SF-36 Vitality	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	5.5 (-5.26, 16.26)	NS
Liow, 2014	Moderate	SF-36 Social Function	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	6.5 (-11.75, 24.75)	NS
Liow, 2014	Moderate	SF-36 Role Emotional	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	11.2 (-7.70, 30.10)	NS
Liow, 2014	Moderate	SF-36 Mental	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	6.8 (-2.56, 16.16)	NS
Liow, 2014	Moderate	SF-36 Vitality	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	13 (4.17, 21.83)	ROBODOC
Liow, 2014	Moderate	SF-36 Social Function	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	-0.1 (-12.43, 12.23)	NS
Liow, 2014	Moderate	SF-36 Role Emotional	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	8 (-1.54, 17.54)	NS
Liow, 2014	Moderate	SF-36 Mental	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	7.6 (0.63, 14.57)	ROBODOC

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
King, 2020	Low	Length of Stay (days)	Postop.	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Author Reported - t-test	N/A	Robotic Assistance
King, 2020	Low	Operation Time (min)	Intraop.	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Author Reported - t-test	N/A	Conventional Tech
King, 2020	Low	Readmissions	90 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	RR	1.08(0.24,4.76)	NS
Marchand, 2017	Low	Operation Time (min)	Intraop.	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Mean Difference	5 (-4.80, 14.80)	NS
Jeon, 2019	Low	SF-36 Mental	Baseline.	ROBODOC	Conventional Jig-based	Mean Difference	-4.3 (-6.11, -2.49)	Conventional Jig-based
Jeon, 2019	Low	SF-36 Mental	9 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-9.3 (-12.70, -5.90)	Conventional Jig-based
Jeon, 2019	Low	Drainage (mL)	9 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-81.2 (-88.82, -73.58)	ROBODOC
Bollars, 2020	Low	Operation Time (min)	Intraop.	NAVIO	Conventional Jig-based	Mean Difference	29 (24.53, 33.47)	Conventional Jig-based
Mitchell, 2021	Low	SF-12 Mental	Preop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	2.9 (-3.35, 9.15)	NS
Mitchell, 2021	Low	SF-12 Mental	1 yrs.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	0.5 (-1.89, 2.89)	NS
Mitchell, 2021	Low	Length of Stay (days)	Postop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Hamilton, 2021	Low	Home Discharge Rates	Postop.	Robotic Arm-Assisted	Conventional Jig-based	RR	1.14(1.00,1.29)	NS
Hamilton, 2021	Low	Length of Stay (days)	Postop.	Robotic Arm-Assisted	Conventional Jig-based	Author Reported - t-test	N/A	Conventional Tech
Marchand, 2021	Low	Drainage	10 days	MAKO Robotic Arm–Assisted	Conventional Jig-based	RD	-0.01(-0.04,0.01)	NS
Shaw, 2021	Low	Readmissions	90 days	MAKO Robotic Arm–Assisted	Conventional Jig-based	RR	0.43(0.05,3.44)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Shaw, 2021	Low	Length of Stay (days)	Postop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	-0.03 (-0.12, 0.06)	NS
Shaw, 2021	Low	Operation Time (min)	Intraop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	-10.37 (-12.33, -8.41)	MAKO Robotic Arm–Assisted
Held, 2021	Low	Operation Time (min)	Periop.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	Conventional Tech
Held, 2021	Low	Blood Loss (Volume (mL))	Periop.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	Conventional Tech
Held, 2021	Low	Length of Stay (days)	Periop.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	SF-12 Mental	Preop.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	SF-12 Mental	3 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	SF-12 Mental	12 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	SF-12 Mental	24 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS

Table 238229: PICO 17- Robotics vs. Control- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kayani, 2018	Moderate	VAS Pain	Postop.	Robotic-guided	Conventional Jig-based	Author Reported - t-test	N/A	Robotic Assistance
Kayani, 2018	Moderate	VAS Pain	1 days	Robotic-guided	Conventional Jig-based	Author Reported - t-test	N/A	Robotic Assistance
Kayani, 2018	Moderate	VAS Pain	2 days	Robotic-guided	Conventional Jig-based	Author Reported - t-test	N/A	Robotic Assistance

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kayani, 2018	Moderate	VAS Pain	3 days	Robotic-guided	Conventional Jig-based	Author Reported - t-test	N/A	Robotic Assistance
Ollivier, 2018	High	KOOS Pain	10 yrs.	Computer Based Navigation	Conventional Jig-based	Mean Difference	-2 (-27.89, 23.89)	NS
Kim, 2020	High	No Pain	13 yrs.	ROBODOC	Conventional Jig-based	RR	1.04(0.99,1.09)	NS
Kim, 2020	High	Mild Pain	13 yrs.	ROBODOC	Conventional Jig-based	RR	0.81(0.63,1.06)	NS
Kim, 2020	High	Severe Pain	13 yrs.	ROBODOC	Conventional Jig-based	RR	1.00(0.47,2.14)	NS
Cho, 2019	High	KSS Pain	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	-2.7 (-4.61, -0.79)	Conventional Jig-based
Cho, 2019	High	KSS Pain	11 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-0.5 (-1.26, 0.26)	NS
Liow, 2017	High	SF-36 Bodily Pain	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	5.4 (-2.70, 13.50)	NS
Liow, 2017	High	SF-36 Bodily Pain	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	-4.8 (-18.44, 8.84)	NS
Liow, 2017	High	SF-36 Bodily Pain	2 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	3.9 (-9.21, 17.01)	NS
Liow, 2017	High	Persistent pain	Postop.	ROBODOC	Conventional Jig-based	RD	0.03(-0.03,0.09)	NS
Petursson, 2018	High	OMERACT-OARSI Pain High Responder	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.23(1.00,1.50)	Computer-Assisted Surgery
Petursson, 2018	High	KOOS Pain	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-2 (-6.67, 2.67)	NS
Petursson, 2018	High	KOOS Pain	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	2.6 (-2.07, 7.27)	NS
Petursson, 2018	High	KOOS Pain	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	4.6 (-1.51, 10.71)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Petursson, 2018	High	KOOS Pain (Highest score(N))	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	2.01(1.05,3.83)	Computer-Assisted Surgery
Petursson, 2018	High	WOMAC Pain	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-2.1 (-7.04, 2.84)	NS
Petursson, 2018	High	WOMAC Pain	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	0.7 (-3.79, 5.19)	NS
Petursson, 2018	High	WOMAC Pain	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	2.8 (-3.36, 8.96)	NS
Petursson, 2018	High	WOMAC Pain	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.18(0.77,1.80)	NS
Liow, 2014	Moderate	SF-36 Bodily Pain	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	5.4 (-2.70, 13.50)	NS
Liow, 2014	Moderate	SF-36 Bodily Pain	6 mos.	ROBODOC	Conventional Jig-based	Mean Difference	0.2 (-13.08, 13.48)	NS
King, 2020	Low	VAS Pain	Postop.	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Author Reported	N/A	NS
King, 2020	Low	VAS Pain	1 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Author Reported	N/A	NS
King, 2020	Low	VAS Pain	2 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Author Reported	N/A	NS
King, 2020	Low	VAS Pain	3 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Author Reported	N/A	NS
King, 2020	Low	VAS Pain	4 days	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Author Reported	N/A	NS
Marchand, 2017	Low	WOMAC Pain	6 mos.	Robotic Arm-Assisted: MAKO	Conventional Jig-based	Mean Difference	-2 (-3.86, -0.14)	Robotic Arm-Assisted: MAKO
Marchand, 2019	Low	WOMAC Pain	Preop.	Robotic Arm-Assisted	Conventional Jig-based	Mean Difference	-1 (-2.14, 0.14)	NS
Marchand, 2019	Low	WOMAC Pain	1 yrs.	Robotic Arm-Assisted	Conventional Jig-based	Mean Difference	-1 (-2.35, 0.35)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yang, 2017	Low	VAS Pain	Preop.	ROBODOC	Conventional Jig-based	Mean Difference	0.3 (-1.13, 1.73)	NS
Yang, 2017	Low	VAS Pain	10 yrs.	ROBODOC	Conventional Jig-based	Mean Difference	-0.1 (-0.51, 0.31)	NS
Hamilton, 2021	Low	VAS Pain	Preop.	Robotic Arm-Assisted	Conventional Jig-based	Mean Difference	0.6 (0.05, 1.15)	Conventional Jig-based
Hamilton, 2021	Low	VAS Pain	1 days	Robotic Arm-Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Hamilton, 2021	Low	VAS Pain	2 days	Robotic Arm-Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Hamilton, 2021	Low	VAS Pain	3 days	Robotic Arm-Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Marchand, 2021	Low	WOMAC Pain	Preop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	-1 (-1.93, -0.07)	MAKO Robotic Arm–Assisted
Marchand, 2021	Low	WOMAC Pain	2 yrs.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	-1 (-1.79, -0.21)	MAKO Robotic Arm–Assisted
Held, 2021	Low	WOMAC Pain	Preop.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	WOMAC Pain	3 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	WOMAC Pain	12 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS
Held, 2021	Low	WOMAC Pain	24 mos.	NAVIO	Conventional Jig-based	Author Reported - t-test	N/A	NS

Table 239230: PICO 17- Robotics vs. Control- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Song, 2013	High	Satisfaction	Postop.	ROBODOC	Conventional Jig-based	RR	0.96(0.87,1.06)	NS
Liow, 2017	High	Satisfaction	6 mos.	ROBODOC	Conventional Jig-based	Author Reported - Fisher's Exact	N/A	NS
Liow, 2017	High	Satisfaction	2 yrs.	ROBODOC	Conventional Jig-based	Author Reported - Fisher's Exact	N/A	NS
Liow, 2017	High	Dissatisfied	6 mos.	ROBODOC	Conventional Jig-based	Author Reported - Fisher's Exact	N/A	NS
Liow, 2017	High	Dissatisfied	2 yrs.	ROBODOC	Conventional Jig-based	Author Reported - Fisher's Exact	N/A	NS
Petursson, 2018	High	KOOS QoL	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-1 (-5.54, 3.54)	NS
Petursson, 2018	High	KOOS QoL	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	5.1 (-1.26, 11.46)	NS
Petursson, 2018	High	KOOS QoL	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	6.1 (-1.23, 13.43)	NS
Petursson, 2018	High	KOOS QoL (Highest score(N))	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.56(0.84,2.88)	NS
Ouanezar, 2016	Low	Satisfaction	10.5 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	1.06(0.82,1.38)	NS
Ouanezar, 2016	Low	Dissatisfied	10.5 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RR	0.15(0.02,1.28)	NS
Shaw, 2021	Low	PROMIS-MH	Preop.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Mean Difference	0.57 (-0.63, 1.77)	NS
Shaw, 2021	Low	PROMIS-MH	4 wks.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	NS
Shaw, 2021	Low	PROMIS-MH	8 mos.	MAKO Robotic Arm–Assisted	Conventional Jig-based	Author Reported - t-test	N/A	Robotic Assistance

Table 240231: PICO 17- Robotics vs. Control- Return to activity

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ollivier, 2018	High	KOOS Sport	10 yrs.	Computer Based Navigation	Conventional Jig-based	Mean Difference	-2 (-7.36, 3.36)	NS
Petursson, 2018	High	KOOS Sport	Preop.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	-3.2 (-7.60, 1.20)	NS
Petursson, 2018	High	KOOS Sport	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	12.3 (4.37, 20.23)	Computer-Assisted Surgery
Petursson, 2018	High	KOOS Sport	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	Mean Difference	16.2 (7.75, 24.65)	Computer-Assisted Surgery
Petursson, 2018	High	KOOS Sport (Highest score(N))	2 yrs.	Computer-Assisted Surgery	Conventional Jig-based	RD	0.09(0.03,0.15)	Computer-Assisted Surgery

Table 241232: PICO 18- Medial Unicompartmental Robotics- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Mergenthaler, 2020	Low	Total Revisions	Postop 1 yrs.	Robotic UKA	Conventional UKA	RR	0.36(0.17,0.80)	Robotic UKA
Mergenthaler, 2020	Low	Aseptic Loosening with Implant Malposition	Postop 1 yrs.	Robotic UKA	Conventional UKA	RR	0.16(0.02,1.31)	NS
Mergenthaler, 2020	Low	Aseptic Loosening without Implant Malposition	Postop 1 yrs.	Robotic UKA	Conventional UKA	RR	0.96(0.20,4.67)	NS
Mergenthaler, 2020	Low	Contralateral/Patellofemoral OA	Postop 1 yrs.	Robotic UKA	Conventional UKA	RR	0.96(0.06,15.16)	NS
Mergenthaler, 2020	Low	Infection (Infection)	Postop 1 yrs.	Robotic UKA	Conventional UKA	RD	0.01(-0.00,0.01)	NS
Mergenthaler, 2020	Low	Limb Malalignment	Postop 1 yrs.	Robotic UKA	Conventional UKA	RD	-0.05(-0.08, -0.02)	Robotic UKA
Mergenthaler, 2020	Low	Subsidence	Postop 1 yrs.	Robotic UKA	Conventional UKA	RR	0.14(0.03,0.59)	Robotic UKA
St Mart, 2020	Low	Bearing Dislocation	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RD	0.00(0.00,0.00)	NS
St Mart, 2020	Low	Bearing Dislocation	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RD	-0.00(-0.01, -0.00)	Robotic UKA
St Mart, 2020	Low	Fracture	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RR	0.22(0.03,1.86)	NS
St Mart, 2020	Low	Fracture	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RR	0.11(0.01,0.80)	Robotic UKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
St Mart, 2020	Low	Implant Breakage Tibial	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RD	0.00(0.00,0.00)	NS
St Mart, 2020	Low	Implant Breakage Tibial	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RD	-0.00(-0.00,0.00)	NS
St Mart, 2020	Low	Incorrect Sizing	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RD	-0.00(-0.00,0.00)	NS
St Mart, 2020	Low	Incorrect Sizing	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RD	-0.00(-0.00,0.00)	NS
St Mart, 2020	Low	Infection (Infection)	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RR	2.79(1.17,6.67)	Zimmer Unicompartmental high flex knee system
St Mart, 2020	Low	Infection (Infection)	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RR	2.27(1.18,4.35)	Conventional UKA
St Mart, 2020	Low	Instability	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RR	3.25(0.34,31.27)	NS
St Mart, 2020	Low	Instability	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RR	0.97(0.25,3.76)	NS
St Mart, 2020	Low	Loosening	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RR	0.40(0.19,0.83)	Robotic UKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
St Mart, 2020	Low	Loosening	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RR	0.26(0.14,0.50)	Robotic UKA
St Mart, 2020	Low	Lysis	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RD	0.00(0.00,0.00)	NS
St Mart, 2020	Low	Lysis	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RD	-0.00(-0.00,0.00)	NS
St Mart, 2020	Low	Malalignment	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RR	0.54(0.05,5.98)	NS
St Mart, 2020	Low	Malalignment	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RR	0.38(0.05,3.14)	NS
St Mart, 2020	Low	Metal Related Pathology	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RD	0.00(0.00,0.00)	NS
St Mart, 2020	Low	Metal Related Pathology	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RD	-0.00(-0.00,0.00)	NS
St Mart, 2020	Low	Osteonecrosis	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RD	0.00(0.00,0.00)	NS
St Mart, 2020	Low	Osteonecrosis	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RD	-0.00(-0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
St Mart, 2020	Low	Other Adverse Events	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RD	0.00(-0.00,0.00)	NS
St Mart, 2020	Low	Other Adverse Events	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RR	2.27(0.32,16.10)	NS
St Mart, 2020	Low	Progression of Disease	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RR	0.41(0.18,0.93)	Robotic UKA
St Mart, 2020	Low	Progression of Disease	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RR	0.42(0.20,0.90)	Robotic UKA
St Mart, 2020	Low	Prosthesis Dislocation	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RD	0.00(0.00,0.00)	NS
St Mart, 2020	Low	Prosthesis Dislocation	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RD	-0.00(-0.00,0.00)	NS
St Mart, 2020	Low	Synovitis	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RD	-0.00(-0.00,0.00)	NS
St Mart, 2020	Low	Synovitis	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RD	0.00(0.00,0.00)	NS
Batailler, 2019	Low	Aseptic Loosening with Implant Malposition	Postop 19.7mos	Robotic UKA	Conventional UKA	RD	-0.04(-0.08,0.00)	NS
Batailler, 2019	Low	Aseptic Loosening without Implant Malposition	Postop 19.7mos	Robotic UKA	Conventional UKA	RD	0.04(-0.00,0.08)	NS
Batailler, 2019	Low	Limb Malalignment	Postop 19.7mos	Robotic UKA	Conventional UKA	RD	-0.04(-0.08,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Gilmour, 2018	Moderate	Infection (Deep Infection)	Postop 2 yrs.	Robotic UKA	Conventional UKA	RD	0.00(0.00,0.00)	NS
Gilmour, 2018	Moderate	Deep Vein Thrombosis	Postop 2 yrs.	Robotic UKA	Conventional UKA	RD	0.00(0.00,0.00)	NS
Gilmour, 2018	Moderate	Dislocated Polyethylene Bearing, Required Surgery	Postop 2 yrs.	Robotic UKA	Conventional UKA	RD	-0.02(-0.05,0.02)	NS
Gilmour, 2018	Moderate	Persistent Numbness	Postop 2 yrs.	Robotic UKA	Conventional UKA	RD	-0.02(-0.05,0.02)	NS
Gilmour, 2018	Moderate	Radiographic Lucent Line, Under Observation Only	Postop 2 yrs.	Robotic UKA	Conventional UKA	RD	-0.09(-0.17, -0.02)	Robotic UKA
Gilmour, 2018	Moderate	Revision to TKA for Aseptic Loosening	Postop 2 yrs.	Robotic UKA	Conventional UKA	RD	-0.02(-0.05,0.02)	NS
Gilmour, 2018	Moderate	Revision to TKA for Pain	Postop 2 yrs.	Robotic UKA	Conventional UKA	RD	-0.02(-0.05,0.02)	NS
St Mart, 2020	Low	Total Revisions	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RR	0.72(0.50,1.03)	NS
Gilmour, 2018	Moderate	Stitch Abscess, Resolved Without Antibiotics	Postop 2 yrs.	Robotic UKA	Conventional UKA	RR	0.93(0.06,14.52)	NS
Gilmour, 2018	Moderate	Infection (Suspected Wound Infection Treated with Antibiotics)	Postop 2 yrs.	Robotic UKA	Conventional UKA	RR	0.31(0.09,1.09)	NS
Gilmour, 2018	Moderate	Wound Dehiscence (Required Surgery)	Postop 2 yrs.	Robotic UKA	Conventional UKA	RD	-0.02(-0.05,0.02)	NS
Gilmour, 2018	Moderate	Wound Secretion	Postop 2 yrs.	Robotic UKA	Conventional UKA	RR	0.76(0.40,1.42)	NS
St Mart, 2020	Low	Total Revisions	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RR	0.46(0.34,0.63)	Robotic UKA
Cool, 2019	Low	Total Revisions	Postop 24mos	Robotic UKA	Conventional UKA	RR	0.15(0.04,0.64)	Robotic UKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Gilmour, 2018	Moderate	Total Revisions	Postop 2 yrs.	Robotic UKA	Conventional UKA	RD	-0.04(-0.09,0.01)	NS

Table 242233: PICO 18- Medial Unicompartmental Robotics- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Mergenthaler, 2020	Low	KSS Total	Postop 1 yrs.	Robotic UKA	Conventional UKA	Mean Difference	4.6 (2.16, 7.04)	Robotic UKA
Clement, 2020	Low	EQ-5D Total	Preop.	Robotic UKA	Conventional UKA	Mean Difference	0.04 (-0.05, 0.13)	NS
Clement, 2020	Low	EQ-5D Total	Postop 6 mos.	Robotic UKA	Conventional UKA	Mean Difference	0.149 (0.08, 0.22)	Robotic UKA
Clement, 2020	Low	Forgotten Joint Score	Postop 6 mos.	Robotic UKA	Conventional UKA	Mean Difference	24.2 (12.74, 35.66)	Robotic UKA
Clement, 2020	Low	Oxford Knee Score	Preop.	Robotic UKA	Conventional UKA	Mean Difference	2.7 (0.22, 5.18)	Conventional UKA
Clement, 2020	Low	Oxford Knee Score	Postop 6 mos.	Robotic UKA	Conventional UKA	Mean Difference	7.7 (5.20, 10.20)	Conventional UKA
Blyth, 2017	High	Forgotten Joint Score	Postop 3 mos.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Fisher's exact test; Chi-Square test;	N/A	NS
Blyth, 2017	High	KSS Total	Postop 3 mos.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Fisher's exact test; Chi-Square test;	N/A	NS
Blyth, 2017	High	KSS Total	Postop 1 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Fisher's exact test; Chi-Square test;	N/A	NS
Blyth, 2017	High	Oxford Knee Score	Postop 1 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Fisher's exact test; Chi-Square test;	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Park, 2019	Low	KSS Total	Preop.	Robotic UKA	Conventional UKA	Mean Difference	4.4 (-3.29, 12.09)	NS
Park, 2019	Low	KSS Total	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	-4.2 (-9.57, 1.17)	NS
Park, 2019	Low	WOMAC Total	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-3 (-8.96, 2.96)	NS
Park, 2019	Low	WOMAC Total	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	2.1 (-4.32, 8.52)	NS
Batailler, 2019	Low	KSS Total (International)	Postop 19.7mos	Robotic UKA	Conventional UKA	Mean Difference	2.3 (-1.77, 6.37)	NS
Gilmour, 2018	Moderate	Forgotten Joint Score	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Gilmour, 2018	Moderate	KSS Total	Preop.	Robotic UKA	Conventional UKA	Mean Difference	2.7 (-6.93, 12.33)	NS
Gilmour, 2018	Moderate	KSS Total	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Gilmour, 2018	Moderate	Oxford Knee Score	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Zhang, 2016	High	KSS Total	Preop.	Robotic UKA	Conventional UKA	Mean Difference	6.1 (5.22, 6.98)	Robotic UKA
Zhang, 2016	High	KSS Total	Postop 24mos	Robotic UKA	Conventional UKA	Mean Difference	0 (-1.23, 1.23)	NS
Crizer, 2021	Low	KOOS Total	Preop.	Robotic UKA	Conventional UKA	Mean Difference	8 (2.59, 13.41)	Robotic UKA
Crizer, 2021	Low	KOOS Total	Postop 6 wks.	Robotic UKA	Conventional UKA	Mean Difference	9 (5.46, 12.54)	Robotic UKA
Crizer, 2021	Low	KOOS Total	Postop 12 wks.	Robotic UKA	Conventional UKA	Mean Difference	6 (1.22, 10.78)	Robotic UKA
Crizer, 2021	Low	KOOS Total	Postop 6 mos.	Robotic UKA	Conventional UKA	Mean Difference	7 (2.62, 11.38)	Robotic UKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Crizer, 2021	Low	KOOS Total	Postop 1 yrs.	Robotic UKA	Conventional UKA	Mean Difference	7 (1.17, 12.83)	Robotic UKA
Crizer, 2021	Low	KOOS Total	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	3.3 (-4.55, 11.15)	NS
Crizer, 2021	Low	KSS Symptoms	Preop.	Robotic UKA	Conventional UKA	Mean Difference	3 (0.49, 5.51)	Robotic UKA
Crizer, 2021	Low	KSS Symptoms	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	1 (-1.09, 3.09)	NS

