



OrthAlign

# Keeping technology **simple.**

OrthAlign is the leader in simple, smart technology for joint surgery; powering partial knee, total knee, and total hip replacements using any approach. Using advanced micro-electromechanical sensors, our solutions deliver clinically proven live-navigation in a cost-effective, easy-to-integrate package. We show you where you're going, and then get out of your way.



## Simple

The future of smart surgery is smaller, lighter, and simpler. Proprietary sensor-based navigation delivers the data you need, when you need it without adding extra time, line-of-site issues, multiple trays, or large-console computers.

## Flexible

Single-use navigation units allow your facility to run multiple ORs concurrently and do not require compromise on implant preference. Navigate in any setting, anytime.

## Economic

A cost-effective approach to building an advanced technologies surgical practice designed to deliver consistent, patient-specific outcomes. Lower per case costs than large body navigation or robotic systems and no pre-operative imaging required.

## Proven

Accuracy and precision supported by more than 20 peer-reviewed clinical studies and over 100,000 procedures worldwide. OrthAlign is an effective technology with continually proven results.



# KneeAlign®

Without the need for external references, KneeAlign uses accelerometers and gyroscopes to continuously calculate the orientation of a cut guide for total knee replacements. By registering the hip center, knee center, and ankle center, KneeAlign provides live-navigation angles for the distal femoral and proximal tibial cuts relative to the mechanical axis.

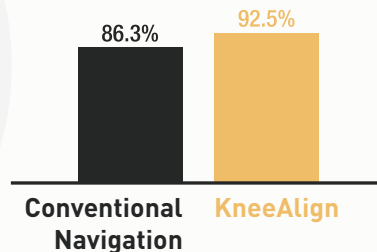
**Live-navigation for distal femur**  
**Live-navigation for proximal tibia**  
**Patient specific approach**  
**Open-implant platform**



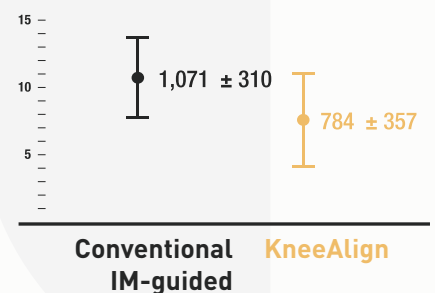
**No intramedullary rod**  
**No capital equipment**  
**No pre-operative imaging**

	Mean absolute difference between nav and x-ray
Tibia coronal plane <sup>1</sup>	<b>-0.9° ± 0.8°</b>
Tibia sagittal plane <sup>1</sup>	<b>0.09° ± 0.7°</b>
Femur coronal plane <sup>2</sup>	<b>0.8° ± 0.6°</b>

**Overall limb alignment within 3° of target<sup>2</sup>**



**Blood loss (mL) per group<sup>3</sup>**



# UniAlign®

The benefits and clinically-proven performance of KneeAlign with instruments designed to address the challenges of unicompartmental knee replacement. UniAlign provides a simple solution for accurate and consistent resection of the medial or lateral proximal tibia.

1. Nam, Denis, et al. "Radiographic results of an accelerometer-based, handheld surgical navigation system for the tibial resection in total knee arthroplasty." *Orthopedics* 34.10 (2011): e615-e621.  
 2. Nam, Denis, et al. "Accelerometer-based computer navigation for performing the distal femoral resection in total knee arthroplasty." *The Journal of arthroplasty* 27.9 (2012): 1717-1722.  
 3. Ikawa, et al. "Usefulness of an accelerometer-based portable navigation system in total knee arthroplasty." *The Bone and Joint Journal*, August 2017.

# HipAlign®

Support for lateral or supine based approaches, HipAlign uses accelerometers and gyroscopes to determine the orientation of an acetabular cup and assess changes in leg length for total hip replacements. Four simple pelvic and femoral registrations enable the system to display abduction and anteversion angles during cup placement and assess changes in leg length while trialing and during final implantation.

