

Real Intelligence

There's nothing artificial about our intelligence

Real Intelligence

Smith+Nephew



Our vision

How Smith+Nephew thinks, innovates and reimagines surgery.

A symphony of software solutions, hardware and data analytics that harmonizes human and machine, like never before.

A seamless, more intuitively connected technology that pushes the limits of the human endeavor and amplifies surgical excellence.

Our goal

Changing the face of orthopaedics with technology.



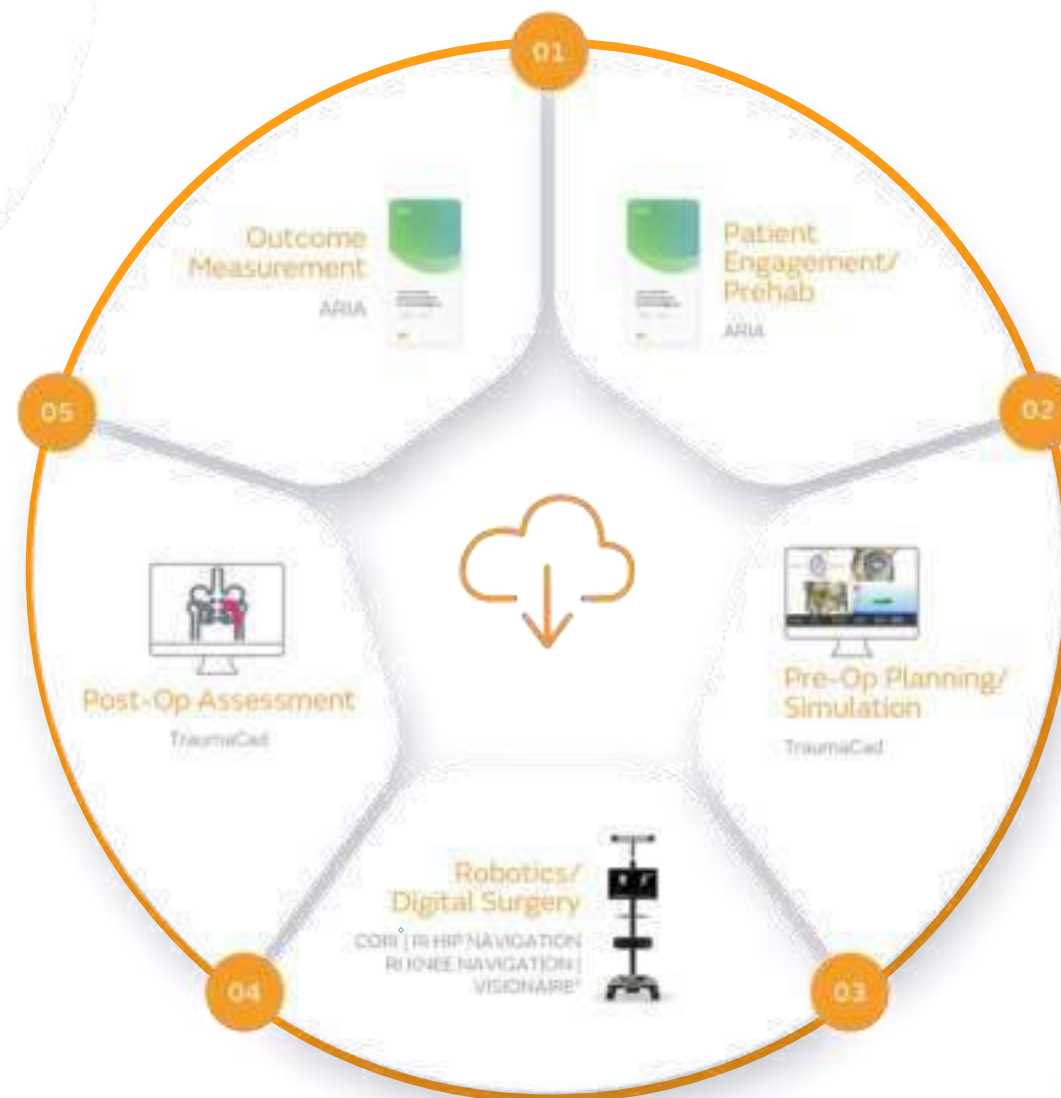
Real Intelligence

There's nothing artificial about our intelligence

The **vision** of how Smith+Nephew thinks, innovates, and reimagines surgery.

