

## **Supplementary Materials**

### **Toward precision and efficiency: a bibliometric study on robotic-assisted unicompartmental knee arthroplasty research and development**

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**Supplementary Table 1. Detailed bibliographies searched from WOS Core Collection in the field of Robotic-Assisted Unicompartmental Knee Arthroplasty**

| Article Title  | Authors  | Journal                            | Public<br>ation<br>Year | DOI                        | Article<br>type |
|--|--|------------------------------------|-------------------------|----------------------------|-----------------|
| Long-term study of functional outcomes of robotic assisted medial UKA using mid-vastus approach in a high-volume centre                        | Vaidya, N.<br>Jain, A.<br>Kulkarni, N.<br>Kale, S.               | Journal of Robotic Surgery         | 2023                    | 10.1007/s11701-023-01564-4 | Article         |
| Computer-assisted robotic system for autonomous unicompartmental knee arthroplasty   | Shalash, O.<br>Rowe, P.  | Alexandria Engineering Journal     | 2023                    | 10.1016/j.aej.2023.03.005  | Article         |
| Accuracy of Intraoperative Mechanical Axis Alignment to Long-Leg Radiographs following Robotic-Arm-Assisted Unicompartmental Knee Arthroplasty | Roche, M. W.<br>Vakharia, R.<br>M.<br>Law, T. Y.<br>Sabeh, K. G. | Journal of Knee Surgery            | 2023                    | 10.1055/s-0042-1742647     | Article         |
| ROBOTIC-ARM -ASSISTED LATERAL UNICOMPARTMENTAL KNEE ARTHROPLASTY WITH A FIXED-BEARING IMPLANT  | Premkumar, A.<br>Bayoumi, T.<br>Pearle, A. D.                    | Jbjs Essential Surgical Techniques | 2023                    | 10.2106/jbjs.St.21.00012   | Article         |

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| Moon, E.   |   |                                  |      |                            |  |         |
| Early muscle recovery following robotic-assisted unicompartmental knee arthroplasty  | Gaston, P.<br>Patton, J. T.<br>Bell, A.<br>Simpson, P. M.<br>MacPherson, G. J.<br>Hamilton, D. F.                     | Bmc Research Notes               | 2023 | 10.1186/s13104-023-06345-8 |  | Article |
| Setting the Tibial Component Rotation Based on Femoral Landmarks Allows Congruent Knee Kinematics in Robotic-Assisted Medial Unicompartmental Knee Replacement | Innocenti, M.<br>Zanna, L.<br>Akkaya, M.<br>Huber, K.<br>Christen, B.<br>Calliess, T.                                 | Journal of Personalized Medicine | 2023 | 10.3390/jpm13040632        |  | Article |
| Robotic-arm assisted lateral unicompartmental knee arthroplasty: 5-Year outcomes & survivorship  | Gaudiani, M. A.<br>Samuel, L. T.<br>Diana, J. N.<br>DeBattista, J. L.<br>Coon, T. M.<br>Moore, R. E.<br>Kamath, A. F. | Journal of Orthopaedic Surgery   | 2023 | 10.1177/10225536221138986  |  | Article |

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| Better accuracy<br>and implant<br>survival in<br>medial imageless<br>robotic-assisted<br>unicompartmental<br>knee  | Foissey, C.<br>Batailler, C.<br>Vahabi, A.<br>Fontalis, A.<br>Servien, E.<br>Lustig, S.                                    | International<br>Orthopaedics | 2023 | 10.1007/s00264-022-05640<br>-6 | Article |
| Is combined<br>robotically<br>assisted<br>unicompartmental<br>knee<br>arthroplasty and<br>anterior cruciate<br>ligament<br>reconstruction a<br>good solution for<br>the young<br>arthritic knee? | Foissey, C.<br>Batailler, C.<br>Shatrov, J.<br>Servien, E.<br>Lustig, S.   | International<br>Orthopaedics | 2023 | 10.1007/s00264-022-05544<br>-5 | Article |
| Image-based<br>robotic<br>unicompartmental<br>knee<br>arthroplasty<br>allowed to match<br>the rotation of the<br>tibial implant<br>with the native<br>kinematic knee<br>alignment                | Favroul, C.<br>Batailler, C.<br>Canetti, R.<br>Shatrov, J.<br>Zambianchi,<br>F.<br>Catani, F.<br>Servien, E.<br>Lustig, S. | International<br>Orthopaedics | 2023 | 10.1007/s00264-022-05637<br>-1 | Article |

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| Comparative efficacy of the different cutting guides in unicompartmental knee arthroplasty: A systematic-review and network meta-analysis               | Bouche, P. A.<br>Corsia, S.<br>Halle, A.<br>Gaujac, N.<br>Nizard, R.   | Knee   | 2023 | 10.1016/j.knee.2023.01.003  | Review  |
| Robotic-assisted medial unicompartmental knee arthroplasty restores estimated pre-arthritis coronal limb alignment: A retrospective cohort study        | Bayoumi, T.<br>Burger, J. A.<br>Zuiderbaan, H. A.<br>Ruderman, L.<br>V.  | Knee   | 2023 | 10.1016/j.knee.2023.01.005  | Article |
| Restoration or relative overcorrection of pre-arthritis coronal alignment leads to improved results following medial unicompartmental knee arthroplasty | Bayoumi, T.<br>Burger, J. A.<br>Ruderman, L.<br>V.<br>van der List, J. P.<br>Zuiderbaan, H. A.<br>Kerkhoffs, Gmmj<br>Pearle, A. D. | Knee Surgery<br>Sports<br>Traumatology<br>Arthroscopy    | 2023 | 10.1007/s00167-023-07441-9  | Article |
| Robotic-assisted unicompartmental knee arthroplasty performed with Navio system: a systematic review  | Are, L.<br>De Mauro, D.<br>Rovere, G.<br>Fresta, L.<br>Tartarone, M.<br>Illuminati, A.<br>Smakaj, A.<br>Maccauro, G.<br>Liuzza, F. | European Review for Medical and Pharmacological Sciences | 2023 | 10.26355/eurrev_202303_1799 | Review  |

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| Robotic arm-assisted versus manual unicompartmental knee arthroplasty A SYSTEMATIC REVIEW AND META-ANALYSIS OF THE MAKO ROBOTIC SYSTEM           | Zhang, J.<br>Ng, N.<br>Scott, C. E.<br>H.<br>Blyth, M. J.<br>G.<br>Haddad, F. S.<br>Macpherson, G. J.<br>Patton, J. T.<br>Clement, N.<br>D. | Bone & Joint Journal                         | 2022 | 10.1302/0301-620x.104b5.<br>Bjj-2021-1506.R1 | Review  |
| Robotic Arm-Assisted Lateral Unicompartmental Knee Arthroplasty: How Are Components Aligned?   | Zambianchi, F.<br>Franceschi, G.<br>Banchelli, F.<br>Marcovigi, A.<br>Ensini, A.<br>Catani, F.  | Journal of Knee Surgery                      | 2022 | 10.1055/s-0040-1722346                       | Article |
| Comparison of Robotic and Conventional Unicompartmental Knee Arthroplasty Outcomes in Patients with Osteoarthritis: A Retrospective Cohort Study | Wu, C. S. P.<br>Fukui, N.<br>Lin, Y. K.<br>Lee, C. Y.<br>Chou, S. H.<br>Huang, T. J.<br>Chen, J. Y.<br>Wu, M. H.                            | Journal of Clinical Medicine                 | 2022 | 10.3390/jcm11010220                          | Article |
| Robotic-arm assisted unicompartmental knee arthroplasty system has a learning curve of 11 cases and increased operating time                     | Tay, M. L.<br>Carter, M.<br>Bolam, S. M.<br>Zeng, N. N.<br>Young, S. W.   | Knee Surgery Sports Traumatology Arthroscopy | 2022 | 10.1007/s00167-021-06814-2                   | Article |