Live-navigation for cup placement

Assessment tools for leg length

Patient specific approach

Open-implant platform

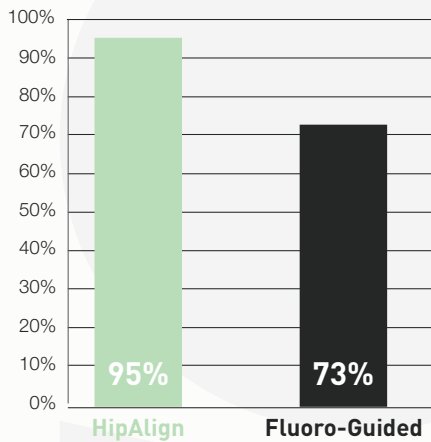


Reduce C-arm reliance

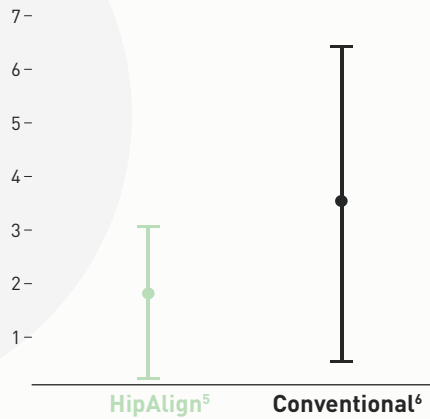
No capital equipment

No pre-operative imaging

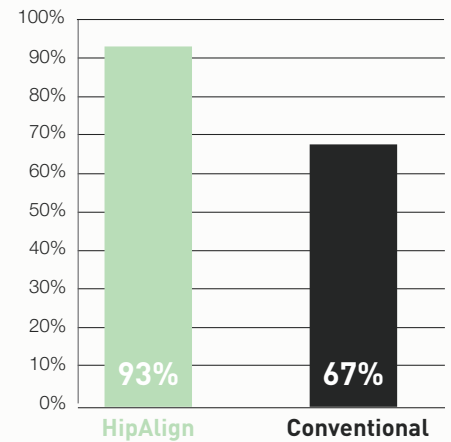
Supine HipAlign: Percentage of cups within target zone<sup>4</sup>



Mean difference (absolute & variance, mm) in leg length<sup>5,6</sup>



Lateral HipAlign: Percentage of cups within target zone<sup>7</sup>



**To learn more about OrthAlign's platform of technologies or to set up a hands-on demonstration visit [www.OrthAlign.com](http://www.OrthAlign.com).**

4. Bryan Emmerson, MD, et al. "Acetabular Cup Placement Accuracy of a Hand-Held Computer Navigation System for Direct Anterior THA." On file at OrthAlign.

5. Mayman, David J. "Validation of HipAlign for Cup Angle and Leg Length with 3D EOS in Posterior Approach Total Hip Arthroplasty." On file at OrthAlign.

6. Domb, Benjamin G., et al. "Accuracy of component positioning in 1980 total hip arthroplasties: a comparative analysis by surgical technique and mode of guidance." The Journal of arthroplasty 30.12 (2015): 2208-2218.

7. Tanino, Hiromasa, et al. "Portable Accelerometer-Based Navigation System for Cup Placement of Total Hip Arthroplasty: A Prospective, Randomized, Controlled Study." The Journal of Arthroplasty [2019].

# LIFT™

MARKETING PROGRAM

Grow your orthopedic practice by finding the right patients and marketing differentiated technology.

Leverage the expertise of OrthAlign's marketing team to develop and launch your own strategic program educating patients about KneeAlign, UniAlign, and HipAlign. Focusing on data-driven demographics and activities like patient seminars, the LIFT Program has helped customers grow their practice through increased market awareness and by targeting the right patients.

## LIFT Programs include:

**Dedicated OrthAlign Program Manager**  
**Program design and implementation**  
**Patient-education material**

**Powerful demographic-targeted data**  
**Fully-customizable marketing toolkit**  
**On-site seminar support**

Generate interest, maintain engagement, and maximize results in a cost-effective package.

## Program highlights<sup>8</sup>:



 **Interested in learning more? Visit [www.OrthAlign.com](http://www.OrthAlign.com).**