A **strategy** that embraces robotics, software, smart tools, and data to improve outcomes.

A **digital ecosystem** that creates a seamless connection through the continuum of care.





CORI[◇] Surgical System



KICK

VISIONAIRE[◇]
Adaptive Guides



Planning
Applications



SmithNephew



ARIA

Outcomes

Real Intelligence
brand architecture



RI.HIP NAVIGATION

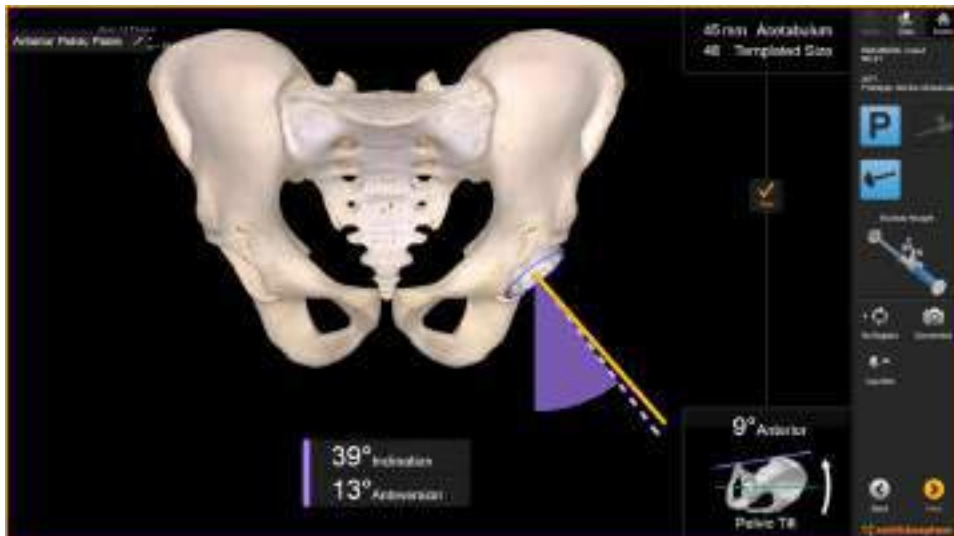
Software-guided surgery

With increasing patient expectations, it becomes more important than ever to deliver individualized component alignment.

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. Get better.

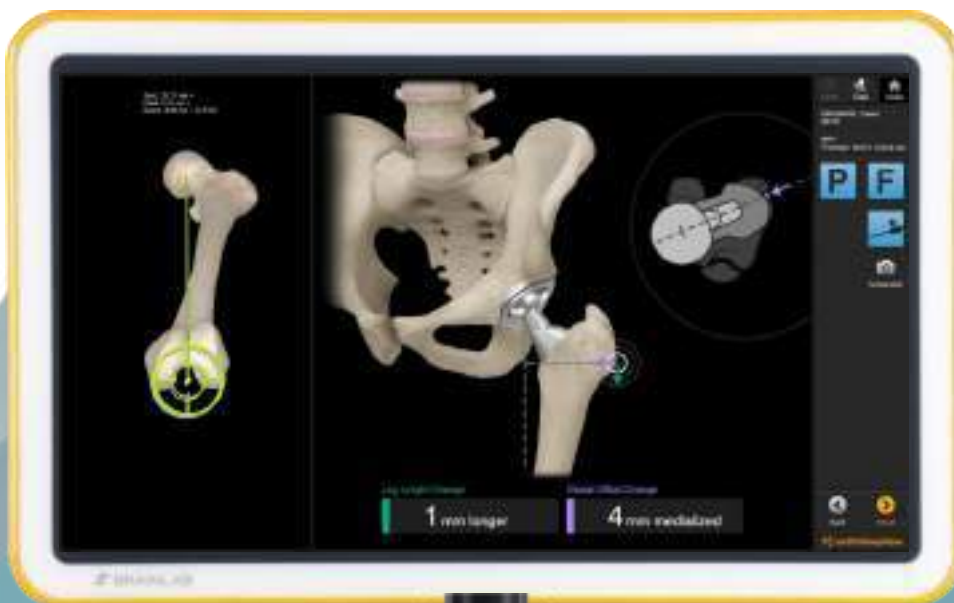




Take control

Patient-specific cup placement

- Compensate for pelvic tilt
- Simulate the post-op AP X-ray with real-time cup orientation
- Provides confidence and controls outliers