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| Clinical and radiological outcomes of robotic-assisted unicompartmental knee arthroplasty: Early lessons from the first 100 consecutive knees in 85 patients | St Mart, J. P.<br>Goh, E. L.<br>Goudie, E.<br>Crawford, R.  | Knee   | 2022 | 10.1016/j.knee.2021.11.016 | Article |
| Short-Term Outcomes of Robotic Lateral Unicompartmental Knee Arthroplasty: An Indian Perspective   | Mohan, T.<br>Panicker, J.<br>Thilak, J.<br>Shaji, D.<br>Hari, H.  | Indian Journal of Orthopaedics                 | 2022 | 10.1007/s43465-021-00555-7 | Article |
| Robotic-Assisted Unicompartmental Knee Arthroplasty Reduces Components' Positioning Differences among High- and Low-Volume Surgeons                          | Matassi, F.<br>Innocenti, M.<br>Giabbani, N.<br>Sani, G.<br>Lepri, A. C.<br>Piolanti, N.<br>Civinini, R.      | Journal of Knee Surgery                        | 2022 | 10.1055/s-0041-1727115     | Article |
| Similar survivorship at the 5-year follow-up comparing robotic-assisted and conventional lateral unicompartmental knee arthroplasty                          | Maritan, G.<br>Franceschi, G.<br>Nardacchione, R.<br>Furlan, E.<br>Mariani, I.<br>Ursino, N.<br>D'Ambrosi, R. | Knee Surgery, Sports Traumatology, Arthroscopy | 2022 | 10.1007/s00167-022-07218-6 | Article |

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| Makoplasty<br>medial<br>unicondylar knee<br>replacement:<br>Correction or<br>postoperative<br>angle matters?<br><br>Robot-assisted<br>knee arthroplasty<br>improves<br>component<br>positioning and<br>alignment, but<br>results are<br>inconclusive on<br>whether it<br>improves clinical<br>scores or reduces<br>complications<br>and revisions: a<br>systematic<br>overview of<br>meta-analyses | Kumar, A.<br>Hung, C. H.<br>Hsieh, S. L.<br>Kuo, C. C.<br>Mao, J. T.<br>Lin, E. T.<br>Hsu, H. C.   | International<br>Journal of<br>Medical<br>Robotics and<br>Computer<br>Assisted<br>Surgery | 2022 | 10.1002/rcs.2356           | Article |
| Midterm<br>Survivorship of<br>Robotic-Assisted<br>Lateral<br>Unicompartment<br>al Knee<br>Arthroplasty   | Kort, N.<br>Stirling, P.<br>Pilot, P.<br>Muller, J. H.   | Knee Surgery<br>Sports<br>Traumatology<br>Arthroscopy                                     | 2022 | 10.1007/s00167-021-06472-4 | Article |
| Robotic-Assisted<br>Versus Manual<br>Unicompartment<br>al Knee<br>Arthroplasty: A<br>Time-Driven<br>Activity-Based<br>Cost Analysis  | Heckmann,<br>N. D.<br>Antonios, J.<br>K.<br>Chen, X. T.<br>Kang, H. P.<br>Chung, B. C.<br>Piple, A. S.<br>Christ, A. B.<br>Gilbert, P. K.<br>Goh, S. G.<br>Haffar, A.<br>Tarabichi, S.<br>Courtney, P.<br>M.<br>Krueger, A.<br>C.<br>Lonner, H. J. | Journal of<br>Arthroplasty  | 2022 | 10.1016/j.arth.2022.01.023 | Article |
|  |  |   | 2022 | 10.1016/j.arth.2022.02.029 | Article |

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|  | Gaudiani, M.  |  |      |                            |         |
| 5-Year Survivorship and Outcomes of Robotic-Arm-Assisted Medial Unicompartmental Knee Arthroplasty   | A. Samuel, L. T. Diana, J. N. DeBattista, J. L. Coon, T. M. Moore, R. E. Kamath, A. F. Deroche, E. Naaim, A. Lording, T. Dumas, R. Servien, E. Cheze, L. Lustig, S. Batailler, C. | Applied Bionics and Biomechanics           | 2022 | 10.1155/2022/8995358       | Article |
| Femorotibial alignment measured during robotic assisted knee surgery is reliable: radiologic and gait analysis Comparison of the radiological parameters between dynamic-referencing tactile guidance robotic system and Microplasty (R) instrumentation in unicompartmental knee arthroplasty | Cabuk, H. Turan, K. Muratoglu, O. G. Ergun, T. Ozturk, C. Erturer, R. E.  | Archives of Orthopaedic and Trauma Surgery | 2022 | 10.1007/s00402-021-04033-5 | Article |
|  |   | Joint Diseases and Related Surgery         |      | 10.52312/jdrs.2022.742     | Article |

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| Are there   |                |                         |      |                            |         |
| functional  |                |                         |      |                            |         |
| biomechanical   |                |                         |      |                            |         |
| differences in  |                |                         |      |                            |         |
| robotic   | Banger, M. S.  |                         |      |                            |         |
| arm-assisted  | Doonan, J.     |                         |      |                            |         |
| bi unicompartmental knee  | Jones, B. G.   |                         |      |                            |         |
| arthroplasty  | MacLean, A. D. | Bone & Joint Journal    | 2022 | 10.1302/0301-620x.104b4    | Article |
| compared with conventional total knee arthroplasty? A prospective, randomized controlled trial  | Rowe, P. J.    |                         |      |                            |         |
| Comparison of robotic-assisted versus conventional unicompartmental knee arthroplasty for the treatment of single compartment knee osteoarthritis: A meta-analysis                    | Blyth, M. J.   |                         |      |                            |         |
| International Journal of Medical Robotics and Computer Assisted Surgery   | Zhang, P.      |                         |      |                            |         |
|   | Xu, K. T.      |                         |      |                            |         |
|   | Zhang, J. L.   |                         |      |                            |         |
|   | Chen, P. T.    |                         |      |                            |         |
|   | Fang, Y. C.    |                         |      |                            |         |
|   | Wang, J. C.    |                         |      |                            |         |
| Osteoarthritis: A Preoperative Osteoarthritic Grade Affects Forgotten Joint Status and Patient Acceptable Symptom State After Robotic Arm-Assisted Unicompartmental Knee Arthroplasty | Zambianchi, F. |                         |      |                            |         |
|   | Daffara, V.    |                         |      |                            |         |
|   | Negri, A.      | Journal of Arthroplasty | 2021 | 10.1016/j.arth.2021.06.028 | Article |
|   | Franceschi, G. |                         |      |                            |         |
|   | Schiavon, G.   |                         |      |                            |         |
|   | Catani, F.     |                         |      |                            |         |