Table 243234: PICO 18- Medial Unicompartmental Robotics- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Mergenthaler, 2020	Low	KSS Function	Postop 1 yrs.	Robotic UKA	Conventional UKA	Mean Difference	4.4 (1.46, 7.34)	Robotic UKA
Park, 2019	Low	Active Flexion (deg)	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-21.3 (-25.36, -17.24)	Conventional UKA
Park, 2019	Low	Active Flexion (deg)	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	-0.5 (-3.69, 2.69)	NS
Park, 2019	Low	Flexion Contracture	Preop.	Robotic UKA	Conventional UKA	Mean Difference	0.8 (-0.85, 2.45)	NS
Park, 2019	Low	Flexion Contracture	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	0.8 (-0.56, 2.16)	NS
Park, 2019	Low	KSS Function	Preop.	Robotic UKA	Conventional UKA	Mean Difference	3.3 (-1.25, 7.85)	NS
Park, 2019	Low	KSS Function	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	-2.4 (-7.83, 3.03)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Park, 2019	Low	WOMAC Function	Postop.	Robotic UKA	Conventional UKA	Mean Difference	-5.1 (-9.47, -0.73)	Robotic UKA
Park, 2019	Low	WOMAC Function	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	1.1 (-3.64, 5.84)	NS
Park, 2019	Low	WOMAC Stiffness	Preop.	Robotic UKA	Conventional UKA	Mean Difference	0.1 (-0.53, 0.73)	NS
Park, 2019	Low	WOMAC Stiffness	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	0.3 (-0.28, 0.88)	NS
Wong, 2019	Low	KSS Function	Preop.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Wong, 2019	Low	KSS Function	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Wong, 2019	Low	SF-12 Physical	Preop.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Wong, 2019	Low	SF-12 Physical	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Wong, 2019	Low	WOMAC Function	Preop.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Wong, 2019	Low	WOMAC Function	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Wong, 2019	Low	WOMAC Stiffness	Preop.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Wong, 2019	Low	WOMAC Stiffness	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Kayani, 2018	Low	Extension (deg)	Postop.	Robotic UKA	Conventional UKA	Mean Difference	0 (0.00, 0.00)	NS
Kayani, 2018	Low	Flexion (deg)	Postop.	Robotic UKA	Conventional UKA	Mean Difference	5.2 (2.89, 7.51)	Robotic UKA
Batailler, 2019	Low	KSS Function (International)	Postop 19.7mos	Robotic UKA	Conventional UKA	Mean Difference	0.6 (-3.42, 4.62)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Gilmour, 2018	Moderate	ROM (deg)	Preop.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Gilmour, 2018	Moderate	ROM (deg)	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Gilmour, 2018	Moderate	UCLA Activity Score	Preop.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Gilmour, 2018	Moderate	VAS Stiffness	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-14.3 (-22.62, -5.98)	Robotic UKA
Gilmour, 2018	Moderate	VAS Stiffness	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	Manual UKA
Zhang, 2016	High	KSS Function	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-3.1 (-4.15, -2.05)	Conventional UKA
Zhang, 2016	High	KSS Function	Postop 24mos	Robotic UKA	Conventional UKA	Mean Difference	0 (-1.94, 1.94)	NS
Zhang, 2016	High	ROM (deg)	Preop.	Robotic UKA	Conventional UKA	Mean Difference	2 (-0.24, 4.24)	NS
Zhang, 2016	High	ROM (deg)	Postop 24mos	Robotic UKA	Conventional UKA	Mean Difference	2.4 (-0.33, 5.13)	NS
Hansen, 2014	Low	ROM (deg)	Postop.	Robotic UKA	Conventional UKA	Mean Difference	14.27 (5.23, 23.31)	Robotic UKA
Hansen, 2014	Low	ROM (deg)	Postop 2 wks.	Robotic UKA	Conventional UKA	Mean Difference	-6.02 (-11.47, -0.57)	Conventional UKA
Crizer, 2021	Low	Lower Extremity Functional Scale	Postop 1 wks.	Robotic UKA	Conventional UKA	Mean Difference	8 (2.81, 13.19)	Robotic UKA
Crizer, 2021	Low	Lower Extremity Functional Scale	Postop 6 wks.	Robotic UKA	Conventional UKA	Mean Difference	4 (-0.78, 8.78)	NS
Crizer, 2021	Low	Lower Extremity Functional Scale	Postop 12 wks.	Robotic UKA	Conventional UKA	Mean Difference	3 (-2.02, 8.02)	NS
Crizer, 2021	Low	KSS Function	Preop.	Robotic UKA	Conventional UKA	Mean Difference	1 (-6.54, 8.54)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Crizer, 2021	Low	KSS Function	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	8 (0.40, 15.60)	Robotic UKA
Crizer, 2021	Low	SF-12 Physical	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-1 (-4.54, 2.54)	NS
Crizer, 2021	Low	SF-12 Physical	Postop 6 wks.	Robotic UKA	Conventional UKA	Mean Difference	4 (0.46, 7.54)	Robotic UKA
Crizer, 2021	Low	SF-12 Physical	Postop 12 wks.	Robotic UKA	Conventional UKA	Mean Difference	3 (-0.17, 6.17)	NS
Crizer, 2021	Low	SF-12 Physical	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	2 (-2.38, 6.38)	NS

Table 244235: PICO 18- Medial Unicompartmental Robotics- Opioid Use

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Crizer, 2021	Low	Opioid Use	Preop.	Robotic UKA	Conventional UKA	Mean Difference	2 (-1.12, 5.12)	NS
Crizer, 2021	Low	Opioid Use	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	54 (-51.12, 159.12)	NS

Table 245236: PICO 18- Medial Unicompartmental Robotics- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Blyth, 2017	High	Length of Stay	Postop 1 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Fisher's exact test; Chi-Square test;	N/A	NS
Blyth, 2017	High	SF-12 General Health	Postop 1 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Fisher's exact test; Chi-Square test;	N/A	NS
Park, 2019	Low	Patellofemoral Score	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-1.2 (-3.05, 0.65)	NS
Park, 2019	Low	Patellofemoral Score	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	0.4 (-1.34, 2.14)	NS
Cool, 2019	Low	Length of Stay	Postop 24mos	Robotic UKA	Conventional UKA	Author Reported - Fisher's exact test; Mann-Whitney U test;	N/A	NS
Wong, 2019	Low	SF-12 Mental	Preop.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Wong, 2019	Low	SF-12 Mental	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Gilmour, 2018	Moderate	Oxford Knee Score	Preop.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Crizer, 2021	Low	SF-12 Mental	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-1 (-4.95, 2.95)	NS
Crizer, 2021	Low	SF-12 Mental	Postop 6 wks.	Robotic UKA	Conventional UKA	Mean Difference	1 (-2.17, 4.17)	NS
Crizer, 2021	Low	SF-12 Mental	Postop 12 wks.	Robotic UKA	Conventional UKA	Mean Difference	-1 (-3.95, 1.95)	NS
Crizer, 2021	Low	SF-12 Mental	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	4 (1.07, 6.93)	Robotic UKA

Table 246237: PICO 18- Medial Unicompartmental Robotics- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Clement, 2020	Low	VAS Pain	Preop.	Robotic UKA	Conventional UKA	Mean Difference	2.9 (-5.58, 11.38)	NS
Clement, 2020	Low	VAS Pain	Postop 6 mos.	Robotic UKA	Conventional UKA	Mean Difference	17.2 (10.45, 23.95)	Conventional UKA
Blyth, 2017	High	Pain	Preop.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Fisher's exact test; Chi-Square test;	N/A	NS
Blyth, 2017	High	Pain	Postop 8 wks.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Fisher's exact test; Chi-Square test;	N/A	Robotic UKA
Blyth, 2017	High	Pain	Postop 3 mos.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Fisher's exact test; Chi-Square test;	N/A	NS
Park, 2019	Low	WOMAC Pain	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-0.7 (-2.11, 0.71)	NS
Park, 2019	Low	WOMAC Pain	Postop 2 yrs.	Robotic UKA	Conventional UKA	Mean Difference	0.9 (-0.66, 2.46)	NS
St Mart, 2020	Low	Pain	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RR	0.54(0.14,2.17)	NS
St Mart, 2020	Low	Pain	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RR	0.68(0.19,2.47)	NS
St Mart, 2020	Low	Patellofemoral Pain	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Zimmer Unicompartmental high flex knee system: Zimmer Unicompartmental high flex knee system	RD	0.00(-0.00,0.00)	NS
St Mart, 2020	Low	Patellofemoral Pain	Postop 3 yrs.	Robotic UKA: Mako Restoris MCK	Conventional UKA: Other Non-Robotic UKA	RR	1.13(0.10,12.51)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wong, 2019	Low	WOMAC Pain	Preop.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Wong, 2019	Low	WOMAC Pain	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Two-tailed t-test; Chi-Square test;	N/A	NS
Kayani, 2018	Low	VAS Pain	Postop.	Robotic UKA	Conventional UKA	Mean Difference	-2 (-2.32, -1.68)	Robotic UKA
Kayani, 2018	Low	VAS Pain	Postop 1 days	Robotic UKA	Conventional UKA	Mean Difference	-2.7 (-3.01, -2.39)	Robotic UKA
Kayani, 2018	Low	VAS Pain	Postop 2 days	Robotic UKA	Conventional UKA	Mean Difference	-3 (-3.34, -2.66)	Robotic UKA
Kayani, 2018	Low	VAS Pain	Post-discharge.	Robotic UKA	Conventional UKA	Mean Difference	-1.7 (-2.05, -1.35)	Robotic UKA
Batailler, 2019	Low	Unexplained Pain	Postop 19.7mos	Robotic UKA	Conventional UKA	RR	0.99(0.06,15.52)	NS
Gilmour, 2018	Moderate	Pain Catastrophizing Scale	Preop.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Gilmour, 2018	Moderate	Pain Catastrophizing Scale	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Gilmour, 2018	Moderate	VAS Pain	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-2.4 (-10.46, 5.66)	NS
Gilmour, 2018	Moderate	VAS Pain	Postop 2 yrs.	Robotic UKA	Conventional UKA	Author Reported - Student's t-test; Mann-Whitney U-test; Chi-Square test;	N/A	NS
Zhang, 2016	High	Pain	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-0.77 (-0.91, -0.63)	Robotic UKA
Zhang, 2016	High	Pain	Postop 24mos	Robotic UKA	Conventional UKA	Mean Difference	-0.68 (-1.30, -0.06)	Robotic UKA
Crizer, 2021	Low	VAS Pain	Preop.	Robotic UKA	Conventional UKA	Mean Difference	-18 (-26.31, -9.69)	Conventional UKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Crizer, 2021	Low	VAS Pain	Postop 1	Robotic UKA	Conventional UKA	Mean Difference	-7 (-14.54, 0.54)	NS
Crizer, 2021	Low	VAS Pain	Postop 2	Robotic UKA	Conventional UKA	Mean Difference	-7 (-14.53, 0.53)	NS
Crizer, 2021	Low	VAS Pain	Postop 3	Robotic UKA	Conventional UKA	Mean Difference	-13 (-20.43, -5.57)	Conventional UKA
Crizer, 2021	Low	VAS Pain	Postop 6	Robotic UKA	Conventional UKA	Mean Difference	-5 (-11.70, 1.70)	NS
Crizer, 2021	Low	VAS Pain	Postop 12	Robotic UKA	Conventional UKA	Mean Difference	-5 (-12.94, 2.94)	NS

Table 247238: PICO 19- Kinematic Alignment vs. Mechanical Alignment- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Young, 2020	High	Total Revisions	5 yrs.	Kinematic Alignment	Mechanical Alignment	RR	1.28(0.37,4.46)	NS

Table 248239: PICO 19- Kinematic Alignment vs. Mechanical Alignment- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
MacDessi, 2020	High	KOOS Total	Preop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	1.5 (-3.83, 6.83)	NS
MacDessi, 2020	High	KOOS Total	Postop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	2.6 (-2.86, 8.06)	NS
MacDessi, 2020	High	Forgotten Joint Score	Preop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	0.4 (-4.82, 5.62)	NS
MacDessi, 2020	High	Forgotten Joint Score	Postop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	7.1 (-2.12, 16.32)	NS
MacDessi, 2020	High	EQ-5D-5L	Preop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	0.3 (-5.50, 6.10)	NS
MacDessi, 2020	High	EQ-5D-5L	Postop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	1.8 (-3.20, 6.80)	NS
Young, 2020	High	Oxford Knee Score	5 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.3 (-3.02, 2.42)	NS
Young, 2020	High	WOMAC Total	5 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-3 (-9.19, 3.19)	NS
Young, 2020	High	Forgotten Joint Score	5 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-6.4 (-17.00, 4.20)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Young, 2020	High	EQ-5D Total	5 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.1 (-0.18, -0.02)	Mechanical Alignment
Young, 2020	High	EQ-5D VAS	5 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.2 (-6.96, 6.56)	NS
Yeo, 2019	High	WOMAC Total	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-6 (-11.32, -0.68)	Kinematic Alignment
Yeo, 2019	High	HSS Total	8 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.6 (-5.07, 1.87)	NS
Yeo, 2019	High	WOMAC Total	8 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.1 (-2.04, -0.16)	Kinematic Alignment
McEwen, 2020	High	KOOS Total	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.6 (-5.19, 6.39)	NS
McEwen, 2020	High	Oxford Knee Score	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1 (-4.90, 2.90)	NS
McEwen, 2020	High	Forgotten Joint Score	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.3 (-9.03, 9.63)	NS
McEwen, 2020	High	KOOS Total	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1.1 (-4.66, 6.86)	NS
McEwen, 2020	High	Oxford Knee Score	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.3 (-1.52, 2.12)	NS
Niki, 2018	Low	KSS Total	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.5 (-10.40, 7.40)	NS
Niki, 2018	Low	KSS Total	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.2 (-2.81, 3.21)	NS
Niki, 2018	Low	KSS Total	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1 (-7.82, 9.82)	NS
Niki, 2018	Low	KSS Symptoms	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.1 (-1.51, 1.31)	NS
Niki, 2018	Low	KSS Total	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	3.2 (-4.99, 11.39)	NS
Niki, 2018	Low	KSS Symptoms	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1 (-0.81, 2.81)	NS
Matsumoto, 2020	Low	KSS Objective	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1.6 (-2.55, 5.75)	NS
Matsumoto, 2020	Low	KSS Objective	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	2.2 (0.05, 4.35)	Kinematic Alignment
Matsumoto, 2020	Low	KSS Objective	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	15.1 (7.43, 22.77)	Kinematic Alignment
Niki, 2020	Low	KSS Total	Preop.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	-62.1 (-70.47, -53.73)	MA w/ OrthoAlign

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Niki, 2020	Low	KSS Symptoms	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	0.1 (-1.14, 1.34)	NS
Niki, 2020	Low	KSS Total	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	4 (-2.71, 10.71)	NS
Jeremic, 2020	Low	KSS Objective	Preop.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	8.8 (-4.09, 21.69)	NS
Jeremic, 2020	Low	Forgotten Joint Score	1 yrs.	KA w/ Howell technique	MA w/ standard instrumentation	Author Reported - t-test	N/A	NS
Jeremic, 2020	Low	KSS Objective	1 yrs.	KA w/ Howell technique	MA w/ standard instrumentation	Author Reported - t-test	N/A	Kinematic Alignment
Jeremic, 2020	Low	KSS Objective	.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	5.6 (-11.52, 22.72)	NS
Koh, 2021	Low	Oxford Knee Score	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.1 (-2.31, 2.51)	NS
Koh, 2021	Low	Oxford Knee Score	Postop 6 mos.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0 (-1.15, 1.15)	NS
Koh, 2021	Low	KSS Total	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	3.1 (-1.11, 7.31)	NS
Koh, 2021	Low	KSS Total	Postop 6 mos.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.1 (-3.13, 2.93)	NS
Koh, 2021	Low	KSS Total	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.7 (-4.34, 0.94)	NS
Kim, 2021	Low	KSS Total	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	3 (-0.54, 6.54)	NS
Kim, 2021	Low	KSS Total	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1.9 (-0.36, 4.16)	NS
Kim, 2021	Low	WOMAC Total	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.8 (-4.85, 1.25)	NS
Kim, 2021	Low	WOMAC Total	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	4 (1.27, 6.73)	Mechanical Alignment
Kim, 2021	Low	SF-36 Physical	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	3 (0.41, 5.59)	Kinematic Alignment
Kim, 2021	Low	SF-36 Total	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.4 (-2.78, 1.98)	NS
Kamenaga, 2021	Low	KSS Total	Postop 1 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.8 (-4.37, 5.97)	NS
Sarzaeem, 2021	High	Oxford Knee Score	Postop 20days	Kinematic Alignment	Mechanical Alignment	Mean Difference	-5.84 (-9.02, -2.66)	Kinematic Alignment

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sarzaeem, 2021	High	Oxford Knee Score	Postop 90days	Kinematic Alignment	Mechanical Alignment	Mean Difference	-4.32 (-6.86, -1.78)	Kinematic Alignment

Table 249240: PICO 19- Kinematic Alignment vs. Mechanical Alignment- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
MacDessi, 2020	High	KOOS Symptoms	Preop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	-2.1 (-8.80, 4.60)	NS
MacDessi, 2020	High	KOOS Symptoms	Postop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	3.5 (-1.96, 8.96)	NS
MacDessi, 2020	High	KOOS ADL	Preop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	3.4 (-2.87, 9.67)	NS
MacDessi, 2020	High	KOOS ADL	Postop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	2 (-3.55, 7.55)	NS
Matsumoto, 2017	High	Extension (deg)	Preop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	-2.7 (-5.91, 0.51)	NS
Matsumoto, 2017	High	Flexion (deg)	Preop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	-1.1 (-7.82, 5.62)	NS
Matsumoto, 2017	High	Extension (deg)	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	-1.2 (-2.50, 0.10)	NS
Matsumoto, 2017	High	Flexion (deg)	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	5.5 (-0.02, 11.02)	NS
Matsumoto, 2017	High	Flexion (deg)	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	6.6 (0.90, 12.30)	KA: 15 PT e-motion TKA and 15 PTPersona TKA
Matsumoto, 2017	High	KSS Objective	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	0.4 (-2.06, 2.86)	NS
Matsumoto, 2017	High	KSS Function	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	4.3 (-3.19, 11.79)	NS
Matsumoto, 2017	High	KSS Objective	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	11.1 (4.34, 17.86)	KA: 15 PT e-motion TKA and 15 PTPersona TKA
Matsumoto, 2017	High	KSS Function	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	10.5 (2.33, 18.67)	KA: 15 PT e-motion TKA and 15 PTPersona TKA
Young, 2020	High	KSS Function	5 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-5.7 (-12.79, 1.39)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yeo, 2019	High	KSS Function	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.6 (-5.84, 2.64)	NS
Yeo, 2019	High	ROM (deg)	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-3.5 (-10.77, 3.77)	NS
Yeo, 2019	High	KSS Function	8 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-2.9 (-7.87, 2.07)	NS
Yeo, 2019	High	ROM (deg)	8 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-4 (-9.82, 1.82)	NS
Yeo, 2019	High	Stride length (cm)	8 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-8.7 (-21.68, 4.28)	NS
Yeo, 2019	High	Stride time (s)	8 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.1 (-0.00, 0.20)	NS
McEwen, 2020	High	KOOS Symptoms	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.1 (-9.23, 9.03)	NS
McEwen, 2020	High	KOOS ADL	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.1 (-9.93, 7.73)	NS
McEwen, 2020	High	Extension (deg)	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1 (-3.39, 1.39)	NS
McEwen, 2020	High	Flexion (deg)	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1 (-4.64, 6.64)	NS
McEwen, 2020	High	KOOS Symptoms	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.1 (-4.95, 4.75)	NS
McEwen, 2020	High	KOOS ADL	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.2 (-3.96, 4.36)	NS
McEwen, 2020	High	Extension (deg)	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0 (-1.30, 1.30)	NS
McEwen, 2020	High	Flexion (deg)	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0 (-4.55, 4.55)	NS
Niki, 2018	Low	ROM (deg)	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-5 (-13.13, 3.13)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Niki, 2018	Low	ROM (deg)	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-2 (-8.28, 4.28)	NS
Niki, 2018	Low	KSS Function	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	5.3 (-0.97, 11.57)	NS
Niki, 2018	Low	KSS Function	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	2.2 (-4.02, 8.42)	NS
Matsumoto, 2020	Low	Extension (deg)	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-2.4 (-5.54, 0.74)	NS
Matsumoto, 2020	Low	Flexion (deg)	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-4 (-9.87, 1.87)	NS
Matsumoto, 2020	Low	KSS Function	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-6.2 (-14.47, 2.07)	NS
Matsumoto, 2020	Low	Extension (deg)	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1.1 (-0.50, 2.70)	NS
Matsumoto, 2020	Low	Flexion (deg)	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1.6 (-2.21, 5.41)	NS
Matsumoto, 2020	Low	KSS Function	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	9.8 (1.48, 18.12)	Kinematic Alignment
Matsumoto, 2020	Low	Flexion (deg)	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	5.5 (0.59, 10.41)	Kinematic Alignment
Matsumoto, 2020	Low	KSS Function	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	14.1 (4.93, 23.27)	Kinematic Alignment
Niki, 2020	Low	ROM (deg)	Preop.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	-4.6 (-10.14, 0.94)	NS
Niki, 2020	Low	KSS Function	Preop.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	0.4 (-5.63, 6.43)	NS
Niki, 2020	Low	ROM (deg)	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	-0.6 (-4.65, 3.45)	NS
Niki, 2020	Low	KSS Walking/Standing	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	2.5 (0.43, 4.57)	KA w/ OrthoAlign

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Niki, 2020	Low	KSS Basic Activity	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	1.2 (-0.08, 2.48)	NS
Niki, 2020	Low	KSS Advanced Activities	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	2.1 (0.63, 3.57)	KA w/ OrthoAlign
Niki, 2020	Low	KSS Discretionary Activities	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	-0.4 (-1.68, 0.88)	NS
Niki, 2020	Low	KSS Function	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	5.5 (0.88, 10.12)	KA w/ OrthoAlign
An, 2019	Low	Extension (deg)	Preop.	KA w/ Omni navigation	MA w/ Omni navigation	Author Reported - t-test	N/A	NS
An, 2019	Low	Extension (deg)	Postop.	KA w/ Omni navigation	MA w/ Omni navigation	Author Reported - t-test	N/A	NS
An, 2019	Low	Flexion (deg)	Intraop.	KA w/ Omni navigation	MA w/ Omni navigation	Author Reported - t-test	N/A	NS
Jeremic, 2020	Low	KSS Function	Preop.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	2.2 (-4.05, 8.45)	NS
Jeremic, 2020	Low	KOOS Symptoms	Preop.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	4.6 (-3.99, 13.19)	NS
Jeremic, 2020	Low	KOOS ADL	Preop.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	0 (-7.58, 7.58)	NS
Jeremic, 2020	Low	KSS Function	1 yrs.	KA w/ Howell technique	MA w/ standard instrumentation	Author Reported - t-test	N/A	NS
Jeremic, 2020	Low	KOOS Symptoms	1 yrs.	KA w/ Howell technique	MA w/ standard instrumentation	Author Reported - t-test	N/A	NS
Jeremic, 2020	Low	KOOS ADL	1 yrs.	KA w/ Howell technique	MA w/ standard instrumentation	Author Reported - t-test	N/A	NS
Jeremic, 2020	Low	KSS Function	.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	4.9 (-4.35, 14.15)	NS
Jeremic, 2020	Low	KOOS Symptoms	.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	5.1 (-5.76, 15.96)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jeremic, 2020	Low	KOOS ADL	.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	6.2 (-3.84, 16.24)	NS
Koh, 2021	Low	Extension (deg)	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0 (-1.72, 1.72)	NS
Koh, 2021	Low	Flexion (deg)	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0 (-4.02, 4.02)	NS
Koh, 2021	Low	Extension (deg)	Postop 6 mos.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1 (-0.44, 2.44)	NS
Koh, 2021	Low	Extension (deg)	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1 (-0.15, 2.15)	NS
Koh, 2021	Low	Flexion (deg)	Postop 6 mos.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-2 (-5.46, 1.46)	NS
Koh, 2021	Low	Flexion (deg)	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1 (-4.50, 2.50)	NS
Koh, 2021	Low	SF-36 Physical	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	2.1 (-0.67, 4.87)	NS
Koh, 2021	Low	SF-36 Physical	Postop 6 mos.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.2 (-2.37, 1.97)	NS
Koh, 2021	Low	SF-36 Physical	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.1 (-2.28, 2.48)	NS
Koh, 2021	Low	KSS Function	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-4.7 (-10.24, 0.84)	NS
Koh, 2021	Low	KSS Function	Postop 6 mos.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.4 (-4.97, 4.17)	NS
Koh, 2021	Low	KSS Function	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-3.3 (-8.37, 1.77)	NS
Kim, 2021	Low	ROM (deg)	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1.8 (-1.80, 5.40)	NS
Kim, 2021	Low	Flexion (deg)	Postop 6 mos.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1.7 (-1.09, 4.49)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2021	Low	Flexion (deg)	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	2.5 (0.93, 4.07)	Kinematic Alignment
Kim, 2021	Low	KSS Function	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	2.5 (-0.75, 5.75)	NS
Kim, 2021	Low	KSS Function	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	69.9 (67.50, 72.30)	Kinematic Alignment
Kim, 2021	Low	WOMAC Stiffness	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.3 (-0.01, 0.61)	NS
Kim, 2021	Low	WOMAC Function	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1.1 (-0.60, 2.80)	NS
Kamenaga, 2021	Low	KSS Function	Postop 1 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	7 (-0.52, 14.52)	NS
Sarzaeem, 2021	High	Oxford Knee Score Function	Postop 20days	Kinematic Alignment	Mechanical Alignment	Mean Difference	-3.66 (-5.74, -1.58)	Kinematic Alignment
Sarzaeem, 2021	High	Oxford Knee Score Function	Postop 90days	Kinematic Alignment	Mechanical Alignment	Mean Difference	-2.56 (-4.26, -0.86)	Kinematic Alignment

