



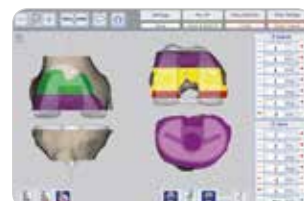
THE MYKNEE JOURNEY



1. Medacta receives the CT or MRI images of the patient's leg.



2. MyKnee pre-operative 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 in-house manufacturing process starts.

HOW TO START WITH MYKNEE

MYKNEE EDUCATION PROGRAM

Attempting a new procedure or working with new technology often means facing a learning curve that can sometimes lead to discouragement and subsequent discontinuance, preventing one from taking full advantage of the benefits offered by the new procedure or technology.

To minimise this learning curve and guided by the successful AMIS Education Program (continuously training hundreds of surgeons worldwide), the M.O.R.E. Institute has created a comprehensive Education Program which supports the surgeon step-by-step in the application of the MyKnee system.

■ Step 1 - Reference Center

Available in several countries worldwide you will have the opportunity to visit a Reference Center and attend live MyKnee surgeries.

■ Step 2 - Learning Center

The MyKnee Learning Center offers you the opportunity to attend live MyKnee surgeries, meet experienced surgeons and discuss the clinical and economical aspects of MyKnee technology.

■ Step 3 - Support

Upon request you will receive the assistance of an experienced Reference Surgeon to assist with your first surgeries in your own hospital.

■ Step 4 - Continuous Education

You can continue your education through GMK and MyKnee user meetings, M.O.R.E. International events, Reference Center visits and other educational tools.

Designed for you by you!

Simply contact Medacta and we will create an Education Program for you!



Medacta International
Strada Regina - 6874 Castel San Pietro - Switzerland
Phone +41 91 696 60 60 - Fax +41 91 696 60 66
Info@medacta.ch - www.medacta.com

MyKnee Leaflet
99_my26.1.1
rev.03
last update: April 2015



MyKnee
PATIENT MATCHED TECHNOLOGY
IN KNEE REPLACEMENT

DESIGNED FOR YOU BY YOU!



Hip Knee Spine Navigation

INNOVATION: THE KEY TO SUCCESS

Medacta's core philosophy is based on the belief that innovation is the key to success. This leads to a constant effort towards the development of cutting edge solutions for Orthopaedics.

MyKnee is a patient-specific cutting block, allowing the surgeon to realize his pre-operative 3D planning, based on CT or MRI images of the patient's knee. This innovative concept combines different features giving potential benefits to both the surgeon and the patient.

- Accurate implant positioning^[1-10]
- No intramedullary canal violation
- Up to 60% reduction of surgical steps and related time for bone resection
- Potentially one extra case per surgery session
- Up to 66% reduction of time and cost in washing, assembling and sterilization procedures
- Interactive 3D web planning



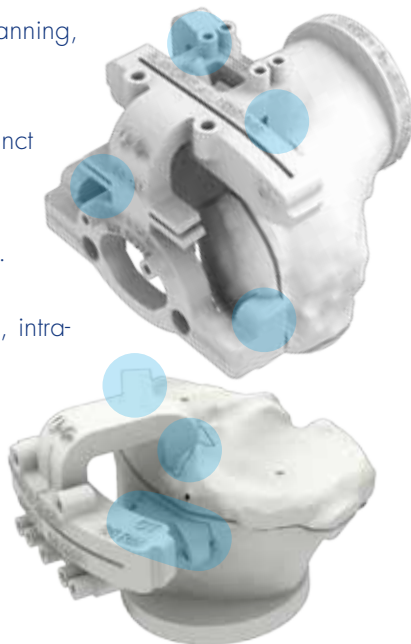
MyKnee

Designed for you by you!