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| Robotic<br>arm-assisted<br>unicompartmental knee<br>arthroplasty: high<br>survivorship and<br>good<br>patient-related<br>outcomes at a<br>minimum five<br>years of<br>follow-up<br>Comparison of<br>Patient<br>Demographics<br>and Utilization<br>Trends of<br>Robotic-Assisted<br>and<br>Non-Robotic-Assisted<br>Unicompartmental Knee<br>Arthroplasty<br>Does<br>robotic-assisted<br>unicompartmental knee<br>arthroplasty have<br>lower<br>complication and<br>revision rates<br>than the<br>conventional<br>procedure? A<br>systematic<br>review and<br>meta-analysis | Zambianchi,<br>F.<br>Daffara, V.<br>Franceschi,<br>G.<br>Banchelli, F.<br>Marcovigi, A.<br>Catani, F.<br>Vakharia, R.<br>M.<br>Sodhi, N.<br>Cohen-Levy,<br>W. B.<br>Vakharia, A.<br>M.<br>Mont, M. A.<br>Roche, M. W.<br>Sun, Y. F.<br>Liu, W.<br>Hou, J.<br>Hu, X. H.<br>Zhang, W. Q. | Knee Surgery<br>Sports<br>Traumatology<br>Arthroscopy<br>Journal of<br>Knee Surgery<br>Journal of<br>Knee Surgery<br>Bmj Open | 2021<br>2021 | 10.1007/s00167-020-06198<br>10.1055/s-0039-1698769<br>10.1136/bmjopen-2020-044778 | -9 | Article<br>Article<br>Review |
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| PERIPROSTHE  |   |  |      |                            |            |
| TIC  |   |  |      |                            |            |
| FRACTURES  | Smith, T. J.  |  |      |                            |            |
| THROUGH  | Siddiqi, A.   |  |      |                            |            |
| TRACKING PIN   | Forte, S. A.  |  |      |                            |            |
| SITES  | Judice, A.  |  |      |                            |            |
| FOLLOWING  | Sculco, P. K.   |  |      |                            |            |
| COMPUTER   | Vigdorchik, J. M.   | Jbjs Reviews                               | 2021 | 10.2106/jbjs.Rvw.20.00091  | Revie<br>w |
| NAVIGATED  | Schwarzkopf, R.   |  |      |                            |            |
| AND ROBOTIC  | Springer, B. D.   |  |      |                            |            |
| TOTAL AND  |   |  |      |                            |            |
| UNICCOMPART  |   |  |      |                            |            |
| MENTAL KNEE  |   |  |      |                            |            |
| ARTHROPLAS   |   |  |      |                            |            |
| TY A Systematic Review   |   |  |      |                            |            |
| Robotic-assisted unicompartmental knee arthroplasty is associated with earlier discharge from physiotherapy and reduced length-of-stay compared to conventional navigated techniques | Shearman, A. D.   | Archives of Orthopaedic and Trauma Surgery | 2021 | 10.1007/s00402-021-04207-1 | Article    |
| Robotics improves alignment accuracy and reduces early revision rates for UKA in the hands of low-volume UKA surgeons  | Savov, P. Tuecking, L. R. Windhagen, H. Calliess, T. Ettinger, M. | Archives of Orthopaedic and Trauma Surgery | 2021 | 10.1007/s00402-021-04114-5 | Article    |

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| Robotic-assisted surgery in medial unicompartmental knee arthroplasty: does it improve the precision of the surgery and its clinical outcomes?  | Negrin, R.<br>Ferrer, G.<br>Iniguez, M.<br>Duboy, J.<br>Saavedra, M.<br>Larrain, N. R.<br>Jabes, N.<br>Barahona, M. | Journal of Robotic Surgery  | 2021 | 10.1007/s11701-020-01162-8 | Review  |
| Systematic review   |   |   |      |                            |         |
| Robotic-assisted vs conventional surgery in medial unicompartmental knee arthroplasty: a clinical and radiological study  | Negrin, R.<br>Duboy, J.<br>Iniguez, M.<br>Reyes, N. O.<br>Barahona, M.<br>Ferrer, G.<br>Infante, C.<br>Jabes, N.    | Knee Surgery & Related Research   | 2021 | 10.1186/s43019-021-00087-2 | Article |
| What is the evidence for clinical use of advanced technology in unicompartmental knee arthroplasty? Is robotic-assisted unicompartmental knee arthroplasty a safe procedure? A case control study |   | International Journal of Medical Robotics and Computer Assisted Surgery | 2021 | 10.1002/rcs.2302           | Review  |
|   | Mittal, A.<br>Meshram, P.<br>Kim, T. K.   |   |      |                            |         |
|   | Batailler, C.<br>Lording, T.<br>Servien, E.<br>Lustig, S.   | Knee Surgery Sports Traumatology Arthroscopy                            | 2021 | 10.1007/s00167-020-06051-z | Article |

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|---|--------------------|-------------------------|------|---------------------------------------|---------|--|
|   | Liu, P.            |                         |      |                                       |         |  |
| Robotic-assisted unicompartmental knee arthroplasty: a review   | Lu, F. F.          |                         |      |                                       |         |  |
|   | Liu, G. J.         |                         |      |                                       |         |  |
|   | Mu, X. H.          | Arthroplasty            | 2021 | 10.1186/s42836-021-00071-x            | Review  |  |
|   | Sun, Y. Q.         |                         |      |                                       |         |  |
|   | Zhang, Q. D.       |                         |      |                                       |         |  |
|   | Wang, W. G.        |                         |      |                                       |         |  |
|   | Guo, W. S.         |                         |      |                                       |         |  |
| Comparing clinical and radiographic outcomes of robotic-assisted, computer-navigated and conventional unicompartmental knee arthroplasty: A network meta-analysis of randomized controlled trials | Kunze, K. N.       |                         |      |                                       |         |  |
| Radiological outcomes following manual and robotic-assisted unicompartmental knee arthroplasty  | Farivar, D.        |                         |      |                                       |         |  |
|   | Premkumar, A.      | Journal of Orthopaedics | 2021 | 10.1016/j.jor.2021.05.012             | Article |  |
|   | Cross, M. B.       |                         |      |                                       |         |  |
|   | Della Valle, A. G. |                         |      |                                       |         |  |
|   | Pearle, A. D.      |                         |      |                                       |         |  |
| Robotic-Assisted versus Manual Unicompartmental Knee Arthroplasty: Contemporary Systematic Review and Meta-analysis of Early Functional Outcomes  | Kazarian, G. S.    |                         |      |                                       |         |  |
|   | Barrack, R. L.     | Bone & Joint Open       | 2021 | 10.1302/2633-1462.23.Bjo-2020-0205.R1 | Article |  |
|   | Barrack, T. N.     |                         |      |                                       |         |  |
|   | Lawrie, C. M.      |                         |      |                                       |         |  |
|   | Nunley, R. M.      |                         |      |                                       |         |  |
|   | Gaudiani, M. A.    |                         |      |                                       |         |  |
|   | Samuel, L. T.      |                         |      |                                       |         |  |
|   | Kamath, A. F.      | Journal of Knee Surgery | 2021 | 10.1055/s-0040-1701455                | Review  |  |
|   | Courtney, P. M.    |                         |      |                                       |         |  |
|   | Lee, G. C.         |                         |      |                                       |         |  |

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| Stiffness after unicompartmental knee arthroplasty: Risk factors and arthroscopic treatment   | Fournier, G.<br>Gaillard, R.<br>Swan, J.<br>Batailler, C.<br>Lustig, S.<br>Servien, E.                    | Sicot-J                 | 2021 | 10.1051/sicotj/2021034                        | Article |
| Robotic Assistance in Unicompartmental Knee Arthroplasty Results in Superior Early Functional Recovery and Is More Likely to Meet Patient Expectations            | Crizer, M. P.<br>Haffar, A.<br>Battenberg, A.<br>McGrath, M.<br>Sutton, R.<br>Lonner, J. H.               | Advances in Orthopedics | 2021 | 10.1155/2021/4770960                          | Article |
| Robot-Assisted versus Conventional Total and Unicompartmental Knee Arthroplasty: A Meta-analysis of Radiological and Functional Outcomes                          | Chin, B. Z.<br>Tan, S. S. H.<br>Chua, K. C.<br>X.<br>Budiono, G.<br>R.<br>Syn, N. L. X.<br>O'Neill, G. K. | Journal of Knee Surgery | 2021 | 10.1055/s-0040-1701440                        | Article |
| Early outcomes after robotic arm-assisted bi unicompartmental knee arthroplasty compared with total knee arthroplasty: a prospective, randomized controlled trial | Blyth, M. J.<br>G.<br>Banger, M. S.<br>Doonan, J.<br>Jones, B.<br>MacLean, A.<br>D.<br>Rowe, P. J.        | Bone & Joint Journal    | 2021 | 10.1302/0301-620x.103b10<br>.Bjj-2020-1919.R2 | Article |