Table 250241: PICO 19- Kinematic Alignment vs. Mechanical Alignment- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
MacDessi, 2020	High	Operation Time (min)	Intraop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	1 (-4.20, 6.20)	NS
Young, 2020	High	Kaplan-Meier	5 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-2.5 (-10.10, 5.10)	NS
Koh, 2021	Low	SF-36 Mental	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-3.6 (-7.00, -0.20)	Mechanical Alignment
Koh, 2021	Low	SF-36 Mental	Postop 6 mos.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-3.3 (-6.37, -0.23)	Mechanical Alignment
Koh, 2021	Low	SF-36 Mental	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-5.8 (-9.05, -2.55)	Mechanical Alignment
Kim, 2021	Low	SF-36 Mental	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	3.2 (0.77, 5.63)	Kinematic Alignment

Table 251242: PICO 19- Kinematic Alignment vs. Mechanical Alignment- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
MacDessi, 2020	High	KOOS Pain	Preop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	2.1 (-3.85, 8.05)	NS
MacDessi, 2020	High	KOOS Pain	Postop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	1.3 (-4.33, 6.93)	NS
Young, 2020	High	KSS Pain	5 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.4 (-3.92, 4.72)	NS
Young, 2020	High	VAS Pain at Rest	5 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.3 (-0.25, 0.85)	NS
Young, 2020	High	VAS Pain on Motion	5 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0 (-0.73, 0.73)	NS
Yeo, 2019	High	KSS Pain	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1.9 (-0.55, 4.35)	NS
Yeo, 2019	High	KSS Pain	8 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.3 (-3.05, 3.65)	NS
McEwen, 2020	High	KOOS Pain	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.6 (-8.13, 6.93)	NS
McEwen, 2020	High	KOOS Pain	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	1.4 (-4.63, 7.43)	NS
Niki, 2018	Low	Pain DETECT Score	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.2 (-1.26, 0.86)	NS
Niki, 2018	Low	Pain Catastrophizing Scale	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.5 (-22.94, 23.94)	NS
Niki, 2018	Low	Pain DETECT Score	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.1 (-4.04, 1.84)	NS
Niki, 2018	Low	Pain Catastrophizing Scale	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.5 (-6.10, 5.10)	NS
Niki, 2020	Low	Pain DETECT Score	Preop.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	0.2 (-1.70, 2.10)	NS
Niki, 2020	Low	Pain Catastrophizing Scale	Preop.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	1.5 (1.05, 1.95)	MA w/ OrthoAlign
Niki, 2020	Low	Pain DETECT Score	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	0.4 (-0.45, 1.25)	NS
Niki, 2020	Low	Pain Catastrophizing Scale	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	2.8 (-0.23, 5.83)	NS
Jeremic, 2020	Low	KOOS Pain	Preop.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	3.2 (-3.24, 9.64)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Jeremic, 2020	Low	KOOS Pain	1 yrs.	KA w/ Howell technique	MA w/ standard instrumentation	Author Reported - t-test	N/A	NS
Jeremic, 2020	Low	KOOS Pain	.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	4.9 (-6.28, 16.08)	NS
Koh, 2021	Low	Pain Score	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-2.6 (-5.94, 0.74)	NS
Koh, 2021	Low	Pain Score	Postop 6 mos.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.8 (-4.37, 0.77)	NS
Koh, 2021	Low	Pain Score	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.7 (-3.81, 0.41)	NS
Kim, 2021	Low	WOMAC Pain	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.8 (0.07, 1.53)	Mechanical Alignment
Sarzaeem, 2021	High	VAS Pain	Postop 1 days	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.12 (-1.75, -0.49)	Kinematic Alignment
Sarzaeem, 2021	High	VAS Pain	Postop 20days	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.72 (-1.15, -0.29)	Kinematic Alignment
Sarzaeem, 2021	High	VAS Pain	Postop 90days	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.79 (-31.63, 30.05)	NS
Sarzaeem, 2021	High	Oxford Knee Score Pain	Postop 20days	Kinematic Alignment	Mechanical Alignment	Mean Difference	-2.19 (-3.74, -0.64)	Kinematic Alignment
Sarzaeem, 2021	High	Oxford Knee Score Pain	Postop 90days	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.75 (-3.15, -0.35)	Kinematic Alignment

Table 252243: PICO 19- Kinematic Alignment vs. Mechanical Alignment- QOL

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
MacDessi, 2020	High	KOOS QoL	Preop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	2 (-3.89, 7.89)	NS
MacDessi, 2020	High	KOOS QoL	Postop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	3.6 (-4.18, 11.38)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Matsumoto, 2017	High	KSS Satisfaction	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	0.9 (-2.16, 3.96)	NS
Matsumoto, 2017	High	KSS Expectation	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	0.6 (-0.84, 2.04)	NS
Matsumoto, 2017	High	KSS Satisfaction	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	0.1 (-3.60, 3.80)	NS
Matsumoto, 2017	High	KSS Expectation	Postop.	KA: 15 PT e-motion TKA and 15 PT Persona TKA	MA: 15 PT e-motion TKA and 15 PTPersona TKA	Mean Difference	1.3 (-0.65, 3.25)	NS
McEwen, 2020	High	KOOS QoL	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.6 (-10.07, 6.87)	NS
McEwen, 2020	High	KOOS QoL	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.8 (-5.22, 6.82)	NS
Niki, 2018	Low	KSS Satisfaction	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.7 (-4.73, 1.33)	NS
Niki, 2018	Low	KSS Expectation	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.6 (-1.70, 0.50)	NS
Niki, 2018	Low	KSS Satisfaction	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.2 (-2.34, 1.94)	NS
Niki, 2018	Low	KSS Expectation	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.4 (-0.14, 0.94)	NS
Matsumoto, 2020	Low	KSS Satisfaction	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-2.2 (-5.72, 1.32)	NS
Matsumoto, 2020	Low	KSS Expectation	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1.2 (-2.57, 0.17)	NS
Matsumoto, 2020	Low	KSS Satisfaction	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	4 (0.33, 7.67)	Kinematic Alignment
Matsumoto, 2020	Low	KSS Expectation	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.8 (-0.57, 2.17)	NS
Matsumoto, 2020	Low	KSS Satisfaction	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	6.2 (1.02, 11.38)	Kinematic Alignment

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Matsumoto, 2020	Low	KSS Expectation	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	2 (0.08, 3.92)	Kinematic Alignment
Niki, 2020	Low	KSS Expectation	Preop.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	0.1 (-0.22, 0.42)	NS
Niki, 2020	Low	KSS Satisfaction	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	-1.5 (-3.70, 0.70)	NS
Niki, 2020	Low	KSS Expectation	2 yrs.	KA w/ OrthoAlign	MA w/ OrthoAlign	Mean Difference	0.6 (-0.24, 1.44)	NS
Jeremic, 2020	Low	KSS Satisfaction	Preop.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	3.2 (0.80, 5.60)	KA w/ Howell technique
Jeremic, 2020	Low	KSS Expectation	Preop.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	0.6 (-0.11, 1.31)	NS
Jeremic, 2020	Low	KOOS QoL	Preop.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	1.1 (-4.54, 6.74)	NS
Jeremic, 2020	Low	KSS Satisfaction	1 yrs.	KA w/ Howell technique	MA w/ standard instrumentation	Author Reported - t-test	N/A	NS
Jeremic, 2020	Low	KSS Expectation	1 yrs.	KA w/ Howell technique	MA w/ standard instrumentation	Author Reported - t-test	N/A	NS
Jeremic, 2020	Low	KOOS QoL	1 yrs.	KA w/ Howell technique	MA w/ standard instrumentation	Author Reported - t-test	N/A	NS
Jeremic, 2020	Low	KSS Satisfaction	.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	0.6 (-4.52, 5.72)	NS
Jeremic, 2020	Low	KSS Expectation	.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	0.3 (-1.65, 2.25)	NS
Jeremic, 2020	Low	KOOS QoL	.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	6.2 (-5.97, 18.37)	NS

Table 253244: PICO 19- Kinematic Alignment vs. Mechanical Alignment- Return to activity

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
MacDessi, 2020	High	KOOS Sport	Preop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	-4.9 (-13.01, 3.21)	NS
MacDessi, 2020	High	KOOS Sport	Postop.	KA + Computer-Assisted Navigation	MA + Computer-Assisted Navigation	Mean Difference	4.9 (-2.97, 12.77)	NS
McEwen, 2020	High	KOOS Sport	Baseline.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-1 (-8.97, 6.97)	NS
McEwen, 2020	High	KOOS Sport	Postop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	-0.8 (-12.36, 10.76)	NS
Jeremic, 2020	Low	KOOS Sport	Preop.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	-0.2 (-5.36, 4.96)	NS
Jeremic, 2020	Low	KOOS Sport	1 yrs.	KA w/ Howell technique	MA w/ standard instrumentation	Author Reported - t-test	N/A	Kinematic Alignment
Jeremic, 2020	Low	KOOS Sport	.	KA w/ Howell technique	MA w/ standard instrumentation	Mean Difference	21.6 (8.56, 34.64)	KA w/ Howell technique

Table 254245: PICO 19- Kinematic Alignment vs. Mechanical Alignment- composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yeo, 2019	High	HSS Total	Preop.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.7 (-2.48, 3.88)	NS
Koh, 2021	Low	Oxford Knee Score	Postop 2 yrs.	Kinematic Alignment	Mechanical Alignment	Mean Difference	0.8 (-0.32, 1.92)	NS

Table 255246: PICO 20- Pre-Op opioid use vs. Control- Adverse Events

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2019	Low	Total Revisions	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	2.27(1.82,2.82)	No opioid use prior to TKA
Kim, 2019	Low	Total Revisions	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	2.21(1.84,2.64)	No opioid use prior to TKA
Kim, 2019	Low	Total Revisions	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	2.27(1.93,2.68)	No opioid use prior to TKA
Kim, 2019	Low	Total Revisions	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.55(1.86,3.48)	No opioid use
Kim, 2019	Low	Total Revisions	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.21(1.70,2.87)	No opioid use
Kim, 2019	Low	Total Revisions	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.37(1.87,2.99)	No opioid use
Kim, 2019	Low	Total Revisions	30 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.50(1.30,1.74)	No opioid use prior to TKA
Kim, 2019	Low	Total Revisions	60 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.50(1.33,1.69)	No opioid use prior to TKA
Kim, 2019	Low	Total Revisions	90 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.48(1.33,1.65)	No opioid use prior to TKA
Zywiel, 2011	Low	Arthroscopic Eval for Unexplained Pain	24 mos.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	RD	0.10(0.02,0.19)	No opioid use prior to TKA
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	Postop.	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.86(1.20,2.86)	No opioid use prior to TKA
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.43(1.11,1.85)	No opioid use prior to TKA
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.72(1.41,2.11)	No opioid use prior to TKA
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.80(1.51,2.16)	No opioid use prior to TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2019	Low	Opioid Overdose	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	5.77(2.50,13.32)	No opioid use prior to TKA
Kim, 2019	Low	Opioid Overdose	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	12.07(5.89,24.76)	No opioid use prior to TKA
Kim, 2019	Low	Opioid Overdose	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	17.85(9.04,35.22)	No opioid use prior to TKA
Kim, 2019	Low	Nonvertebral fracture	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	2.18(1.25,3.81)	No opioid use prior to TKA
Kim, 2019	Low	Nonvertebral fracture	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	2.52(1.80,3.54)	No opioid use prior to TKA
Kim, 2019	Low	Nonvertebral fracture	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	2.58(2.00,3.32)	No opioid use prior to TKA
Kim, 2019	Low	Vertebral Fracture	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	3.46(2.50,4.81)	No opioid use prior to TKA
Kim, 2019	Low	Vertebral Fracture	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	3.31(2.67,4.11)	No opioid use prior to TKA
Kim, 2019	Low	Vertebral Fracture	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	3.41(2.87,4.05)	No opioid use prior to TKA
Kim, 2019	Low	Myocardial Infarction or Stroke	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.05(0.76,1.45)	NS
Kim, 2019	Low	Myocardial Infarction or Stroke	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.17(0.90,1.53)	NS
Kim, 2019	Low	Myocardial Infarction or Stroke	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.25(0.99,1.58)	NS
Kim, 2019	Low	Respiratory Complications	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	2.55(1.39,4.68)	No opioid use prior to TKA
Kim, 2019	Low	Respiratory Complications	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	3.16(2.01,4.97)	No opioid use prior to TKA
Kim, 2019	Low	Respiratory Complications	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	3.64(2.46,5.38)	No opioid use prior to TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2019	Low	Pneumonia	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	2.18(1.62,2.95)	No opioid use prior to TKA
Kim, 2019	Low	Pneumonia	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	2.36(1.84,3.01)	No opioid use prior to TKA
Kim, 2019	Low	Pneumonia	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	2.77(2.24,3.44)	No opioid use prior to TKA
Kim, 2019	Low	Gastrointestinal Complications (Bowel Obstruction)	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.71(1.17,2.50)	No opioid use prior to TKA
Kim, 2019	Low	Gastrointestinal Complications (Bowel Obstruction)	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.80(1.31,2.48)	No opioid use prior to TKA
Kim, 2019	Low	Gastrointestinal Complications (Bowel Obstruction)	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.78(1.33,2.39)	No opioid use prior to TKA
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	Postop.	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.95(1.25,3.03)	NS
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.52(1.09,2.11)	NS
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.67(1.24,2.23)	NS
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.50(1.14,1.99)	NS
Zywiel, 2011	Low	Total Revisions (Pain or Stiffness)	24 mos.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	RD	0.16(0.06,0.27)	No opioid use prior to TKA
Kim, 2019	Low	Opioid Overdose	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	8.89(2.82,28.00)	NS
Kim, 2019	Low	Opioid Overdose	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	15.41(5.43,43.76)	NS
Kim, 2019	Low	Opioid Overdose	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	25.99(9.75,69.25)	NS
Kim, 2019	Low	Nonvertebral fracture	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	3.08(1.26,7.56)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2019	Low	Nonvertebral fracture	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.24(1.25,4.02)	NS
Kim, 2019	Low	Nonvertebral fracture	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.44(1.62,3.68)	NS
Kim, 2019	Low	Vertebral Fracture	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	4.40(2.70,7.14)	NS
Kim, 2019	Low	Vertebral Fracture	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	4.22(3.10,5.75)	NS
Kim, 2019	Low	Vertebral Fracture	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	4.18(3.26,5.35)	NS
Kim, 2019	Low	Myocardial Infarction or Stroke	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.02(0.63,1.65)	NS
Kim, 2019	Low	Myocardial Infarction or Stroke	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.11(0.75,1.66)	NS
Kim, 2019	Low	Myocardial Infarction or Stroke	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.25(0.88,1.77)	NS
Kim, 2019	Low	Respiratory Complications	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.13(0.77,5.85)	NS
Kim, 2019	Low	Respiratory Complications	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.66(1.22,5.78)	NS
Kim, 2019	Low	Respiratory Complications	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.58(1.36,4.91)	NS
Kim, 2019	Low	Pneumonia	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.04(1.32,3.14)	NS
Kim, 2019	Low	Pneumonia	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.02(1.39,2.93)	NS
Kim, 2019	Low	Pneumonia	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	2.29(1.63,3.20)	NS
Kim, 2019	Low	Gastrointestinal Complications (Bowel Obstruction)	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.84(1.04,3.27)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2019	Low	Gastrointestinal Complications (Bowel Obstruction)	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.87(1.15,3.04)	NS
Kim, 2019	Low	Gastrointestinal Complications (Bowel Obstruction)	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.86(1.20,2.87)	NS
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	Postop.	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.61(1.24,2.09)	No opioid use prior to TKA
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	30 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.22(1.06,1.41)	No opioid use prior to TKA
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	60 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.25(1.10,1.41)	No opioid use prior to TKA
Kim, 2019	Low	Death/Mortality (All-Cause Mortality Rate)	90 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.25(1.11,1.40)	No opioid use prior to TKA
Starr, 2018	Low	Total Revisions	7 yrs.	Chronic Opioid use 3mos Preoperatively	No opioid use prior to TKA	Author Reported - x2 Test	N/A	No Opioid Use
Starr, 2018	Low	Total Revisions	7 yrs.	Nonchronic Opioid use 3 months Preoperatively	No opioid use prior to TKA	Author Reported - x2 Test	N/A	No Opioid Use
Kim, 2019	Low	Opioid Overdose	30 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	3.05(1.57,5.93)	No opioid use prior to TKA
Kim, 2019	Low	Opioid Overdose	60 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	3.65(1.90,7.01)	No opioid use prior to TKA
Kim, 2019	Low	Opioid Overdose	90 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	3.94(2.06,7.55)	No opioid use prior to TKA
Kim, 2019	Low	Nonvertebral fracture	30 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.58(1.10,2.27)	No opioid use prior to TKA
Kim, 2019	Low	Nonvertebral fracture	60 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.56(1.24,1.97)	No opioid use prior to TKA
Kim, 2019	Low	Nonvertebral fracture	90 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.48(1.24,1.76)	No opioid use prior to TKA
Kim, 2019	Low	Vertebral Fracture	30 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	2.02(1.60,2.57)	No opioid use prior to TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2019	Low	Vertebral Fracture	60 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.83(1.57,2.14)	No opioid use prior to TKA
Kim, 2019	Low	Vertebral Fracture	90 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.81(1.59,2.05)	No opioid use prior to TKA
Kim, 2019	Low	Myocardial Infarction or Stroke	30 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	0.99(0.84,1.18)	NS
Kim, 2019	Low	Myocardial Infarction or Stroke	60 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.04(0.90,1.20)	NS
Kim, 2019	Low	Myocardial Infarction or Stroke	90 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.07(0.94,1.22)	NS
Kim, 2019	Low	Respiratory Complications	30 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.56(1.03,2.37)	No opioid use prior to TKA
Kim, 2019	Low	Respiratory Complications	60 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.41(1.00,1.97)	No opioid use prior to TKA
Kim, 2019	Low	Respiratory Complications	90 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.33(0.98,1.82)	NS
Kim, 2019	Low	Pneumonia	30 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.35(1.11,1.65)	No opioid use prior to TKA
Kim, 2019	Low	Pneumonia	60 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.38(1.17,1.63)	No opioid use prior to TKA
Kim, 2019	Low	Pneumonia	90 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.49(1.28,1.73)	No opioid use prior to TKA
Kim, 2019	Low	Gastrointestinal Complications (Bowel Obstruction)	30 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.10(0.87,1.40)	NS
Kim, 2019	Low	Gastrointestinal Complications (Bowel Obstruction)	60 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.17(0.95,1.43)	NS
Kim, 2019	Low	Gastrointestinal Complications (Bowel Obstruction)	90 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.22(1.02,1.47)	No opioid use prior to TKA
Ingall, 2021	Low	Aseptic Loosening	13 mos.	Opioid use prior to TKA	No opioid use prior to TKA	Author Reported - chi-sq	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ingall, 2021	Low	PJI	13 mos.	Opioid use prior to TKA	No opioid use prior to TKA	Author Reported - chi-sq	N/A	NS
Ingall, 2021	Low	Instability	13 mos.	Opioid use prior to TKA	No opioid use prior to TKA	Author Reported - chi-sq	N/A	NS
Ingall, 2021	Low	Wear	13 mos.	Opioid use prior to TKA	No opioid use prior to TKA	Author Reported - chi-sq	N/A	NS
Ingall, 2021	Low	Periprosthetic Fracture	13 mos.	Opioid use prior to TKA	No opioid use prior to TKA	Author Reported - chi-sq	N/A	NS
Wilson, 2021	Low	Emergency Department Visit	Postop.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.12(0.94,1.33)	NS
Wilson, 2021	Low	Wound Complications	Postop.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.16(1.03,1.30)	No opioid use prior to TKA
Wilson, 2021	Low	Infection (Infection)	Postop.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.08(0.97,1.20)	NS
Wilson, 2021	Low	Infection (Surgical Site Infection)	Postop.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.04(0.91,1.18)	NS
Wilson, 2021	Low	PJI	Postop.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.16(1.01,1.34)	No opioid use prior to TKA
Wilson, 2021	Low	Pneumonia	Postop.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.22(1.00,1.50)	NS
Wilson, 2021	Low	Thromboembolic Complications	Postop.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.05(0.99,1.12)	NS
Wilson, 2021	Low	Stroke	Postop.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.01(0.89,1.14)	NS
Wilson, 2021	Low	Myocardial Infarction or Stroke	Postop.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	0.93(0.72,1.19)	NS
Wilson, 2021	Low	Emergency Department Visit	Postop.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.62(1.48,1.77)	No opioid use prior to TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wilson, 2021	Low	Wound Complications	Postop.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.45(1.36,1.54)	No opioid use prior to TKA
Wilson, 2021	Low	Infection (Infection)	Postop.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.66(1.58,1.75)	No opioid use prior to TKA
Wilson, 2021	Low	Infection (Surgical Site Infection)	Postop.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.52(1.42,1.62)	No opioid use prior to TKA
Wilson, 2021	Low	PJI	Postop.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.96(1.83,2.10)	No opioid use prior to TKA
Wilson, 2021	Low	Pneumonia	Postop.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.42(1.26,1.59)	No opioid use prior to TKA
Wilson, 2021	Low	Thromboembolic Complications	Postop.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.14(1.10,1.18)	No opioid use prior to TKA
Wilson, 2021	Low	Stroke	Postop.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.07(1.00,1.15)	NS
Wilson, 2021	Low	Myocardial Infarction or Stroke	Postop.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.03(0.90,1.18)	NS
Wilson, 2021	Low	Emergency Department Visit	Postop.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.87(1.59,2.21)	No opioid use prior to TKA
Wilson, 2021	Low	Wound Complications	Postop.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.36(1.20,1.55)	No opioid use prior to TKA
Wilson, 2021	Low	Infection (Infection)	Postop.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.71(1.55,1.90)	No opioid use prior to TKA
Wilson, 2021	Low	Infection (Surgical Site Infection)	Postop.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.59(1.40,1.80)	No opioid use prior to TKA
Wilson, 2021	Low	PJI	Postop.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.95(1.70,2.23)	No opioid use prior to TKA
Wilson, 2021	Low	Pneumonia	Postop.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.39(1.10,1.75)	No opioid use prior to TKA
Wilson, 2021	Low	Thromboembolic Complications	Postop.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.17(1.09,1.25)	No opioid use prior to TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wilson, 2021	Low	Stroke	Postop.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.03(0.89,1.20)	NS
Wilson, 2021	Low	Myocardial Infarction or Stroke	Postop.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	0.67(0.47,0.96)	Opioid and Tramadol use prior to TKA
Wilson, 2021	Low	Total Revisions	1 yrs.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.21(1.07,1.38)	No opioid use prior to TKA
Wilson, 2021	Low	Total Revisions	1 yrs.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.65(1.54,1.76)	No opioid use prior to TKA
Wilson, 2021	Low	Total Revisions	1 yrs.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.72(1.51,1.96)	No opioid use prior to TKA
Wilson, 2021	Low	Total Revisions	3 yrs.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	3.28(2.91,3.69)	No opioid use prior to TKA
Wilson, 2021	Low	Total Revisions	3 yrs.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	3.63(3.40,3.88)	No opioid use prior to TKA
Wilson, 2021	Low	Total Revisions	3 yrs.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	4.38(3.87,4.96)	No opioid use prior to TKA