Get better

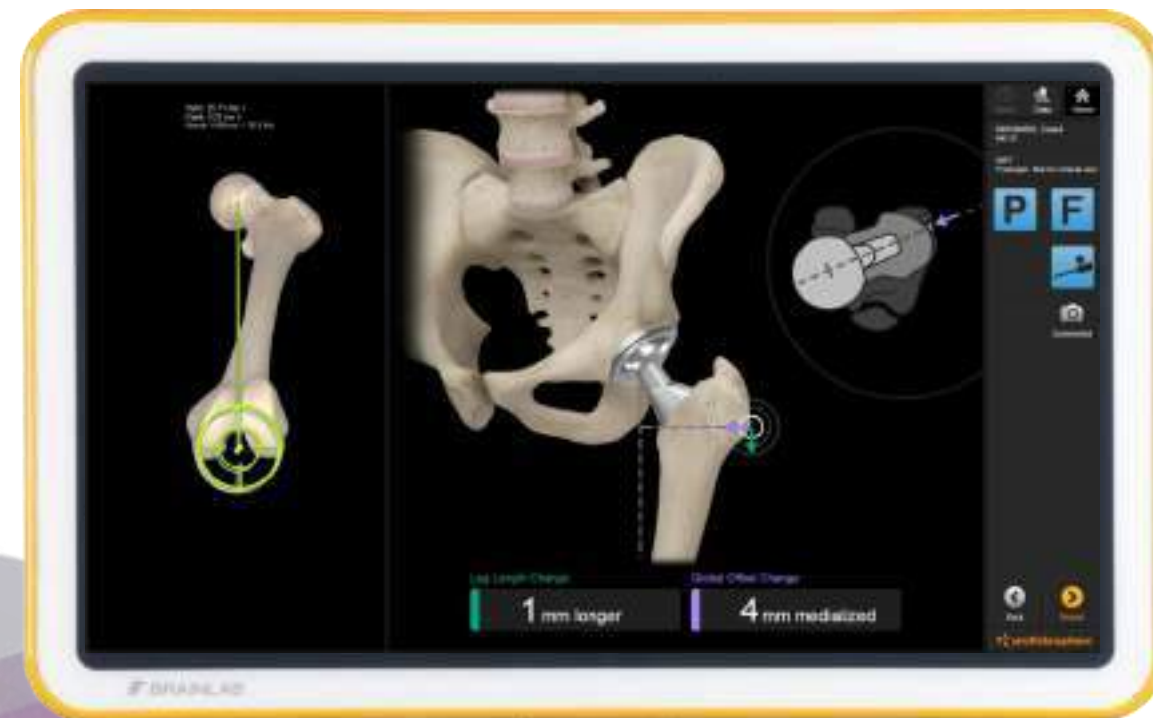
Get more from your investment

- Image-free, no CT required
- Ideal for ASC or inpatient
- Scalable with additional robotic hardware

Get more reproducible results¹⁻³

- Shown to reduce outliers in acetabular positioning
- Achieve more consistent leg length restoration compared to conventional techniques

POLAR3[◇] delivers excellent performance with high survivorship at 8 years^{4†}



1. 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.
2. 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.
3. 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.
4. 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.





Say 'Hi' To CORI[◊]

Smarter.* More Efficient.* Handheld Robotics.



*compared to NAVIO[◊] Surgical System.

CORI[◇] Surgical System

The most advanced and efficient* handheld robotic solution backed by Real Intelligence, designed to change the face of orthopaedics.

Smarter.* More efficient.* Handheld robotics.



Smarter*

- Intelligent platform supports robotics, software, smart tools and data.
- Enhanced robotic software solution that delivers:
 - Image-free smart mapping
 - Real-time planning and gap assessment
 - Optimized* alignment and balance
- Surgeon-controlled, handheld intelligence for a modern robotic approach.