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| Health economic value of CT scan based robotic assisted UKA: a systematic review of comparative studies  | Bernard-de-Villeneuve, F.<br>Kayikci, K.<br>Sappey-Mariotti, E.<br>Lording, T.<br>Batailler, C.<br>Servien, E.<br>Lustig, S. | Archives of Orthopaedic and Trauma Surgery         | 2021 | 10.1007/s00402-021-04066-w               | Review  |
| No difference of gait parameters in patients with image-free robotic-assisted medial unicompartmental knee arthroplasty compared to a conventional technique: early results of a randomized controlled trial | Batailler, C.<br>Lording, T.<br>Naaim, A.<br>Servien, E.<br>Cheze, L.<br>Lustig, S.  | Knee Surgery<br>Sports Traumatology<br>Arthroscopy | 2021 | 10.1007/s00167-021-06560-5               | Article |
| Improved sizing with image-based robotic-assisted system compared to image-free and conventional techniques in medial unicompartmental knee arthroplasty A CASE CONTROL STUDY                                | Batailler, C.<br>Bordes, M.<br>Lording, T.<br>Nigues, A.<br>Servien, E.<br>Calliess, T.<br>Lustig, S.                        | Bone & Joint Journal                               | 2021 | 10.1302/0301-620x.103b4.Bjj-2020-1453.R1 | Article |

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| Robotic<br>arm-assisted<br>versus<br>conventional<br>medial<br>unicompartmental<br>knee<br>arthroplasty:<br>five-year clinical<br>outcomes of a<br>randomized<br>controlled trial<br>Clinical results<br>and short-term<br>survivorship of<br>robotic-arm-assisted<br>medial and<br>lateral<br>unicompartmental<br>knee<br>arthroplasty<br>How should we<br>evaluate robotics<br>in the operating<br>theatre? A<br>SYSTEMATIC<br>REVIEW OF<br>THE<br>LEARNING<br>CURVE OF<br>ROBOT-ASSISTED<br>KNEE<br>ARTHROPLASTY | Banger, M.<br>Doonan, J.<br>Rowe, P.<br>Jones, B.<br>MacLean, A.<br>Blyth, M. J.<br>B.        | Bone & Joint<br>Journal                               | 2021 | 10.1302/0301-620x.103b6.<br>Bjj-2020-1355.R2 | Article |
| Accuracy of<br>tibial component<br>positioning in the<br>robotic arm<br>assisted versus<br>conventional<br>unicompartmental<br>knee<br>arthroplasty   | Franceschi,<br>G.<br>Rivi, E.<br>Banchelli, F.<br>Marcovigi, A.<br>Khabbaze, C.<br>Catani, F. | Knee Surgery<br>Sports<br>Traumatology<br>Arthroscopy | 2020 | 10.1007/s00167-019-05566-4                   | Article |
| SYSTEMATIC<br>REVIEW OF<br>THE<br>LEARNING<br>CURVE OF<br>ROBOT-ASSISTED<br>KNEE<br>ARTHROPLASTY  | Vermue, H.<br>Lambrechts,<br>J.<br>Tampere, T.<br>Arnout, N.<br>Auvinet, E.<br>Victor, J.     | Bone & Joint<br>Journal                               | 2020 | 10.1302/0301-620x.102b4.<br>Bjj-2019-1210.R1 | Review  |
| Accuracy of<br>tibial component<br>positioning in the<br>robotic arm<br>assisted versus<br>conventional<br>unicompartmental<br>knee<br>arthroplasty   | Thilak, J.<br>Thadi, M.<br>Mane, P. P.<br>Sharma, A.<br>Mohan, V.<br>Babu, B. C.              | Journal of<br>Orthopaedics                            | 2020 | 10.1016/j.jor.2020.08.022                    | Article |

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| The three-year<br>survivorship of<br>robotically<br>assisted versus<br>non-robotically<br>assisted<br>unicompartmental<br>knee<br>arthroplasty A<br>STUDY FROM<br>THE<br>AUSTRALIAN<br>ORTHOPAEDIC<br>ASSOCIATION<br>NATIONAL<br>JOINT<br>REPLACEMENT<br>T REGISTRY<br>Achieving<br>discharge within<br>24 h of robotic<br>unicompartmental<br>knee<br>arthroplasty may<br>be possible with<br>appropriate<br>patient selection<br>and a<br>multi-disciplinary<br>team approach | St Mart, J. P.<br>de Steiger, R.<br>N.<br>Cuthbert, A.<br>Donnelly, W. | Bone & Joint<br>Journal | 2020                      | 10.1302/0301-620x.102b3.<br>Bjj-2019-0713.R1 | Article |
| Sephton, B.<br>M.<br>De la Cruz,<br>N.<br>Shearman, A.<br>D.<br>Nathwani, D.  | Journal of<br>Orthopaedics   | 2020                    | 10.1016/j.jor.2020.01.051 |  | Article |

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| Early Economic<br>Evaluation |                |              |      |                          |  |         |
| Demonstrates                 |                |              |      |                          |  |         |
| That                         |                |              |      |                          |  |         |
| Noncomputerize               |                |              |      |                          |  |         |
| d Tomography                 |                |              |      |                          |  |         |
| Robotic-Assisted             | Nherera, L.    |              |      |                          |  |         |
| Surgery Is                   | M.             |              |      |                          |  |         |
| Cost-Effective in            | Verma, S.      | Advances in  |      |                          |  |         |
| Patients                     | Trueman, P.    | Orthopedics  | 2020 | 10.1155/2020/3460675     |  | Article |
| Undergoing                   | Jennings, S.   |              |      |                          |  |         |
| Unicompartment               |                |              |      |                          |  |         |
| al Knee                      |                |              |      |                          |  |         |
| Arthroplasty at              |                |              |      |                          |  |         |
| High-Volume                  |                |              |      |                          |  |         |
| Orthopaedic                  |                |              |      |                          |  |         |
| Centres                      |                |              |      |                          |  |         |
| Robotic-assisted             | Negrin, R.     |              |      |                          |  |         |
| Unicompartment               | Duboy, J.      |              |      |                          |  |         |
| al knee                      | Reyes, N. O.   |              |      |                          |  |         |
| Arthroplasty                 | Barahona, M.   | Journal of   |      |                          |  |         |
| optimizes joint              | Iniguez, M.    | Experimental | 2020 | 10.1186/s40634-020-00309 |  | Article |
| line restitution             | Infante, C.    | Orthopaedics | -8   |                          |  |         |
| better than                  | Cordero, J. A. |              |      |                          |  |         |
| conventional                 | Sepulveda, V.  |              |      |                          |  |         |
| surgery                      | Ferrer, G.     |              |      |                          |  |         |
| Comparison of                |                |              |      |                          |  |         |
| 1-year outcomes              | Leelasestapor  |              |      |                          |  |         |
| between MAKO                 | n, C.          |              |      |                          |  |         |
| versus NAVIO                 | Tarnpitchpras  |              |      |                          |  |         |
| robot-assisted               | ert, T.        | Knee Surgery |      |                          |  |         |
| medial UKA:                  | Arirachakara   | & Related    | 2020 | 10.1186/s43019-020-00030 |  | Article |
| nonrandomized,               | n, A.          | Research     | -x   |                          |  |         |
| prospective,                 | Kongtharvon    |              |      |                          |  |         |
| comparative                  | skul, J.       |              |      |                          |  |         |
| study                        |                |              |      |                          |  |         |

