This brochure describes the Surgical Technique to implant the GMK® Total Knee System using the MyKnee® MIS cutting blocks. MyKnee® MIS 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. The bone resections are performed directly through the slots integrated on the MyKnee® MIS cutting blocks, according to the surgeon’s preoperative planning. The reduced size, rounded edges and anatomical shape allow the MyKnee® MIS cutting block to flawlessly adapt to minimally invasive approaches. The soft tissues are respected in the easiest way with the added value of an increased accuracy and efficiency.

KNEE MINIMALLY INVASIVE SURGERY: BENEFITS

Surgeons and orthopaedics companies have been working together for years to make today’s total knee replacement (TKR) a well proven and safe daily surgical practice. Medacta® International is committed in developing high level technologies to improve the surgeon’s daily activity and maximize patient’s satisfaction. Minimally invasive knee surgery aims at causing minimal surgical trauma to reduce post-operative knee pain and provide earlier functional recovery.

Benefits of minimally invasive surgery are widely demonstrated in medical literature:

- Reduction of hospital stay (17% - 43% time less) [1,2]
- Earlier functional recovery (110° ROM 6 weeks earlier) [2]
- Shorter rehabilitation [3]
- Less pain (16% less at discharge) [2]
- Less medication needed (12% less at 2 weeks) [4]

Bibliographic references:

4 King et al. Minimally invasive total knee arthroplasty compared with traditional total knee arthroplasty. Assessment of the learning curve and the postoperative recuperative period. JBJS Am. 2007 Jul;89(7):1497-1503.
MINI-SUBVASTUS: THE MUSCLE SPARING APPROACH

Different MSS approaches are available for TKR. The mini-subvastus approach provides a specific set of benefits.

- **No muscles cut**: the mini-subvastus approach uses a quad-sparing arthrotomy. Vastus medialis is released but not resected. In comparison the mini-midvastus extends into the vastus medialis.
- **No muscles incision**: no risk of damaging nerves and vascular structures.
- **No patella eversion**: less stress on patellar tendon and quadriceps, thus preserving the leg extensor mechanism.
- **No joint dislocation**: less stress on soft tissues.
- **Reduced scar**.

MINI-SUBVASTUS: NOT ONLY SHORT TERM BENEFITS

“At 1 year, the quadriceps strength of the MIS TKA knee was equal to that of the uninvolved side, whereas the medial parapatellar TKA was 24% weaker than the uninvolved side.” [5]

---

**QUADRICEPS STRENGTH COMPARED TO NON-OP LEG AT 1 YEAR**

<table>
<thead>
<tr>
<th></th>
<th>MINI-SUBVASTUS TKA</th>
<th>MEDIAL PARAPATELLAR TKA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>100%</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>76%</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Medacta® International would like to express its gratitude to

**DR. JEAN PIERRE CANCIANI**
Centre Hospitalier Privé Saint Gregoire,
Saint-Gregoire, France

**PROF. SYLVAIN LECLERQ**
Centre Hospitalier Privé Saint Martin,
Caen, France

**DR. EMMANUEL THIENPONT**
Saint Luc University Hospital,
Bruxelles, Belgium

*for their valuable and constant help in MyKnee® MIS development.*
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1 INDICATIONS

MyKnee Cutting Blocks are intended to be used as anatomical cutting blocks specifically designed for a single patient to assist in the positioning of total knee replacement components intraoperatively and in guiding the marking of bone before cutting. MyKnee Cutting Blocks are intended for use with GMK Total Knee System when the clinical evaluation complies with its cleared indications for use.

2 CONTRAINDICATIONS

Contraindications in using MyKnee instrumentation are the same as the situations when a total knee replacement is contraindicated. It is the surgeon’s responsibility to verify that the patient is not allergic to the material of which the MyKnee cutting blocks are made (Polyamide PA12).

3 PREOPERATIVE PLANNING

The preoperative planning is managed through the website https://myknee.medacta.com in cooperation between the surgeon and Medacta International.

Please contact Medacta International to gain access to the website.

The goal of the preoperative planning is to assess the surgical parameters regarding femoral and tibial implantation in order to manufacture dedicated single patient use cutting blocks. Parameters are to be planned by the surgeon and include:

- Femoral implant size
- Tibial implant size
- Femoral resections
  - Posterior cut height, on both condyles (medial and lateral)
  - Distal cut height, on both condyles (medial and lateral)
- Femoral angles
  - Varus / valgus
  - Flexion / extension
- Femoral rotation
  - Internal / external rotation vs posterior condyles line and vs epicondylar axis
- Tibial resection
  - Proximal cut height related to both plateaus (medial and lateral)
- Tibial angles
  - Varus / valgus
  - Posterior slope.