More efficient*

- Enhanced robotic knee workflow that saves time in the O.R.
- Portable hand-held robotics with the smallest footprint in orthopaedics
- Redesigned robotic handpiece with **improved ergonomics**^{*1}
 - New bur designs delivering **2X cutting volume**^{*1}
 - **29% faster resection**^{*1}
 - **Cut more in less time**^{*1}
- Advanced tracking system (ATRACSYS[◇])
 - **458% faster**^{*1} designed specifically for robotic surgery



*compared to NAVIO[◇] Surgical System.

1. Data on file with Smith+Nephew and NAVIO technical specification comparison. March 2020. Internal Report ER0488 REV.B.



ATRACSYS[◇] camera

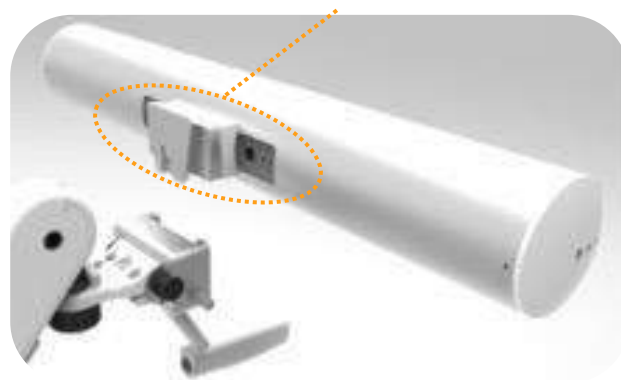


fusionTrack 250/500

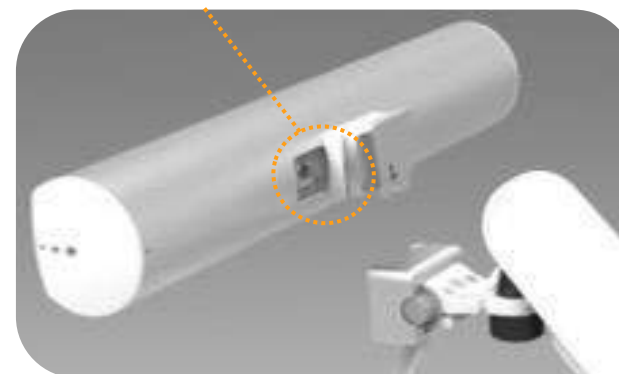
Advanced tracking system

- 458% (~5x) faster refresh rate*¹
- Designed specifically for robotic-assisted surgery