ACCURATE IMPLANT POSITIONING^[1-10]

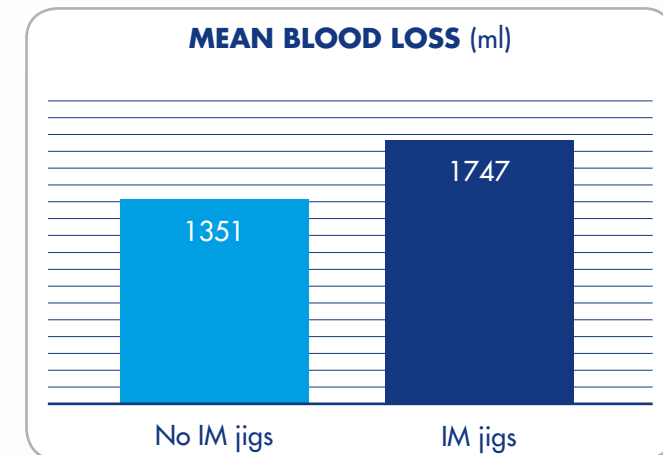
The MyKnee cutting blocks are made to match exactly the surgeon's pre-operative planning, based on **individual patient's anatomy and mechanical axis**:

- **Unmistakable positioning**: the MyKnee guides are positioned on the bone using distinct references: the osteophytes.
- **Maximized visibility** through the guides during both blocks positioning and resections.
- **Telescopic alignment rod**: the guides allow a drop rod to be connected, to validate, intra-operatively, the actual positioning and axial alignment of the blocks.

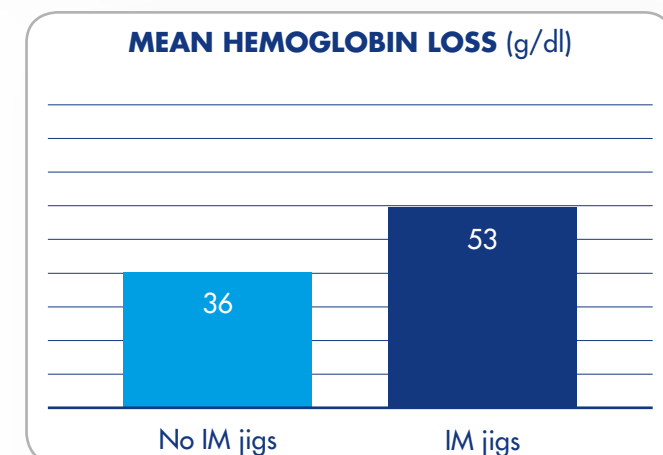


NO INTRAMEDULLARY CANAL VIOLATION

- Less bleeding^[15]

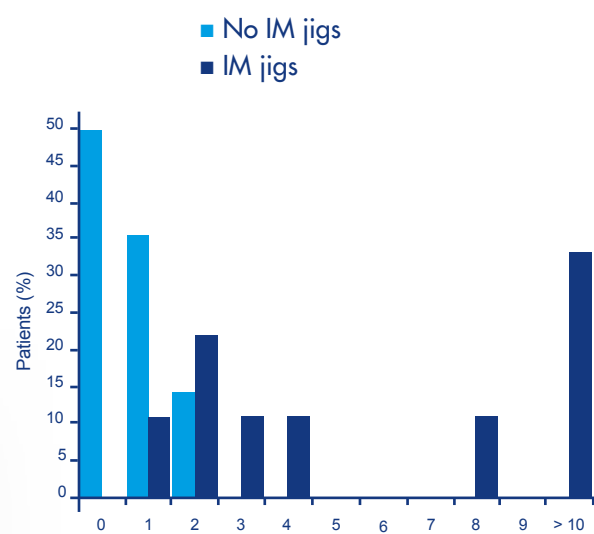


- Less haemoglobin loss



- Less risk of emboli^[16]

Emboli distribution as a percentage of patients operated upon using IntraMedullary jigs versus no IntraMedullary jigs.



Less blood loss equates to **transfusion savings** for the patient and the hospital.^[12]

MYKNEE OFFERS YOU MORE. . .

■ THIS ONE WORKS!

