+ Evidence in focus

Smith*Nephew

New clinical evidence demonstrates excellent outcomes and survivorship of the JOURNEY[®] II Cruciate Retaining (CR) Knee System for TKA

Can asymmetry in total knee arthroplasty design lead to more normal-like post-operative kinematics? A multi-implant evaluation Smith LA, LaCour MT, Cates HE, Komistek RD. J Arthroplasty. 2024;39(7):1699–1706.

INTERPORT

publication

Single-surgeon, retrospective study comparing post-operative kinematics of three total knee replacements:

- Triathlon™ PCR (n=30) no asymmetry
- Persona™ PCR (n=29) some asymmetry*
- JOURNEY II CR (n=30) most asymmetry[†]
- Normal knee (n=10; control)



Weight bearing deep knee bend under fluoroscopic surveillance ≥3 months after TKA



JOURNEY II CR 119.0° ±6.9° (p<0.0001)



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Range of motion in the normal knee controls was 139.0° ±13.8°; ±95% confidence interval reported

Kinematic patterns **most like the normal knee**

Compared with Persona™ PCR and Triathlon™ PCR and with increasing flexion, JOURNEY II CR resulted in:



The most axial rotation



The most posterior femoral rollback

Mid-term outcomes of a kinematically designed CR TKA

Katzman JL, Habibi AA, Cardillo C, Fernandez-Madrid I, Meftah M, Schwarzkopf R. World J Orthop. 2024;15(2):118–128.



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High mid-term survivorship with significantly improved KOOS JR and PROMIS scores

(at 6 months and 2 years follow up versus pre-op scores)

Multi-surgeon, retrospective study of JOURNEY II CR (n=255; mean follow up of 3.3 years [range, 2.2–6.6 years])



Significant improvements in KOOS JR and PROMIS‡ scores

(at 6 months and 2 years follow up vs pre-op scores; p≤0.045)

Clinical and patient-reported outcomes of a kinematically designed CR TKA with a novel medial dished insert design

Katzman JL, Cardillo C, Haider MA, Ehlers M, Schwarzkopf R. Presented at ISTA 2024 — the 35th International Congress; August 28–31, 2024; Nashville, TN, USA.

High mid-term survivorship and significantly improved KOOS JR scores,§ with most patients discharged home after 1.3 days

Single-surgeon, retrospective study of JOURNEY II CR with Medial Dished (n=324; mean follow up of 3.3 years)

98.8% survivorship

Mean of 1.3 days before hospital discharge 97.2% patients discharged home

Significant improvements in KOOS JR scores

(at 6 months and 2 years follow up vs pre-op scores; p<0.001)

We strive to bring Life Unlimited to patients, so we developed JOURNEY II TKA to help patients rediscover their normal knee 11-4



Normal shapes:

Replicates asymmetric femoral and tibial profile 2,3,5,7

Normal position:

Designed to restore native 3° joint line and anterior/posterior position

Normal motion:

Reproduces native femoral rollback and axial rotation $^{\parallel 1-6,8,9}$

This material is intended for healthcare professionals. For detailed product information, including indications for use, contraindications, warnings and precautions, please consult the product's Instructions for Use (IFU) prior to use.

*Asymmetry in the condylar radii and bearing conformity. †Asymmetry in the anterior/posterior and superior/inferior direction for femoral and tibial components with anatomical alignment built into the design. †Pain Intensity, Pain Interference, Mobility, Physical Health. §At 6 months and 2 years follow up vs pre-op scores; p<0.001. †As observed in JOURNEY II Bicruciate Stabilised knee systems. ||As observed in JOURNEY II Bicruciate Stabilised and JOURNEY II Cruciate Retaining knee systems.

Abbreviations: CR = Cruciate Retaining; KOOS JR = Knee Injury Osteoarthritis Outcome Survey, Joint Replacement; TKA = total knee arthroplasty; PCR = posterior cruciate-retaining; PROMIS = Patient-Reported Outcome Measurement Information System.

References: 1. Iriuchishima T, Ryu K. J Knee Surg. 2018;31(6):568–572. 2. Murakami K, et al. J Orthop. 2018;15(2):650–654. 3. Grieco TF, et al. J Arthroplasty. 2018;33(2):56–571. 4. Murakami K, et al. J Orthop. 2018;42(11):2573–2581. 5. Smith LA, et al. J Arthroplasty. 2021;36:1445–1454. 6. Carpenter RD, et al. Knee. 2009;16(5):332–336. 7. Kaneko T, et al. J Orthop. 2017;14:201–206. 8. Catani F, et al. J Orthop Res. 2009;27(12):1569–1575. 9. Smith LA, et al. J Arthroplasty. 2024;39(7):1699–1706.