CT or MRI imaging is used to create a tridimensional bone model of the specific patient knee anatomy. This bone modeling is the base used to create the anatomical cutting blocks that can fit a patient’s knee morphology without using any alignment jigs to position them.

NOTICE

Please refer to the official CT and MRI protocols available on the website myknee.medacta.com. Scanning taken with different protocols may lead to unusable images.

Before using MyKnee procedures, every Radiological Center must be registered. Please contact Medacta International to register your Radiological Center.
Different combinations of MyKnee cutting blocks can be ordered (MyKnee MIS femoral with standard tibial cutting block and vice versa). For each cutting block type, the user should refer to the dedicated surgical technique.

Different MyKnee MIS cutting blocks are available depending on the scanning technology used. The surgeon will receive a MyKnee Surgical Planning Report (ref.no. M 08.59) that indicates the surgical parameters, according to his default profile previously set by the surgeon on the MyKnee website (see picture on the next page). It is the surgeon’s responsibility to validate the preliminary planning or set different parameters according to his own assessment. Both validation and changes in the planning must be communicated via the MyKnee website (see picture on the next page). After the planning is confirmed by the surgeon, MyKnee blocks are manufactured and delivered to the agent responsible.

MyKnee cutting blocks can be supplied sterile or non-sterile (see pictures below). In case they are supplied non-sterile, it is the health care institution’s responsibility to clean and sterilize them before use. Please read the “Note for sterilization” included at the end of this surgical technique.

In the surgical technique here after described, the resections are performed in the following order:
- Distal femoral resection
- Tibial resection
- A/P femoral resections and chamfers*

* The surgeon can change the resections’ order according to his preferences**.
** Distal femoral resection must be done before the A/P Femoral resections and chamfers.

Federal law (USA) restricts this device to sale by or on the order of physician.

Some specific instruments are fixed to the bone by means of dedicated pins. Before using the pins, ensure that they are intact and fully functional. BENT OR DEFECTIVE PINS CANNOT BE USED AND MUST BE REPLACED BY NEW ONES. When extracting pins it is important to avoid any bending. This results in axial alignment between the pin and the dedicated extractor.

It is strongly recommended not to impact or hammer on any instruments unless otherwise specified in the surgical technique.

For detailed instructions contact your local Medacta sales representative.
### MyKnee Surgical Planning Report

**CASE CODE**: value
**SURGEON**: value
**SURGERY DATE**: value
**SURGICAL APPROACH**: value
**PRODUCT**: value
**CUTTING BLOCKS**: value

**PREOPERATIVE DATA [deg]**

<table>
<thead>
<tr>
<th>Parameter</th>
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<tr>
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<tr>
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<td>External Rotation</td>
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**RIGHT TOTAL KNEE**

<table>
<thead>
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</tr>
<tr>
<td>Tibial Implant Size</td>
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### FEMUR

**FEMORAL RESECTIONS [mm]**

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</tr>
</thead>
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</tr>
<tr>
<td>Medial Posterior Cut</td>
<td>value</td>
<td>value</td>
</tr>
<tr>
<td>Lateral Distal Cut</td>
<td>value</td>
<td>value</td>
</tr>
<tr>
<td>Medial Distal Cut</td>
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**FEMORAL ANGLES [deg]**

<table>
<thead>
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<td>Femoral Angle</td>
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</table>

**ROTATION [deg]**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Rotation vs. value</td>
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### TIBIA

**TIBIAL RESECTIONS [mm]**

<table>
<thead>
<tr>
<th>Parameter</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>Medial Tibial Cut</td>
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**TIBIAL ANGLES [deg]**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Slope</td>
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<td>value</td>
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</tbody>
</table>

**CAUTION**

- **Accurately clear the posterior condyles from any osteophytes and overhanging bone.**
- **REMOVE FROM THE BONE THE CARTILAGE AND SOFT TISSUES COVERING THE CUTTING BLOCK CONTACT AREAS.**

**COMMENTS**

- **value**

**CONFIDENTIAL**

myknee@medacta.ch  
M08.59 rev.6
MyKnee Surgical Planning Report

CASE CODE: value
SURGEON: value
SURGERY DATE: value
SURGICAL APPROACH: value
PRODUCT: value
CUTTING BLOCKS: value

PREOPERATIVE DATA [deg]

- HKA: value
- Femoral value (from bone): value
- Tibial value (from bone): value
- Tibia Posterior Slope: value
- External Rotation: value

RIGHT TOTAL KNEE

- Femoral Implant Size: value
- Tibial Implant Size: value

FEMUR

- Lateral Posterior Cut: value
- Medial Posterior Cut: value
- Lateral Distal Cut: value
- Medial Distal Cut: value

FEMORAL ANGLES [deg]

- value: value
- value: value
- value: value
- value: value

ROTATION [deg]

- value: value

CAUTION

Accurately clear the posterior condyles from any osteophytes and overhanging bone.

