Take control.
Get better.

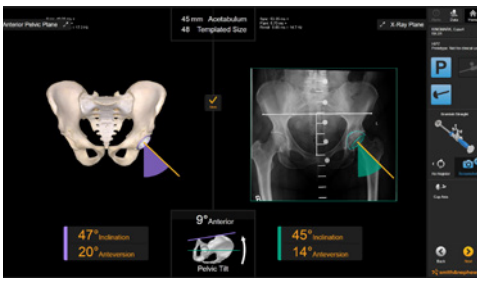
Smith+Nephew

RI.HIP NAVIGATION
Total Hip Arthroplasty

+ Real Intelligence

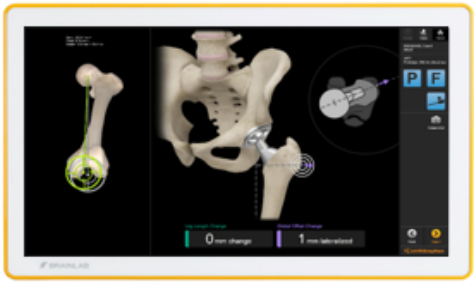
Take control

With increasing patient expectations, it becomes increasingly important to deliver individualized component alignment. Real Intelligence (RI) HIP NAVIGATION empowers the surgeon with an assessment of individual patient pelvic tilt, a predicted view of the post-op AP X-ray in surgery and a digital measurement of leg length and offset changes.



Take control with patient specific cup placement

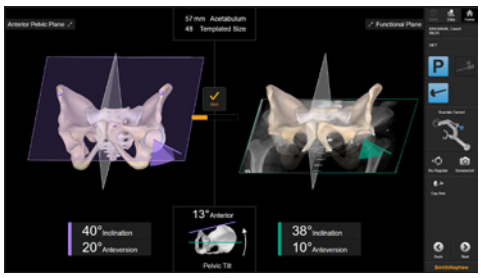
Patients present with varying degrees of pelvic tilt, which is often difficult to quantify in the OR. RI.HIP NAVIGATION introduces a method to visualize cup orientation relative to the anterior pelvic plane side by side **with a view corrected for pelvic tilt.** Using only a pre-operative AP X-ray, RI.HIP NAVIGATION displays in real time **your cup orientation on the pre-op AP X-ray, simulating the post-op X-ray result.** This qualitative view is designed to provide confidence and control outliers.



Take control of leg length and offset

Leg length mismatch is a significant contributor to patient dissatisfaction.[1,2] RI.HIP NAVIGATION* allows a **more accurate measurement of leg length and offset change compared to the conventional technique.**[3-5] Use as a standalone measurement or together with cup positioning.

- Pinless femoral reference
- Only two registration steps required
- Also available as a standalone workflow



Take control of your time

Using RI.HIP NAVIGATION*, you can now take accurate control of pelvic tilt as well as leg length and offset while still being **able to perform your total hip surgery in as little as just over 30min** for the most straightforward cases.[6]

- No repositioning
- Reduced registration steps compared to previous versions[7]
- Automated software workflow

The references provided relate to previous versions of hip navigation which RI.HIP NAVIGATION is built on.

Get better

Literature shows that improving patient satisfaction may lead to higher hospital reimbursement rates and increased patient loyalty.[8,9]

Get more from your investment

RI.HIP NAVIGATION is designed for the hospital or Ambulatory Surgery Center, with **cost-efficiency and scalability as top requirements.** Express workflows and image-free technology make it flexible for the inpatient or outpatient practice.

- Image-free technology, no CT required
- Small footprint platform
- **Maximize your investment using scalable platform solutions** with additional navigation or robotic-based TKA applications
- **Optional digital integration** to EMR, PACS and PROMS

Get more reproducible results

Using software guided surgery in total hip arthroplasty has been **shown to reduce outliers*** and improve acetabular positioning, as well as achieve more consistent leg length restoration compared to conventional techniques.[3-5]

Get better performance with POLAR3

RI.HIP NAVIGATION gives surgeons **access to the trusted performance of the POLAR3** total hip solution. POLAR3 delivers excellent performance with high survivorship at 8 years.