Published articles prove the accuracy and effectiveness of MyKnee^[1-13]

■ ACTUAL CUTTING BLOCKS, NOT JUST PIN POSITIONERS

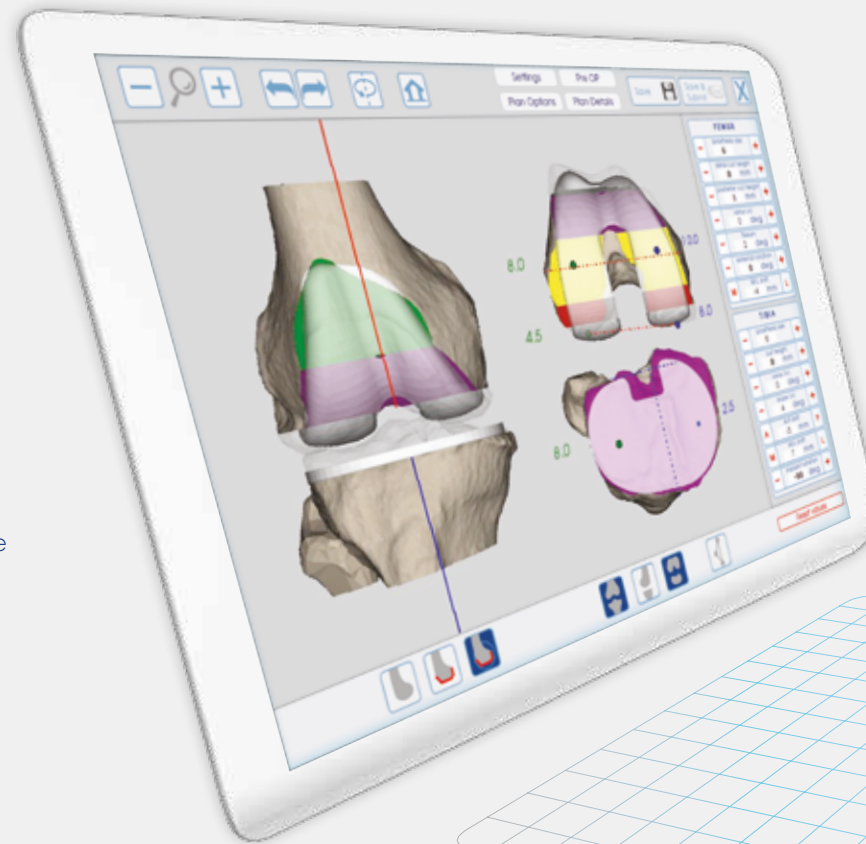
The bone resections are performed directly through the slots and all checks can be carried out intra-operatively before pinning the cutting blocks.

■ CT OR MRI BASED

Freedom to choose the preferred imaging technology.

■ ONLINE CASE MANAGEMENT

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



■ COMPLETE IN-HOUSE TECHNOLOGY

The MyKnee process is kept entirely in-house from the 3D anatomical reconstruction to the manufacture of the cutting blocks, **allowing a direct contact between the surgeon and his personal MyKnee technician.**

■ ONLY 3 WEEKS LEAD TIME

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

■ A PERSONAL MYKNEE TECHNICIAN JUST FOR YOU

Each surgeon is assigned a personal MyKnee technician to assist with any questions or concerns.

UP TO 60% REDUCTION OF SURGICAL STEPS AND RELATED TIME FOR BONE RESECTION^[15]

Only 3 surgical steps are required when using MyKnee cutting guides: **fit – pin – cut**, saving more than 20 steps.

