

ROSA[®] Hip System



ROSA[®] Hip

Precisely Personalized

ROSA[®] Hip is a personalized robotic system that enables direct anterior surgeons to evaluate and execute a surgical plan based on real-time feedback and the patient's unique anatomy. It provides surgeons with reassurance and control, while seamlessly integrating into their workflow.

Combining ZBEdge™ Dynamic Intelligence™ integrated technologies with the clinical heritage of our comprehensive implant systems, Zimmer Biomet is revolutionizing the standard of care.



SURGEON-CENTERED



ACCURATE¹



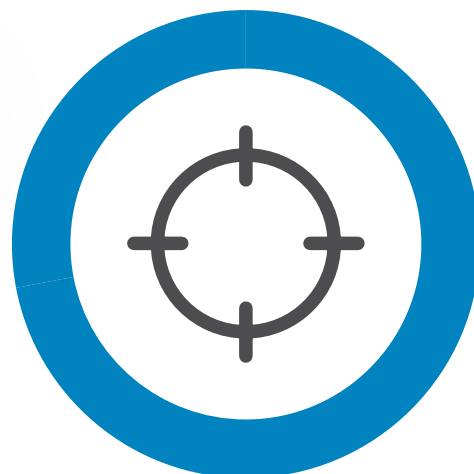
EFFICIENT²



DATA DRIVEN



HIP DISLOCATION IS ONE OF THE LEADING CAUSES OF REVISION³⁻⁵ AND CAN INCREASE HOSPITAL COSTS BY UP TO 300% FOLLOWING PRIMARY TOTAL HIP ARTHROPLASTY.^{6,7}



TECHNOLOGIES THAT AID IN COMPONENT IMPLANTATION WILL REDUCE OUTLYING POSITIONS, WHICH MAY REDUCE RISK OF DISLOCATION.⁸

SURGEON-CENTERED

ROSA Hip is customized to a surgeon's existing direct anterior workflow to maintain surgical efficiency.



FLUOROSCOPY-BASED WORKFLOW
MIRRORS CURRENT PROCEDURE

NO PINS, REFERENCE ARRAYS
OR CAMERAS RESULTING IN NO
ADDITIONAL PROCEDURE SETUP



FLAT PANEL DETECTOR AND IMAGE
INTENSIFIER COMPATIBILITY

Compatible with
Avenir Complete[®] Hip System
and **G7[®] Acetabular System**

From implants to instruments, surgical systems to support services, each product of the Zimmer Biomet portfolio has been designed to address the distinct needs of individual patients.

The Avenir Complete[®] Hip System, together with the G7[®] Acetabular System, pairs a comprehensive offering of stems, shells and liners (including Dual Mobility) with streamlined instrumentation designed to meet distinct patient needs, simplify the surgical workflow and maximize hospital and OR efficiencies.



ROSA Hip is also compatible with Taperloc[®] Complete Hip System, Avenir[®] Hip System, and Echo Bi-Metric[®] Stem

ACCURATE

Precisely assists with accurate acetabular component orientation and leg length through robotic guidance.¹

- Component positioning with ROSA Hip has been shown to be **more accurate and reproducible** than conventional instrumentation.¹
- **Provides real-time data** to evaluate leg length and offset decision-making intra-operatively.
 - Designed to measure leg length change from Lesser or Greater Trochanter.
- ROSA Hip resulted in **100% of cases within the Lewinnek and Callanan Safe Zones** (fewer outliers compared to conventional instrumentation).¹
- Use **ONE Planner™ Hip**, our web-based surgical software, to plan a hip replacement case.
 - Utilizes pre-operative X-ray images to validate implant components and neck cut location, restore leg length and offset and evaluate pelvic tilt.
 - When utilizing ONE Planner Hip, surgeon pre-operative plans will be directly available on the ROSA Hip user interface.



EFFICIENT²

Simplified setup may minimize additional time to procedure.

- **Auto landmarking and overlay tool supports a streamlined procedure.**
 - Manual landmarking may be tedious and time consuming. After your first two image uploads, ROSA Hip automatically identifies and places landmarks.
 - Overlay tool provides a comparison of X-ray images to quickly identify inconsistencies in patient and C-arm positioning.
 - Ensure femoral rotation is consistent among workflow images with trochanter trace feature.
- Plan case virtually with intuitive, web-based **ONE Planner Hip**.
- **ONE Matrix™ Hip, our Trial panel**, evaluates the **best possible implant combinations** for each patient in terms of leg length and offset.
- No pins or reference arrays required.
- No CT scans required.



DATA-DRIVEN

Making the best decision when it matters requires data-driven intelligence.

ROSA Hip, a cornerstone of ZBEdge™ Dynamic Intelligence™, is an integral part of creating a comprehensive view of orthopedic care informed by data.

Meaningful Connections to Unlock Insights

ZBEdge is Dynamic Intelligence with the power to elevate and unlock the full potential of Zimmer Biomet's cutting-edge suite of integrated digital technologies, robotics and implant solutions.