TIBIA

- Lateral Tibial Cut: value
- Medial Tibial Cut: value

TIBIAL ANGLES [deg]

- value: value
- value Slope: value

CONFIDENTIAL
4 SURGICAL APPROACH

The MyKnee MIS cutting blocks are conceived and designed to flawlessly adapt to MIS surgical approaches, respecting soft tissues without compromising accuracy. The most commonly used MIS approaches are the midvastus and the subvastus approaches. The surgeon may occasionally need to use a different approach in some revision procedures or in patients with significant valgus deformation. However, MyKnee MIS allows to follow a standard surgical approach as well: the most frequently used standard approach is the medial parapatellar one.

CAUTION

Do not remove any osteophytes from the tibia or from the femur, in order not to alter the bony references of the MyKnee anatomical cutting blocks.

5 DISTAL FEMORAL RESECTION

5.1 Distal cutting block positioning

Each MyKnee MIS distal cutting block shows the following information:
- 1-patient ID
- 2-cutting block reference and lot number.

Before starting the surgery, please check the accuracy of the data that is specific to the patient. An example of patient ID is shown below: N_SUR_XTK_SN_DDMMYYYY
- N= first letter of patient’s given name
- SUR = first three letters of patient’s family name
- XTK = side operated, left (LTK) or right (RTK)
- SN= surgeon’s given and family name first letters
- DDMMYYYY= patient’s birth date (DD=day, MM=month, YYYY=year).

CAUTION

If the cutting block does not clearly indicate the patient identification string, it MUST NOT be used for the surgery. In such a case please contact immediately Medacta staff.

CAUTION

Do not use MyKnee MIS cutting blocks on a patient for whom the pre-operative planning has not been carried out. A MyKnee MIS cutting block used on a different patient will lead to unpredictable total knee replacement outcomes.

CAUTION

Do not remove any osteophytes from or around the trochlea groove before positioning the femoral cutting block on the bone.
Before use, ensure that the MyKnee femoral cutting block is intact and in good working order, by visually inspecting the block. A 3D bone model of the patient's femoral bone may be supplied with the MyKnee femoral cutting block. Matching the cutting block with the 3D bone model allows for an additional check of the cutting block integrity before use. The 3D bone model can be supplied sterile or non-sterile. In case it is supplied non-sterile, it must be sterilized by the healthcare institution (Please read the “Note for sterilization” included at the end of this surgical technique).

The 3D femoral bone model allows to accurately simulate the correct positioning of the MyKnee femoral cutting block and to verify, by using the angel wing, the resection level, as the planned femoral resection level is marked on the bone model.

The block has to be positioned manually on the distal femur. Considering the anatomical shape of the block, only one orientation is allowed. The correct placement corresponds to the maximum stability position of the block.

To ensure the maximum stability, verify that the points of contact between the MyKnee distal cutting block and the femur are respected. If bone models are available ensure that the contact points between MyKnee block and bone are in the position of the areas marked on the bone model.

Before positioning the MyKnee MIS distal cutting block, remove the soft tissues from the femur without damaging the osteophytes.

When using CT based MyKnee distal cutting block, the cartilage and soft tissues covering the cutting block contact areas must be removed from the bone with the help of an electric cutter (see figures above) in order to obtain the most stable position of the cutting block. The cutting block contact areas can be easily identified on the bone model, if provided.
CAUTION
An inaccurate positioning may lead to cut parameters not in line with the planning.

Once the cutting guide has been properly positioned on the femur, the cut parameters are automatically set for the knee undergoing surgery according to the pre-operative planning (see pag. 6).

TIP
The telescopic alignment rod can be connected to the cutting block (see purple holes in the figure below) to help identify the correct position on the bone. A visual check on the distal and anterior cut level can be carried out using the angel wing (see yellow slots in the figure below).

CAUTION
Check the varus/valgus with the telescopic alignment rod only after positioning the MyKnee cutting block (do not use the telescopic rod to position the MyKnee block).

5.2 Fixing the distal cutting block on the femur
Once the positioning is deemed satisfactory, the distal cutting block can be fixed on the femur as shown in the pictures below by use of standard 3.2 mm diameter pins.