A smaller number of surgical steps may reduce the overall surgical time, **POTENTIALLY ADDING ONE EXTRA CASE PER SURGERY SESSION**.^[10]

Moreover, the patient may benefit from:

- **Less exposure to the risk of infection**^[17]
- **Less time under anaesthesia**
- **Less tourniquet time**

UP TO 66% REDUCTION OF TIME AND COST IN WASHING, ASSEMBLING AND STERILIZATION PROCEDURES^[12, 18]

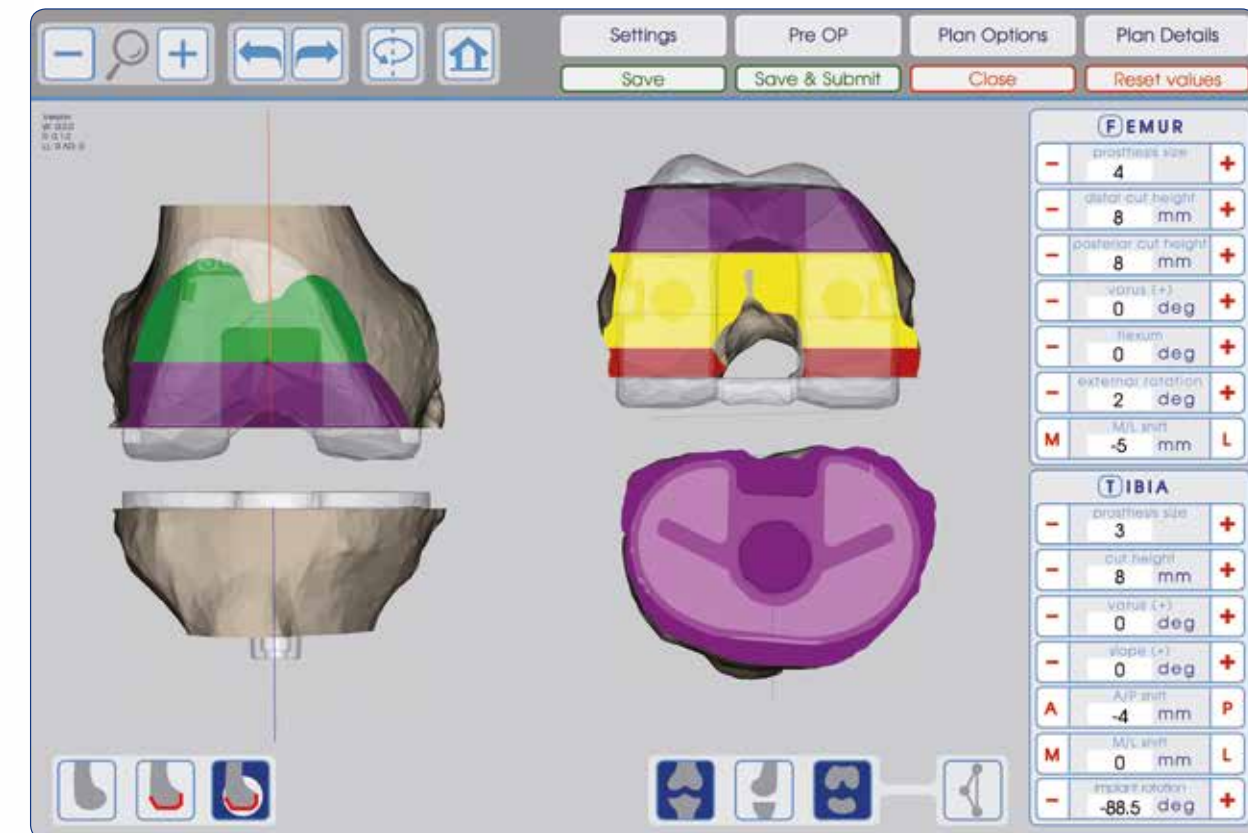


- Only 2 MyKnee trays opened vs. 6 or more for a conventional TKR
- Specific implants ready in the operating room
- Less set-up and turnover time
- Less risk of losing or damaging items
- Fewer cleaning requirements
- Improved operating room logistics and efficiency

INTERACTIVE 3D WEB PLANNING

DESIGNED BY YOU!

The MyKnee pre-operative planning is based on the surgeon's specific preferences and submitted to the surgeon for approval through an interactive website available at <https://myknee.medacta.com>.