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| Low femoral<br>component<br>prominence<br>negatively<br>influences early<br>revision rate in<br>robotic<br>unicompartmental<br>1 knee<br>arthroplasty<br>Robotic-arm<br>assisted medial<br>unicondylar knee<br>arthroplasty<br>versus jig-based<br>unicompartmental<br>1 knee<br>arthroplasty with<br>navigation<br>control: study<br>protocol for a<br>prospective<br>randomised<br>controlled trial | Klasan, A.<br>Carter, M.<br>Holland, S.<br>Young, S. W.<br><br>Kayani, B.<br>Konan, S.<br>Tahmassebi,<br>J.<br>Ayuob, A.<br>Moriarty, P.<br>D.<br>Haddad, F. S. | Knee Surgery<br>Sports<br>Traumatology<br>Arthroscopy<br><br>Trials   | 2020 | 10.1007/s00167-020-05886<br>-w | Article |
| Robotic-Assisted<br>Versus Manual<br>Unicompartmental<br>Knee<br>Arthroplasty: A<br>Systematic<br>Review  | Iturriaga, C.<br>Salem, H. S.<br>Sodhi, N.<br>Ehiorobo, J.<br>O.<br>Mont, M. A.   | Surgical<br>Technology<br>International-In<br>ternational<br>Developments<br>in Surgery and<br>Surgical<br>Research | 2020 | /                              | Review  |
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| Robotic-assisted unicompartmental knee arthroplasty has a greater early functional outcome when compared to manual total knee arthroplasty for isolated medial compartment arthritis | Clement, N.<br>D.<br>Bell, A.<br>Simpson, P.<br>Macpherson, G.<br>Patton, J. T.<br>Hamilton, D.<br>F. | Bone & Joint Research | 2020 | 10.1302/2046-3758.91.Bjr-2019-0147.R1    | Article |
| A systematic review of imageless hand-held robotic-assisted knee arthroplasty: learning curve, accuracy, functional outcome and survivorship   | Clement, N.<br>D.<br>Al-Zibari, M.<br>Afzal, I.<br>Deehan, D. J.<br>Kader, D.                         | Efort Open Reviews    | 2020 | 10.1302/2058-5241.5.190065               | Review  |
| What is the impact of patellofemoral joint degeneration and malalignment on patient-reported outcomes after lateral unicompartmental knee arthroplasty?                              | Burger, J. A.<br>Dooley, M. S.<br>Kleeblad, L.<br>J.<br>Zuiderbaan, H. A.<br>Pearle, A. D.            | Bone & Joint Journal  | 2020 | 10.1302/0301-620x.102b6.Bjj-2019-1429.R1 | Article |

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| Robotic             |               |              |  |                   |                          |         |
| technology:         | Begum, F. A.  |              |  |                   |                          |         |
| current concepts,   | Kayani, B.    |              |  |                   |                          |         |
| operative           | Morgan, S.    |              |  |                   |                          |         |
| techniques and      | D. J.         | Efort Open   |  | 2020              | 10.1302/2058-5241.5.1900 | Article |
| emerging uses in    | Ahmed, S. S.  | Reviews      |  | 89                |                          |         |
| unicompartmental    | Singh, S.     |              |  |                   |                          |         |
| knee                | Haddad, F. S. |              |  |                   |                          |         |
| arthroplasty        |               |              |  |                   |                          |         |
| A novel handheld    |               |              |  |                   |                          |         |
| robotic-assisted    |               |              |  |                   |                          |         |
| system for          |               |              |  |                   |                          |         |
| unicompartmental    | Battenberg,   |              |  |                   |                          |         |
| knee                | A. K.         | Journal of   |  |                   |                          |         |
| arthroplasty:       | Netravali, N. | Robotic      |  | 2020              | 10.1007/s11701-018-00907 | Article |
| surgical            | A.            | Surgery      |  | -w                |                          |         |
| technique and       | Lonner, J. H. |              |  |                   |                          |         |
| early               |               |              |  |                   |                          |         |
| survivorship        |               |              |  |                   |                          |         |
| Robotic             |               |              |  |                   |                          |         |
| arm-assisted        | Banger, M. S. |              |  |                   |                          |         |
| bi unicompartmental | Johnston, W.  |              |  |                   |                          |         |
| knee                | D.            |              |  |                   |                          |         |
| arthroplasty        | Razii, N.     |              |  |                   |                          |         |
| maintains natural   | Doonan, J.    | Bone & Joint |  |                   |                          |         |
| knee joint          | Rowe, P. J.   | Journal      |  | 2020              | 10.1302/0301-620x.102b11 | Article |
| anatomy             | Jones, B. G.  |              |  | .Bjj-2020-1166.R1 |                          |         |
| compared with       | MacLean, A.   |              |  |                   |                          |         |
| total knee          | D.            |              |  |                   |                          |         |
| arthroplasty: a     | Blyth, M. J.  |              |  |                   |                          |         |
| prospective         | G.            |              |  |                   |                          |         |
| randomized          |               |              |  |                   |                          |         |
| controlled trial    |               |              |  |                   |                          |         |
| Robotic             |               |              |  |                   |                          |         |
| arm-assisted vs     | Zhang, F. J.  |              |  |                   |                          |         |
| conventional        | Li, H. C.     |              |  |                   |                          |         |
| unicompartmental    | Ba, Z. C.     | Medicine     |  | 2019              | 10.1097/md.000000000001  | Review  |
| knee                | Bo, C. G.     |              |  | 6968              |                          | w       |
| arthroplasty A      | Li, K.        |              |  |                   |                          |         |
| meta-analysis of    |               |              |  |                   |                          |         |
| the effects on      |               |              |  |                   |                          |         |
| clinical outcomes   |               |              |  |                   |                          |         |

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| Zambianchi,<br>Does component<br>placement affect<br>short-term<br>clinical outcome<br>in robotic-arm<br>assisted<br>unicompartmental<br>knee<br>arthroplasty?  | F.<br>Franceschi,<br>G.<br>Rivi, E.<br>Banchelli, F.<br>Marcovigi, A.<br>Nardacchione<br>, R.<br>Ensini, A.<br>Catani, F.   | Bone & Joint<br>Journal                               | 2019 | 10.1302/0301-620x.101b4.<br>Bjj-2018-0753.R1 | Article |
| Robotic-assisted<br>unicompartmental<br>knee<br>replacement<br>offers no early<br>advantage over<br>conventional<br>unicompartmental<br>knee<br>replacement   | Wong, J.<br>Murtaugh, T.<br>Lakra, A.<br>Cooper, H. J.<br>Shah, R. P.<br>Geller, J. A.  | Knee Surgery<br>Sports<br>Traumatology<br>Arthroscopy | 2019 | 10.1007/s00167-019-05386<br>-6               | Article |
| Cognitive<br>Training for<br>Robotic<br>Arm-Assisted<br>Unicompartmental<br>Knee<br>Arthroplasty<br>through a<br>Surgical<br>Simulation<br>Mobile<br>Application<br>A systematic<br>review of<br>robotic-assisted<br>unicompartmental<br>knee<br>arthroplasty<br>PROSTHESIS<br>DESIGN AND<br>TYPE SHOULD<br>BE REPORTED | Vestermark,<br>G. L.<br>Bhowmik-Stoker, M.<br>Springer, B.<br>D.<br>Robinson, P.<br>G.<br>Clement, N.<br>D.<br>Hamilton, D.<br>Blyth, M. J.<br>G.<br>Haddad, F. S.<br>Patton, J. T. | Journal of<br>Knee Surgery                            | 2019 | 10.1055/s-0038-1675190                       | Article |
|   |   | Bone & Joint<br>Journal                               | 2019 | 10.1302/0301-620x.101b7.<br>Bjj-2018-1317.R1 | Review  |