Quick connect- easy on/off



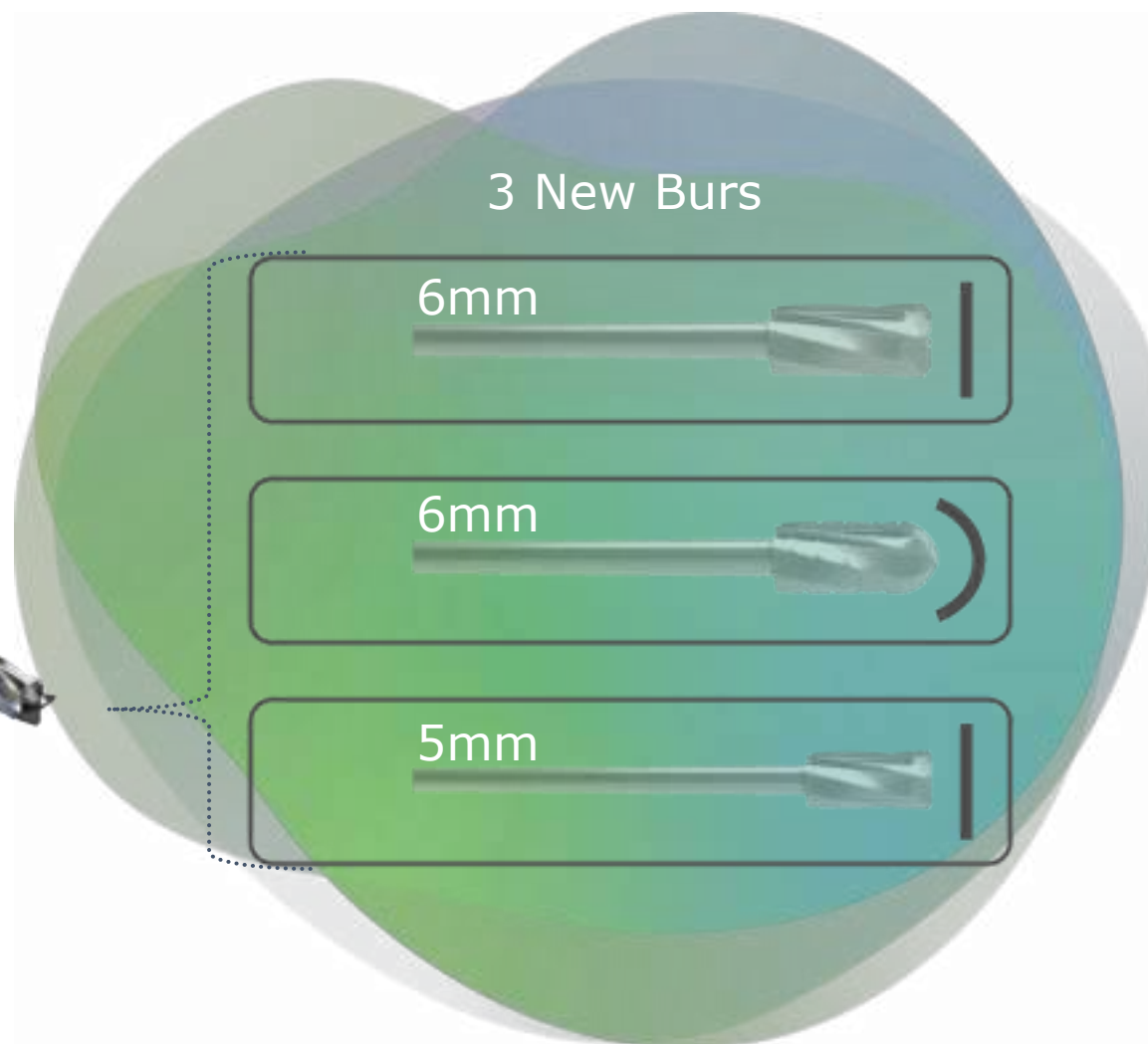
Ethernet cable



*compared to NAVIO[◇] Surgical System.

1. Data on file with Smith+Nephew and NAVIO technical specification comparison. March 2020. Internal Report ER0488 REV.B.

Faster milling*¹, Cuts more in less time*¹



- 29% faster*¹
- 2X cutting volume*¹
- Requires fewer passes
- Leaves smooth surface
- 2x longer “Throw” for easier posterior resection*

*compared to NAVIO[®] Surgical System.

1. Data on file with Smith+Nephew and NAVIO technical specification comparison. March 2020. Internal Report ER0488 REV.B.



Improved ergonomic design*1



Tracker array moves 0-180°

Pistol-grip design allows for a more natural hand position



*compared to NAVIO[®] Surgical System.

1. Data on file with Smith+Nephew and NAVIO technical specification comparison. March 2020. Internal Report ER0488 REV.B.

Completely redesigned handpiece*1

- Sealed internal components allow autowash processing
- Smarter design tracks total use of each handpiece

Dedicated suction for high visibility



Integrated irrigation

Utilizes existing reflective markers for easy inventory management

*compared to NAVIO[®] Surgical System.

1. Data on file with Smith+Nephew and NAVIO technical specification comparison. March 2020. Internal Report ER0488 REV.B.



