

NAVIO Robotics for Partial Knee Replacement

NAVIO Robotic Surgical System - robotics-assisted navigation technology to treat patients suffering from early to mid-stage osteoarthritis of the knee.

NAVIO Robotics is an advancement in the way orthopedic surgeons can perform partial knee replacements. Using state-of-the-art, robotics-assisted technology, the system works with the surgeon's skilled hands to achieve precise positioning of the knee implant for consistently accurate results.

During the procedure, the surgeon uses **NAVIO Robotics** to collect anatomical data to build a 3D model of the patient's knee. This information helps the surgeon place the implant and balance the knee's ligaments for optimal alignment and a well-balanced knee.

NAVIO-TRAINED FLORIDA ORTHOPAEDIC INSTITUTE SURGEONS

- Grant G. Garlick, M.D.
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Florida Orthopaedic Institute complies with applicable Federal civil rights laws and is committed to ensuring that persons with disabilities, including persons who have hearing, vision, or speech disabilities, as well as persons of Limited English Proficiency (LEP), have an equal opportunity to participate in any of our services.

Welcome

Our patients are the focus of all we do at Florida Orthopaedic Institute and our goal is to keep you active. We achieve this by providing you with the best orthopedic solutions for virtually every bone, joint, ligament and muscle in the body.

We are different from other orthopedic groups because our team of highly skilled, board certified physicians and surgeons has advanced training, which allows the highest standard of care. Our surgeons are also fellowship trained, which requires an additional year of study in the orthopedic subspecialties of hand, spine, joint replacement, shoulder and elbow, sports medicine, foot and ankle, and trauma. This expertise is invaluable for proper diagnosis and treatment, providing a level of care unattainable elsewhere in the Tampa Bay Area.

Our philosophy is to first try all appropriate nonsurgical methods to increase mobility and function. This may include medication, bracing, injections, physical and/or occupational therapy, or chiropractic services, all of which we provide. Then, and only then, do we suggest surgery.

We are also proud of our strong partnership with USF Health Morsani College of Medicine. In addition to my role as president and chief medical officer of Florida Orthopaedic Institute, I also chair USF's Department of Orthopedic Surgery. Together, we can capitalize on our combined strengths and advance academic orthopedics. This combination assures our patients the finest orthopedic treatment and brings a substantial benefit to our community, patients, residents, students and faculty.

As one of Florida's largest orthopedic groups, our mission is simple: to provide excellence in clinical outcomes and an exceptional patient experience, while in an environment that fosters growth through teaching, education and research in all aspects of musculoskeletal medicine.

Please let us know if there is anything we can do to further improve your experience. We look forward to serving you!

Sincerely,
Roy Sanders, M.D.
President and Chief Medical Officer

Bloomingtondale

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Brandon

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South Tampa and Orthopaedic Urgent Care

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FloridaOrtho.com (800) FL-ORTHO

NAVIO® Robotics for Partial Knee Replacement

FLORIDA
ORTHOPAEDIC
INSTITUTE®



NAVIO ROBOTICS FOR PARTIAL KNEE REPLACEMENT AT FLORIDA ORTHOPAEDIC

AN APPROACH TAILORED TO THE PATIENT

The process starts by focusing on the patient and planning a procedure with your unique anatomy in mind. Rather than a time-consuming and radiation-intensive CT scan, the NAVIO approach involves only a simple x-ray before the surgeon uses advanced planning software to tailor the surgery to the patient's anatomy, align the implant, and balance the knee.

NAVIO® ROBOTICS BENEFITS

For patients seeking an alternative to total knee replacement, partial knee replacement with NAVIO Robotics offers:

- Smaller surgical cut (incision)
- Less pain because there is less cutting of tissues (tissue dissection)
- Quicker rehabilitation and recovery
- More natural knee motion (kinematics)
- Lower risk of complications
- Outpatient surgery vs. hospital stay
- A quicker return to an active lifestyle. Many patients are able to walk and climb stairs the same day of surgery and leave within 24 hrs.