NOTICE
To guarantee a stable fixation two parallel pins plus an oblique one must be used.

CAUTION
Do not alter the cutting block position while drilling to create holes for pins in order to avoid any guide misalignment.
5.3 Preparing the 4in1 cutting block fixation holes

Before removing the MyKnee MIS distal block, prepare the holes for the 4in1 cutting block fixation using the dedicated drills. Two alternative options are available:

- Anterior reference parallel pins
- Posterior reference parallel pegs

CAUTION
Do not alter the cutting block position while drilling to create holes for pins in order to avoid any guide misalignment.

5.4 Performing the distal resection

Visually double check the cut height by using the standard angle wing prior to cutting. Then perform the distal resection using a 1.27 mm thick blade.

CAUTION
Use physiological solution to cool the guide during the resection.

CAUTION
After the distal resection has been done, accurately rinse the joint before positioning both trial and final implant.

After the distal resection has been done, remove the oblique pin and the MyKnee MIS cutting block from the femur. In case a recut is necessary, position the corresponding conventional MIS distal cutting block or correction block on the parallel pins.

The picture below shows the correspondence between MyKnee MIS distal cutting block pins row and GMK MIS distal cutting block pins holes.

CAUTION
The pin holes of the MyKnee MIS distal cutting block are compatible with conventional MIS cutting blocks only.

CAUTION
If the holes for pins do not correspond to the ones on the conventional cutting blocks, a complete back up conventional instruments set must be available in the operative room to conclude surgery.

To perform a distal recut, follow the same procedure as described in the Bone Referencing technique (ref. no. 99.26.12ICUS).
6 TIBIAL RESECTION

6.1 Tibial cutting block positioning

Each MyKnee MIS tibial cutting block shows the following information:

- 1-patient ID
- 2-cutting block reference and lot number.

Before starting the surgery, please check the accuracy of the data that is specific to the patient. An example of patient ID is shown below: N_SUR_XTK_SN_DDMYYYY

- N= first letter of patient’s given name
- SUR = first three letters of patient’s family name
- XTK = side operated, left (LTK) or right (RTK)
- SN= surgeon’s given and family name first letters
- DDMYYYY= patient’s birth date (DD=day, MM=month, YYYY=year).

CAUTION

If the cutting block does not clearly indicate the patient identification string, it MUST not be used for the surgery.

In such a case please contact immediately Medacta staff.

CAUTION

Do not remove any osteophytes from the tibial bone.

Before use, ensure that the MyKnee tibial cutting block is intact and in good working order, by visually inspecting the block. A 3D bone model of the patient’s femoral bone is provided may be supplied with the MyKnee tibial cutting block. Matching the cutting block with the 3D bone model allows for an additional check of the cutting block integrity before use.

The 3D bone model can be supplied sterile or non-sterile. In case it is supplied non-sterile, it must be sterilized by the health care institution (Please read the “Note for sterilization” included at the end of this surgical technique).

The 3D tibial bone model allows to accurately simulate the correct positioning of the MyKnee tibial cutting block and to verify, by using the angel wing, the resection level, as the planned tibial resection level is marked on the bone model.

The block has to be positioned manually on the tibial plateaus.

CAUTION

Considering the anatomical shape of the block, only one orientation is possible. The correct placement corresponds to the maximum stability position of the block.

To ensure the maximum stability, verify that the points of contact between the MyKnee tibial cutting block and the tibial bone are respected.
If bone models are available ensure that the contact points between MyKnee block and bone are in the position of the areas marked on the bone model.

CAUTION

An inaccurate positioning may lead to cut parameters not in line with the planning.

Once the cutting guide has been properly arranged on the tibia, cut parameters are automatically set for the knee undergoing surgery according to the pre-operative planning (see par. 3).

TIP

The telescopic alignment rod can be connected to the cutting block (see red holes in the figure below) to help identify the correct position on the bone. A visual check on the distal and anterior cut level can be carried out using the angel wing (see yellow slot in the figure below). A visual check on the tibial slope can be carried out by inserting a pin in the “slope hole” without fixing it to the bone.

CAUTION

Check the tibial varus/valgus with the telescopic alignment rod only after positioning the MyKnee cutting block (do not use the telescopic rod to position the MyKnee block).

TIP

The “slope hole” direction corresponds to the sagittal plane. Marking the position of this hole on the bone can be useful, in order to detect the center of the tibial plateau.

CT- and MRI-based cutting blocks contact areas

CT- and MRI-based contact area

Before positioning the MyKnee MIS tibial cutting block, remove the soft tissues from the tibia without damaging the osteophytes.