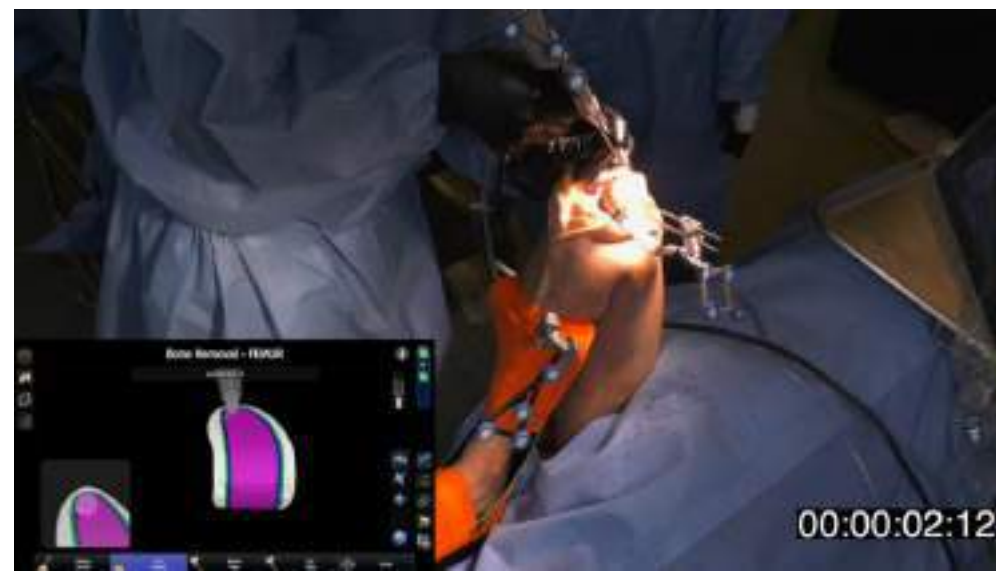
More efficient resection: Cut more in less time¹



NAVIO \diamond Surgical System



CORI \diamond Surgical System



1. Data on file with Smith+Nephew and NAVIO technical specification comparison. March 2020. Internal Report ER0488 REV.B.

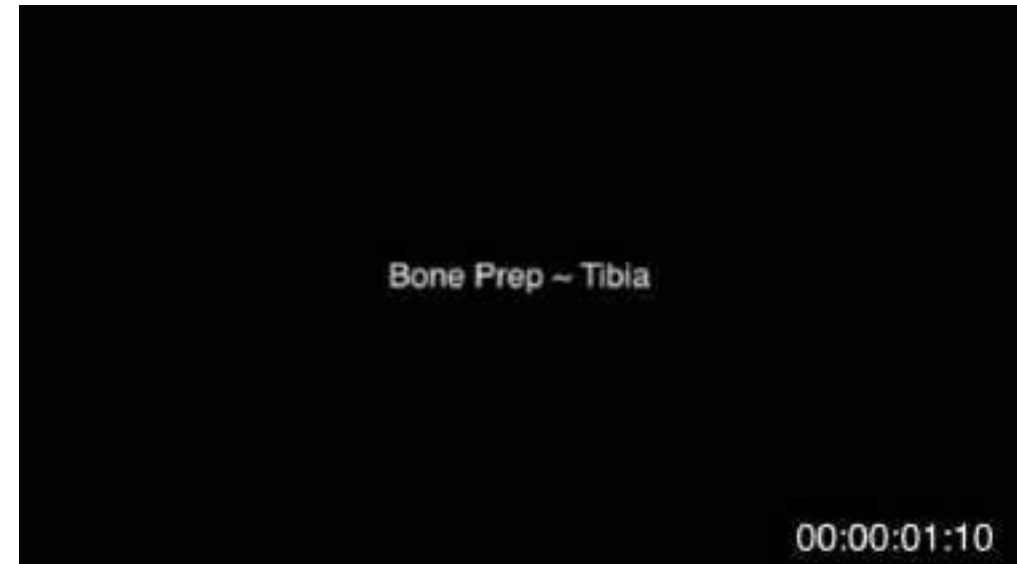
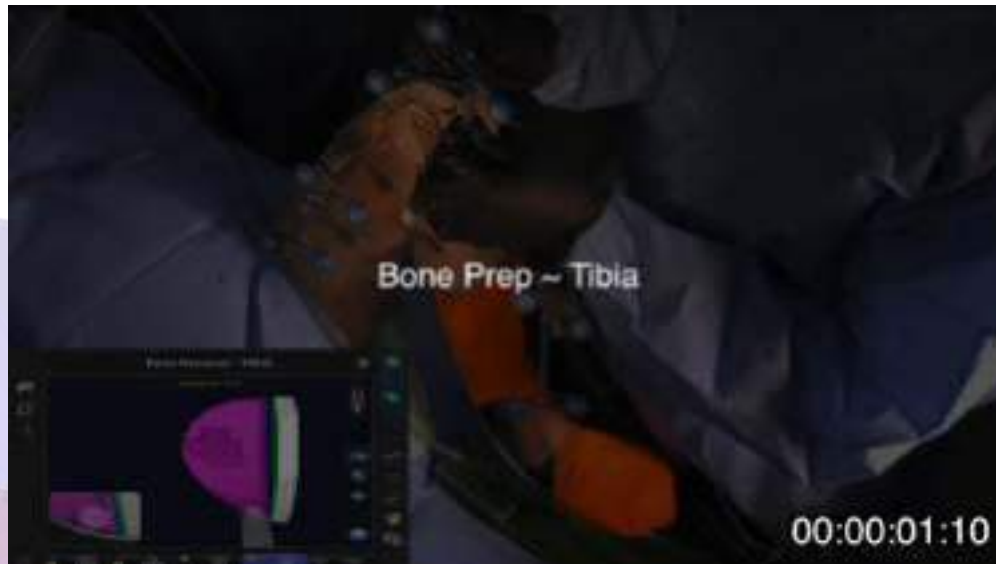
More efficient resection: Cut more in less time