Table 256247: PICO 20- Pre-Op opioid use vs. Control- Composite

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Manalo, 2018	Low	EQ-5D-US	Preop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-0.03 (-0.08, 0.02)	NS
Manalo, 2018	Low	EQ-5D-US	519 days	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-0.05 (-0.16, 0.06)	NS
Zywiel, 2011	Low	KSS Total	24 mos.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	Mean Difference	-13 (-18.00, -8.00)	No opioid use prior to TKA
Driesman, 2019	Low	KOOS Total	Baseline.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	-0.45 (-6.50, 5.60)	NS
Driesman, 2019	Low	KOOS Total	12 wks.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	-8 (-13.19, -2.81)	No opioid use prior to TKA
Driesman, 2019	Low	KOOS Total	12 wks.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	-7.56 (-15.03, -0.09)	No opioid use prior to TKA
Driesman, 2019	Low	KOOS Total	Baseline.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	-2.39 (-7.14, 2.36)	NS
Driesman, 2019	Low	KOOS Total	12 wks.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	-3.33 (-7.98, 1.32)	NS
Driesman, 2019	Low	KOOS Total	12 wks.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	-0.95 (-6.18, 4.28)	NS

Table 257248: PICO 20- Pre-Op opioid use vs. Control- Function

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Manalo, 2018	Low	ROM (deg)	Postop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-0.9 (-6.18, 4.38)	NS
Manalo, 2018	Low	ROM (deg)	Postop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	1.1 (-8.30, 10.50)	NS
Manalo, 2018	Low	UCLA Activity Score	Preop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-1.1 (-1.90, -0.30)	No opioid use prior to TKA
Manalo, 2018	Low	UCLA Activity Score	519 days	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-0.5 (-1.12, 0.12)	NS
Zywiel, 2011	Low	ROM (deg)	24 mos.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	Mean Difference	-4 (-10.71, 2.71)	NS
Driesman, 2019	Low	VR-12 Physical	Baseline.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	-4.38 (-7.97, -0.79)	Preop Tramadol Use
Driesman, 2019	Low	VR-12 Physical	12 wks.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	-4.54 (-8.02, -1.06)	Preop Tramadol Use
Driesman, 2019	Low	VR-12 Physical	12 wks.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	-0.15 (-4.03, 3.73)	NS
Driesman, 2019	Low	VR-12 Physical	Baseline.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	-2.88 (-5.69, -0.07)	Preop Opioid Use (excluding Tramadol)
Driesman, 2019	Low	VR-12 Physical	12 wks.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	-1.01 (-3.85, 1.83)	NS
Driesman, 2019	Low	VR-12 Physical	12 wks.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	1.88 (-1.15, 4.91)	NS
Ingall, 2021	Low	Stiffness	13 mos.	Opioid use prior to TKA	No opioid use prior to TKA	Author Reported - chi-sq	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ingall, 2021	Low	KOOS Function	Preop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-8.6 (-12.34, -4.86)	No opioid use prior to TKA
Ingall, 2021	Low	KOOS Function	Postop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-8 (-11.78, -4.22)	No opioid use prior to TKA
Ingall, 2021	Low	PROMIS-SF Physical	Preop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-5.3 (-7.11, -3.49)	No opioid use prior to TKA
Ingall, 2021	Low	PROMIS-SF Physical	Postop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-9.2 (-11.21, -7.19)	No opioid use prior to TKA
Ingall, 2021	Low	SF-10A Physical	Preop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-2.7 (-3.97, -1.43)	No opioid use prior to TKA
Ingall, 2021	Low	SF-10A Physical	Postop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-8.9 (-11.00, -6.80)	No opioid use prior to TKA
Goplen, 2021	Low	WOMAC Function	Preop.	Long Term, 90 days use within 180 days of surgery	No opioid use prior to TKA	Mean Difference	-6.5 (-9.60, -3.40)	No opioid use prior to TKA
Goplen, 2021	Low	WOMAC Function	Postop.	Long Term, 90 days use within 180 days of surgery	No opioid use prior to TKA	Author Reported - t-test	-7.80(-11.60, -4.00)	Non-opioid use
Goplen, 2021	Low	WOMAC Function	Preop.	Intermittent, <90 day use within 180 days of surgery	No opioid use prior to TKA	Mean Difference	-4.1 (-5.60, -2.60)	No opioid use prior to TKA
Goplen, 2021	Low	WOMAC Function	Postop.	Intermittent, <90 day use within 180 days of surgery	No opioid use prior to TKA	Author Reported - t-test	-5.20(-7.40, -3.10)	Non-opioid use

Table 258249: PICO 20- Pre-Op opioid use vs. Control- Opioid Use

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Zywiel, 2011	Low	IV Controlled Analgesia	Postop.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	RR	1.03(0.76,1.41)	NS
Zywiel, 2011	Low	Continuous Catheter Infusion Analgesia	Postop.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	RR	1.20(0.57,2.51)	NS
Zywiel, 2011	Low	Intermittent IV Analgesia	Postop.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	RR	0.40(0.08,1.96)	NS
Zywiel, 2011	Low	ME dose of oral narcotics prescribed	Post-discharge.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	Mean Difference	-6 (-37.89, 25.89)	NS
Zywiel, 2011	Low	Regional blocks with Postop Infusion	Periop.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	RR	1.20(0.57,2.51)	NS

Table 259250: PICO 20- Pre-Op opioid use vs. Control- Other

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Manalo, 2018	Low	Length of Stay (days)	Postop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	0.2 (-0.26, 0.66)	NS
Manalo, 2018	Low	Disposition	Postop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-79 (-91.95, -66.05)	No opioid use prior to TKA
Zywiel, 2011	Low	Length of Stay (days)	Postop.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	Author Reported - t-test	N/A	NS
Zywiel, 2011	Low	General Anesthesia Only	Periop.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	RR	0.83(0.57,1.20)	NS
Kim, 2019	Low	Readmissions	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.59(1.51,1.67)	No opioid use prior to TKA
Kim, 2019	Low	Readmissions	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.65(1.59,1.72)	No opioid use prior to TKA
Kim, 2019	Low	Readmissions	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	RR	1.69(1.63,1.76)	No opioid use prior to TKA
Kim, 2019	Low	Readmissions	30 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.47(1.36,1.60)	NS
Kim, 2019	Low	Readmissions	60 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.57(1.47,1.67)	NS
Kim, 2019	Low	Readmissions	90 days	Continuous Opioid Users: ?1 dispensing in each of twelve 30-day blocks prior to TKR),	No opioid use prior to TKA	Author Reported	1.63(1.54,1.73)	NS
Kim, 2019	Low	Readmissions	30 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.21(1.18,1.25)	No opioid use prior to TKA
Kim, 2019	Low	Readmissions	60 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.22(1.19,1.26)	No opioid use prior to TKA
Kim, 2019	Low	Readmissions	90 days	Intermittent Opioid Users: any dispensing of opioids but not continuous use	No opioid use prior to TKA	RR	1.23(1.21,1.26)	No opioid use prior to TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Driesman, 2019	Low	Operation Time (min)	Intraop.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	-6.8 (-16.16, 2.56)	NS
Driesman, 2019	Low	Length of Stay (days)	Postop.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	0.33 (-0.34, 1.00)	NS
Driesman, 2019	Low	VR-12 Mental	Baseline.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	-2.98 (-8.36, 2.40)	NS
Driesman, 2019	Low	VR-12 Mental	12 wks.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	-5.22 (-10.06, -0.38)	Preop Tramadol Use
Driesman, 2019	Low	VR-12 Mental	12 wks.	Preop Tramadol Use	No opioid use prior to TKA	Mean Difference	-2.24 (-6.55, 2.07)	NS
Driesman, 2019	Low	Operation Time (min)	Intraop.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	-2.61 (-14.52, 9.30)	NS
Driesman, 2019	Low	Length of Stay (days)	Postop.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	0 (-0.48, 0.48)	NS
Driesman, 2019	Low	VR-12 Mental	Baseline.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	-2.97 (-7.58, 1.64)	NS
Driesman, 2019	Low	VR-12 Mental	12 wks.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	-2.55 (-6.16, 1.06)	NS
Driesman, 2019	Low	VR-12 Mental	12 wks.	Preop Opioid Use (excluding Tramadol): hydrocodone/acetaminophen, oxycodone/acetaminophen, hydrocodone/	No opioid use prior to TKA	Mean Difference	0.42 (-3.08, 3.92)	NS
Ingall, 2021	Low	Length of Stay (days)	Postop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	0.8 (0.64, 0.96)	No opioid use prior to TKA
Ingall, 2021	Low	PROMIS-SF Mental	Preop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-7.1 (-9.40, -4.80)	No opioid use prior to TKA
Ingall, 2021	Low	PROMIS-SF Mental	Postop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-11.4 (-13.35, -9.45)	No opioid use prior to TKA

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wilson, 2021	Low	Readmissions	90 days	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.12(1.08,1.17)	No opioid use prior to TKA
Wilson, 2021	Low	Length of Stay (days)	Postop.	Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.04(1.01,1.08)	No opioid use prior to TKA
Wilson, 2021	Low	Readmissions	90 days	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	1.20(1.17,1.23)	No opioid use prior to TKA
Wilson, 2021	Low	Length of Stay (days)	Postop.	Opioid Use (excluding Tramadol) prior to TKA	No opioid use prior to TKA	RR	0.99(0.97,1.01)	NS
Wilson, 2021	Low	Readmissions	90 days	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	1.32(1.26,1.38)	No opioid use prior to TKA
Wilson, 2021	Low	Length of Stay (days)	Postop.	Opioid and Tramadol use prior to TKA	No opioid use prior to TKA	RR	0.93(0.90,0.97)	Opioid and Tramadol use prior to TKA

Table 260251: PICO 20- Pre-Op opioid use vs. Control- Pain

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Manalo, 2018	Low	VAS Pain	Preop.	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-5 (-11.53, 1.53)	NS
Manalo, 2018	Low	VAS Pain	519 days	Opioid use prior to TKA	No opioid use prior to TKA	Mean Difference	-6.6 (-12.53, -0.67)	Opioid use prior to TKA
Zywiel, 2011	Low	Pain Management Referral	24 mos.	Minimum Equivalent dose 20mg/day	No opioid use prior to TKA	RR	10.00(1.33,75.17)	No opioid use prior to TKA
Smith, 2017	Low	WOMAC Pain	Baseline.	1+ opioid prescription within 2yrs prior to TKA	No opioid use prior to TKA	Mean Difference	0.9 (-3.98, 5.78)	NS
Smith, 2017	Low	WOMAC Pain	6 mos.	1+ opioid prescription within 2yrs prior to TKA	No opioid use prior to TKA	Mean Difference	6.6 (1.72, 11.48)	No opioid use prior to TKA
Smith, 2017	Low	WOMAC Pain	6 mos.	1+ opioid prescription within 2yrs prior to TKA	No opioid use prior to TKA	Mean Difference	-6.6 (-11.48, -1.72)	1+ opioid prescription within2yrs prior to TKA
Goplen, 2021	Low	WOMAC Pain	Preop.	Long Term, 90 days use within 180 days of surgery	No opioid use prior to TKA	Mean Difference	-7 (-10.42, -3.58)	No opioid use prior to TKA
Goplen, 2021	Low	WOMAC Pain	Postop.	Long Term, 90 days use within 180 days of surgery	No opioid use prior to TKA	Author Reported - t-test	-7.70(-11.60, -3.70)	Non-opioid use
Goplen, 2021	Low	WOMAC Pain	Preop.	Intermittent, <90 day use within 180 days of surgery	No opioid use prior to TKA	Mean Difference	-5.2 (-7.04, -3.36)	No opioid use prior to TKA
Goplen, 2021	Low	WOMAC Pain	Postop.	Intermittent, <90 day use within 180 days of surgery	No opioid use prior to TKA	Author Reported - t-test	-4.30(-6.60, -2.10)	Non-opioid use

2015 Guideline Data

Table 261: PICO 1- Drains vs. No Drains

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Li, 2011	High	Infection - Complications (Wound Infections)	Postop.	Drains	No Use of Drains	RD	-0.02(-0.06,0.02)	NS
Li, 2011	High	Deep Venous Thrombosis	Postop.	Drains	No Use of Drains	RD	0.00(0.00,0.00)	NS
Li, 2011	High	Range of Motion (Overall) - Function (Degrees of Active Flexion	Postop 3 days.	Drains	No Use of Drains	Mean Difference	-3(-9.08,3.08)	NS
Li, 2011	High	Range of Motion (Overall) - Function (Degrees of Active Flexion	Postop 1 wk.	Drains	No Use of Drains	Mean Difference	-2(-6.70,2.70)	NS
Li, 2011	High	Range of Motion (Overall) - Function (Degrees of Active Flexion	Postop 2 wks.	Drains	No Use of Drains	Mean Difference	-1(-6.89,4.89)	NS
Li, 2011	High	Range of Motion (Overall) - Function (Degrees of Active Flexion	Postop 1 yr.	Drains	No Use of Drains	Mean Difference	0(-4.33,4.33)	NS
Esler, 2003	High	Complications Other (fever above 30°C)	Postop.	Drains (closed wound drainage)	No Use of Drains	RR	0.44(0.15,1.35)	NS
Esler, 2003	High	Deep Venous Thrombosis	Postop.	Drains (closed wound drainage)	No Use of Drains	RD	0.00(0.00,0.00)	NS
Esler, 2003	High	Hematoma (hematoma or bruising)	Postop.	Drains (closed wound drainage)	No Use of Drains	RD	0.00(0.00,0.00)	NS
Esler, 2003	High	Blood Transfusion % (transfusion)	Postop.	Drains (closed wound drainage)	No Use of Drains	RR	1.63(1.08,2.47)	No Use of Drains
Esler, 2003	High	Range Of Motion (Overall) - Function (percentage of preoperation flexion regained by day 10)	1.4 wks.	Drains (closed wound drainage)	No Use of Drains	Author Reported	N/A	NS
Esler, 2003	High	Length Of Recovery - Length Of Stay	Postop.	Drains (closed wound drainage)	No Use of Drains	Author Reported	N/A	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Esler, 2003	High	VAS Pain (10cm) - Pain	2 days.	Drains (closed wound drainage)	No Use of Drains	Author Reported	N/A	NS
Esler, 2003	High	VAS Pain (10cm) - Pain	6 days.	Drains (closed wound drainage)	No Use of Drains	Author Reported	N/A	NS
Esler, 2003	High	VAS Pain (10cm) - Pain	1.4 wks.	Drains (closed wound drainage)	No Use of Drains	Author Reported	N/A	NS
Omonbude, 2010	High	Effusion (maximum depth of thickness in mm)	1 day.	Drains	No Use of Drains	Mean Difference	-0.17(-12.91,12.57)	NS
Omonbude, 2010	High	Hematoma (maximum depth of thickness in mm)	4 days.	Drains	No Use of Drains	Mean Difference	-2.67(-116.17,110.83)	NS
Jenny, 2001	Moderate	Swelling - Other	1 wk.	Drains	No Use of Drains	Mean Difference	0(-2.29,2.29)	NS
Jenny, 2001	Moderate	Blood Transfusion %	Postop.	Drains	No Use of Drains	RR	1.10(0.55,2.19)	NS
Jenny, 2001	Moderate	Swelling - Other	2 hrs.	Drains	No Use of Drains	Mean Difference	0(-2.29,2.29)	NS
Jenny, 2001	Moderate	Range of Motion (flexion) - Function	1 wk.	Drains	No Use of Drains	Mean Difference	3(-4.61,10.61)	NS
Jenny, 2001	Moderate	Range of Motion (flexion) - Function	2 days.	Drains	No Use of Drains	Mean Difference	-1(-7.60,5.60)	NS
Jenny, 2001	Moderate	VAS Pain (10cm) - Pain	2 days.	Drains	No Use of Drains	Mean Difference	0.2(-0.99,1.39)	NS
Jenny, 2001	Moderate	VAS Pain (10cm) - Pain	1 wk.	Drains	No Use of Drains	Mean Difference	-0.1(-1.21,1.01)	NS

Table 262: PICO 2- All Component Cemented vs. Hybrid (Cementless Femoral)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Demey, 2011	High	Loosening - Complications (aseptic loosening)	2 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral, tibial, and patellar components)	Hybrid (Partially) Cemented Arthroplasty (TKA with Hydroxyapatite (HA)-coated femoral and patellar component and cemented tibial component)	RD	0.02(-0.02,0.05)	NS
Demey, 2011	High	Complications Other (ligamentous laxity)	2 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral, tibial, and patellar components)	Hybrid (Partially) Cemented Arthroplasty (TKA with Hydroxyapatite (HA)-coated femoral and patellar component and cemented tibial component)	RD	0.02(-0.02,0.05)	NS
Demey, 2011	High	Complications Other (pain due to intra-articular cement fragment)	2 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral, tibial, and patellar components)	Hybrid (Partially) Cemented Arthroplasty (TKA with Hydroxyapatite (HA)-coated femoral and patellar component and cemented tibial component)	RD	0.02(-0.02,0.05)	NS
Demey, 2011	High	Complications Other (vascular ischemia secondary to popliteal thrombosis)	Postop.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral, tibial, and patellar components)	Hybrid (Partially) Cemented Arthroplasty (TKA with Hydroxyapatite (HA)-coated femoral and patellar component and cemented tibial component)	RD	-0.02(-0.05,0.02)	NS
Demey, 2011	High	Infection - Complications (deep infection)	2 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral, tibial, and patellar components)	Hybrid (Partially) Cemented Arthroplasty (TKA with Hydroxyapatite (HA)-coated femoral and patellar component and cemented tibial component)	RD	-0.02(-0.05,0.02)	NS
Demey, 2011	High	Knee Society Score - Function - Function (international knee society)	2 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral, tibial, and patellar components)	Hybrid (Partially) Cemented Arthroplasty (TKA with Hydroxyapatite (HA)-coated femoral and patellar component and cemented tibial component)	Mean Difference	1(-4.70,6.70)	NS
Iosifidis, 2014	High	KOOS -Total Score - Composite	10 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial and femoral components)	Hybrid (Partially) Cemented Arthroplasty (TKA with cemented tibial component and uncemented femoral components)	Mean Difference	0.6(-7.73,8.93)	NS
Iosifidis, 2014	High	Mortality - Mortality	10 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial and femoral components)	Hybrid (Partially) Cemented Arthroplasty (TKA with cemented tibial component and uncemented femoral components)	RR	2.01(0.41,9.83)	NS

Iosifidis, 2014	High	KOOS Pain - Pain	10 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial and femoral components)	Hybrid (Partially) Cemented Arthroplasty (TKA with cemented tibial component and uncemented femoral components)	Mean Difference	-0.8(-9.81,8.21)	NS
Iosifidis, 2014	High	KOOS - Quality of Life - Quality of Life	10 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial and femoral components)	Hybrid (Partially) Cemented Arthroplasty (TKA with cemented tibial component and uncemented femoral components)	Mean Difference	1.7(-10.97,14.37)	NS
Iosifidis, 2014	High	Reoperation - Reoperation (revision)	10 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial and femoral components)	Hybrid (Partially) Cemented Arthroplasty (TKA with cemented tibial component and uncemented femoral components)	RR	0.40(0.04,4.28)	NS
Iosifidis, 2014	High	KOOS - Symptoms - Other	10 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial and femoral components)	Hybrid (Partially) Cemented Arthroplasty (TKA with cemented tibial component and uncemented femoral components)	Mean Difference	2(-4.88,8.88)	NS
Iosifidis, 2014	High	KOOS - Function in Daily Living	10 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial and femoral components)	Hybrid (Partially) Cemented Arthroplasty (TKA with cemented tibial component and uncemented femoral components)	Mean Difference	-.4(-9.12,8.32)	NS

Table 263: PICO 2- Tibial Component Cementing

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Beaupré, 2007	High	Loosening - Complications (progressive loosening)	5 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	RR	2.85(0.31,26.28)	NS
Beaupré, 2007	High	Complications Other (postoperative or after discharge)	Postop.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar	RD	0.00(0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
				resurfacing was deemed necessary.)	component when resurfacing was deemed necessary)			
Beaupré, 2007	High	RAND Short Form 36 (all other subscales besides pain and function)	5 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Author Reported	NA	NS
Beaupré, 2007	High	WOMAC - Function Averaged VAS Version (0-100) (raw scores)	6 mos.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	2.1(-3.64,7.84)	NS
Beaupré, 2007	High	WOMAC - Function Averaged VAS Version (0-100) (raw scores)	1 yr.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	-3(-11.44,5.44)	NS
Beaupré, 2007	High	WOMAC - Function Averaged VAS Version (0-100) (raw scores)	5 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	1.4(-7.63,10.43)	NS
Beaupré, 2007	High	RAND Short Form 36 - Physical Function (raw score)	6 mos.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	8.6(-1.64,18.84)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
				resurfacing was deemed necessary.)				
Beaupré, 2007	High	RAND Short Form 36 - Physical Function (raw score)	1 yr.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	9.4(-1.49,20.29)	NS
Beaupré, 2007	High	RAND Short Form 36 - Physical Function (raw score)	5 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	-3.46(-15.23,8.31)	NS
Beaupré, 2007	High	WOMAC - Pain Averaged VAS Version (0-100)	6 mos.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	9.1(2.79,15.41)	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)
Beaupré, 2007	High	WOMAC - Pain Averaged VAS Version (0-100)	1 yr.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	-1.8(-10.09,6.49)	NS
Beaupré, 2007	High	WOMAC - Pain Averaged VAS Version (0-100)	5 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	1.6(-7.06,10.26)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
				resurfacing was deemed necessary.)				
Beaupré, 2007	High	RAND Short Form 36 - Bodily Pain (raw scores)	6 mos.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	18.1(9.66,26.54)	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)
Beaupré, 2007	High	RAND Short Form 36 - Bodily Pain (raw scores)	1 yr.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	5.4(-5.33,16.13)	NS
Beaupré, 2007	High	RAND Short Form 36 - Bodily Pain (raw scores)	5 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial fixation and cemented patellar component when resurfacing was deemed necessary.)	Uncemented Arthroplasty (TKA with hydroxyapatite-coated tibial component and cemented patellar component when resurfacing was deemed necessary)	Mean Difference	-3.4(-16.02,9.22)	NS
Lizaur-Utrilla, 2014	High	WOMAC - Overall - Composite Averaged VAS version (0-100)	6 mos.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	Mean Difference	-2(-8.82,4.82)	NS
Lizaur-Utrilla, 2014	High	WOMAC - Overall - Composite Averaged VAS version (0-100)	1 yr.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when	Mean Difference	-6(-14.95,2.95)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
				resurfacing was deemed necessary)	resurfacing was deemed necessary)			
Lizaur-Utrilla, 2014	High	WOMAC - Overall - Composite Averaged VAS version (0-100)	2 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	Mean Difference	-4(-9.12,1.12)	NS
Lizaur-Utrilla, 2014	High	WOMAC - Overall - Composite Averaged VAS version (0-100)	7 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	Mean Difference	-5(-9.49,-0.51)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)
Lizaur-Utrilla, 2014	High	Knee Society Score - Function	6 mos.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	Mean Difference	-2(-6.19,2.19)	NS
Lizaur-Utrilla, 2014	High	Knee Society Score - Function	1 yr.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	Mean Difference	-3(-7.27,1.27)	NS
Lizaur-Utrilla, 2014	High	Knee Society Score - Function	2 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when	Mean Difference	-4(-7.62,-0.38)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
				resurfacing was deemed necessary)	resurfacing was deemed necessary)			resurfacing was deemed necessary)
Lizaur-Utrilla, 2014	High	Knee Society Score - Function	7 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	Mean Difference	-3(-7.19,1.19)	NS
Lizaur-Utrilla, 2014	High	Knee Society Score - Pain	6 mos.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	Mean Difference	0 (-2.29, 2.29)	NS
Lizaur-Utrilla, 2014	High	Knee Society Score - Pain	1 yr.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	Mean Difference	-2 (-4.42, 0.42)	NS
Lizaur-Utrilla, 2014	High	Knee Society Score - Pain	2 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	Mean Difference	-3 (-5.58, -0.42)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)
Lizaur-Utrilla, 2014	High	Knee Society Score - Pain	7 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when	Mean Difference	-3 (-5.68, -0.32)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
				resurfacing was deemed necessary)	resurfacing was deemed necessary)			resurfacing was deemed necessary)
Lizaur-Utrilla, 2014	High	Reoperation - Reoperation (revision)	9 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	RR	4.69(0.57,38.59)	NS
Lizaur-Utrilla, 2014	High	Reoperation - Reoperation (reoperation for any reason)	9 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial components and cemented patellar components when resurfacing was deemed necessary)	Uncemented Arthroplasty (TKA with uncemented porous tibial components and cemented patellar components when resurfacing was deemed necessary)	RR	2.81(0.60,13.22)	NS
Pulido, 2014	High	Change in Knee Society Pain	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	Mean Difference	5 (0.08, 9.92)	Conventional Bone Cement (Without Antibiotics) (all components cemented)
Pulido, 2014	High	Change in Knee Society Function	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	Mean Difference	1 (-5.1, 7.1)	NS
Pulido, 2014	High	Complications (femoral fracture)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RD	0 (0, 0)	NS
Pulido, 2014	High	Complications (femoral loosening)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RD	0 (0, 0)	NS
Pulido, 2014	High	Complications (tibial loosening)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RD	0 (0, 0)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Pulido, 2014	High	Complications (instability)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	3.69 (0.42, 32.47)	NS
Pulido, 2014	High	Complications (infection)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	0.92 (0.13, 6.43)	NS
Pulido, 2014	High	Complications (total complications)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	1.23 (0.28, 5.36)	NS
Pulido, 2014	High	Complications (wound drainage or delayed healing)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	1.47 (0.5, 4.37)	NS
Pulido, 2014	High	Complications (arthrofibrosis)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	0.92 (0.27, 3.09)	NS
Pulido, 2014	High	Complications (patellar crepitus and Clunk Syndrome)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RD	-0.011 (-0.03, 0.01)	NS
Pulido, 2014	High	Complications (contained hematoma)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	1.38 (0.24, 8.11)	NS
Pulido, 2014	High	Complications (deep periprosthetic joint infection)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	0.92 (0.13, 6.43)	NS
Pulido, 2014	High	Complications (femoral aseptic loosening)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RD	0 (0, 0)	NS
Pulido, 2014	High	Complications (tibial loosening)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RD	0 (0, 0)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Pulido, 2014	High	Complications (instability)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	3.69 (0.42, 32.47)	NS
Pulido, 2014	High	Complications (femoral periprosthetic fracture)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RD	0.011 (-0.01, 0.03)	NS
Pulido, 2014	High	Complications (patella periprosthetic fracture)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RD	0 (0, 0)	NS
Pulido, 2014	High	Complications (deep vein thrombosis)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	1.47 (0.5, 4.37)	NS
Pulido, 2014	High	Complications (pulmonary embolism)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	2.77 (0.29, 26.18)	NS
Pulido, 2014	High	Complications (myocardial infarction)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RD	-0.011 (-0.03, 0.01)	NS
Pulido, 2014	High	Complications (atrial fibrillation)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RR	0.92 (0.06, 14.55)	NS
Pulido, 2014	High	Complications (gastrointestinal bleeding)	Minimum of 2 yr. Follow-Up	Conventional Bone Cement (Without Antibiotics) (all components cemented)	Conventional Bone Cement (Without Antibiotics) (all but tibial components cemented)	RD	-0.011 (-0.03, 0.01)	NS
Carlsson, 2005	Moderate	Knee Society Score - Function - Function	2 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial component)	Uncemented Arthroplasty (TKA with uncemented porous or hydroxyapatite-coated tibial component)	Author Reported	NA	NS