PRE-OPERATIVE



INTRA-OPERATIVE



POST-OPERATIVE



MEANINGFUL DATA



ZBEdge™

by  ZIMMER BIOMET



ZBEdge™
PRIVACY

DATA PRIVACY

**AT ZIMMER BIOMET, THE PATIENT IS ALWAYS THE PATIENT,
AND NEVER THE PRODUCT.**

We accept the responsibility that comes along with the new age of data transformation and we are committed to protecting the patient's privacy.

Our dedicated teams of privacy professionals work to support Zimmer Biomet's data protection obligations, data management and use.

References

1. Kamath AF, Durbhakula SM, Pickering T, Cafferky NL, Murray TG, Wind Jr. MA, Méthot S. Improved Accuracy and Fewer Outliers with a Novel CT-free Robotic THA System in Matchedpair Analysis with Manual THA. *Journal of Robotic Surgery*. 2021 Oct 28. doi: 10.1007/s11701-021-01315-3. Epub ahead of print. PMID: 34709535. Study funded by Zimmer Biomet. Cadaveric studies are not necessarily indicative of clinical performance.
2. Buchan, G.B.J., et al., The learning curve for a novel, fluoroscopy-based robotic-assisted total hip arthroplasty system. *Int J Med Robot*, 2023; p. e2518.
3. Hailer N P, Weiss R J, Stark A, Kärrholm J. The risk of revision due to dislocation after total hip arthroplasty depends on surgical approach, femoral head size, sex, and primary diagnosis: an analysis of 78,098 operations in the Swedish Hip Arthroplasty Register. *Acta Orthop* 2012; 83 (5): 442-8
4. Kostensalo I, Junnila M, Virolainen P, Remes V, Matilainen3M, Vahlberg T, Pulkkinen P, Eskelinen A, Mäkelä KT. Effect of femoral head size on risk of revision for dislocation after total hip arthroplasty: a population-based analysis of 42,379 primary procedures from the Finnish Arthroplasty Register. *Acta Orthop* 2013; 84 (4): 342-7
5. Gwam CU, Mistry JB, Mohamed NS, Thomas M, Bigart KC, Mont MA, et al. Current epidemiology of revision total hip arthroplasty in the United States: National Inpatient Sample 2009 to 2013. *J Arthroplasty* 2017;32:2088e92
6. Abdel MP, Cross MB, Yaseen AT, Haddad FS. The functional and financial impact of isolated and recurrent dislocation after total hip arthroplasty. *Bone Joint J* 2015;97:1046e9.
7. Sanchez-Sotelo J, Haidukewych GJ, Boberg CJ. Hospital cost of dislocation after primary total hip arthroplasty. *J Bone Joint Surg* 2006;88:290.
8. Rowan, Fiachra E., Benjamin, Biju, Pietrak, Jurek R., Haddad, Fares S. Prevention of Dislocation After Total Hip Arthroplasty. *The Journal of Arthroplasty* 33 (2018) 1316e1324.

A close-up photograph of a white robotic arm. The word "ROSA" is printed in a bold, blue, sans-serif font on the side of the arm. The background is a plain, light color, and the lighting is bright, highlighting the smooth surface of the robot's body.

ROSA

For more information contact
your local representative or visit
zimmerbiomet.com/rosahip



Legal Manufacturer
ROSA Hip
Zimmer CAS
75 Queen Street Suite 3300
Montreal (Quebec) H3C 2N6
Canada
Tel +1.866.3D.ORTHO or
514.395.8883 EC



Legal Manufacturer
ONE Planner Hip
Zimmer CAS
75 Queen Street Suite 3300
Montreal (Quebec) H3C 2N6
Canada
Tel +1.866.3D.ORTHO or
514.395.8883 EC



Legal Manufacturer
mymobility App Platform
Zimmer U.S., Inc. Connected Health
601 5th St. NW
Suite 200
Grand Rapids, MI 49504 USA

All content herein is protected by copyright, trademarks and other intellectual property rights, as applicable, owned by or licensed to Zimmer Biomet or its affiliates unless otherwise indicated, and must not be redistributed, duplicated or disclosed, in whole or in part, without the express written consent of Zimmer Biomet.

This material is intended for health care professionals. Distribution to any other recipient is prohibited.

For indications, contraindications, warnings, precautions, potential adverse effects and patient counselling information, see the package insert or contact your local representative; visit <http://www.zimmerbiomet.com> for additional product information.

Not for distribution in France. Check for country product clearances and reference product specific instructions for use.

Patients must have a compatible smartphone to use mymobility. Not all patients are candidates for the use of this product and surgeons should evaluate individually to determine which patients are appropriate for therapy at home. All names used in the mymobility app examples are fictitious. No identification with actual patients or health care professionals is intended or should be inferred. Zimmer Biomet Connected Health mymobility Application. Microsoft and HoloLens are trademarks of the Microsoft Corporation.

©2021, 2023 Zimmer Biomet

 **ZIMMER BIOMET**
Moving You Forward.™

3527.2-GLBL-en-Issue Date-2023-06