The user interface may change without prior notice. The images shown above are for indicative purposes only showing the type of information provided by the interactive website.

With each case, the surgeon can modify femur and tibia parameters, such as:

- Femoral distal and anterior-posterior resection levels, femoral rotation, femoral flexion, femoral and tibial varus/valgus.
- Tibial resection level and tibial slope.

The MyKnee team is always at the surgeon's disposal and happy to help!

Once approved by the surgeon, Medacta produces the MyKnee cutting blocks using in-house laser sintering technology.

The guides are then shipped to be ready for surgery.

REFERENCES

[1] Anderl W et al. CT-based patient-specific vs. conventional instrumentation: Early clinical outcome and radiological accuracy in primary TKA; Knee Surg Sports Traumatol Arthrosc. 2014. [2] Koch P, Müller D, Pisan M, Fucentese S. Radiographic accuracy in TKA with CT-based patient-specific cutting block technique; Knee Surg Sports Traumatol Arthrosc. 2013 Oct;21(10):2200-5. [3] Nabavi et al. Assessment of the accuracy of TKR's Performed Using Patient Matched Technology by Computed Tomography; Podium Presentation at the 27th ISIA congress Kyoto, Sept 24-27, 2014. [4] Leon V. Patient matched technology vs conventional instrumentation and CAS; Poster at the 13th EFORT Congress, Berlin, May 23-25 2012. [5] Dussault M, Goldberg T, Greenhow R, Hampton D, Pary S, Slimack M - Preoperative planning accuracy of MyKnee system; M.O.R.E. Journal. 2012 May; 2:22-25. [6] Müller D et al. CT based patient specific cutting blocks for total knee arthroplasty: technique and preliminary radiological results; Podium Presentation at the 71st Annual Congress of the SSOI, Lausanne, Switzerland, June 22-24, 2011. [7] Goldberg T et al. CR-Based Patient-Specific Instrumentation Is Accurate for TKA: A Single-Surgeon Prospective Trial; Bone Joint Journal. vol. 95-B no. SUPP 34 325, 2013. [8] Goldberg T et al. CR-Based Patient-Specific Instrumentation Is Effective in Patients With Pre-Existing Hardware about the Knee; Bone Joint Journal. vol. 95-B no. SUPP 34 326, 2013. [9] Teng M, Helmy N et al. Improved positioning of the tibial component in unicompartmental knee arthroplasty with patient-specific cutting blocks; Knee Surg Sports Traumatol Arthrosc. 2014 Jan, Epub ahead of print. [10] Baldo F, Boniforti B. Patient-specific cutting blocks for total knee arthroplasty: preoperative planning reliability; J Orthopaed Traumatol 2011; 12 (Suppl 1): S23-S88. [11] Goldberg T. MyKnee economical and clinical results; Podium Presentation at the 6th M.O.R.E International symposium, Stresa, Italy, May 13-14, 2011. [12] Koch P. MyKnee System: A new vision in total knee replacement; Leading Opinions - Orthopédie & Rhumatologie 2, 2011: 32-35. [13] Gagna G. Aspects économiques de la technologie sur mesure MyKnee en chirurgie prothétique du genou; Podium Presentation at the SCFCOT Annual Meeting, Paris, November 11-14, 2012. [14] Ritter MA, et al. Postoperative alignment of total knee replacement: its effect on survival. Clin Orthop. 1994; 299:153-156. [15] Kalairajah Y, et al. Blood loss after total knee replacement: effects of computer-assisted surgery. JBJS Br. 2005; Nov;87(11):1480-2. [16] Kalairajah Y, et al. Are systemic emboli reduced in computer-assisted knee surgery? A prospective, randomised, clinical trial. JBJS Br. 2006 Feb;88(2):198-202. [17] Peersman G, et al. Prolonged Operative Time Correlates with Increased Infection Rate after Total Knee Arthroplasty; Hospital for Special Surgery Journal 2006-Feb;2(1):70-2. [18] Data on file: Medacta