Table 264: PICO 2- Cemented Femoral and Tibial Components

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Khaw, 2002	High	Reoperation - Reoperation (revision)	10 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral and tibial components)	Uncemented Arthroplasty (TKA with uncemented porous coated)	Author Reported Hazard Ratio	.97(.36,2.6)	NS
Kim, 2014	High	WOMAC - Overall - Composite Likert (0-96)	16 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial, femoral and patellar component)	Uncemented Arthroplasty (TKA with cemented patellar component only and uncemented tibial and femoral)	Author Reported	NA	NS
Kim, 2014	High	Infection - Complications (deep)	Postop.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial, femoral and patellar component)	Uncemented Arthroplasty (TKA with cemented patellar component only and uncemented tibial and femoral)	RR/RD	1.00(0.06,15.71)	NS
Kim, 2014	High	Reoperation - Reoperation (revision)	17 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented tibial, femoral and patellar component)	Uncemented Arthroplasty (TKA with cemented patellar component only and uncemented tibial and femoral)	RR/RD	-0.01(-0.04,0.01)	NS
Pandit, 2013	High	Knee Society Score - Function	1 yr.	Conventional Bone Cement (Without Antibiotics) (unicompartmental arthroplasty with cemented tibial and femoral components)	Uncemented Arthroplasty (unicompartmental uncemented femoral and tibial components (both filled with porous titanium and coated with hydroxyapatite))	Mean Difference	-3(-10.16,4.16)	NS
Pandit, 2013	High	Knee Society Score - Function	2 yrs.	Conventional Bone Cement (Without Antibiotics) (unicompartmental arthroplasty with cemented tibial and femoral components)	Uncemented Arthroplasty (unicompartmental uncemented femoral and tibial components (both filled with porous titanium and coated with hydroxyapatite))	Mean Difference	-4.9(-11.95,2.15)	NS
Pandit, 2013	High	Knee Society Score - Function	5 yrs.	Conventional Bone Cement (Without Antibiotics) (unicompartmental	Uncemented Arthroplasty (unicompartmental uncemented femoral and tibial	Mean Difference	-12.2(-20.26,-4.14)	Uncemented Arthroplasty (unicompartmental uncemented femoral and tibial

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
				arthroplasty with cemented tibial and femoral components)	components (both filled with porous titanium and coated with hydroxyapatite))			components (both filled with porous titanium and coated with hydroxyapatite))
Pandit, 2013	High	Tegner Activity Scale	1 yr.	Conventional Bone Cement (Without Antibiotics) (unicompartmental arthroplasty with cemented tibial and femoral components)	Uncemented Arthroplasty (unicompartmental uncemented femoral and tibial components (both filled with porous titanium and coated with hydroxyapatite))	Mean Difference	-0.2(-0.72,0.32)	NS
Pandit, 2013	High	Tegner Activity Scale	2 yrs.	Conventional Bone Cement (Without Antibiotics) (unicompartmental arthroplasty with cemented tibial and femoral components)	Uncemented Arthroplasty (unicompartmental uncemented femoral and tibial components (both filled with porous titanium and coated with hydroxyapatite))	Mean Difference	-0.6(-1.10,-0.10)	Uncemented Arthroplasty (unicompartmental uncemented femoral and tibial components (both filled with porous titanium and coated with hydroxyapatite))
Pandit, 2013	High	Tegner Activity Scale	5 yrs.	Conventional Bone Cement (Without Antibiotics) (unicompartmental arthroplasty with cemented tibial and femoral components)	Uncemented Arthroplasty (unicompartmental uncemented femoral and tibial components (both filled with porous titanium and coated with hydroxyapatite))	Mean Difference	-0.3(-0.66,0.06)	NS
Pandit, 2013	High	Mortality	6 mos.	Conventional Bone Cement (Without Antibiotics) (unicompartmental arthroplasty with cemented tibial and femoral components)	Uncemented Arthroplasty (unicompartmental uncemented femoral and tibial components (both filled with porous titanium and coated with hydroxyapatite))	RD	0.03(-0.03,0.09)	NS
Pandit, 2013	High	Mortality	5 yrs.	Conventional Bone Cement (Without Antibiotics) (unicompartmental arthroplasty with cemented tibial and femoral components)	Uncemented Arthroplasty (unicompartmental uncemented femoral and tibial components (both filled with porous titanium and coated with hydroxyapatite))	RR	1.00(0.15,6.68)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Park, 2011	High	Knee Society Score - Function - Function	13.6 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral tibial and patellar components)	Uncemented Arthroplasty (TKA with cemented patellar components only uncemented tibial and femoral components)	Author Reported	NA	NS
Park, 2011	High	WOMAC - Overall - Composite Averaged VAS Version (0-100)	13.6 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral tibial and patellar components)	Uncemented Arthroplasty (TKA with cemented patellar components only uncemented tibial and femoral components)	Author Reported	NA	NS
Park, 2011	High	Reoperation - Reoperation (revision)	1 yr.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral tibial and patellar components)	Uncemented Arthroplasty (TKA with cemented patellar components only uncemented tibial and femoral components)	RR/RD	-0.02(-0.06,0.02)	NS
Baker, 2007	Moderate	Reoperation - Reoperation (revision)	15 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral and tibial components)	Uncemented Arthroplasty (TKA with uncemented porous coated)	Author Reported	0.97 (0.55, 1.71)	NS
Baker, 2007	Moderate	Reoperation - Reoperation (reoperation for any reason)	15 yrs.	Conventional Bone Cement (Without Antibiotics) (TKA with cemented femoral and tibial components)	Uncemented Arthroplasty (TKA with uncemented porous coated)	Author Reported	0.81(0.49,1.34)	NS

Table 265: PICO 2- Hybrid (Cementless Femoral) vs. All Cementless Components

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Parker, 2001	High	Reoperation - Reoperation (revision)	14 yrs.	Hybrid (Partially) Cemented Arthroplasty (TKA with cemented tibial and patellar fixation)	Uncemented Arthroplasty (TKA with uncemented porous fixation)	RR	0.75(0.46,1.25)	NS
Parker, 2001	High	Infection - Complications (revision due to infection)	14 yrs.	Hybrid (Partially) Cemented Arthroplasty (TKA with cemented tibial and patellar fixation)	Uncemented Arthroplasty (TKA with uncemented porous fixation)	RR	1.08(0.16,7.39)	NS

Table 266: PICO 3- Unicompartmental Knee Arthroplasty vs. Osteotomy (early follow-up < 90 days)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Stukenborg-Coleman, 2001	High	Complications Other (pseudoarthritis)	Postop.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RD	-0.03(-0.09,0.03)	NS
Stukenborg-Coleman, 2001	High	Fractures - Complications	Postop.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RD	-0.06(-0.15,0.02)	NS
Stukenborg-Coleman, 2001	High	Complications Other (arthrolysis)	Postop.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RD	0.04(-0.03,0.10)	NS
Stukenborg-Coleman, 2001	High	Complications Other (mobilization)	Postop.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RD	0.04(-0.03,0.10)	NS
Stukenborg-Coleman, 2001	High	Deep Venous Thrombosis	Postop.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RD	-0.09(-0.19,0.01)	NS
Stukenborg-Coleman, 2001	High	Infection - Complications	Postop.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RD	-0.06(-0.15,0.02)	NS
Stukenborg-Coleman, 2001	High	Complications Other (pseudoarthritis)	Postop.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RD	-0.03(-0.09,0.03)	NS
Stukenborg-Coleman, 2001	High	Knee Society Score - Function - Function (follow ups are 14 days, 2-5 years, 4-7 years, and 7-10 years)	2 wks.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	Author Reported	NA	NS

Table 267: PICO 3- Unicompartmental Knee Arthroplasty vs. Osteotomy (late follow-up > 90 days)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Stukenborg-Coleman, 2001	High	Knee Society Score - Function - Function (follow ups are 14 days, 2-5 years, 4-7 years, and 7-10 years)	5 yrs.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	Author Reported	NA	NS
Stukenborg-Coleman, 2001	High	Knee Society Score - Function - Function (follow ups are 14 days, 2-5 years, 4-7 years, and 7-10 years)	7 yrs.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	Author Reported	NA	NS
Stukenborg-Coleman, 2001	High	Knee Society Score - Function - Function (follow ups are 14 days, 2-5 years, 4-7 years, and 7-10 years)	10 yrs.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	Author Reported	NA	NS
Stukenborg-Coleman, 2001	High	Implant Survival - Reoperation (implant survival)	5 yrs.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RR	1.07(0.84,1.36)	NS
Stukenborg-Coleman, 2001	High	Implant Survival - Reoperation (implant survival)	10 yrs.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RR	1.29(0.91,1.83)	NS
Stukenborg-Coleman, 2001	High	Implant Survival - Reoperation (implant survival)	5 yrs.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RR	1.07(0.84,1.36)	NS
Stukenborg-Coleman, 2001	High	Implant Survival - Reoperation (implant survival)	10 yrs.	Unicompartmental Arthroplasty	High/Proximal Tibial Osteotomy	RR	1.29(0.91,1.83)	NS

Table 268: PICO 3- Unicompartmental Knee Arthroplasty vs. Total Knee Arthroplasty (early follow-up < 90 days)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sun, 2012	High	Deep Venous Thrombosis	Postop.	Unicompartmental Arthroplasty	Total Knee Arthroplasty (TKA)	Author Reported	NA	Total Knee Arthroplasty (TKA)
Newman, 1998	Moderate	Deep Venous Thrombosis (clinical signs)	Postop.	Unicompartmental Arthroplasty (St. George sled)	Total Knee Arthroplasty (TKA) (posterior cruciate retaining)	RR	0.20(0.02,1.68)	NS
Newman, 1998	Moderate	Manipulation Under Anesthesia - Other	Postop.	Unicompartmental Arthroplasty (St. George sled)	Total Knee Arthroplasty (TKA) (posterior cruciate retaining)	RD	-0.09(-0.17, -0.01)	Unicompartmental Arthroplasty (St. George sled)
Newman, 1998	Moderate	Wound Complications (delayed healing)	Postop.	Unicompartmental Arthroplasty St. George sled)	Total Knee Arthroplasty (TKA) (posterior cruciate retaining)	RD	-0.02(-0.06,0.02)	NS
Newman, 1998	Moderate	Length Of Recovery - Length Of Stay (>= 20 days)	NA	Unicompartmental Arthroplasty (St. George sled)	Total Knee Arthroplasty (TKA) (posterior cruciate retaining)	RR	0.28(0.08,0.93)	Total Knee Arthroplasty (TKA) (posterior cruciate retaining)

Table 269: PICO 3- Unicompartmental Knee Arthroplasty vs. Total Knee Arthroplasty (late follow-up > 90 days)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sun, 2012	High	Reoperation - Reoperation	2 yrs.	Unicompartmental Arthroplasty	Total Knee Arthroplasty (TKA)	RD	0.25(0.09,0.41)	Total Knee Arthroplasty (TKA)
Newman, 1998	Moderate	Bristol Knee Score Pain (excellent: score 35 to 40)	5 yrs.	Unicompartmental Arthroplasty (St. George sled)	Total Knee Arthroplasty (TKA) (posterior cruciate retaining)	RR	1.08(0.91,1.27)	NS
Newman, 1998	Moderate	Reoperation - Reoperation	5 yrs.	Unicompartmental Arthroplasty (St. George sled)	Total Knee Arthroplasty (TKA) (posterior cruciate retaining)	RR	2.04(0.19,21.76)	NS

Table 270: PICO 5- Peripheral Nerve Blockade Pain at First Day

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Chan, 2012	High	VAS Pain (10cm) - Pain (Pain at rest)	1 day.	Peripheral Nerve Block (Post-op PNB)	No Peripheral Nerve Block (No Post-op PNB)	Mean Difference	-2.2(-2.99,-1.41)	Peripheral Nerve Block (Pre-op PNB)
Chan, 2012	High	VAS Pain (10cm) - Pain (Pain at rest)	1 day.	Peripheral Nerve Block (Post-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	Mean Difference	-2.3(-3.07,-1.53)	Peripheral Nerve Block (Pre-op PNB)
Chan, 2012	High	VAS Pain (10cm) - Pain (Pain at rest)	1 day.	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Post-op PNB)	Mean Difference	-1.9(-2.67,-1.13)	Peripheral Nerve Block (Pre-op PNB)
Chan, 2012	High	VAS Pain (10cm) - Pain (Pain at rest)	1 day.	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	Mean Difference	-2(-2.74,-1.26)	Peripheral Nerve Block (Pre-op PNB)
Chan, 2012	High	Morphine Consumption (mg) (Accumulative morphine consumption)	1 day.	Peripheral Nerve Block (Post-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	Mean Difference	-15.02(-21.42,-8.62)	Peripheral Nerve Block (Pre-op PNB)
Chan, 2012	High	Morphine Consumption (mg) (Accumulative morphine consumption)	1 day.	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	Mean Difference	-10.08(-17.79,-2.37)	Peripheral Nerve Block (Pre-op PNB)
Chan, 2012	High	Morphine Consumption (mg) (Accumulative morphine consumption)	6 hrs.	Peripheral Nerve Block (Post-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	Mean Difference	-9.2(-13.22,-5.18)	Peripheral Nerve Block (Pre-op PNB)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Chan, 2012	High	Morphine Consumption (mg) (Accumulative morphine consumption)	6 hrs.	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	Mean Difference	-4.38(-10.10,1.34)	NS
Good, 2007	High	VAS Pain (10cm) - Pain (ranging from O (no pain) to 10 (worst possible pain))	1 day.	Peripheral Nerve Block (40 mL of 0.50% bupivacaine hydrochloride with epinephrine 1:200,000 before surgery)	No Peripheral Nerve Block (40-mL solution of 0.9% normal saline before surgery)	Mean Difference	-0.6(-1.66,0.46)	NS
Moghtadaei, 2014	High	VAS Pain (10cm) - Pain	1 day.	Peripheral Nerve Block (post-op femoral nerve block with 20cc ropivacaine)	Peri-Articular Local Infiltration (anesthetic and/ or anti-inflammatory and or/ analgesic) (300mg ropivacaine, 30mg ketorolac, and 0.5mg ephedrine diluted to a volume of 150cc and locally injected intra- and peri-articularly intra-op)	Author Reported	NA	NS
Moghtadaei, 2014	High	VAS Pain (10cm) - Pain	12 hrs.	Peripheral Nerve Block (post-op femoral nerve block with 20cc ropivacaine)	Peri-Articular Local Infiltration (anesthetic and/ or anti-inflammatory and or/ analgesic) (300mg ropivacaine, 30mg ketorolac, and 0.5mg ephedrine diluted to a volume of 150cc and locally injected intra- and peri-articularly intra-op)	Author Reported	NA	NS
Moghtadaei, 2014	High	VAS Pain (10cm) - Pain	6 hrs.	Peripheral Nerve Block (post-op femoral nerve block with 20cc ropivacaine)	Peri-Articular Local Infiltration (anesthetic and/ or anti-inflammatory and or/ analgesic) (300mg ropivacaine, 30mg ketorolac, and 0.5mg ephedrine diluted to a volume of 150cc and locally injected intra- and peri-articularly intra-op)	Author Reported	NA	Peripheral Nerve Block (post-op femoral nerve block with 20cc ropivacaine)
Moghtadaei, 2014	High	Morphine Consumption (mg)	1 day.	Peripheral Nerve Block (post-op femoral nerve block with 20cc ropivacaine)	Peri-Articular Local Infiltration (anesthetic and/ or anti-inflammatory and or/ analgesic) (300mg ropivacaine, 30mg ketorolac, and 0.5mg ephedrine diluted to a volume of 150cc and locally injected intra- and peri-articularly intra-op)	Author Reported	NA	Peripheral Nerve Block (post-op femoral nerve block with 20cc ropivacaine)
Xie, 2012	High	WOMAC - Pain Likert Version (0-20) (pain measured on a 6-point Likert scale (0-5))	Postop.	Peripheral Nerve Block (pre-op 3-in-1 PNB with high-dose bupivacaine (30-mL 0.5% bupivacaine with 1:200 000 epinephrine))	No Peripheral Nerve Block (Pre-op placebo nerve block (30ml normal saline))	Author Reported	NA	Peripheral Nerve Block (pre-op 3-in-1 PNB with high-dose bupivacaine (30-mL 0.5% bupivacaine with 1:200 000 epinephrine))
Xie, 2012	High	WOMAC - Pain Likert Version (0-20) (pain measured on a	Postop.	Peripheral Nerve Block (pre-op 3-in-1 PNB with low-dose bupivacaine (30-	No Peripheral Nerve Block (Pre-op placebo nerve block (30ml normal saline))	Author Reported	NA	Peripheral Nerve Block (pre-op 3-in-1 PNB with high-dose bupivacaine

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
		6-point Likert scale (0-5))		mL 0.25% bupivacaine with 1:200 000 epinephrine))				(30-mL 0.5% bupivacaine with 1:200 000 epinephrine))
Kim, 2012	Low	VAS Pain (10cm) - Pain	1 day.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS
Kim, 2012	Low	VAS Pain (10cm) - Pain	1 hr.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS
Kim, 2012	Low	VAS Pain (10cm) - Pain	12 hrs.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS
Kim, 2012	Low	VAS Pain (10cm) - Pain	2 days.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS
Kim, 2012	Low	VAS Pain (10cm) - Pain	2 hrs.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS
Kim, 2012	Low	VAS Pain (10cm) - Pain	6 hrs.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS

