Smith+Nephew

+ Knee solutions

Personalization · Versatility · Performance

CORI◊
Surgical System

JOURNEY◊ II
Total Knee Arthroplasty
with OXINIUM◊ Technology

LEGION◊ CONCELOC◊
Cementless Total Knee System

JOURNEY◊ II UK
Unicompartmental Knee System
with OXINIUM◊ Technology

LEGION◊ RK
Revision Knee System
with OXINIUM◊ Technology

CORI®
Surgical System

- Ability to **execute any* alignment philosophy with CORI System**
- **Objective and reproducible** soft tissue tensioning with the CORI Digital Tensioner[1,2]
- **Image-based or image-free** planning
- Flexible surgical execution with **Burr and Saw** options
- **Compact and mobile** robotic-assisted system compared to competitors[†3]
- Flexibility to perform **partial, primary and revision knees,** all robotically-enabled

Key pillars

Personalization **Versatility** **Performance**

JOURNEY◊ II
Total Knee Arthroplasty
with OXINIUM◊ Technology

- Shown to reproduce the **kinematics of a normal knee**‡[4-8]
- Demonstrated to restore the **anatomical shape and joint line** of the patient[9-12]
- Exhibited **significant improvements in Knee Society Scores** at 1-year compared to other TKA designs[10,13]

JOURNEY◊ II UK
Unicompartmental Knee System
with OXINIUM◊ Technology

- Designed to give surgeons the flexibility to **optimize** the construct for **each patient's unique anatomy**[14]
- UKA with CORI◊ System has been shown to provide **improved joint line restoration** and **higher patient satisfaction**¶[15-18]
- **Robotic UKA has shown to decrease the risk of revision by 17%**§[19-23]

LEGION◊ CONCELOC◊
Cementless Total Knee System

- Shown to provide excellent **biological fixation****[24,25]
- Demonstrated high survivorship and **significantly improved patient reported outcomes**††[26,27]
- Cementless TKA **supports efficiency in the OR**‡‡[28]

LEGION◊ RK
Revision Knee System
with OXINIUM◊ Technology

- **Image-free joint line referencing with CORI System** enabling anatomic replication[29]
- Comprehensive implant options enabling a **personalized fit**
- LEGION Revision with OXINIUM Technology demonstrated **excellent survivorship at 15 years**[30]

*Any alignment refers to kinematic, functional and mechanical alignment

†Compared to MAKO™ and ROSA™

‡Based on BCS and CR evidence

¶Evidence based on JOURNEY° family implants; Compared to conventional UKA

§Based on general robotic UKA evidence; Compared to conventional UKA

**Shown in a validated, ovine model

††Compared to preoperative scores at one year follow-up

‡‡Based on general cementless TKA evidence, when compared to cemented TKA

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Smith & Nephew, Inc.
1450 Brooks Road
Memphis, TN 38116
USA