NAVIO \diamond Surgical System



CORI \diamond Surgical System





Recommended approach: Bur all

Milling technique using only the robotic handpiece. (UKA/XR/TKA*)

Requires fewer instruments



Portable hand-held robotics with the smallest footprint* in orthopaedics¹

Transportation Case for hospital to hospital or ASC



Portable cart for OR to OR



Integrated OR



*compared to NAVIO[®] Surgical System.

1. Data on file with Smith+Nephew and NAVIO technical specification comparison. March 2020. Internal Report ER0488 REV.B.



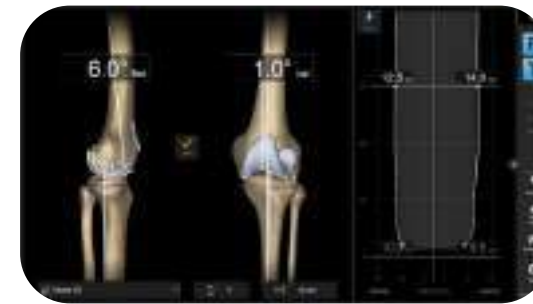
Software applications



RI.KNEE
Robotic-assisted Applications



RI.KNEE and RI.HIP
Software-guided Surgery Applications



More efficient

Similar workflow across knee applications

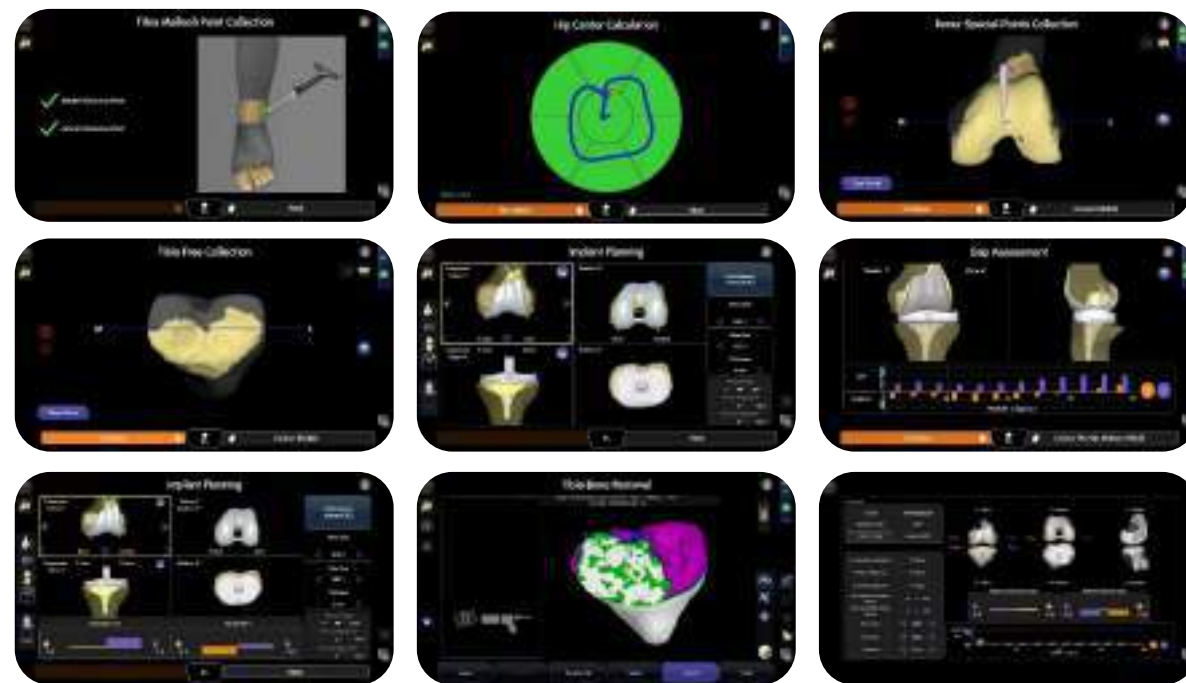
RI.KNEE

Robotic-assisted **UKA** Applications



RI.KNEE