Table 271: PICO 5- Peripheral Nerve Block

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Chan, 2012	High	Complications Other (no morphine related side effect)	Discharge	Peripheral Nerve Block (Post-op PNB)	No Peripheral Nerve Block (No Post-op PNB)	RR	1.25(0.79,1.98)	NS
Chan, 2012	High	Complications Other (no morphine related side effect)	Discharge	Peripheral Nerve Block (Post-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	RR	0.84(0.61,1.17)	NS
Chan, 2012	High	Complications Other (no morphine related side effect)	Discharge	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Post-op PNB)	RR	1.66(1.13,2.44)	Peripheral Nerve Block (Pre-op PNB)
Chan, 2012	High	Complications Other (no morphine related side effect)	Discharge	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	RR	1.12(0.91,1.38)	NS
Chan, 2012	High	Range of Motion (overall) - Function (ROM)	1 day.	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Post-op PNB)	Mean Difference	6.6(-0.62,13.82)	NS
Chan, 2012	High	Range of Motion (overall) - Function (ROM)	1 day.	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	Mean Difference	7.7(1.44,13.96)	Peripheral Nerve Block (Pre-op PNB)
Chan, 2012	High	Range of Motion (overall) - Function (ROM)	2 days.	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Post-op PNB)	Mean Difference	3(-4.53,10.53)	NS
Chan, 2012	High	Range of Motion (overall) - Function (ROM)	2 days.	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	Mean Difference	2.7(-4.64,10.04)	NS
Chan, 2012	High	Range of Motion (overall) - Function (ROM)	3 days.	Peripheral Nerve Block (Pre-op PNB)	No Peripheral Nerve Block (No Pre op PNB)	Author Reported	NA	NS
Good, 2007	High	Complications Other (Adverse Events)	3 days.	Peripheral Nerve Block (40 mL of 0.50% bupivacaine hydrochloride with epinephrine 1:200,000 before surgery)	No Peripheral Nerve Block (40-mL solution of 0.9% normal saline before surgery)	RR	0.91(0.54,1.53)	NS
Good, 2007	High	Ambulation (walking) (Ambulation Distances Based on Graded Scale O (worst score) to 4 (best score))	1 day.	Peripheral Nerve Block (40 mL of 0.50% bupivacaine hydrochloride with epinephrine 1:200,000 before surgery)	No Peripheral Nerve Block (40-mL solution of 0.9% normal saline before surgery)	Mean Difference	0.1(-0.51,0.71)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Good, 2007	High	Ambulation (walking) (Ambulation Distances Based on Graded Scale O (worst score) to 4 (best score))	2 days.	Peripheral Nerve Block (40 mL of 0.50% bupivacaine hydrochloride with epinephrine 1:200,000 before surgery)	No Peripheral Nerve Block (40-mL solution of 0.9% normal saline before surgery)	Mean Difference	0.2(-0.29,0.69)	NS
Good, 2007	High	Ambulation (walking) (Ambulation Distances Based on Graded Scale O (worst score) to 4 (best score))	3 days.	Peripheral Nerve Block (40 mL of 0.50% bupivacaine hydrochloride with epinephrine 1:200,000 before surgery)	No Peripheral Nerve Block (40-mL solution of 0.9% normal saline before surgery)	Mean Difference	0(-0.42,0.42)	NS
Good, 2007	High	Range of Motion (extension) - Function (Degrees)	2 days.	Peripheral Nerve Block (40 mL of 0.50% bupivacaine hydrochloride with epinephrine 1:200,000 before surgery)	No Peripheral Nerve Block (40-mL solution of 0.9% normal saline before surgery)	Mean Difference	1(-1.73,3.73)	NS
Good, 2007	High	Range of Motion (extension) - Function (Degrees)	3 days.	Peripheral Nerve Block (40 mL of 0.50% bupivacaine hydrochloride with epinephrine 1:200,000 before surgery)	No Peripheral Nerve Block (40-mL solution of 0.9% normal saline before surgery)	Mean Difference	1(-1.62,3.62)	NS
Good, 2007	High	Range of Motion (flexion) - Function (Degrees)	2 days.	Peripheral Nerve Block (40 mL of 0.50% bupivacaine hydrochloride with epinephrine 1:200,000 before surgery)	No Peripheral Nerve Block (40-mL solution of 0.9% normal saline before surgery)	Mean Difference	4(-3.91,11.91)	NS
Good, 2007	High	Range of Motion (flexion) - Function (Degrees)	3 days.	Peripheral Nerve Block (40 mL of 0.50% bupivacaine hydrochloride with epinephrine 1:200,000 before surgery)	No Peripheral Nerve Block (40-mL solution of 0.9% normal saline before surgery)	Mean Difference	5(-3.48,13.48)	NS
Liu, 2014	High	Complications Other (intra-operative blood pressure and heart rate)	Intraop.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg), fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))	Author Reported	NA	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)
Liu, 2014	High	Quality of Recovery (QoR)-40 (PQRS -	Postop.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg),	Author Reported	NA	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
		Modified ADL domain)		sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)	fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))			
Liu, 2014	High	Quality of Recovery (QoR)-40 (PQRS - Physiology domain)	Postop.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg), fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))	Author Reported	NA	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)
Liu, 2014	High	Quality of Recovery (QoR)-40 (PQRS - Physiology domain)	Postop.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg), fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))	Author Reported	NA	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)
Liu, 2014	High	Quality of Recovery (QoR)-40 (PQRS – emotive-anxiety)	Postop.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg), fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))	Author Reported	NA	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liu, 2014	High	Quality of Recovery (QoR)-40 (PQRS – emotive-depression)	Postop.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg), fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))	Author Reported	NA	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)
Liu, 2014	High	Quality of Recovery (QoR)-40 (PQRS – Nociceptive- Pain)	Postop.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg), fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))	Author Reported	NA	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)
Liu, 2014	High	Quality of Recovery (QoR)-40 (PQRS – Nociceptive-Nausea)	Postop.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg), fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))	Author Reported	NA	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)
Liu, 2014	High	Quality of Recovery (QoR)-40 (PQRS – Cognitive Domain)	Postop.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg), fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))	Author Reported	NA	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
				elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)				toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)
Liu, 2014	High	Quality of Recovery (QoR)-40 (PQRS – Overall)	Postop.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg), fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))	Author Reported	NA	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)
Liu, 2014	High	Additional Medication - Postoperative Pain Control (Sufentanil consumption, mg)	1 day.	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)	General Anesthesia (general anesthesia was induced with midazolam (0.015–0.03 mg/kg), fentanyl (1.8–3.5 µg/kg), etomidate (0.2–0.3 mg/kg), and rocuronium (0.4–0.6 mg/kg))	Mean Difference	-26(-28.56,-23.44)	Peripheral Nerve Block (received midazolam (0.015–0.03 mg/kg) and fentanyl (0.8–2.0 µg/kg) titrated to provide conscious sedation before nerve block insertion; sciatic nerve block was performed in the same position after a twitch of hamstring, soleus, foot, or toes had been elicited using a similar current, and 15–25 mL of 0.35% ropivacaine was injected.)
Moghtadaei, 2014	High	Range Of Motion (overall) - Function (degrees)	3 mos.	Peripheral Nerve Block (post-op femoral nerve block with 20cc ropivacaine)	Peri-Articular Local Infiltration (anesthetic and/ or anti-inflammatory and or/ analgesic) (300mg ropivacaine, 30mg ketorolac, and 0.5mg ephedrine diluted to a volume of 150cc and locally injected intra- and peri-articularly intra-op)	Mean Difference	-2.2(-10.71,6.31)	NS
Moghtadaei, 2014	High	Range Of Motion (overall) - Function (degrees)	Discharge	Peripheral Nerve Block (post-op femoral nerve block with 20cc ropivacaine)	Peri-Articular Local Infiltration (anesthetic and/ or anti-inflammatory and or/ analgesic) (300mg ropivacaine, 30mg ketorolac, and 0.5mg ephedrine diluted to a volume of 150cc and	Mean Difference	-2.6(-8.75,3.55)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
					locally injected intra- and peri-articularly intra-op)			
Moghtadaei, 2014	High	Days - Length Of Stay	Postop.	Peripheral Nerve Block (post-op femoral nerve block with 20cc ropivacaine)	Peri-Articular Local Infiltration (anesthetic and/ or anti-inflammatory and or/ analgesic) (300mg ropivacaine, 30mg ketorolac, and 0.5mg ephedrine diluted to a volume of 150cc and locally injected intra- and peri-articularly intra-op)	Author Reported	NA	NS
Moghtadaei, 2014	High	Patient Satisfaction (satisfaction level (1-4, 1=very good) after 48 hours)	2 days.	Peripheral Nerve Block (post-op femoral nerve block with 20cc ropivacaine)	Peri-Articular Local Infiltration (anesthetic and/ or anti-inflammatory and or/ analgesic) (300mg ropivacaine, 30mg ketorolac, and 0.5mg ephedrine diluted to a volume of 150cc and locally injected intra- and peri-articularly intra-op)	Author Reported	NA	NS
Xie, 2012	High	Nausea and Vomiting (nausea on a 6 point Likert scale (0-5) - Any)	1 day.	Peripheral Nerve Block (pre-op 3-in-1 PNB with high-dose bupivicaine (30-mL 0.5% bupivacaine with 1:200 000 epinephrine))	No Peripheral Nerve Block (Pre-op placebo nerve block (30ml normal saline))	RR	1.41(0.88,2.27)	NS
Xie, 2012	High	Nausea and Vomiting (nausea on a 6-point Likert scale (0-5) - Any)	1 day.	Peripheral Nerve Block (pre-op 3-in-1 PNB with low-dose bupivacaine (30-mL 0.25% bupivacaine with 1:200 000 epinephrine))	No Peripheral Nerve Block (Pre-op placebo nerve block (30ml normal saline))	RR	1.32(0.81,2.15)	NS
Xie, 2012	High	Nausea and Vomiting (nausea on a 6-point Likert scale (0-5) - Any)	Postop.	Peripheral Nerve Block (pre-op 3-in-1 PNB with high-dose bupivacaine (30-mL 0.5% bupivacaine with 1:200 000 epinephrine))	No Peripheral Nerve Block (Pre-op placebo nerve block (30ml normal saline))	RR	1.25(0.49,3.22)	NS
Xie, 2012	High	Nausea and Vomiting (nausea on a 6-point Likert scale (0-5) - Any)	Postop.	Peripheral Nerve Block (pre-op 3-in-1 PNB with low-dose bupivacaine (30-mL 0.25% bupivacaine with 1:200 000 epinephrine))	No Peripheral Nerve Block (Pre-op placebo nerve block (30ml normal saline))	RR	1.29(0.50,3.31)	NS
Kim, 2012	Low	Postoperative Nausea and Vomiting	1 day.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RR	1.00(0.27,3.72)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Kim, 2012	Low	Postoperative Nausea and Vomiting	1 hr.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RR	0.50(0.05,5.30)	NS
Kim, 2012	Low	Postoperative Nausea and Vomiting	12 hrs.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RR	1.00(0.21,4.66)	NS
Kim, 2012	Low	Postoperative Nausea and Vomiting	2 days.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RD	0.00(0.00,0.00)	NS
Kim, 2012	Low	Postoperative Nausea and Vomiting	2 hrs.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RR	0.83(0.28,2.51)	NS
Kim, 2012	Low	Postoperative Nausea and Vomiting	6 hrs.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RR	0.33(0.04,3.07)	NS
Kim, 2012	Low	Complications Other (Dizziness)	1 day.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RD	0.03(-0.02,0.07)	NS
Kim, 2012	Low	Complications Other (Dizziness)	1 hr.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RD	-0.05(-0.12,0.02)	NS
Kim, 2012	Low	Complications Other (Dizziness)	12 hrs.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RR	0.50(0.05,5.30)	NS
Kim, 2012	Low	Complications Other (Dizziness)	2 days.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RR	1.00(0.06,15.44)	NS
Kim, 2012	Low	Complications Other (Dizziness)	2 hrs.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5%	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of	RD	-0.05(-0.12,0.02)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
				mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)			
Kim, 2012	Low	Complications Other (Dizziness)	6 hrs.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RR	0.83(0.28,2.51)	NS
Kim, 2012	Low	Patient Satisfaction (rate of satisfaction with postoperative analgesia (0-100))	Postop.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS
Kim, 2012	Low	Patient Satisfaction (rate of satisfaction with surgical anesthesia (0-100))	Postop.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS
Kim, 2012	Low	Patient Satisfaction (willingness to recommend the same surgical anesthesia to others)	Postop.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	RR	1.20(0.98,1.48)	NS
Kim, 2012	Low	Perioperative Use Of Narcotics - Pain (complete resolution time of IV PCA (min))	Postop.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS
Kim, 2012	Low	Perioperative Use Of Narcotics - Pain (duration of IV PCA use (min))	Postop.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS
Kim, 2012	Low	Perioperative Use Of Narcotics - Pain (remaining amount of IV PCA (ml))	Postop.	Peripheral Nerve Block (femoral nerve block with 10ml of 1.5% mepivacaine, sciatic nerve block with 20ml of 1.5% mepivacaine)	Neuraxial Anesthesia or Epidural/Spinal (1.3ml of hyperbaric bupivacaine followed by 10ml 0.75% ropivacaine)	Author Reported	NA	NS
Lau, 1998	Low	Blood Loss - Complications (ml)	Intraop.	Peripheral Nerve Block (40ml 2% xylocaine and 10ml 0.5% Marcaine)	Neuraxial Anesthesia or Epidural/Spinal (2.75-3.25ml 0.5% bupivacaine with propofol infusion 3.5mg/kg/hr.)	Author Reported	NA	NS
Lau, 1998	Low	Complications Other (Urinary retention (n))	Postop.	Peripheral Nerve Block (40ml 2% xylocaine and 10ml 0.5% Marcaine)	Neuraxial Anesthesia or Epidural/Spinal (2.75-3.25ml 0.5% bupivacaine	Author Reported	NA	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
					with propofol infusion 3.5mg/kg/hr.)			
Lau, 1998	Low	Perioperative Use Of Narcotics - Pain (Time until first dose of morphine (hrs))	Postop.	Peripheral Nerve Block (40ml 2% xylocaine and 10ml 0.5% Marcaine)	Neuraxial Anesthesia or Epidural/Spinal (2.75-3.25ml 0.5% bupivacaine with propofol infusion 3.5mg/kg/hr.)	Author Reported	NA	NS
Kadic, 2009	High	Knee Society Score - Knee	3 mos.	Peripheral Nerve Block	No Peripheral Nerve Block	Mean Difference	0.6(-7.73,8.93)	NS
Kadic, 2009	High	Knee Society Score - Function - Function	3 mos.	Peripheral Nerve Block	No Peripheral Nerve Block	Mean Difference	2.7(-13.38,18.78)	NS
Kadic, 2009	High	Range of Motion (flexion) - Function	3 days.	Peripheral Nerve Block	No Peripheral Nerve Block	Author Reported	NA	NS
Kadic, 2009	High	Range of Motion (flexion) - Function	3 days.	Peripheral Nerve Block	No Peripheral Nerve Block	Author Reported	NA	NS
Kadic, 2009	High	Range of Motion (flexion) - Function	3 mos.	Peripheral Nerve Block	No Peripheral Nerve Block	Author Reported	NA	NS
Kadic, 2009	High	Range of Motion (flexion) - Function	3 mos.	Peripheral Nerve Block	No Peripheral Nerve Block	Author Reported	NA	NS
Kadic, 2009	High	Range of Motion (flexion) - Function	4 days.	Peripheral Nerve Block	No Peripheral Nerve Block	Author Reported	NA	NS
Kadic, 2009	High	Range of Motion (flexion) - Function	5 days.	Peripheral Nerve Block	No Peripheral Nerve Block	Author Reported	NA	NS
Kadic, 2009	High	Range of Motion (flexion) - Function	6 days.	Peripheral Nerve Block	No Peripheral Nerve Block	Author Reported	NA	NS
Kadic, 2009	High	WOMAC - Function Averaged VAS Version (0-100)	3 mos.	Peripheral Nerve Block	No Peripheral Nerve Block	Mean Difference	8.6(-1.70,18.90)	NS
Kadic, 2009	High	WOMAC - Stiffness Averaged VAS Version (0-100)	3 mos.	Peripheral Nerve Block	No Peripheral Nerve Block	Mean Difference	4.3(-8.69,17.29)	NS
McNamee, 2001	High	VAS Pain (100mm) - Pain (VAS Pain Scores)	2 days.	Peripheral Nerve Block (2 mg· kg-1 of ropivacaine 7.5 mg· ml-1 divided equally between the femoral and sciatic nerves.)	No Peripheral Nerve Block (no peripheral nerve blockade but the area was prepared, and a dressing applied to the appropriate sites)	Author Reported	NA	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
McNamee, 2001	High	Morphine Consumption (mg) (consumption and time to first morphine request)	2 days.	Peripheral Nerve Block (2 mg· kg-1 of ropivacaine 7.5 mg· ml-1 divided equally between the femoral and sciatic nerves.)	No Peripheral Nerve Block (no peripheral nerve blockade but the area was prepared, and a dressing applied to the appropriate sites)	Author Reported	NA	Peripheral Nerve Block (2 mg· kg-1 of ropivacaine 7.5 mg· ml-1 divided equally between the femoral and sciatic nerves.)

Table 272: PICO 6- Tranexamic Acid vs. Placebo

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sarzaeem, 2014	High	Blood Loss - Complications	Postop.	Tranexamic Acid (topical: the knee joint cavity irrigated with 3 g of TXA in 100 cc of saline just before suturing for 5 min)	No Tranexamic Acid	Mean Difference	-117.3(-170.43, -64.17)	Tranexamic Acid (topical: the knee joint cavity irrigated with 3 g of TXA in 100 cc of saline just before suturing for 5 min)
Sarzaeem, 2014	High	Fall in HB, g/dL (drop in HB (higher=greater drop))	Postop.	Tranexamic Acid (topical: the knee joint cavity irrigated with 3 g of TXA in 100 cc of saline just before suturing for 5 min)	No Tranexamic Acid	Mean Difference	-0.3(-0.69,0.09)	NS
Sarzaeem, 2014	High	Need Transfusion - Complications (need for transfusion)	Postop.	Tranexamic Acid (topical: the knee joint cavity irrigated with 3 g of TXA in 100 cc of saline just before suturing for 5 min)	No Tranexamic Acid	RR	1.00(0.38,2.64)	NS
Sarzaeem, 2014	High	VTE - Complications (any thromboembolic event)	Postop.	Tranexamic Acid (topical: the knee joint cavity irrigated with 3 g of TXA in 100 cc of saline just before suturing for 5 min)	No Tranexamic Acid	RD	0.00(0.00,0.00)	NS
Sarzaeem, 2014	High	Blood Loss - Complications	Postop.	Tranexamic Acid (500 mg of TXA in 100 cc of saline)	No Tranexamic Acid	Mean Difference	-383.7(-436.54, -330.86)	Tranexamic Acid (topical: the knee joint cavity irrigated with 3 g of TXA in 100 cc of saline just before suturing for 5 min)
Sarzaeem, 2014	High	Need Transfusion - Complications (need for transfusion)	Postop.	Tranexamic Acid (500 mg of TXA in 100 cc of saline)	No Tranexamic Acid	RD	-0.14(-0.24, -0.04)	Tranexamic Acid (topical: the knee joint cavity irrigated with

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
								3 g of TXA in 100 cc of saline just before suturing for 5 min)
Sarzaeem, 2014	High	VTE - Complications (any thromboembolic event)	Postop.	Tranexamic Acid (500 mg of TXA in 100 cc of saline)	No Tranexamic Acid	RD	0.00(0.00,0.00)	NS
Sarzaeem, 2014	High	Fall in HB, g/dL (drop in HB (higher=greater drop))	Postop.	Tranexamic Acid (500 mg of TXA in 100 cc of saline)	No Tranexamic Acid	Mean Difference	-1.9(-2.27, -1.53)	Tranexamic Acid (topical: the knee joint cavity irrigated with 3 g of TXA in 100 cc of saline just before suturing for 5 min)
Sa-Ngasoongsong, 2013	High	Complications Other (re-clamp)	Postop.	Tranexamic Acid (500mg)	No Tranexamic Acid	RD	-0.13(-0.23, -0.03)	Tranexamic Acid (500mg)
Sa-Ngasoongsong, 2013	High	Complications Other (re-dressing)	Postop.	Tranexamic Acid (500mg)	No Tranexamic Acid	RD	-0.07(-0.14,0.01)	NS
Sa-Ngasoongsong, 2013	High	VTE - Complications	Periop.	Tranexamic Acid (500mg)	No Tranexamic Acid	RR	0.50(0.10,2.59)	NS
Sa-Ngasoongsong, 2013	High	Complications Other (congestive heart failure)	Postop.	Tranexamic Acid (500mg)	No Tranexamic Acid	RD	0.00(0.00,0.00)	NS
Sa-Ngasoongsong, 2013	High	Blood Loss - Complications (drainage blood loss)	Periop.	Tranexamic Acid (250 mg)	No Tranexamic Acid	Mean Difference	-71.9(-180.93,37.13)	NS
Sa-Ngasoongsong, 2013	High	Fall in HB, g/dL	Periop.	Tranexamic Acid (500mg)	No Tranexamic Acid	Mean Difference	-0.7(-35.59,34.19)	NS
Sa-Ngasoongsong, 2013	High	Blood Loss - Complications (calculated total blood loss)	Periop.	Tranexamic Acid (500mg)	No Tranexamic Acid	Mean Difference	-112(-155.61, -68.39)	Tranexamic Acid (500mg)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sa-Ngasoongsong, 2013	High	Fall in HB, g/dL	Periop.	Tranexamic Acid (250 mg)	No Tranexamic Acid	Mean Difference	-0.7(-35.59,34.19)	NS
Sa-Ngasoongsong, 2013	High	Blood Loss - Complications (calculated total blood loss)	Periop.	Tranexamic Acid (250 mg)	No Tranexamic Acid	Mean Difference	-89.5(-132.10, -46.90)	Tranexamic Acid (500mg)
Sa-Ngasoongsong, 2013	High	Blood Loss - Complications (drainage blood loss)	Postop.	Tranexamic Acid (500mg)	No Tranexamic Acid	Mean Difference	-116.7(-219.88, -13.52)	Tranexamic Acid (500mg)
Sa-Ngasoongsong, 2013	High	Blood Transfusion %	Periop.	Tranexamic Acid (250 mg)	No Tranexamic Acid	RR	0.60(0.24,1.51)	NS
Sa-Ngasoongsong, 2013	High	Complications Other (re-clamp)	Postop.	Tranexamic Acid (250 mg)	No Tranexamic Acid	RR	0.17(0.02,1.33)	NS
Sa-Ngasoongsong, 2013	High	Complications Other (re-dressing)	Postop.	Tranexamic Acid (250 mg)	No Tranexamic Acid	RD	-0.07(-0.14,0.01)	NS
Sa-Ngasoongsong, 2013	High	VTE - Complications	Postop.	Tranexamic Acid (250 mg)	No Tranexamic Acid	RR	0.25(0.03,2.15)	NS
Sa-Ngasoongsong, 2013	High	Complications Other (congestive heart failure)	Postop.	Tranexamic Acid (250 mg)	No Tranexamic Acid	RD	0.02(-0.02,0.07)	NS
Sa-Ngasoongsong, 2013	High	WOMAC - Overall - Composite Likert (0-96) (unclear if Likert or VAS)	3 mos.	Tranexamic Acid (250 mg)	No Tranexamic Acid	Mean Difference	-0.9 (-4.21, 2.41)	NS
Sa-Ngasoongsong, 2013	High	WOMAC - Overall - Composite Likert (0-96) (unclear if Likert or VAS)	6 mos.	Tranexamic Acid (250 mg)	No Tranexamic Acid	Mean Difference	-2.3 (-4.92, 0.32)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sa-Ngasoongsong, 2013	High	WOMAC - Overall - Composite Likert (0-96) (unclear if Likert or VAS)	1 yr.	Tranexamic Acid (250 mg)	No Tranexamic Acid	Mean Difference	-0.4 (-3.08, 2.28)	NS
Sa-Ngasoongsong, 2013	High	WOMAC - Overall - Composite Likert (0-96) (unclear if Likert or VAS)	3 mos.	Tranexamic Acid (500 mg)	No Tranexamic Acid	Mean Difference	-1.2 (-4.43, 2.03)	NS
Sa-Ngasoongsong, 2013	High	WOMAC - Overall - Composite Likert (0-96) (unclear if Likert or VAS)	6 mos.	Tranexamic Acid (500 mg)	No Tranexamic Acid	Mean Difference	-1.9 (-4.54, 0.74)	NS
Sa-Ngasoongsong, 2013	High	WOMAC - Overall - Composite Likert (0-96) (unclear if Likert or VAS)	1 yr.	Tranexamic Acid (500 mg)	No Tranexamic Acid	Mean Difference	-1 (-3.87, 1.87)	NS
Roy, 2012	High	Drainage - Complications (measured between 0-6,6-48 hours. and total in 5 days)	6 hrs.	Tranexamic Acid (500 mg/5 ml)	No Tranexamic Acid (placebo)	Mean Difference	-201.6(-264.15, -139.05)	Tranexamic Acid (500 mg/5 ml)
Roy, 2012	High	Drainage - Complications (measured between 0-6,6-48 hours. and total in 5 days)	2 days.	Tranexamic Acid (500 mg/5 ml)	No Tranexamic Acid (placebo)	Mean Difference	-248.4(-326.05, -170.75)	Tranexamic Acid (500 mg/5 ml)
Roy, 2012	High	Drainage - Complications (measured between 0-6,6-48 hours. and total in 5 days)	5 days.	Tranexamic Acid (500 mg/5 ml)	No Tranexamic Acid (placebo)	Mean Difference	-469(-554.18, -383.82)	Tranexamic Acid (500 mg/5 ml)
Roy, 2012	High	Fall in HB, g/dL (day5-day0)	5 days.	Tranexamic Acid (500 mg/5 ml)	No Tranexamic Acid (placebo)	Mean Difference	-1.1(-1.75, -0.45)	Tranexamic Acid (500 mg/5 ml)
Roy, 2012	High	Hematocrit (day5-day0)	5 days.	Tranexamic Acid (500 mg/5 ml)	No Tranexamic Acid (placebo)	Mean Difference	2.36(0.61,4.11)	Tranexamic Acid (500 mg/5 ml)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Roy, 2012	High	Blood Transfusion % (number of patients transfused)	5 days.	Tranexamic Acid (500 mg/5 ml)	No Tranexamic Acid (placebo)	RR	0.29(0.07,1.24)	NS
Roy, 2012	High	VTE - Complications (thromboembolic events)	5 days.	Tranexamic Acid (500 mg/5 ml)	No Tranexamic Acid (placebo)	RD	0.00(0.00,0.00)	NS
Roy, 2012	High	Blood Loss - Complications	Intraop.	Tranexamic Acid (500 mg/5 ml)	No Tranexamic Acid (placebo)	Mean Difference	-84.4(-127.46, -41.34)	Tranexamic Acid (500 mg/5 ml)
Ishida, 2011	High	Drainage - Complications	3 hrs.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	Tranexamic Acid
Ishida, 2011	High	Drainage - Complications	6 hrs.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	Tranexamic Acid
Ishida, 2011	High	Drainage - Complications	1 hr.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	NS
Ishida, 2011	High	Fall in HB, g/dL	1 day.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	Tranexamic Acid
Ishida, 2011	High	Fall in HB, g/dL	1 wk.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	Tranexamic Acid
Ishida, 2011	High	Fall in HB, g/dL	2 wks.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ishida, 2011	High	Fall in HB, g/dL	Postop.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	Tranexamic Acid
Ishida, 2011	High	Drainage - Complications	12 hrs.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	Tranexamic Acid
Ishida, 2011	High	Drainage - Complications	1 day.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	Tranexamic Acid
Ishida, 2011	High	Drainage - Complications	2 days.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	NS
Ishida, 2011	High	Blood Transfusion % (allogenic blood transfusions)	2 wks.	Tranexamic Acid	No Tranexamic Acid	RD	-0.02(-0.06,0.02)	NS
Ishida, 2011	High	Swelling - Other (suprapatellar girth cm)	1 wk.	Tranexamic Acid	No Tranexamic Acid	Mean Difference	-0.9(-1.37, -0.43)	Tranexamic Acid
Ishida, 2011	High	Swelling - Other (suprapatellar girth cm)	2 wks.	Tranexamic Acid	No Tranexamic Acid	Mean Difference	-0.4(-1.06,0.26)	NS
Ishida, 2011	High	Swelling - Other (suprapatellar girth cm)	4 wks.	Tranexamic Acid	No Tranexamic Acid	Mean Difference	0.2(-0.27,0.67)	NS
Ishida, 2011	High	Swelling - Other (calf girth cm)	1 wk.	Tranexamic Acid	No Tranexamic Acid	Mean Difference	-0.4(-1.11,0.31)	NS
Ishida, 2011	High	Swelling - Other (calf girth cm)	2 wks.	Tranexamic Acid	No Tranexamic Acid	Mean Difference	-0.8(-1.39, -.20)	Tranexamic Acid