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| Robot-assisted unicompartmental knee arthroplasty can reduce radiologic outliers compared to conventional techniques    | Park, K. K.<br>Han, C. D.<br>Yang, I. H.<br>Lee, W. S.<br>Han, J. H.<br>Kwon, H. M. | Plos One   | 2019 | 10.1371/journal.pone.0225941 | Article |
| Robotic-assisted Medial Unicompartmental Knee Arthroplasty: Options and Outcomes  | Journal of the American Academy of Orthopaedic Surgeons                             | Lonner, J. H.<br>Klement, M.<br>R.   | 2019 | 10.5435/jaaos-d-17-00710     | Article |
| Low rate of iatrogenic complications during unicompartmental knee arthroplasty with two semiautonomous robotic systems  | Knee  | Lonner, J. H.<br>Kerr, G. J.   | 2019 | 10.1016/j.knee.2019.02.005   | Article |
| Reliability of Intraoperative Knee Range of Motion Measurements by Goniometer Compared with Robot-Assisted Arthroplasty | Journal of Knee Surgery   | Kwon, H. M.<br>Yang, I. H.<br>Lee, W. S.<br>Yu, A. R. L.<br>Oh, S. Y.<br>Park, K. K. | 2019 | 10.1055/s-0038-1641140       | Article |

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| An assessment of early functional rehabilitation and hospital discharge in conventional versus robotic-arm assisted unicompartmental knee arthroplasty: A novel patient-specific instrument design can deliver accuracy in unicompartmental knee arthroplasty: A novel patient-specific instrument design can deliver accuracy in unicompartmental knee arthroplasty | Kayani, B.<br>Konan, S.<br>Tahmassebi, J.<br>Rowan, F. E.<br>Haddad, F. S.   | Bone & Joint Journal  | 2019 | 10.1302/0301-620x.101b1.<br>Bjj-2018-0564.R2                 | Article |
| Outcomes of robotic-arm-assisted medial unicompartmental knee arthroplasty: minimum 3-year follow-up Revision Analysis of Robotic Arm-Assisted and Manual Unicompartmental Knee Arthroplasty   | Jones, G. G.<br>Clarke, S.<br>Harris, S.<br>Jaere, M.<br>Aldalmani, T.<br>de Klee, P.<br>Cobb, J. P.<br><br>Dretakis, K.<br>Igoumenou, V. G. | Knee European Journal of Orthopaedic Surgery and Traumatology | 2019 | 10.1016/j.knee.2019.08.001<br><br>10.1007/s00590-019-02424-4 | Article |
|  | Cool, C. L.<br>Needham, K. A.<br>Khlopas, A.<br>Mont, M. A.  | Journal of Arthroplasty                                       | 2019 | 10.1016/j.arth.2019.01.018                                   | Article |

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| Robotic-assisted<br>versus standard<br>unicompartmental   |  |   |      |                           |         |  |
| 1 knee  | Cavinatto, L.  |   |      |                           |         |  |
| arthroplasty-evaluation of<br>manuscript conflict of<br>interests,  | Bronson, M.<br>J. Chen, D. D.<br>Moucha, C.<br>S.  | International<br>Orthopaedics                           | 2019 | 10.1007/s00264-018-4175-5 | Article |  |
| scientific quality<br>and bibliometrics   |  |   |      |                           |         |  |
| An Experienced<br>Surgeon Can   | Bush, A. N.  |   |      |                           |         |  |
| Meet or Exceed<br>Robotic<br>Accuracy in<br>Manual<br>Unicompartmental<br>Knee  | Ziemba-Davis, M.<br>Deckard, E. R.<br>Meneghini, R. M.                                     | Journal of<br>Bone and Joint<br>Surgery-American Volume | 2019 | 10.2106/jbjs.18.00906     | Article |  |
| Arthroplasty  |  |   |      |                           |         |  |
| The Influence of<br>Preoperative<br>Radiographic<br>Patellofemoral<br>Degenerative<br>Changes and<br>Malalignment on<br>Patellofemoral-Specific Outcome<br>Scores Following | Burger, J. A.<br>Kleeblad, L.<br>J. Laas, N.<br>Pearle, A. D.                              | Journal of<br>Bone and Joint<br>Surgery-American Volume | 2019 | 10.2106/jbjs.18.01385     | Article |  |
| Fixed-Bearing<br>Medial<br>Unicompartmental Knee  |  |   |      |                           |         |  |
| Arthroplasty  |  |   |      |                           |         |  |
| Improved<br>implant position<br>and lower<br>revision rate with<br>robotic-assisted<br>unicompartmental<br>1 knee<br>arthroplasty   | Batailler, C.<br>White, N.<br>Ranaldi, F.<br>M.<br>Neyret, P.<br>Servien, E.<br>Lustig, S. | Knee Surgery<br>Sports<br>Traumatology<br>Arthroscopy   | 2019 | 10.1007/s00167-018-5081-5 | Article |  |

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| Robotic-Assisted<br>and<br>Computer-Navig<br>ated  | Naziri, Q.  | Surgical<br>Technology                                 |      |                                    |         | Revie<br>w |
| Unicompartment<br>al Knee  | Mixa, P. J.   | International-In<br>ternational                        | 2018 | \                                  |         |            |
| Arthroplasties: A<br>Systematic<br>Review  | Murray, D. P.<br>Abraham, R.<br>Zikria, B. A.<br>Sastry, A.<br>Patel, P. D.                         | Developments<br>in Surgery and<br>Surgical<br>Research |      |                                    |         |            |
| A comparison of<br>gait one year post<br>operation in an<br>RCT of robotic<br>UKA versus<br>traditional<br>Oxford UKA                | Motesharei,<br>A.   |  |      |                                    |         |            |
| Predicting the<br>Feasibility of<br>Correcting<br>Mechanical Axis<br>in Large Varus<br>Deformities With<br>Unicompartment<br>al Knee | Rowe, P.<br>Blyth, M.<br>Jones, B.<br>Maclean, A.<br>Kleeblad, L.<br>J.                             | Gait & Posture   | 2018 | 10.1016/j.gaitpost.2018.02.<br>029 | Article |            |
| Arthroplasty   | van der List,<br>J. P.  | Journal of<br>Arthroplasty                             | 2018 | 10.1016/j.arth.2017.09.052         | Article |            |
| Midterm<br>Survivorship and<br>Patient<br>Satisfaction of<br>Robotic-Arm-As<br>sisted Medial<br>Unicompartment<br>al Knee            | Pearle, A. D.<br>Fragomen, A.<br>T.<br>Rozbruch, S.<br>R.   |  |      |                                    |         |            |
| Arthroplasty: A<br>Multicenter<br>Study  | Kleeblad, L.<br>J.<br>Borus, T. A.<br>Coon, T. M.<br>Dounchis, J.<br>Nguyen, J. T.<br>Pearle, A. D. | Journal of<br>Arthroplasty                             | 2018 | 10.1016/j.arth.2018.01.036         | Article |            |

