



## **MYHIP WORKFLOW**



1. Medacta receives the CT images of the patient's



MyHip preoperative 2. planning commences with the 3D reconstruction of the joint following the surgeon's preferences.



**3.** Virtual positioning of the implant is proposed to the surgeon, who can modify this planning, if required.



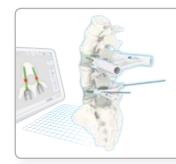
4. Once the planning has been validated by the surgeon, the 3D printing in-house manufacturing process starts.

### MYSOLUTION: LEADER IN PATIENT MATCHED TECHNOLOGY

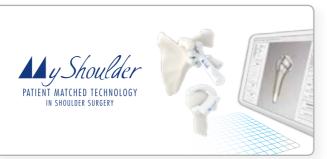












# **REFERENCES**

[1] Lewinnek GE, Lewis JL, Tarr R, Compere CL, Zimmerman JR. Dislocations after total hip replacement arthroplasties. J bone Joint Sur Am. 1978;60:217-220. [2] Nishii T, Sugano N, Miki H, Koyama T, Tokao M, Yashikawa H. Influence of component positions on dislocation: computed tomographic evaluations in a consecutive series of total hip arthroplasty. J Arthroplasty. 2004;19:162-166. [3] Röder C, Vogel R, Burri L, Dietrich D, Staub LP. Total hip arthroplasty leg length inequality impairs functional outcomes and patient satisfaction. BMC Musculoskeletal Disorders. 2012; 13:95. [4] Austin MS, Hazack WJ, Sharkey FF, Rothman RH. Stability and leg length equality in Total Hip Arthroplasty. J Arthroplasty. 2003; 18(3) suppl 1):88-90. [5] Cassidy KA, Noticewala MS, Macaulay W, Lee JH, Geller JA. Effect of femaral offset on pain and function after total hip arthroplasty. J Arthroplasty. 2012; 27(10):1863-1869. [6] Was 1. The influence of accetabular component position on Wear in THA. J Arthroplasty. 2008 [an; 28(11):51-6. [7] Difficult AG, Buellet KQ, et al. The effect of the orientations of the acetabular and femoral components on the range of motion of the hip at different head-neck ratios. J Bone Joint Surg Am. 2000 Mar; 82(3):315-21. [8] Schmid J, Chênes C., Chagué S., Hoffmeyer P., Christofilopoulos P., Bernardoni M., Charbonnier C. My-Hip: supporting planning and surgical guidatione for a better total hip arthroplasty. In J. [10] Willer ME. Lessons of 30 years of total hip arthroplasty. Clin Orthop 1992;274:1122-11. [11] Smidl E, Moutet A, pasquier G, Durante E, Catone Y, Accuracy of reconstruction of the hip using computerised three-dimensional preoperative planning and a cementless modular neck. J Bone Joint Surg Bill 2009;91:8:333-40. [12] Smidl E, Mauprivez R, Khicmi F, Pascal-Mousselard H, Catonné Y, Accuracy of the preoperative planning for cementless total hip arthroplasty. A randomised comparison between three-dimensional computerised planning and computerised planning and computerised planning and compute

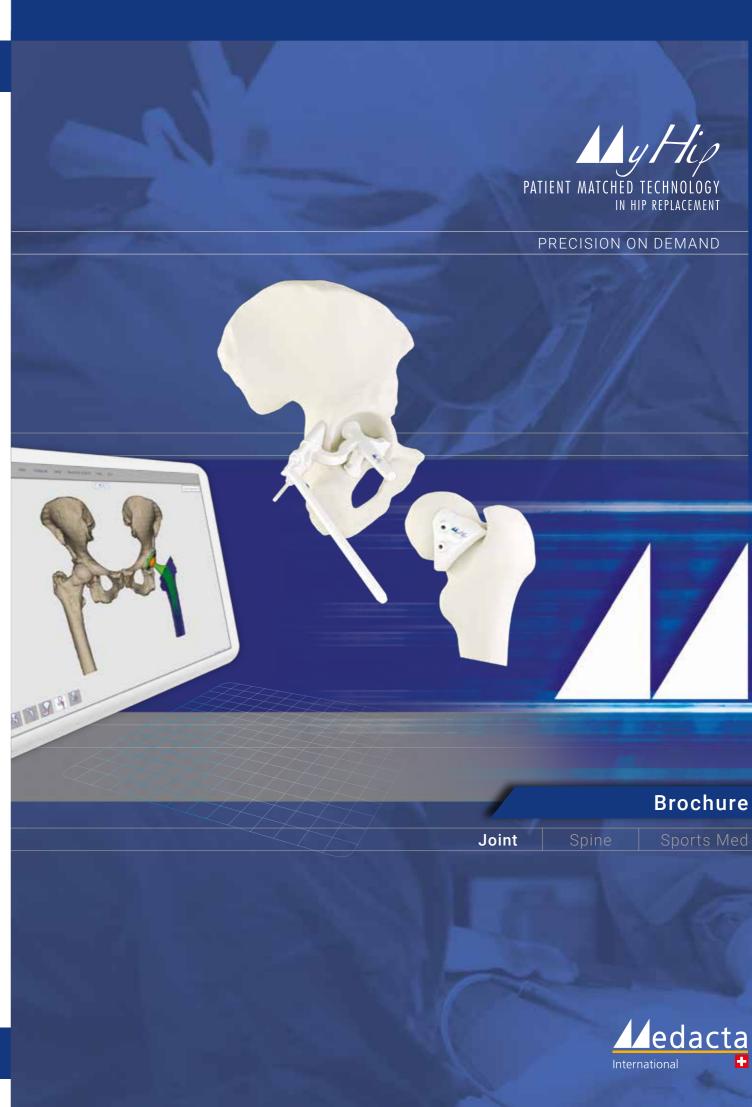
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Please verify approval of the devices described in this document with your local Medacta representative.





