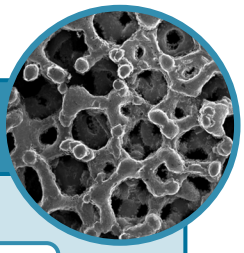
Why choose LEGION◊ CONCELOC◊ Cementless Total Knee System (TKS)?

CONCELOC Technology is designed for long-term fixation



- Pioneered through an innovative 3D-printing process that creates a fully randomised porous titanium structure with predictable porosity, pore size and node interconnectivity to promote biological in-growth[1,2]
- New evidence shows stable fixation by one year,[3,4] which is predictive of long-term stability[5]

Operating room efficiency

Compared to conventional surgery, CORI◊ Surgical System with RI.KNEE for total knee arthroplasty, has been shown to result in:

Reduced number of trays[6]

Significantly better accuracy of knee alignment and component positioning[7]

LEGION TKS has a successful clinical history of more than 20 years[8–11]

Developed using our trusted legacy in total knee arthroplasty and including an anatomically designed tibia and s-shaped trochlear grove

Smith+Nephew

LEGION◊ CONCELOC◊ Cementless TKS demonstrates stable fixation, high survival rates, and significant improvement in patient outcomes at one-year follow-up[3,4]

New evidence from two multi-centre studies shows at one year:[3,4]

- **Stable fixation**
- **100% survivorship** of tibial and femoral components*
- Significantly **improved PROMs** (versus pre-operative scores)

These new studies build on the **proven clinical history of CONCELOC technology**†

†Over five years of clinical history based on Smith+Nephew's REDAPT◊ Revision Hip System

Tibial baseplate migration using radiostereometric analysis (interim analysis)[3]

Number of patients: 30

Patient age (years, mean): 66

BMI (kg/m², mean): 30.6

Primary outcome:
Change in maximum total point motion (MTPM) of the tibial baseplate between 6 and 12 months

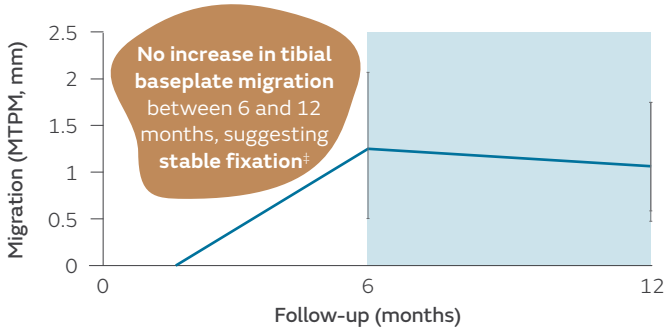


Figure 1. Tibial baseplate migration (mean MTPM) up to 12 months

LEGION CONCELOC Cementless TKS achieved **stable fixation** by one year[3], which is predictive of **long-term stability**[5]

‡Stable fixation was defined as <0.2mm change in mean MTPM between 6 and 12 months

Prospective multi-centre study (interim data extraction)[4]

Number of patients: 153

Patient age (years, mean): 63

Primary outcome:
Survivorship at one-year post-operation

1 year

100% survivorship of tibial and femoral components*

*One patient (0.6%) required debridement, antibiotics, and implant retention due to infection

PROMs improved as early as 6 weeks post-operatively, and showed **significant improvement** versus pre-operative scores at one year (KOOS JR, FJS, OKS; p<0.001)

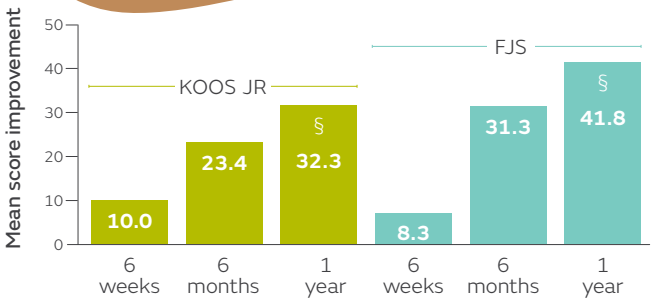


Figure 2. Mean change in KOOS JR and FJS through one-year; §p<0.001

High survivorship and **significantly improved patient functionality** and **quality of life** at one-year post-operation[4]

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Abbreviations: FJS = Forgotten Joint Score; KOOS JR = Knee Injury and Osteoarthritis Outcome Score for Joint Replacement; MTPM = maximum total point motion; OKS = Oxford Knee Score; PROMS = patient-reported outcome measures; TKS = total knee system.

References: 1. Fenwick S, et al. World Biomaterials Congress; May 28–June 1, 2008; Amsterdam, NL. **2.** Smith+Nephew 2016. OR-16-009. **3.** 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. **4.** 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. **5.** Laende EK, Richardson CG, Dunbar M.J. Predictive value of short-term migration in determining long-term stable fixation in cemented and cementless total knee arthroplasties. *Bone Joint J.* 2019;101-B(7 Supple C):55–60. **6.** Smith+Nephew 2020. Tray Reduction Claim — References Consolidation. Internal Report. **7.** Thiengwittayaporn S, Uthaitas P, Senwiruch C, Hongku N, Tunyasuwanakul R. Imageless robotic-assisted total knee arthroplasty accurately restores the radiological alignment with a short learning curve: a randomized controlled trial. *Int Orthop.* 2021;45(11):2851–2858. **8.** Victor J, Ghijselings S, Tajdar F, et al. Total knee arthroplasty at 15–17 years: does implant design affect outcome? *Int Orthop.* 2014;38(2):235–241 **9.** Australian 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. **10.** National Joint Registry for England, Wales, Northern Ireland. 20th Annual Report, 2023. Available at: https://reports.njrcentre.org.uk. Accessed June 10, 2023. **11.** McCalden RW, Hart GP, MacDonald SJ, Naudie DD, Howard JH, Bourne RB. Clinical results and survivorship of the GENESIS II total knee arthroplasty at a minimum of 15 Years. *J Arthroplasty.* 2017;32(7):2161–2166. **12.** Moriarty P, Vles G, Haddad F, Konan S. Early clinical and radiological outcomes of a new tapered fluted titanium monobloc revision stem in hip arthroplasty. *Arch Orthop Trauma Surg.* 2021;141(6):1065–1071.

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