www.smith-nephew.com

References

1. Smith+Nephew 2022. Optimus TKA Tensioner Gap Assessment Verification Report. Internal Report. 10059269. **2.** Smith+Nephew 2021. Tensioner Design Verification Test Report. Internal Report. TR100123. **3.** Smith+Nephew 2020. Comparison of operating room footprint for robotic-assisted knee arthroplasty systems. Internal Report. EO.REC.PCS015.002.v1. **4.** Iriuchishima T, Ryu K. A Comparison of Rollback Ratio between Bicruciate Substituting Total Knee Arthroplasty and Oxford Unicompartmental Knee Arthroplasty. J Knee Surg. 2018;31(6):568-572 **5.** Murakami K, Hamai S, Okazaki K, et al. Knee kinematics in bi-cruciate stabilized total knee arthroplasty during squatting and stairclimbing activities. J Orthop. 2018;15(2):650-654. **6.** Carpenter RD, Brilhault J, Majumdar S, Ries MD. Magnetic resonance imaging of in vivo patellofemoral kinematics after total knee arthroplasty. Knee. 2009;16(5):332-336. **7.** Grieco TF, Sharma A, Dessinger GM, Cates HE, Komistek RD. In Vivo Kinematic Comparison of a Bicruciate Stabilized Total Knee Arthroplasty and the Normal Knee Using Fluoroscopy. J Arthroplasty. 2018;33(2):565-571. **8.** Smith LA, Nachtrab J, LaCour M, et al. In Vivo Knee Kinematics: How Important Are the Roles of Femoral Geometry and the Cruciate Ligaments? J Arthroplasty. 2021;36:1445-1454. **9.** Mayman DJ, Patel AR, Carroll KM. Hospital Related Clinical and Economic Outcomes of a Bicruciate Knee System in Total Knee Arthroplasty Patients. Poster presented at: ISPOR Symposium;19-23 May, 2018; Baltimore, Maryland, USA. **10.** Nodzo SR, Carroll KM, Mayman DJ. The Bicruciate Substituting Knee Design and Initial Experience. Tech Orthop. 2018;33(1):37-41. **11.** Murakami K, Hamai S, Okazaki K, et al. In vivo kinematics of gait in posteriorstabilized and bicruciate-stabilized total knee arthroplasties using image-matching techniques. Int Orthop. 2018;42(11):2573-2581. **12.** Di Benedetto P, Vidi D, Colombo, Buttironi MM, Cainero V, Causero A. Pre-operative and post-operative kinematic analysis in total knee arthroplasty. A pilot study. Acta Biomed. 2019;90:91-97. **13.** Lutes W, Fitch D. Comparison of functional outcomes following total knee arthroplasty with a conventional implant design or one designed to mimic natural knee kinematics. Presented at: 39th SICOT Orthopaedic World Congress; October 10-13, 2018; Montréal, Canada. **14.** Smith+Nephew 2020. 23448 V1 JOURNEY II UK Design Rationale. **15.** Ashok Kumar PS, Pawar S, Kanniyan K, et al. Does robotic assisted unicompartmental knee arthroplasty restore native joint line more accurately than with conventional instruments? J Robot Surg. 2024;18(1):49. **16.** Negrin R, Duboy J, Iniguez M, et al. Robotic-assisted vs conventional surgery in medial unicompartmental knee arthroplasty: a clinical and radiological study. Knee Surg Relat Res. 2021;33(1):5. **17.** Negrin R, Duboy J, Reyes NO, et al. Robotic-assisted Unicompartmental knee Arthroplasty optimizes joint line restitution better than conventional surgery. J Exp Orthop. 2020;7(1):94. **18.** Mergenthaler G, et al. Is robotic-assisted unicompartmental knee arthroplasty a safe procedure? A case control study. Knee Surg Sports Traumatol Arthrosc. 2021;29:931–938.2023. **19.** Smith PN, et al. Hip, Knee and Shoulder Arthroplasty: 2023 Annual Report, Australian Orthopaedic Association National Joint Replacement Registry, AOA: Adelaide, South Australia. 2023. https://doi.org/10.25310/YWQZ9375. **20.** Chen K, et al. In: Lonner JH, editor. Robotics in Knee and Hip Arthroplasty: Springer; 2019. **21.** Allen MW, Jacofsky DJ. In: Lonner JH editor. Robotics in Knee and Hip Arthroplasty: Springer; 2019. **22.** Karia M, Masjedi M, Andrews B, et al. Robotic Assistance Enables Inexperienced Surgeons to Perform Unicompartmental Knee Arthroplasties on Dry Bone Models with Accuracy Superior to Conventional Methods. Adv Orthop. 2013;2013:481039. **23.** Jacofsky DJ, Allen M. Robotics in Arthroplasty: A Comprehensive Review. J Arthroplasty. 2016;31:2353–2363. **24.** Fenwick S, et al. World Biomaterials Congress; May 28–June 1, 2008; Amsterdam, NL. **25.** Smith+Nephew 2015. NCS249. **26.** Laende EK, Gascoyne TC, Teeter MG, et al. Poster presented at Orthopaedic Research Society 2024 Annual Meeting, February 2–6, 2024; Long Beach, CA, USA. **27.** Prinos A, Cardillo c, Greenky S, et al. Poster presented at Orthopaedic Research Society 2024 Annual Meeting, February 2–6, 2024; Long Beach, CA, USA. **28.** Liu Z, Wen L, Zhou L, et al. Comparison of Cemented and Cementless Fixation in Total Knee Arthroplasty: A Meta-Analysis and Systematic Review of RCTs. J Orthop Surg. 2024;32(3):1-12. **29.** Cochrane NH, Kim BI, Stauffer TP, et al. Revision total knee arthroplasty with an imageless, second-generation robotic system. J Arthroplasty. Published online February 12, 2024. **30.** National Joint Registry for England, Wales and Northern Ireland: LEGION revision OXINIUM (with revision tibial) implant summary report. 13 November 2025.