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ishida, 2011	High	Swelling - Other (calf girth cm)	4 wks.	Tranexamic Acid	No Tranexamic Acid	Mean Difference	-0.2(-0.67,0.27)	NS
Ishida, 2011	High	Swelling - Other (change from preoperative thigh girth cm)	1 wk.	Tranexamic Acid	No Tranexamic Acid	Mean Difference	-0.3(-1.03,0.43)	NS
Ishida, 2011	High	Swelling - Other (change from preoperative thigh girth cm)	2 wks.	Tranexamic Acid	No Tranexamic Acid	Mean Difference	-0.1(-0.88,0.68)	NS
Ishida, 2011	High	Swelling - Other (change from preoperative thigh girth cm)	4 wks.	Tranexamic Acid	No Tranexamic Acid	Mean Difference	-0.2(-1.04,0.64)	NS
Ishida, 2011	High	Reoperation - Reoperation (at average of 21.5 month follow up)	1.7 yrs.	Tranexamic Acid	No Tranexamic Acid	Author Reported	NA	NS
Good, 2003	High	Drainage - Complications	5 days.	Tranexamic Acid (tranexamic acid 10 mg kg-1)	No Tranexamic Acid (placebo)	Author Reported	NA	Tranexamic Acid (tranexamic acid 10 mg kg-1)
Good, 2003	High	Blood Loss - Complications (ml)	5 days.	Tranexamic Acid (tranexamic acid 10 mg kg-1)	No Tranexamic Acid (placebo)	Author Reported	NA	Tranexamic Acid (tranexamic acid 10 mg kg-1)
Good, 2003	High	Blood Loss - Complications (hidden blood loss)	5 days.	Tranexamic Acid (tranexamic acid 10 mg kg-1)	No Tranexamic Acid (placebo)	Author Reported	NA	NS
Good, 2003	High	Blood Transfusion % (red blood cells transfused)	5 days.	Tranexamic Acid (tranexamic acid 10 mg kg-1)	No Tranexamic Acid (placebo)	Author Reported	NA	Tranexamic Acid (tranexamic acid 10 mg kg-1)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Good, 2003	High	Blood Transfusion % (number transfused)	5 days.	Tranexamic Acid (tranexamic acid 10 mg kg-1)	No Tranexamic Acid (placebo)	RR	0.19(0.06,0.58)	Tranexamic Acid (tranexamic acid 10 mg kg-1)
Good, 2003	High	Deep Venous Thrombosis (clinical symptoms of dvt)	5 days.	Tranexamic Acid (tranexamic acid 10 mg kg-1)	No Tranexamic Acid (placebo)	RR	0.89(0.14,5.83)	NS
Good, 2003	High	Infection - Complications (wound infection)	5 days.	Tranexamic Acid (tranexamic acid 10 mg kg-1)	No Tranexamic Acid (placebo)	RD	0.04(-0.03,0.11)	NS
Good, 2003	High	Fall in HB, g/dL (raw post op hb)	1 day.	Tranexamic Acid (tranexamic acid 10 mg kg-1)	No Tranexamic Acid (placebo)	Author Reported	NA	Tranexamic Acid (tranexamic acid 10 mg kg-1)
Good, 2003	High	Fall in HB, g/dL (raw post op hb)	3 days.	Tranexamic Acid (tranexamic acid 10 mg kg-1)	No Tranexamic Acid (placebo)	Author Reported	NA	Tranexamic Acid (tranexamic acid 10 mg kg-1)
Good, 2003	High	Fall in HB, g/dL (raw post op hb)	5 days.	Tranexamic Acid (tranexamic acid 10 mg kg-1)	No Tranexamic Acid (placebo)	Author Reported	NA	Tranexamic Acid (tranexamic acid 10 mg kg-1)
Gautam, 2011	High	Blood Loss - Complications (postoperative)	Postop.	Tranexamic Acid (received tranexamic acid 10 mg/kg IV, approximately half an hour before deflation of tourniquet and 3 hours after the first dose)	No Tranexamic Acid (placebo)	Mean Difference	-412.5(-487.11, -337.89)	Tranexamic Acid (received tranexamic acid 10 mg/kg IV, approximately half an hour before deflation of tourniquet and 3 hours after the first dose)
Gautam, 2011	High	Blood Loss - Complications (total blood loss)	5 days.	Tranexamic Acid (received tranexamic acid 10 mg/kg IV, approximately half an hour before deflation of tourniquet and 3 hours after the first dose)	No Tranexamic Acid (placebo)	Mean Difference	-542.25(-655.38, -429.12)	Tranexamic Acid (received tranexamic acid 10 mg/kg IV, approximately half an hour before deflation of tourniquet and 3 hours after the first dose)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Gautam, 2011	High	Fall in HB, g/dL	Postop.	Tranexamic Acid (received tranexamic acid 10 mg/kg IV, approximately half an hour before deflation of tourniquet and 3 hours after the first dose)	No Tranexamic Acid (placebo)	Mean Difference	0.69(-0.23,1.61)	NS
Gautam, 2011	High	Blood Transfusion %	5 days.	Tranexamic Acid (received tranexamic acid 10 mg/kg IV, approximately half an hour before deflation of tourniquet and 3 hours after the first dose)	No Tranexamic Acid (placebo)	RR	0.47(0.24,0.89)	Tranexamic Acid (received tranexamic acid 10 mg/kg IV, approximately half an hour before deflation of tourniquet and 3 hours after the first dose)
Gautam, 2011	High	Blood Transfusion % (multiple transfusions required)	5 days.	Tranexamic Acid (received tranexamic acid 10 mg/kg IV, approximately half an hour before deflation of tourniquet and 3 hours after the first dose)	No Tranexamic Acid (placebo)	RD	-0.10(-0.23,0.03)	NS
Antinolfi, 2013	High	Blood Loss - Complications (cc's, .75 indicates evening)	0 days. (morning)	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	-68(-150.36,14.36)	NS
Antinolfi, 2013	High	Blood Loss - Complications (cc's, .75 indicates evening)	0 days. (evening)	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	-131.9(-250.83, -12.97)	Tranexamic Acid (500 mg)
Antinolfi, 2013	High	Blood Loss - Complications (cc's, .75 indicates evening)	1 day. (morning)	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	-283(-407.96, -158.04)	Tranexamic Acid (500 mg)
Antinolfi, 2013	High	Blood Loss - Complications (cc's, .75 indicates evening)	1 day. (evening)	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	-394(-519.65, -268.35)	Tranexamic Acid (500 mg)
Antinolfi, 2013	High	Blood Loss - Complications (cc's, .75 indicates evening)	2 days.	Tranexamic Acid (500 mg)	No Tranexamic	Mean Difference	-434.5(-561.30, -307.66)	Tranexamic Acid (500 mg)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
					Acid (placebo)			
Antinolfi, 2013	High	Fall in HB, g/dL (raw scores, not change scores)	0 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	1.3(0.62,1.98)	Tranexamic Acid (500 mg)
Antinolfi, 2013	High	Fall in HB, g/dL (raw scores, not change scores)	2 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	10.9(10.25,11.55)	Tranexamic Acid (500 mg)
Antinolfi, 2013	High	Fall in HB, g/dL (raw scores, not change scores)	3 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	0.4(-0.26,1.06)	NS
Antinolfi, 2013	High	Fall in HB, g/dL (raw scores, not change scores)	4 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	-0.2(-0.76,0.36)	NS
Antinolfi, 2013	High	Fall in HB, g/dL (raw scores, not change scores)	5 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	-0.4(-0.96,0.16)	NS
Antinolfi, 2013	High	Fall in HB, g/dL (raw scores, not change scores)	1 day.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	1.4(0.65,2.15)	Tranexamic Acid (500 mg)
Antinolfi, 2013	High	Hematocrit (raw scores, not change scores)	0 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	3.8(1.60,6.00)	Tranexamic Acid (500 mg)
Antinolfi, 2013	High	Hematocrit (raw scores, not change scores)	1 day.	Tranexamic Acid (500 mg)	No Tranexamic	Mean Difference	2.9(0.61,5.19)	Tranexamic Acid (500 mg)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
					Acid (placebo)			
Antinolfi, 2013	High	Hematocrit (raw scores, not change scores)	2 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	2.1(0.21,3.99)	Tranexamic Acid (500 mg)
Antinolfi, 2013	High	Hematocrit (raw scores, not change scores)	3 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	.1(--1.81, -2.01)	NS
Antinolfi, 2013	High	Hematocrit (raw scores, not change scores)	4 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	-1.2(-2.94,0.54)	NS
Antinolfi, 2013	High	Hematocrit (raw scores, not change scores)	5 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	-1.7(-3.41,0.01)	NS
Antinolfi, 2013	High	Blood Transfusion % (units transfused)	5 days.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Mean Difference	-1.4(-1.98, -.82)	Tranexamic Acid (500 mg)
Antinolfi, 2013	High	Wound Complications (wound healing complications)	3 mos.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	RD	-0.10(-0.23,0.03)	NS
Antinolfi, 2013	High	Deep Venous Thrombosis (symptomatic dvt)	3 mos.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	RD	0.00(0.00,0.00)	NS
Antinolfi, 2013	High	Pulmonary Embolism (symptomatic PE)	3 mos.	Tranexamic Acid (500 mg)	No Tranexamic	RD	0.00(0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
					Acid (placebo)			
Antinolfi, 2013	High	Range Of Motion (overall) - Function (recovery of during hospital stay)	During Hospital Stay	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Author Reported	NA	NS
Antinolfi, 2013	High	Range Of Motion (overall) - Function	3 mos.	Tranexamic Acid (500 mg)	No Tranexamic Acid (placebo)	Author Reported	NA	NS

Table 273: PICO 7- Simultaneous Bilateral Knee Arthroplasty vs. Staged Knee Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yoon, 2010	Low	Complications Other (hypovolemic shock)	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RD	-0.01(-0.02,0.01)	NS
Yoon, 2010	Low	Complications Other (pneumonia)	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RD	0.01(-0.01,0.02)	NS
Yoon, 2010	Low	Complications Other (confusion)	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RD	0.02(-0.01,0.04)	NS
Yoon, 2010	Low	Complications Other (acute renal failure)	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RD	0.008(-.015,.031)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Yoon, 2010	Low	Complications Other (uremic encephalitis)	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RD	0.02(-0.02,0.06)	NS
Yoon, 2010	Low	Complications Other (ICU care)	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RD	0.01(-0.01,0.02)	NS
Yoon, 2010	Low	Complications Other (systemic complications among patients with ASA grade of 3 or 4)	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RD	0.20(0.06,0.34)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months
Yoon, 2010	Low	Complications Other (systemic complications among patients with ASA grade of 1 or 2)	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RD	-0.01(-0.04,0.01)	NS
Yoon, 2010	Low	Complications Other (systemic complications overall)	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RR	6(.73, 49.08)	NS
Yoon, 2010	Low	VTE - Complications (Thromboembolic disease)	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RD	0.00(0.00,0.00)	NS
Yoon, 2	Low	Mortality - Mortality	Periop.	Simultaneous Bilateral Total Knee Arthroplasty (TKA)	Staged (Not Simultaneous) Total Knee Arthroplasties (TKA) On Each Knee Within 6 Months	RD	0.00(0.00,0.00)	NS

Table 274: PICO 8- Surgical Navigation (early follow-up < 90 days)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Thiengwittayaporn, 2013	High	Blood Loss - Complications (ml)	Periop.	Surgical Navigation	No Surgical Navigation	Mean Difference	-26(-110.95,58.95)	NS
Thiengwittayaporn, 2013	High	Infection - Complications (superficial infection)	Postop.	Surgical Navigation	No Surgical Navigation	RR	1.00(0.06,15.61)	NS
Thiengwittayaporn, 2013	High	Manipulation Under Anesthesia - Other (need for manipulation)	Postop.	Surgical Navigation	No Surgical Navigation	RD	0.02(-0.02,0.05)	NS
Thiengwittayaporn, 2013	High	Drainage - Complications (prolonged wound drainage)	Postop.	Surgical Navigation	No Surgical Navigation	RD	0.02(-0.02,0.05)	NS
Thiengwittayaporn, 2013	High	Length Of Surgery - Length of Surgery (min)	Intraop.	Surgical Navigation	No Surgical Navigation	Mean Difference	42 (32.73, 51.27)	No Surgical Navigation
Thiengwittayaporn, 2013	High	Reoperation - Reoperation (open reduction surgery for fracture (in non-navigation group: for patellar fracture; for navigation group: for supracondylar fracture))	Postop.	Surgical Navigation	No Surgical Navigation	RR	1.00(0.06,15.61)	NS
Thiengwittayaporn, 2013	High	Outcomes Of Conversions - Reoperation (polyethylene exchange for postoperative recurvatum)	Postop.	Surgical Navigation	No Surgical Navigation	RD	-0.02(-0.05,0.02)	NS
Lützner, 2008	High	Length Of Surgery - Length of Surgery (minutes)	Intraop.	Surgical Navigation	No Surgical Navigation	Author Reported	NA	No Surgical Navigation
Chin, 2005	High	Drainage - Complications (ml)	Intraop.	Surgical Navigation	No Surgical Navigation (Intramedullary Guide)	Author Reported	NA	Surgical Navigation
Chin, 2005	High	Fall in HB, g/dL	Intraop.	Surgical Navigation	No Surgical Navigation (Intramedullary Guide)	Author Reported	NA	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Chin, 2005	High	Drainage - Complications (ml)	Intraop.	Surgical Navigation	No Surgical Navigation (Extramedullary Guide)	Author Reported	NA	Surgical Navigation
Chin, 2005	High	Fall in HB, g/dL	Intraop.	Surgical Navigation	No Surgical Navigation (Extramedullary Guide)	Author Reported	NA	NS
Chin, 2005	High	Length Of Surgery - Length of Surgery (minutes)	Intraop.	Surgical Navigation	No Surgical Navigation (Intramedullary Guide)	Author Reported	NA	No Surgical Navigation (Intramedullary Guide)
Chin, 2005	High	Length Of Surgery - Length of Surgery (minutes)	Intraop.	Surgical Navigation	No Surgical Navigation (Extramedullary Guide)	Author Reported	NA	No Surgical Navigation (Extramedullary Guide)
Blakeney, 2011	High	Manipulation Under Anesthesia - Other	Postop.	Surgical Navigation	No Surgical Navigation (Extramedullary Guide)	RD	-0.03(-0.09,0.03)	NS
Blakeney, 2011	High	Infection - Complications	Postop.	Surgical Navigation	No Surgical Navigation (Extramedullary Guide)	RD	-0.03(-0.09,0.03)	NS
Blakeney, 2011	High	Manipulation Under Anesthesia - Other	Postop.	Surgical Navigation	No Surgical Navigation (Intramedullary Guide)	RD	-0.03(-0.08,0.03)	NS
Blakeney, 2011	High	Infection - Complications	Postop.	Surgical Navigation	No Surgical Navigation (Intramedullary Guide)	RD	0.00(0.00,0.00)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Blakeney, 2011	High	Length Of Surgery - Length of Surgery (minutes)	NA	Surgical Navigation	No Surgical Navigation (Extramedullary Guide)	Author Reported	NA	No Surgical Navigation (Extramedullary Guide)
Blakeney, 2011	High	Length Of Surgery - Length of Surgery (minutes)	NA	Surgical Navigation	No Surgical Navigation (Intramedullary Guide)	Author Reported	NA	No Surgical Navigation (Intramedullary Guide)
Kim, 2007	High	Blood Loss - Complications (ml)	Intraop.	Surgical Navigation	No Surgical Navigation	Author Reported	NA	NS
Kim, 2007	High	Overall Complications - Complications	Postop.	Surgical Navigation	No Surgical Navigation	RR	7.00(0.88,55.86)	NS
Kim, 2007	High	Drainage - Complications (ml)	Postop.	Surgical Navigation	No Surgical Navigation	Author Reported	NA	NS
Kim, 2008	Low	Complications Other (fat embolism measured as at least 1 fat globule found)	Postop.	Surgical Navigation	No Surgical Navigation	RR	0.94(0.77,1.13)	NS
Kim, 2008	Low	Complications Other (at least 1 bone marrow cell embolization)	Postop.	Surgical Navigation	No Surgical Navigation	RR	1.16(0.75,1.80)	NS
Mizu-uchi, 2008	Low	Knee Society Score - Function - Function	6 mos.	Surgical Navigation	No Surgical Navigation	Author Reported	NA	NS

Table 275: PICO 8- Surgical Navigation (late follow-up > 90 days)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Thiengwittayaporn, 2013	High	Knee Society Score - Function - Function	1.4 mos.	Surgical Navigation	No Surgical Navigation	Mean Difference	1(0.08,1.92)	Surgical Navigation
Thiengwittayaporn, 2013	High	Knee Society Score - Function - Function	6 yrs.	Surgical Navigation	No Surgical Navigation	Mean Difference	0.6(-0.79,1.99)	NS
Seon, 2009	High	WOMAC - Overall - Composite Likert (0-96)	2 yrs.	Surgical Navigation	No Surgical Navigation	Author Reported	NA	NS
Seon, 2009	High	Range of Motion (overall) - Function	2 yrs.	Surgical Navigation	No Surgical Navigation	Author Reported	NA	NS
Seon, 2009	High	Hospital for Special Surgery Knee Rating (pain subscale)	2 yrs.	Surgical Navigation	No Surgical Navigation	Author Reported	NA	NS
Seon, 2009	High	WOMAC - Pain Likert Version (0-20)	2 yrs.	Surgical Navigation	No Surgical Navigation	Author Reported	NA	NS

Table 276: PICO 10- Tourniquets vs. No Tourniquets

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liu, 2014	High	Drainage - Complications	Postop.	Tourniquet	No Tourniquet	Author Reported	NA	NS
Liu, 2014	High	Need Transfusion - Complications	Postop.	Tourniquet	No Tourniquet	RD	0.30(0.02,0.58)	No Tourniquet
Liu, 2014	High	Pain	1 day.	Tourniquet	No Tourniquet	Author Reported	NA	NS
Liu, 2014	High	Pain	2 days.	Tourniquet	No Tourniquet	Author Reported	NA	No Tourniquet

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liu, 2014	High	Pain	3 days.	Tourniquet	No Tourniquet	Author Reported	NA	NS
Liu, 2014	High	Pain	4 days.	Tourniquet	No Tourniquet	Author Reported	NA	No Tourniquet
Liu, 2014	High	Pain	5 days.	Tourniquet	No Tourniquet	Author Reported	NA	NS
Ledin, 2012	High	Blood Loss - Complications (overt bleeding)	Preop.	Tourniquet (110 mm wide, which was inflated to 275 mmHg during the entire operation)	No Tourniquet	Author Reported	NA	Tourniquet (110 mm wide, which was inflated to 275 mmHg during the entire operation)
Ledin, 2012	High	Blood Loss - Complications (total blood loss measured by hemoglobin dilution method)	NR	Tourniquet (110 mm wide, which was inflated to 275 mmHg during the entire operation)	No Tourniquet	Mean Difference	-52(-248.82,144.82)	NS
Ledin, 2012	High	Need Transfusion - Complications	Postop.	Tourniquet (110 mm wide, which was inflated to 275 mmHg during the entire operation)	No Tourniquet	RR	1.23 (0.31, 4.9)	NS
Ledin, 2012	High	Manipulation Under Anesthesia - Other (need for)	4 days.	Tourniquet (110 mm wide, which was inflated to 275 mmHg during the entire operation)	No Tourniquet	RD	0.04(-0.04,0.12)	NS
Ledin, 2012	High	VAS Pain (100mm) - Pain	4 days.	Tourniquet (110 mm wide, which was inflated to 275 mmHg during the entire operation)	No Tourniquet	Author Reported	NA	No Tourniquet
Ledin, 2012	High	Reoperation - Reoperation (revision due to loosening)	2 yrs.	Tourniquet (110 mm wide, which was inflated to 275 mmHg during the entire operation)	No Tourniquet	RR	0.92(0.06,13.87)	NS
Aglietti, 2000	Moderate	Blood Loss - Complications (ml during post operative period only)	During 1st Postop hr.	Tourniquet (tourniquet routinely was deflated intraoperatively after the components were cemented in place so that hemostasis could be obtained)	No Tourniquet	Mean Difference	145 (96.11, 193.89)	No Tourniquet

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Aglietti, 2000	Moderate	Blood Loss - Complications (ml)	Intraop.	Tourniquet (tourniquet routinely was deflated intraoperatively after the components were cemented in place so that hemostasis could be obtained)	No Tourniquet	Mean Difference	-132(-192.83, -71.17)	Tourniquet (tourniquet routinely was deflated intraoperatively after the components were cemented in place so that hemostasis could be obtained)
Aglietti, 2000	Moderate	Blood Loss - Complications (total blood loss intraoperative + post operative)	1 hr.	Tourniquet (tourniquet routinely was deflated intraoperatively after the components were cemented in place so that hemostasis could be obtained)	No Tourniquet	Mean Difference	13(-102.23,128.23)	NS

Table 277: PICO 11- Patellar Resurfacing (late follow-up > 90 days)

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Wood, D.J., 2002	High	Knee Society Score -Function - Function	4 yrs.	Resurfacing	No Resurfacing (Control)	Mean Difference	-5(-13.14,3.14)	NS
Wood, D.J., 2002	High	Reoperation - Reoperation (Revisions and other reoperations)	4 yrs.	Resurfacing	No Resurfacing (Control)	Mean Difference	NA	NS
Liu, 2012	High	Knee Society Score -Function - Function	3 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	2.2(-4.08,8.48)	NS
Liu, 2012	High	Knee Society Score -Function - Function	1 yr.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	4.1(-1.65,9.85)	NS
Liu, 2012	High	Knee Society Score -Function - Function	2 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	-2.8 (-8.5, 2.9)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liu, 2012	High	Knee Society Score -Function - Function	4 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	-1.8(-7.97,4.37)	NS
Liu, 2012	High	Knee Society Score -Function - Function	5 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	3.5(-2.90,9.90)	NS
Liu, 2012	High	Knee Society Score -Function - Function	6 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	-1.7(-8.25,4.85)	NS
Liu, 2012	High	Knee Society Score -Function - Function	7 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	3.6(-2.29,9.49)	NS
Liu, 2012	High	Knee Society Score -Pain - Pain	1 yr.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	-3.4(-6.56,-0.24)	No Resurfacing (Control) (Reshaping)
Liu, 2012	High	Knee Society Score -Pain - Pain	2 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	1.8(-1.20,4.80)	NS
Liu, 2012	High	Knee Society Score -Pain - Pain	3 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	-3.4(-6.40,-0.40)	No Resurfacing (Control) (Reshaping)
Liu, 2012	High	Knee Society Score -Pain - Pain	4 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	-0.5(-2.92,1.92)	NS
Liu, 2012	High	Knee Society Score -Pain - Pain	5 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	-0.6(-3.24,2.04)	NS
Liu, 2012	High	Knee Society Score -Pain - Pain	6 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	-0.4(-3.26,2.46)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Liu, 2012	High	Knee Society Score -Pain - Pain	7 yrs.	Resurfacing	No Resurfacing (Control) (Reshaping)	Mean Difference	0.7(-2.04,3.44)	NS
Bourne, 1995	High	Knee Society Score -Function - Function	5.9 mos.	Resurfacing	No Resurfacing (Control)	Mean Difference	2(-6.10,10.10)	NS
Bourne, 1995	High	Knee Society Score -Function - Function	1 yr.	Resurfacing	No Resurfacing (Control)	Mean Difference	-1(-9.04,7.04)	NS
Bourne, 1995	High	Knee Society Score -Function - Function	2 yrs.	Resurfacing	No Resurfacing (Control)	Mean Difference	-9(-17.93,-0.07)	No Resurfacing (Control)
Bourne, 1995	High	Range Of Motion (flexion) - Function (Knee flexion torque)	5.9 mos.	Resurfacing	No Resurfacing (Control)	Mean Difference	-1(-6.88,4.88)	NS
Bourne, 1995	High	Range Of Motion (flexion) - Function (Knee flexion torque)	1 yr.	Resurfacing	No Resurfacing (Control)	Mean Difference	-4 (-10.4, 2.4)	NS
Bourne, 1995	High	Range Of Motion (flexion) - Function (Knee flexion torque)	2 yrs.	Resurfacing	No Resurfacing (Control)	Mean Difference	-8(-13.77,-2.23)	No Resurfacing (Control)
Bourne, 1995	High	Range Of Motion (extension) - Function (Knee extension torque)	5.9 mos.	Resurfacing	No Resurfacing (Control)	Mean Difference	-7(-16.23,2.23)	NS
Bourne, 1995	High	Range Of Motion (extension) - Function (Knee extension torque)	1 yr.	Resurfacing	No Resurfacing (Control)	Mean Difference	-11(-20.46,-1.54)	No Resurfacing (Control)
Bourne, 1995	High	Range Of Motion (extension) - Function (Knee extension torque)	2 yrs.	Resurfacing	No Resurfacing (Control)	Mean Difference	-4 (-12.74, 4.74)	NS
Bourne, 1995	High	Reoperation due to Anterior Knee Pain (reoperation due to anterior knee pain)	2 yrs.	Resurfacing (Reoperation - Reoperation)	No Resurfacing (Control)	RD	-4.00(-9.43,1.43)	NS
Waters, 2003	High	Anterior Knee Pain - Pain	5.3 yrs.	Resurfacing	No Resurfacing (Control)	RR	0.21(0.12,0.38)	Resurfacing
Waters, 2003	High	Reoperation - Reoperation (reoperation due to anterior knee pain)	5.3 yrs.	Resurfacing	No Resurfacing (Control)	RR	0.26(0.07,0.92)	Resurfacing