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| The learning            |                 |                  |      |                            |  |         |
| curve associated        | Kayani, B.      |                  |      |                            |  |         |
| with robotic-arm        | Konan, S.       |                  |      |                            |  |         |
| assisted                | Pietrzak, J. R. |                  |      |                            |  |         |
| unicompartmental        | T.              | Bone & Joint     | 2018 | 10.1302/0301-620x.100b8.   |  |         |
| 1 knee                  | Huq, S. S.      | Journal          |      | Bjj-2018-0040.R1           |  | Article |
| arthroplasty A          | Tahmassebi,     |                  |      |                            |  |         |
| PROSPECTIVE             | J.              |                  |      |                            |  |         |
| COHORT                  | Haddad, F. S.   |                  |      |                            |  |         |
| STUDY                   |                 |                  |      |                            |  |         |
| Decreased Time          |                 |                  |      |                            |  |         |
| to Return to            | Jinnah, A. H.   | Surgical         |      |                            |  |         |
| Work Using              | Augart, M. A.   | Technology       |      |                            |  |         |
| Robotic-Assisted        | Lara, D. L.     | International-In |      |                            |  |         |
| Unicompartmental        | Jinnah, R. H.   | ternational      |      |                            |  |         |
| Knee                    | Poehling, G.    | Developments     | 2018 | \                          |  | Article |
| Arthroplasty            | G.              | in Surgery and   |      |                            |  |         |
| Compared to             | Gwam, C. U.     | Surgical         |      |                            |  |         |
| Conventional            | Plate, J. F.    | Research         |      |                            |  |         |
| Techniques              |                 |                  |      |                            |  |         |
| Robotic-Arm-Assisted vs | Gilmour, A.     |                  |      |                            |  |         |
| Conventional            | MacLean, A.     |                  |      |                            |  |         |
| Unicompartmental        | D.              |                  |      |                            |  |         |
| Knee                    | Rowe, P. J.     |                  |      |                            |  |         |
| Arthroplasty. The       | Banger, M. S.   | Journal of       |      |                            |  |         |
| 2-Year Clinical         | Donnelly, I.    | Arthroplasty     | 2018 | 10.1016/j.arth.2018.02.050 |  | Article |
| Outcomes of a           | Jones, B. G.    |                  |      |                            |  |         |
| Randomized              | Blyth, M. J.    |                  |      |                            |  |         |
| Controlled Trial        | G.              |                  |      |                            |  |         |
| Robot-assisted          | Fu, J.          |                  |      |                            |  |         |
| vs. conventional        | Wang, Y. N.     |                  |      |                            |  |         |
| unicompartmental        | Li, X.          |                  |      |                            |  |         |
| 1 knee                  | Yu, B. Z.       | Orthopade        | 2018 | 10.1007/s00132-018-3604-x  |  | Review  |
| arthroplasty:           | Ni, M.          |                  |      |                            |  | w       |
| Systematic              | Chai, W.        |                  |      |                            |  |         |
| review and              | Hao, L. B.      |                  |      |                            |  |         |
| meta-analysis           | Chen, J. Y.     |                  |      |                            |  |         |

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| Patient reported<br>and clinical<br>outcomes of<br>robotic-arm<br>assisted<br>unicondylar knee<br>arthroplasty:<br>Minimum two<br>year follow-up | Deese, J. M.<br>Gratto-Cox,<br>G.<br>Carter, D. A.<br>Sasser, T. M.<br>Brown, K. L.  | Journal of<br>Orthopaedics                            | 2018 | 10.1016/j.jor.2018.08.018  | Article |
| Robotic-Assisted<br>Unicompartmental<br>Knee<br>Arthroplasty:<br>State-of-the Art<br>and Review of<br>the Literature                             | Christ, A. B.<br>Pearle, A. D.<br>Mayman, D.<br>J.<br>Haas, S. B.  | Journal of<br>Arthroplasty                            | 2018 | 10.1016/j.arth.2018.01.050 | Article |
| Faster return to<br>sport after<br>robotic-assisted<br>lateral<br>unicompartmental<br>knee<br>arthroplasty: a<br>comparative<br>study            | Canetti, R.<br>Batailler, C.<br>Bankhead, C.<br>Neyret, P.<br>Servien, E.<br>Lustig, S.  | Archives of<br>Orthopaedic<br>and Trauma<br>Surgery   | 2018 | 10.1007/s00402-018-3042-6  | Article |
| Obesity has no<br>effect on<br>outcomes<br>following<br>unicompartmental<br>knee<br>arthroplasty   | Plate, J. F.<br>Augart, M. A.<br>Seyler, T. M.<br>Bracey, D. N.<br>Hoggard, A.<br>Akbar, M.<br>Jinnah, R. H.<br>Poehling, G.<br>G. | Knee Surgery<br>Sports<br>Traumatology<br>Arthroscopy | 2017 | 10.1007/s00167-015-3597-5  | Article |

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| Survivorship and patient satisfaction of robotic-assisted medial unicompartmental knee arthroplasty at a minimum two-year follow-up | Pearle, A. D.<br>van der List, J. P.<br>Lee, L.<br>Coon, T. M.<br>Borus, T. A.<br>Roche, M. W.  | Knee                       | 2017 | 10.1016/j.knee.2016.12.001 | Article |
| Regional Femoral and Tibial Radiolucency in Cemented Unicompartmental Knee Arthroplasty and the Relationship to Functional Outcomes | Kleeblad, L.<br>J.<br>van der List, J. P.<br>Zuiderbaan, H. A.<br>Pearle, A. D.                 | Journal of Arthroplasty    | 2017 | 10.1016/j.arth.2017.06.022 | Article |
| Improved joint-line restitutioin in unicompartmental knee arthroplasty using a robotic-assisted surgical technique                  | Herry, Y.<br>Batailler, C.<br>Lording, T.<br>Servien, E.<br>Neyret, P.<br>Lustig, S.            | International Orthopaedics | 2017 | 10.1007/s00264-017-3633-9  | Article |
| Optimization of sagittal and coronal planes with robotic-assisted unicompartmental knee arthroplasty                                | Gaudiani, M.<br>A.<br>Nwachukwu, B. U.<br>Baviskar, J.<br>V.<br>Sharma, M.<br>Ranawat, A.<br>S. | Knee                       | 2017 | 10.1016/j.knee.2017.05.002 | Article |

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| Robotic          | Blyth, M. J.  |              |      |                          |         |         |
| arm-assisted     | G.            |              |      |                          |         |         |
| versus           | Anthony, I.   |              |      |                          |         |         |
| conventional     | Rowe, P.      | Bone & Joint | 2017 | 10.1302/2046-3758.611.Bj |         | Article |
| unicompartmental | Banger, M. S. | Research     |      | r-2017-0060.R1           |         |         |
| 1 knee           | MacLean, A.   |              |      |                          |         |         |
| arthroplasty     | Jones, B.     |              |      |                          |         |         |
| EXPLORATOR       |               |              |      |                          |         |         |
| Y SECONDARY      |               |              |      |                          |         |         |
| ANALYSIS OF      |               |              |      |                          |         |         |
| A                |               |              |      |                          |         |         |
| RANDOMISED       |               |              |      |                          |         |         |
| CONTROLLED       |               |              |      |                          |         |         |
| TRIAL            |               |              |      |                          |         |         |
| Current state of |               |              |      |                          |         |         |
| computer         |               |              |      |                          |         |         |
| navigation and   | van der List, | Knee Surgery |      |                          |         |         |
| robotics in      | J. P.         | Sports       |      |                          |         |         |
| unicompartmental | Chawla, H.    | Traumatology | 2016 | 10.1007/s00167-016-4305- | Revie   |         |
| 1 and total knee | Joskowicz, L. | Arthroscopy  | 9    | 9                        | w       |         |
| arthroplasty: a  | Pearle, A. D. |              |      |                          |         |         |
| systematic       |               |              |      |                          |         |         |
| review with      |               |              |      |                          |         |         |
| meta-analysis    |               |              |      |                          |         |         |
| The John Insall  |               |              |      |                          |         |         |
| Award No         |               |              |      |                          |         |         |
| Functional       | Ollivier, M.  |              |      |                          |         |         |
| Benefit After    | Parratte, S.  |              |      |                          |         |         |
| Unicompartmental | Lunebourg,    | Clinical     |      |                          |         |         |
| Knee             | A.            | Orthopaedics |      |                          |         |         |
| Arthroplasty     | Viehweger,    | and Related  | 2016 | 10.1007/s11999-015-4259- | Article |         |
| Performed With   | E.            | Research     | 0    | 0                        |         |         |
| Patient-specific | Argenson, J.  |              |      |                          |         |         |
| Instrumentation: | N.            |              |      |                          |         |         |
| A Randomized     |               |              |      |                          |         |         |
| Trial            |               |              |      |                          |         |         |