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#### PRECISION ON DEMAND

Challenges in Total Hip Replacement (THR) include:

- Dislocation prevention<sup>[1,2]</sup>
- Leg length discrepancy assessment<sup>[3,4]</sup>
- Femoral offset restoration<sup>[5]</sup>
- Cup positioning to avoid edge loading<sup>[6]</sup>
- Impingement analysis<sup>[7]</sup>
- Range of Motion assessment<sup>[7]</sup>

The MyHip system has been designed to **assist the surgeon with implant selection and positioning**<sup>[8]</sup>, addressing these challenges and streamlining the pathway to a carefully planned procedure, through:

- Complete 3D Preoperative Planning<sup>[9,10]</sup> which can halve the number of alignment outliers when compared to 2D templating.<sup>[11,12]</sup>
- 3D Printed Patient-Specific Guides<sup>[13,14,15]</sup> which can help reproducing the 3D preoperative plan.

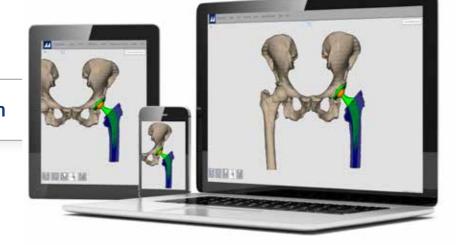




The MyHip 3D preoperative planning is based on the surgeon's specific preferences and patient anatomy, and submitted to the surgeon for approval through an **interactive website** available at **https://myhip.medacta.com**.

With each case, the surgeon can modify implant type, size and position, to further improve the preoperative planning precision. Following surgeon approval of the 3D preoperative plan, Medacta produces the MyHip 3D Printed Patient-Specific Guides using in-house laser sintering technology.

myhip.medacta.com



## WHY MYHIP?

- TO ASSIST THE SURGEON WITH IMPLANT SELECTION AND POSITIONING through a COMPLETE 3D PREOPERATIVE PLANNING and 3D PRINTED PATIENT-SPECIFIC GUIDES.
- ONLY 3 WEEKS LEAD TIME

The shortest delivery time in today's market for this technology.

A PERSONAL MYHIP TECHNICIAN TO WORK WITH

Fach surgeon is assigned a personal MyHip technician to deve

Each surgeon is assigned a personal MyHip technician to develop a direct relationship and familiarize with his/her preferences.

• ONLINE CASE MANAGEMENT

MyHip cases are managed entirely online with no need to install software. The cases database is available to the surgeon at any time, from anywhere and the information on the website is always kept up-to-date.

• COMPLETE IN-HOUSE TECHNOLOGY

The MyHip process is kept entirely in-house, from the 3D anatomical reconstruction to the manufacture of the 3D printed patient-specific femoral and acetabular guides, **allowing direct contact between the surgeon and his/her personal MyHip technician**.

#### 3D PRINTED PATIENT-SPECIFIC GUIDES

MyHip 3D Printed Patient-Specific Guides are designed to accurately reproduce the surgeon's preoperative plan.

MyHip 3D Printed Patient-Specific Guides are:

- Unaffected by intraoperative patient movement
- Positioned unambiguously on the bone
- Available for different approaches: femoral cutting guide for anterior/posterior approach and acetabular reaming/ impaction guide for posterior approach



ANTERIOR FEMORAL CUTTING GUIDE



POSTERIOR FEMORAL CUTTING GUIDE



POSTERIOR ACETABULAR REAMING/IMPACTION GUIDE