Available for unicompartmental and patellofemoral joint replacement, the NAVIO system delivers the precision of robotics through handheld instrumentation. Intraoperative planning software uses soft-tissue kinematics and 3D surface capture to predict joint laxity, enable precise implant positioning, and customize a solution for each patient without requiring a preoperative CT scan.

The NAVIO System Advantage

Handheld robotic assistance
- Precise execution of bone resection within the defined surgical plan.

CT-free technology
- Direct anatomic mapping paired with kinematic registration recreates a virtual 3D representation of patient anatomy.

Customizable surgical planning
- Intraoperative, patient specific implant localization and soft-tissue balance.

Surgeon controlled
- No reliance on representative to drive case forward. Surgeon remains in full control.

Portable
- Small and compact with a minimal OR footprint.
- Simple transportation between OR rooms and health care facilities

Open implant architecture
- Support for the Smith & Nephew JOURNEY® UNI and PFJ knee systems.
- Delivers the first OXINIUM Oxidized Zirconium option to robotics-assisted joint replacement.
- Enables the surgeon use their implant of choice.
JOURNEY\textsuperscript{\textregistered} Partial Knee System

The JOURNEY UNI and PFJ knee systems have been engineered to empower patients with a renewed right to an active lifestyle and seek to bridge the gap of improving patient satisfaction and implant longevity through function, motion, and durability. Paired with the NAVIO\textsuperscript{\textreg} Surgical System, JOURNEY Partial Knee procedures can utilize the benefits of intraoperative planning software and robotic assistance to enable precise implant placement and soft-tissue balance.

The JOURNEY Partial Knee System Advantage

Function

- Femoral design exhibits a 10° anatomic bend to mimic natural femur anatomy and provide optimal bone coverage.
- Round on flat design allows all 7 femur sizes to match all 6 tibia sizes.
- Consistent JOURNEY UNI contact area for +/-12° of varus/valgus misalignment to help prevent edge loading.
- Anatomic shape of JOURNEY PFJ enables optimal bone coverage to help reduce stress shielding and bone resorption.

Motion

- Round on flat JOURNEY UNI design intended to allow patient's native ligaments to drive motion.
- Femoral component features a 15° anatomic bend to allow for more normal patella tracking and to avoid impingement.
- Engineered to allow up to 140° of flexion.
- Deepened and lateralized trochlear groove of the JOURNEY PFJ intended to drive optimal patella tracking.

Durability

- <0.0035% nickel content.
- Components are made with OXINIUM\textsuperscript{\textreg} alloy, an advanced material shown to be 4,900 times more resistant to abrasion\textsuperscript{1}, more than twice as hard\textsuperscript{2}, and has a coefficient of friction that is up to half that of CoCr\textsuperscript{3}.

\textsuperscript{1}Hunt, G., and Long, M. Abrasive Wear of Oxidized Zr-2.5Nb, CoCrMo, and Ti-6Al-4V Against Bone Cement. 6th World Biomaterials Cong. Trans., Society for Biomaterials, Minneapolis, MN, 2000, p. 835.