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|-------------------|---------------|----------------|------|----------------------------|---------|--|
| Can               |               |                |      |                            |         |  |
| Robot-Assisted    | Moschetti,    |                |      |                            |         |  |
| Unicompartmental  | W. E.         |                |      |                            |         |  |
| Knee              | Konopka, J.   |                |      |                            |         |  |
| Arthroplasty Be   | F.            | Journal of     |      |                            |         |  |
| Cost-Effective?   | Rubash, H. E. | Arthroplasty   | 2016 | 10.1016/j.arth.2015.10.018 | Article |  |
| A Markov          | Genuario, J.  |                |      |                            |         |  |
| Decision          | W.            |                |      |                            |         |  |
| Analysis          |               |                |      |                            |         |  |
| Robotically       |               |                |      |                            |         |  |
| Assisted          |               |                |      |                            |         |  |
| Unicompartmental  |               | Orthopedic     |      |                            |         |  |
| Knee              | Lonner, J. H. | Clinics of     | 2016 | 10.1016/j.ocl.2015.08.024  | Article |  |
| Arthroplasty with |               | North America  |      |                            |         |  |
| a Handheld        |               |                |      |                            |         |  |
| Image-Free        |               |                |      |                            |         |  |
| Sculpting Tool    |               |                |      |                            |         |  |
| Improved          |               |                |      |                            |         |  |
| Accuracy of       | Bell, S. W.   |                |      |                            |         |  |
| Component         | Anthony, I.   | Journal of     |      |                            |         |  |
| Positioning with  | Jones, B.     | Bone and Joint |      |                            |         |  |
| Robotic-Assisted  | MacLean, A.   | Surgery-Ameri  | 2016 | 10.2106/jbjs.15.00664      | Article |  |
| Unicompartmental  | Rowe, P.      | can Volume     |      |                            |         |  |
| Knee              | Blyth, M.     |                |      |                            |         |  |
| Arthroplasty      |               |                |      |                            |         |  |
| Robotic-assisted  |               |                |      |                            |         |  |
| Unicompartmental  |               | Orthopedic     |      |                            |         |  |
| Knee              | Roche, M.     | Clinics of     | 2015 | 10.1016/j.ocl.2014.09.008  | Article |  |
| Arthroplasty: The |               | North America  |      |                            |         |  |
| MAKO              |               |                |      |                            |         |  |
| Experience        |               |                |      |                            |         |  |
| Preoperative      |               |                |      |                            |         |  |
| Mapping in        |               |                |      |                            |         |  |
| Unicompartmental  |               |                |      |                            |         |  |
| Knee              |               |                |      |                            |         |  |
| Arthroplasty      |               |                |      |                            |         |  |
| Using Computed    | Ponzio, D. Y. | Journal of     |      |                            |         |  |
| Tomography        | Lonner, J. H. | Arthroplasty   | 2015 | 10.1016/j.arth.2014.10.039 | Article |  |
| Scans Is          |               |                |      |                            |         |  |
| Associated with   |               |                |      |                            |         |  |
| Radiation         |               |                |      |                            |         |  |
| Exposure and      |               |                |      |                            |         |  |
| Carries High      |               |                |      |                            |         |  |
| Cost              |               |                |      |                            |         |  |

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| The Valgus Stress Radiograph Does Not Determine the Full Extent of Correction of Deformity Prior to Medial Unicompartmental Knee Arthroplasty | Kreitz, T. M.<br>Maltenfort, M. G.<br>Lonner, J. H.   | Journal of Arthroplasty                | 2015 | 10.1016/j.arth.2015.02.008   | Article |
| In vivo kinematics of a robot-assisted uni- and multi-compartmental knee arthroplasty   | Watanabe, T.<br>Abbasi, A. Z.<br>Conditt, M.<br>A.<br>Christopher, J.   | Journal of Orthopaedic Science         | 2014 | 10.1007/s00776-014-0578-3    | Article |
| Lateral Robotic Unicompartmental Knee Arthroplasty  | Kreuzer, S.<br>Otto, J. K.<br>Banks, S. A.<br>Thein, R.<br>Khamaisy, S.<br>Zuiderbaan, H. A.<br>Nawabi, D. H. | Sports Medicine and Arthroscopy Review | 2014 | 10.1097/jsa.0000000000000053 | Review  |
| Robotic-assisted Unicompartmental Knee Arthroplasty   | Pearle, A. D.<br>Tamam, C.<br>Poehling, G. G.   | Sports Medicine and Arthroscopy Review | 2014 | 10.1097/jsa.0000000000000043 | Review  |
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|   | Mofidi, A.    |                            |      |                            |  |         |
| Assessment of accuracy of robotically assisted unicompartmental arthroplasty  | Plate, J. F.  |                            |      |                            |  |         |
|   | Lu, B.        | Knee Surgery               |      |                            |  |         |
|   | Conditt, M.   | Sports Traumatology        | 2014 | 10.1007/s00167-014-2969-6  |  | Article |
|   | A.            | Arthroscopy                |      |                            |  |         |
|   | Lang, J. E.   |                            |      |                            |  |         |
|   | Poehling, G.  |                            |      |                            |  |         |
|   | G.            |                            |      |                            |  |         |
|   | Jinnah, R. H. |                            |      |                            |  |         |
| Unicompartmental knee arthroplasties: Robot vs. patient specific instrumentation  | Jaffry, Z.    |                            |      |                            |  |         |
|   | Masjedi, M.   |                            |      |                            |  |         |
|   | Clarke, S.    |                            |      |                            |  |         |
|   | Harris, S.    | Knee                       | 2014 | 10.1016/j.knee.2013.11.017 |  | Article |
|   | Karia, M.     |                            |      |                            |  |         |
|   | Andrews, B.   |                            |      |                            |  |         |
|   | Cobb, J.      |                            |      |                            |  |         |
| Robotic Guidance Does Not Improve Component Position or Short-Term Outcome in Medial Unicompartmental Knee Arthroplasty Does the type of tibial component affect mechanical alignment in unicompartmental knee replacement? | Hansen, D. C. |                            |      |                            |  |         |
|   | Kusuma, S.    | Journal of Arthroplasty    | 2014 | 10.1016/j.arth.2014.04.012 |  | Article |
|   | K.            |                            |      |                            |  |         |
|   | Palmer, R. M. |                            |      |                            |  |         |
|   | Harris, K. B. |                            |      |                            |  |         |
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|   | Citak, M.     |                            |      |                            |  |         |
|   | Njoku, I. U.  |                            |      |                            |  |         |
|   | Pearle, A. D. |                            |      |                            |  |         |
|   | Citak, M.     |                            |      |                            |  |         |
|   | Suero, E. M.  |                            |      |                            |  |         |
|   | Citak, M.     |                            |      |                            |  |         |
|   | Dunbar, N. J. |                            |      |                            |  |         |
|   | Branch, S. H. | Knee                       | 2013 | 10.1016/j.knee.2012.11.001 |  | Article |
|   | Conditt, M.   |                            |      |                            |  |         |
|   | A.            |                            |      |                            |  |         |
|   | Banks, S. A.  |                            |      |                            |  |         |
|   | Pearle, A. D. |                            |      |                            |  |         |

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| Robotic-assisted unicompartmental knee arthroplasty in a patient with combined medial compartment arthritis and subchondral defect of the medial femoral condyle | Suero, E. M.<br>Citak, M.<br>Kraneburg, U. M.   | Knee  | 2012 | 10.1016/j.knee.2011.12.003 | Article |
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| Robot-Assisted Unicompartmental Knee Arthroplasty  | Branch, S. H.<br>Conditt, M. A.<br><br>Banks, S. A.<br>Pearle, A. D.<br>O'Loughlin, P. F. | Journal of Arthroplasty                           | 2010 | 10.1016/j.arth.2008.09.024 | Article |
| Robotic Arm-assisted UKA Improves Tibial Component Alignment A Pilot Study   | Conditt, M. A.<br><br>Lonner, J. H.<br>John, T. K.<br>Conditt, M. A.                      | Clinical Orthopaedics and Related Research        | 2010 | 10.1007/s11999-009-0977-5  | Article |
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