WHY ROBOTICS?

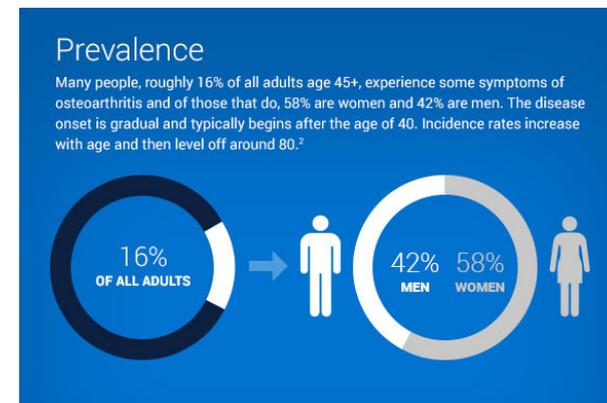
- The use of robotics provides unmatched accuracy in bone preparation and implant positioning, where misalignment can be a major contributor to implant failure.
- Accurate bone resurfacing (removing part of the bone and replacing it with a metal or ceramic cap)
- More consistent results
- More accurately placed implants

- Greater consistency than with traditional instrumentation
- No pre-operative imaging is required vs. using a computerized tomography (CT) scan, saving time and money
- Customized patient-specific planning - implant size and position determined virtually

WHAT IS OSTEOARTHRITIS?

Osteoarthritis, also known as OA, occurs when there is a breakdown in the cushioning cartilage between joints, such as the knee. When this cartilage wears down, bones begin to rub against each other, causing pain, swelling, stiffness and damage to other parts of the knee. While the exact cause of OA is unknown there are several factors that increase risk of developing OA, including age, gender, joint injury, obesity and joint alignment.

DIAGNOSIS



Osteoarthritis generally starts with pain that has developed gradually, with stiffness and swelling of the joint – most associated with activity. A doctor performs a physical examination that focuses on the patient's walk, range of motion in the joint, and swelling or

tenderness. Cartilage loss can be generally confirmed with X-rays that show a loss of cartilage in the affected knee.

NON-SURGICAL TREATMENT OPTIONS

Osteoarthritis can be treated non-surgically, with drugs or with a variety of surgical treatment options. Nonsurgical options generally begin with lifestyle modification—losing weight, switching from running to lower impact exercises, and minimizing activities that may aggravate the patient's condition. Physical therapy can help increase range of motion and flexibility in affected joints, and supportive devices like braces, canes and specialized shoes can assist with pain and weight-bearing issues. Certain anti-inflammatory and pain management medications are available in treatment of OA.

SURGICAL TREATMENT OPTIONS

Recent advances in navigation and computer-assisted surgery (including robotic-assisted techniques) have gained traction by providing enhanced planning and accuracy.

Partial Knee Replacement preserves all soft-tissue ligaments (ACL and PCL) while resurfacing only the diseased portions of the knee with artificial joints.

A **Total Knee Replacement** sacrifices one or both of the ACL and PCL, removing all weight bearing surfaces of the knee and replacing it with an artificial joint.

Arthroscopic Surgery using fiber-optic instruments enables the surgeon to see inside the joint to remove debris or repair torn cartilage.

FLORIDA ORTHOPAEDIC INSTITUTE & NAVIO ROBOTICS



smith&nephew
NAVIO[®]
Surgical System

- 1st in Florida with NAVIO Robotics
- Only location in Florida with NAVIO Robotics
- One of 79 locations worldwide
- Founded in 1989, Florida Orthopaedic Institute is one of Florida's largest orthopaedic groups
- Over 40 highly skilled, board-certified physicians and surgeons with advanced sub-specialty training – expertise that provides a level of care unattainable anywhere else

NAVIO is a trademark of Smith & Nephew.

**FLORIDA
ORTHOPAEDIC
INSTITUTE**[®]

Keeping you active.