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Sun, 2012	High	Knee Society Score -Function - Function	4.5 yrs.	Resurfacing (Patelloplasty)	No Resurfacing (Control) (Traditional)	Mean Difference	11.7(6.60,16.80)	Resurfacing (Patelloplasty)
Sun, 2012	High	Range Of Motion (overall) - Function	4.5 yrs.	Resurfacing (Patelloplasty)	No Resurfacing (Control) (Traditional)	Mean Difference	3.5(-0.41,7.41)	NS
Sun, 2012	High	Global pain, %	4.5 yrs.	Resurfacing (Patelloplasty)	No Resurfacing (Control) (Traditional)	Author Reported	NA	NS
Sun, 2012	High	Anterior Knee Pain - Pain (VAS)	4.5 yrs.	Resurfacing (Patelloplasty)	No Resurfacing (Control) (Traditional)	Author Reported	NA	NS
Smith, 2008	High	Knee Society Score -Function - Function	4 yrs.	Resurfacing	No Resurfacing (Control)	Mean Difference	-4.2(-10.25,1.85)	NS
Smith, 2008	High	Functional Task (able to rise with ease without use of arms)	4 yrs.	Resurfacing	No Resurfacing (Control)	RR	NA	NS
Smith, 2008	High	Functional Task (ascent stair using no rail or rail for balance only)	4 yrs.	Resurfacing	No Resurfacing (Control)	RR	NA	NS
Smith, 2008	High	Functional Task (ascent leads with operated leg or in reciprocal manner)	4 yrs.	Resurfacing	No Resurfacing (Control)	RR	NA	NS
Smith, 2008	High	Functional Task (descent rail using no rail or rail for balance only)	4 yrs.	Resurfacing	No Resurfacing (Control)	RR	NA	NS
Smith, 2008	High	Functional Task (stair decent leads with non-operated leg or in reciprocal manner)	4 yrs.	Resurfacing	No Resurfacing (Control)	RR	NA	NS
Smith, 2008	High	Knee Pain Scale	4 yrs.	Resurfacing	No Resurfacing (Control)	Mean Difference	-1(-8.55,6.55)	NS
Smith, 2008	High	Reoperation - Reoperation (reoperation for any reason)	4 yrs.	Resurfacing	No Resurfacing (Control)	RR	1.18(0.35,3.91)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Newman, 2000	High	Reoperation - Reoperation (revision: subsequent patellar resurfacing)	5 yrs.	Resurfacing	No Resurfacing (Control)	RD	-0.18(-0.30,-0.05)	Resurfacing
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting out of a car)	1 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting out of a car)	3 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting out of a car)	6 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting out of a car)	1 yr.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting out of a car)	2 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting into a chair)	1 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting into a chair)	3 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting into a chair)	6 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting into a chair)	1 yr.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting into a chair)	2 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting up/down stairs)	1 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting up/down stairs)	3 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting up/down stairs)	5.9 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting up/down stairs)	1 yr.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Functional Task (VAS: perceived difficulty getting up/down stairs)	2 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Knee Society Score -Function - Function	1 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Knee Society Score Function - Function	3 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Gildone, 2005	High	Reoperation - Reoperation (reoperation for any reason)	2 yrs.	Resurfacing	No Resurfacing (Control)	RD	0.00(0.00,0.00)	NS
Campbell, 2006	High	Knee Society Score -Function - Function	1 yr.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Campbell, 2006	High	Knee Society Score -Function - Function	2 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Campbell, 2006	High	Knee Society Score -Function - Function	4 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Campbell, 2006	High	Knee Society Score -Function - Function	8 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Campbell, 2006	High	Knee Society Score -Function - Function	10 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Campbell, 2006	High	WOMAC - Pain Averaged VAS Version (0-100)	8 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Campbell, 2006	High	WOMAC - Pain Averaged VAS Version (0-100)	10 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Campbell, 2006	High	Anterior Knee Pain - Pain	4 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Campbell, 2006	High	Anterior Knee Pain - Pain	8 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Campbell, 2006	High	Anterior Knee Pain - Pain	10 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Campbell, 2006	High	Reoperation - Reoperation (reoperation for any reason)	10 yrs.	Resurfacing	No Resurfacing (Control)	RR	0.75(0.22,2.50)	NS
Campbell, 2006	High	WOMAC - Stiffness Averaged VAS Version (0-100)	8 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Campbell, 2006	High	WOMAC - Stiffness Averaged VAS Version (0-100)	10 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Burnett, 2004	High	Range Of Motion (overall) - Function	10 yrs.	Resurfacing	No Resurfacing (Control)	Mean Difference	0.1(-6.18,6.38)	NS
Burnett, 2004	High	Knee Society Score-Function - Function	10 yrs.	Resurfacing	No Resurfacing (Control)	Mean Difference	-0.8(-11.83,10.23)	NS
Burnett, 2004	High	Knee Society Score -Pain - Pain	10 yrs.	Resurfacing	No Resurfacing (Control)	Mean Difference	1.6(-1.97,5.17)	NS
Burnett, 2004	High	Patient Satisfaction (extremely satisfied or very satisfied)	10 yrs.	Resurfacing	No Resurfacing (Control)	RR	0.92(0.78,1.07)	NS
Burnett, 2004	High	Reoperation - Reoperation	10 yrs.	Resurfacing	No Resurfacing (Control)	RR	0.33(0.07,1.49)	NS
Barrack, 2001	High	Knee Society Score - Function - Function	5 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Barrack, 2001	High	Functional Task (exiting an automobile)	5 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Barrack, 2001	High	Functional Task (rising for a chair)	5 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Barrack, 2001	High	Functional Task (stair-climbing)	5 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Barrack, 2001	High	Reoperation - Reoperation (reoperation due to anterior knee pain)	5 yrs.	Resurfacing	No Resurfacing (Control)	RD	-0.10(-0.20, -0.03)	Resurfacing

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Barrack, 2001	High	Knee Society Score - Pain - Pain	5 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Barrack, 2001	High	Reoperation - Reoperation (revision due to anterior knee pain)	5 yrs.	Resurfacing	No Resurfacing (Control)	RD	-0.10(-0.18, -0.02)	Resurfacing
Barrack, 1997	High	Range Of Motion (overall) - Function	2.5 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Barrack, 1997	High	Functional Task (difficulty exiting from an automobile)	2.5 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Barrack, 1997	High	Functional Task (difficulty rising from a chair)	2.5 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Barrack, 1997	High	Functional Task (difficulty in stair climbing)	2.5 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Barrack, 1997	High	Reoperation - Reoperation (revision due to anterior knee pain)	2.5 yrs.	Resurfacing	No Resurfacing (Control)	RD	-0.12(-0.20, -0.04)	Resurfacing
Schroeder-Boersch, 1998	Moderate	Knee Society Score - Function - Function	1 yr.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Schroeder-Boersch, 1998	Moderate	Knee Society Score - Function - Function	2 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	Resurfacing
Schroeder-Boersch, 1998	Moderate	Functional Task (climbing stairs)	1 yr.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	Resurfacing
Schroeder-Boersch, 1998	Moderate	Functional Task (climbing stairs)	2 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	Resurfacing
Schroeder-Boersch, 1998	Moderate	Knee Society Score - Pain - Pain	11.8 mos.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Schroeder-Boersch, 1998	Moderate	Knee Society Score - Pain - Pain	2 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Schroeder-Boersch, 1998	Moderate	Patient Satisfaction (excellent)	2 yrs.	Resurfacing	No Resurfacing (Control)	RR	1.14(0.65,1.99)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Partio, 1995	Moderate	Knee Society Score - Function - Function	2 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Partio, 1995	Moderate	Range Of Motion (overall) - Function	2 yrs.	Resurfacing	No Resurfacing (Control)	Author Reported	NA	NS
Partio, 1995	Moderate	Anterior Knee Pain - Pain (no patellar pain)	2 yrs.	Resurfacing	No Resurfacing (Control)	RR	1.27(1.08,1.49)	Resurfacing
Partio, 1995	Moderate	Functional Task (no compression pain)	2 yrs.	Resurfacing	No Resurfacing (Control)	RR	1.69(1.28,2.22)	Resurfacing
Partio, 1995	Moderate	Patient Satisfaction (enthusiastic)	2 yrs.	Resurfacing	No Resurfacing (Control)	RR	1.28(0.83,1.96)	NS
Partio, 1995	Moderate	Reoperation - Reoperation (reoperation for any reason)	2 yrs.	Resurfacing	No Resurfacing (Control)	RD	-0.02(-0.06,0.02)	NS

Table 278: PICO 12- Cruciate Retaining Arthroplasty

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Roh, 2013	High	Complications Other (total complications)	2 yrs.	Cruciate Retaining TKA Design (PCL retaining)	Posterior Stabilized TKA Design (PCL substituting)	RD	0.07(-0.01,0.15)	NS
Roh, 2013	High	WOMAC - Overall - Composite Averaged VAS Version (0-100)	2 yrs.	Cruciate Retaining TKA Design (PCL retaining)	Posterior Stabilized TKA Design (PCL substituting)	Mean Difference	-1.1(-5.27,3.07)	NS
Roh, 2013	High	Knee Society Score - Function - Function	2 yrs.	Cruciate Retaining TKA Design (PCL retaining)	Posterior Stabilized TKA Design (PCL substituting)	Mean Difference	-0.80 (-7.23, .63)	NS
Roh, 2013	High	Range Of Motion (Overall) - Function	2 yrs.	Cruciate Retaining TKA Design (PCL retaining)	Posterior Stabilized TKA Design (PCL substituting)	Mean Difference	0.3 (-4.26, 4.86)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Roh, 2013	High	Range Of Motion (maximum flexion) - Function	2 yrs.	Cruciate Retaining TKA Design (PCL retaining)	Posterior Stabilized TKA Design (PCL substituting)	Mean Difference	1.2 (-2.59, 4.99)	NS
Roh, 2013	High	Reoperation - Reoperation (instability following falls leading to replacement of polyethylene insert with thicker insert)	2 yrs.	Cruciate Retaining TKA Design (PCL retaining)	Posterior Stabilized TKA Design (PCL substituting)	RD	0.05(-0.02,0.11)	NS
Roh, 2013	High	Reoperation - Reoperation (subluxation leading to resection of the PCL and insertion of thicker polyethylene insert)	2 yrs.	Cruciate Retaining TKA Design (PCL retaining)	Posterior Stabilized TKA Design (PCL substituting)	RD	0.02(-0.02,0.07)	NS
Tanzer, 2002	High	Knee Society Score - Function - Function	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	-3(-19.16,13.16)	NS
Tanzer, 2002	High	Range of Motion (flexion) - Function	1.4 mos.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	-3(-10.45,4.45)	NS
Tanzer, 2002	High	Range of Motion (flexion) - Function	3 mos.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	-1(-8.44,6.44)	NS
Tanzer, 2002	High	Range of Motion (flexion) - Function	5.9 mos.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	-2(-10.70,6.70)	NS
Tanzer, 2002	High	Range of Motion (flexion) - Function	1 yr.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	0(-7.80,7.80)	NS
Tanzer, 2002	High	Range of Motion (flexion) - Function	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	1(-8.38,10.38)	NS
Tanzer, 2002	High	Range of Motion (extension) - Function	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Author Reported	NA	NS
Tanzer, 2002	High	Range Of Motion (overall) - Function	1.4 mos.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Author Reported	NA	NS
Tanzer, 2002	High	Range Of Motion (overall) - Function	3 mos.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Author Reported	NA	NS
Tanzer, 2002	High	Range Of Motion (overall) - Function	5.9 mos.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Author Reported	NA	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Tanzer, 2002	High	Range Of Motion (overall) - Function	1 yr.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Author Reported	NA	NS
Tanzer, 2002	High	Range Of Motion (overall) - Function	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Author Reported	NA	NS
Tanzer, 2002	High	Ambulation (walking) (unlimited walking distance)	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	RR	0.91 (0.5, 1.64)	NS
Tanzer, 2002	High	Ambulation (walking) (walk stairs without support)	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	RR	1.11(0.58,2.14)	NS
Molt, 2014	High	Infection - Complications (superficial)	Postop.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	RR	1.24(0.08,18.64)	NS
Molt, 2014	High	Pulmonary Embolism)	Postop.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	RD	0.05(-0.04,0.14)	NS
Molt, 2014	High	KOOS - Function, Daily Living - Function	3 mos.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	2(-7.44,11.44)	NS
Molt, 2014	High	KOOS - Function, Daily Living - Function	1 yr.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	7(-3.01,17.01)	NS
Molt, 2014	High	KOOS - Function, Daily Living - Function	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	2(-6.89,10.89)	NS
Molt, 2014	High	KOOS - Function, Sports and Recreational Activities - Function	3 mos.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	2(-8.84,12.84)	NS
Molt, 2014	High	KOOS - Function, Sports and Recreational Activities - Function	1 yr.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	1(-12.18,14.18)	NS
Molt, 2014	High	KOOS - Function, Sports and Recreational Activities - Function	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	-6(-20.31,8.31)	NS
Molt, 2014	High	Knee Society Score - Pain - Pain	3 hrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	1(-10.50,12.50)	NS
Molt, 2014	High	Knee Society Score - Pain - Pain	1 yr.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	6(-3.44,15.44)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Molt, 2014	High	Knee Society Score - Pain - Pain	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	0(-9.39,9.39)	NS
Molt, 2014	High	KOOS - Quality of Life - Quality Of Life	3 mos.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	-2(-13.73,9.73)	NS
Molt, 2014	High	KOOS - Quality of Life - Quality Of Life	1 yr.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	0(-12.31,12.31)	NS
Molt, 2014	High	KOOS - Quality of Life - Quality Of Life	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	-1(-13.15,11.15)	NS
Molt, 2014	High	KOOS - Symptoms - Other	3 mos.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	1(-9.35,11.35)	NS
Molt, 2014	High	KOOS - Symptoms - Other	1 yr.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	0(-9.96,9.96)	NS
Molt, 2014	High	KOOS - Symptoms - Other	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	-1(-10.62,8.62)	NS
Catani, 2004	High	Manipulation Under Anesthesia - Other (underwent MUA due to severe lack of knee range of motion)	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	RD	0.05(-0.05,0.15)	NS
Catani, 2004	High	International Knee Society Score - Function - Function	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	4.7(-2.76,12.16)	NS
Catani, 2004	High	Range Of Motion (overall) - Function	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	5(-6.54,16.54)	Posterior Stabilized TKA Design
Catani, 2004	High	Reoperation - Reoperation (lateral release with resurfacing of the patellar in patients with anterior knee pain with a lateral subluxation of the patella)	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	RR	0.50(0.05,5.08)	NS
Clark, 2001	Moderate	WOMAC - Overall - Composite Averaged VAS Version (0-100) (unclear if Likert or vas version used. cannot meta analyze)	2 yrs.	Cruciate Retaining TKA Design	Posterior Stabilized TKA Design	Mean Difference	-4.3(-17.18,8.58)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Ishii, 2011	Moderate	Range Of Motion (overall) - Function	2 yrs.	Cruciate Retaining TKA Design (posterior cruciate retaining TKA)	Posterior Stabilized TKA Design (PCL sacrificing)	Author Reported	NA	NS
Ishii, 2011	Moderate	Range Of Motion (overall) - Function	1 yr.	Cruciate Retaining TKA Design (posterior cruciate retaining TKA)	Posterior Stabilized TKA Design (PCL sacrificing)	Author Reported	NA	NS
Ishii, 2011	Moderate	Range Of Motion (overall) - Function	6 mos.	Cruciate Retaining TKA Design (posterior cruciate retaining TKA)	Posterior Stabilized TKA Design (PCL sacrificing)	Author Reported	NA	NS
Ishii, 2011	Moderate	Range Of Motion (overall) - Function	3 mos.	Cruciate Retaining TKA Design (posterior cruciate retaining TKA)	Posterior Stabilized TKA Design (PCL sacrificing)	Author Reported	NA	NS

Table 279: PICO 13- Patient Specific Technology

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Boonen, 2013	High	Fall in HB, g/dL (raw hb levels mmol/L)	1 day.	Use Of Patient Specific Technology (MRI patient specific guides)	No Use of Patient Specific Technology	Mean Difference	0.1(-0.28,0.48)	NS
Boonen, 2013	High	Fall in HB, g/dL (raw hb levels mmol/L)	3 days.	Use Of Patient Specific Technology (MRI patient specific guides)	No Use of Patient Specific Technology	Mean Difference	0.2(-0.25,0.65)	NS
Boonen, 2013	High	Blood Loss - Complications (ml)	Periop.	Use Of Patient Specific Technology (MRI patient specific guides)	No Use of Patient Specific Technology	Author Reported	NA	Use Of Patient Specific Technology (MRI patient specific guides)
Boonen, 2013	High	Length Of Recovery - Length of Stay (days)	Periop.	Use Of Patient Specific Technology (MRI patient specific guides)	No Use of Patient Specific Technology	Mean Difference	-0.1(-0.52,0.32)	NS

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Boonen, 2013	High	Length Of Surgery - Length of Surgery (in minutes)	Intraop.	Use Of Patient Specific Technology (MRI patient specific guides)	No Use of Patient Specific Technology	Mean Difference	-5.3(-7.87, -2.73)	Use Of Patient Specific Technology (MRI patient specific guides)
Chareancholvanich, 2013	High	Blood Loss - Complications (ml)	Intraop.	Use Of Patient Specific Technology (patient specific cutting guides)	No Use of Patient Specific Technology	Author Reported	NA	NS
Chareancholvanich, 2013	High	Blood transfusion %	Intraop.	Use Of Patient Specific Technology (patient specific cutting guides)	No Use of Patient Specific Technology	RR	0.80(0.35,1.82)	NS
Chareancholvanich, 2013	High	Length Of Recovery - Length of Stay (days)	During Hospital Stay	Use Of Patient Specific Technology (patient specific cutting guides)	No Use of Patient Specific Technology	Author Reported	NA	NS
Pfitzner, 2014	High	WOMAC - Overall - Composite Likert (0-96)	3 mos.	Use Of Patient Specific Technology (MRI patient specific cutting blocks)	No Use of Patient Specific Technology	Author Reported	NA	NS
Pfitzner, 2014	High	Knee Society Score - Function - Function	3 mos.	Use Of Patient Specific Technology (MRI patient specific cutting blocks)	No Use of Patient Specific Technology	Author Reported	NA	NS
Pfitzner, 2014	High	Length Of Surgery - Length of Surgery	Intraop.	Use Of Patient Specific Technology (MRI patient specific cutting blocks)	No Use of Patient Specific Technology	Author Reported	NA	Use Of Patient Specific Technology (MRI patient specific cutting blocks)
Pfitzner, 2014	High	Knee Society Score - Pain - Pain	3 mos.	Use Of Patient Specific Technology (MRI patient specific cutting blocks)	No Use of Patient Specific Technology	Author Reported	NA	NS
Roh, 2013	High	Blood Loss - Complications (ml)	Postop.	Use Of Patient Specific Technology	No Use of Patient Specific Technology	Author Reported	NA	NS
Roh, 2013	High	Length Of Surgery - Length of Surgery (minutes)	Intraop.	Use Of Patient Specific Technology	No Use of Patient Specific Technology	Author Reported	NA	No Use of Patient Specific Technology

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Hamilton, 2013	Moderate	Length Of Surgery - Length of Surgery (in seconds)	Intraop.	Use Of Patient Specific Technology (patient specific instrumentation with CT scan)	No Use of Patient Specific Technology	Mean Difference	-260(-436.11, -83.89)	Use Of Patient Specific Technology (patient specific instrumentation with CT scan)
Chen, 2014	Low	Complications Other (Non-ST Elevation Myocardial Infarction (NSTEMI))	Postop.	Use Of Patient Specific Technology (patient specific instrumentation with MRI scan)	No Use of Patient Specific Technology	RD	0.03(-0.03,0.10)	NS

Table 280: PICO 14- Peri-articular Local Anesthetic Infiltration

Reference Title	Quality	Outcome Details	Duration	Treatment 1 (Details)	Treatment 2 (Details)	Effect Measure	Result (95% CI)	Favored Treatment
Busch, 2006	High	VAS Pain (10cm) - Pain (Visual analog scores (VAS) for pain during activity)	4 hrs.	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))	Control (Peri-articular local infiltration) (Saline)	Author Reported	NA	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))
Busch, 2006	High	VAS Pain (10cm) - Pain (Visual analog scores (VAS) for pain during activity)	1 day.	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))	Control (Peri-articular local infiltration) (Saline)	Author Reported	NA	NS
Busch, 2006	High	Morphine Consumption (mg) (Consumption of patient-controlled analgesia (PCA) in milligrams)	6 hrs.	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))	Control (Peri-articular local infiltration) (Saline)	Author Reported	NA	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))
Busch, 2006	High	Morphine Consumption (mg) (Consumption of patient-controlled analgesia (PCA) in milligrams)	12 hrs.	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))	Control (Peri-articular local infiltration) (Saline)	Author Reported	NA	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))

Busch, 2006	High	Morphine Consumption (mg) (Consumption of patient-controlled analgesia (PCA) in milligrams)	1 day.	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))	Control (Peri-articular local infiltration) (Saline)	Author Reported	NA	NS
Busch, 2006	High	Morphine Consumption (mg) (Consumption of patient-controlled analgesia (PCA) in milligrams)	1.4 mos.	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))	Control (Peri-articular local infiltration) (Saline)	Author Reported	NA	NS
Busch, 2006	High	Patient Satisfaction (Visual analog scores (VAS) for patient satisfaction)	4 hrs.	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))	Control (Peri-articular local infiltration) (Saline)	Author Reported	NA	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))
Busch, 2006	High	Patient Satisfaction (Visual analog scores (VAS) for patient satisfaction)	1 day.	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))	Control (Peri-articular local infiltration) (Saline)	Author Reported	NA	NS
Busch, 2006	High	Patient Satisfaction (Visual analog scores (VAS) for patient satisfaction)	1.4 mos.	Local Infiltration (400 mg of ropivacaine, 30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 mL of epinephrine (1:1000))	Control (Peri-articular local infiltration) (Saline)	Author Reported	NA	NS