

Transforming orthopaedics



Mako™ heritage

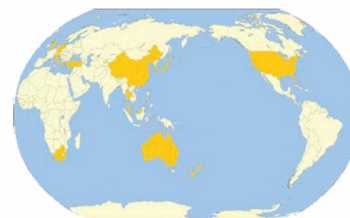
- Acquired by Stryker in December 2013, with a goal of transforming orthopaedics, combining Stryker's market-leading implants (U.S.)² with Mako's proprietary robotic-arm technology
- Ten+ years of robotic-arm experience; 3rd generation robotic-arm platform with multiple generations of knee & hip applications
 - More than 300 U.S. and foreign patents and patent applications
- 300+ systems worldwide¹, with continuing expansion in 19 countries
- Platform technology with uni, patellofemoral and bicompartamental knee, and total hip
- As we continue to prepare for the commercial launch of the Mako Total Knee application, Stryker is actively partnering with surgeons and experts in product user experience to study the operating room work flow and learning curve of the Mako Total Knee application.

Robotic-arm assisted surgery: market leadership with Stryker

- Over 70,000 robotic-arm assisted hip & knee procedures
 - 16,500+ in 2015; >700 active surgeon users¹
 - Over 1500 surgeons attended cadaveric and saw bones training courses
 - The global market leader in robotic-arm assisted PKA
- Patient specific 3D planning & Robotic-Arm Assisted execution:
 - CT derived, patient-specific 3-D modeling enables accurate planning of implant size, orientation and alignment preoperatively³
 - Real-time intra-operative adjustments allow for more correct knee kinematics and soft-tissue balance prior to resection⁴
 - In a cadaveric study, has been shown to provide excellent accuracy and precision with regard to planned cup position, leg length, and offset⁵
 - Allows single stage reaming for the hip⁶

Mako platform clinical success

- Significant primary clinical research conducted on the Mako platform:
 - 50+ peer reviewed clinical publications
 - 350+ scientific abstracts accepted at peer reviewed scientific conferences
- Mako Robotic-Arm Assisted PKA resulted in 92% patient satisfaction at 2 years⁷
- Mako Robotic-Arm Assisted PKA resulted in lower post-operative pain at day seven and more accurate implant placement than manual PKA in a randomized control trial⁸
- Mako Robotic-Arm Assisted THA demonstrated significantly higher modified Harris Hip scores and UCLA activity scores compared to manual THA at minimum one-year follow-up⁹



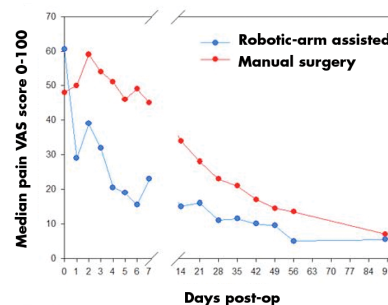
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Virtual x-ray

Actual post-op x-ray

Pain score results from randomized control trial of manual vs. Robotic-Arm Assisted UKA



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5. Accuracy of Cup Positioning and Achieving Desired Hip Length and Offset Following Robotic THA. Jerabek SA; Carroll KM; Maratt JD; Mayman DJ; Padgett DE; 14th Annual CAOS Meeting, June 18-21, 2014, Milan, Italy.
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8. Accuracy of UKA Implant Positioning and Early Clinical Outcomes in a RCT Comparing Robotic Assisted and Manual Surgery. Blyth MJ; Jones B; MacLean A; Anthony I; Rowe P; 13th Annual CAOS Meeting, June 12-15, 2013, Orlando, FL, USA.
9. Bukowski, B.; Abiola, R; Illgen R. Outcomes after primary total hip arthroplasty: Manual compared with robotic assisted techniques. ; 44th Annual Advances in Arthroplasty; Cambridge, MA. October 7-10 2014.

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MKOSYM-SS-1 10898

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