Robotic-assisted **TKA*** Applications



*compared to NAVIO[®] Surgical System.



Smarter

Image-free smart mapping





More efficient

Soft-tissue balancing integrated into software



RI.KNEE Applications 2020 to 2021

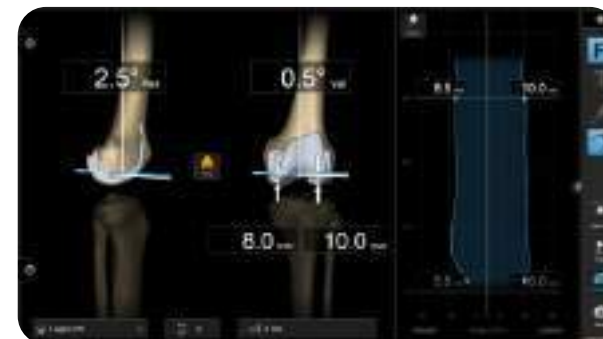


RI.KNEE applications for software-guided surgery (2020)

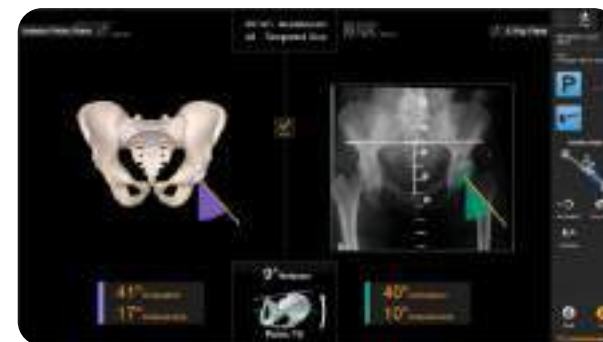


KICK System

RI.KNEE
Software-guided TKA



RI.HIP
Software-guided THA



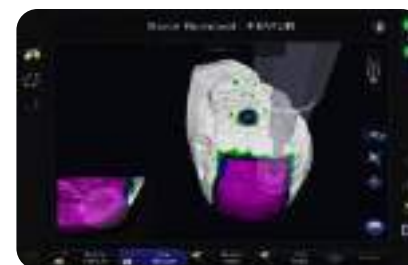
RI.KNEE applications for robotics (2020)



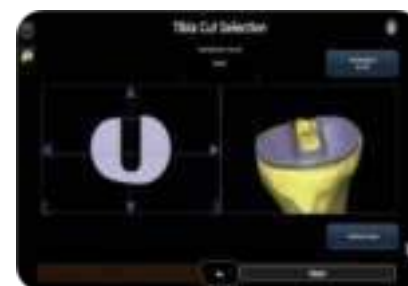
Knee robotics
TKA*



Knee robotics
UKA



Knee robotics
TKA XR



*compared to NAVIO Surgical System.

RI.KNEE and RI.HIP applications (2021)



CORI[◇] Surgical System

RI.KNEE
Robotic-assisted
UKA, PFJ, TKA and XR

RI.KNEE
Software-guided TKA

RI.HIP
Software-guided THA



Thank You



Divider Slide



Divider Slide

Smith+Nephew