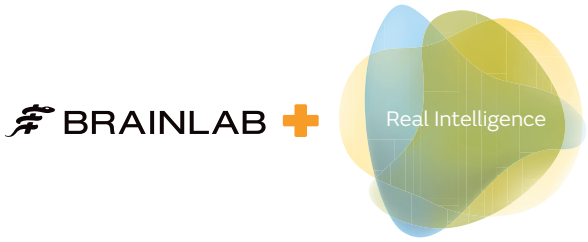
8 years

98% survivorship[10]

35% Significantly lower **revision risk** compared to all other cementless stems ($p<0.001$)[10]

Significantly higher patient satisfaction and better PROMs compared to class average for cementless stems ($p<0.001$)[10]

*Outliers are defined as cups outside the most commonly used safe zone, the Lewinnek Safe Zone. The Lewinnek Safe Zone describes an area of 40°±10° for cup inclination and 15°±10° for cup anteversion for which (Lewinnek et al. 1978) a reduced probability of postoperative dislocation was found. Hence the area is further addressed as a zone for safe cup placement in respect to dislocation. Despite concerns of its validity the Lewinnek Safe Zone is still the most commonly used safe zone for cup placement addressed in the literature.



Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets.

Real Intelligence Hip Navigation is released on the Kick navigation platform only, and only available in markets requiring CE marking.

Please contact your Smith+Nephew representative if you have questions about the availability of Smith+Nephew products in your area.

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1. Manzotti A, Cerveri P, De Momi E, Pullen C, Confalonieri N. Does computer-assisted surgery benefit leg length restoration in total hip replacement? Navigation versus conventional freehand. Int Orthop. 2011;35:19-24. **2.** Murphy SB, Ecker TM. Evaluation of a New Leg Length Measurement Algorithm in Hip Arthroplasty. Clin Orthop Relat Res. 2007;463:85-89. **3.** Clavé A, Fazilleau F, Cheval D, Williams T, Lefèvre C, Stindel E. Comparison of the reliability of leg length and offset data generated by three hip replacement CAOS systems using EOS™ imaging. In Orthopaedics & Traumatology, Surgery & Research. 2015;101:647-653. **4.** Renkawitz T, Sendtner E, Schuster T, Weber M, Grifka J, Woerner M. Femoral Pinless Length and Offset Measurements During Computer-Assisted, Minimally Invasive Total Hip Arthroplasty. J Arthroplasty. 2014;29(5):1021–1025. **5.** Ulivi M, Orlandini L, Pascale W, Consonni O, Sansone V. Intraoperative Validation of Navigated Limb Measurements in THA Using a Pinless Femoral Array. J Arthroplasty. 2014;29(5):1026–1029. **6.** Chaudhry FA, Ismail SZ, Davis ET. A new system of computer-assisted navigation leading to reduction in operating time in uncemented total hip replacement in a matched population. Eur J Orthop Surg Traumatol. 2018;28(4):645-648. **7.** Davis ET, Schubert M, Wegner M, Haimerl M. A New Method of Registration in Navigated Hip Arthroplasty Without the Need to Register the Anterior Pelvic Plane. J Arthroplasty. 2015;30:55-60. **8.** Lyu H, Wick E, Housman M, Freischlag J, Makary M. Patient satisfaction as a possible indicator of quality surgical care. JAMA Surg. 2013;148:362–367. **9.** Otani K, Waterman B, Faulkner K, Boslaugh S, Burroughs T, Dunagan W. Patient satisfaction: focusing on "excellent". J Healthc Manag. 2009;54:93–102. **10.** National Joint Registry for England, Wales and Northern Ireland: POLARSTEM cementless (Oxinium/XLPE/R3 cup) bespoke summary report. 14 August 2019. Available at: http://bit.ly/POLAR3_Aug2019

†The data used for this analysis was obtained from the NJR Supplier Feedback System. The Healthcare Quality Improvement Partnership ("HQIP") and/or the National Joint Registry ("NJR") take no responsibility for the accuracy, currency, reliability and correctness of any data used or referred to in this report, nor for the accuracy, currency, reliability and correctness of links or references to other information sources and disclaims all warranties in relation to such data, links and references to the maximum extent permitted by legislation.

‡Using case-mix adjusted scores allows for a more accurate comparison between groups by taking into account variations in patient characteristics