CAUTION

When using CT-based MyKnee tibial cutting block, the cartilage and soft tissues covering the cutting block contact areas must be removed from the bone with the help of an electric cutter (see figures above) in order to obtain the most stable position of the cutting block. The cutting block contact areas can be easily identified on the bone model, if provided.

Telescopic alignment rod holes
Slope hole
Parallel pins holes
Saw blade slot
6.2 Fixing the tibial cutting block on the tibia

Once the tibial cutting block positioning is deemed satisfactory, it can be fixed on the tibia by use of standard 3.2 mm diameter pins as shown in the picture below.

**NOTICE**
To guarantee a stable fixation two parallel pins plus an oblique one must be used.

- Parallel pins holes
- Oblique pin hole
- Saw blade slot

**CAUTION**
Do not alter the cutting block position while drilling to create holes for pins in order to avoid any guide misalignment.

6.3 Performing the tibial resection

Once the tibial cutting block has been properly fixed to the tibia, visually double check the cut height by use of the angel wing before cutting. Then carry out the tibial resection using a 1.27 mm thick blade.

**CAUTION**
Use physiological solution to cool the guide during the resection.

**CAUTION**
After the resection, rinse the joint before positioning both the trial and final implant.

After the tibial cut has been done, remove the oblique and MyKnee MIS cutting block from the tibia.

In the case a recut is necessary, position the corresponding conventional tibial cutting block on the parallel pins. The picture below shows the correspondence between MyKnee MIS tibial cutting block pins holes and the GMK MIS tibial cutting blocks pins row.

If the holes for the pins do not correspond to the ones on the conventional cutting blocks, a complete back up conventional instruments set must be available in the operative room to conclude surgery.

To perform a tibial recut, follow the same procedure as described in the Bone Referencing technique (ref. no.99.26.12ICUS).
7 EXTENSION GAP CONTROL

Follow the same procedure as described in the Bone Referencing technique (ref.no.99.26.12ICUS).

8 ANTERIOR CUT, POSTERIOR CUT AND CHAMFERS

To perform the anterior, posterior and chamfer resections the conventional 4in1 cutting block of the planned femoral size is required.

Two methods are available to fix that block on the femur:
- Anterior reference
- Posterior reference

8.1 Anterior reference

After the MyKnee MIS distal block has been removed from the femur (see 5.4), position the anterior referenced parallel pins in the holes previously drilled (purple) (see 5.3) using the dedicated pin impactor and slide the predetermined 4in1 cutting block on the femur. Be careful to slide the block on the corresponding zero reference line indicated on the 4in1 cutting block.

Further stabilization can be obtained as indicated in the figure below.

If the holes for pins do not correspond to the ones on the conventional cutting blocks, a complete back up conventional instruments set must be available in the operative room to conclude surgery.

4in1 cutting blocks holes ref. 02.07.10.0201-6, 02.07.10.9787, 02.07.10.2001-6, 02.07.10.3001-7 and 02.07.10.3011-6

- Parallel positioning holes (Anterior Referencing)
- Oblique fixation holes
- Cancellous bone screws holes

Once the 4in1 cutting block has been properly fixed to the femur, visually double check the cut height by use of the standard angel wing before cutting.

Check the correct femoral external rotation of the 4in1 cutting blocks, using the rotation guide (horse-shoe). To perform the cuts, follow the same procedure as described in the dedicated surgical technique of the Medacta knee implant.

TIP

The anterior reference method allows for correction of the 4in1 cutting block position.
To correct the position move the block on to a different parallel pin row as indicated in picture below.

4in1 cutting blocks holes ref. 02.07.10.0201-6, 02.07.10.9787, 02.07.10.2001-6, 02.07.10.3001-7 and 02.07.10.3011-6

- Parallel +2/-2 mm repositioning holes (Anterior Referencing)

### 8.2 Posterior reference

After the MyKnee MIS distal block has been removed from the femur (see 5.4) screw the posterior reference pegs to the 4in1 cutting block of the correct size and position the guide to the distal resection respecting the corresponding pre-drilled holes (orange).

**NOTICE**

The position of the 4 in 1 pegs DO NOT CORRESPOND to the position of the pegs of the femoral component. The holes for the final femoral component are prepared through the trial femoral component.

**CAUTION**

The posterior reference method DOES NOT allow the correction of the 4in1 cutting block position.

Once the 4in1 cutting block has been correctly fixed to the femur, visually double check the cut height using the standard angel wing before cutting. Check the correct femoral external rotation of the 4in1 cutting blocks, using the rotation guide (horse-shoe). To perform the cuts, follow the same procedure as described in the dedicated surgical technique of the Medacta knee implant.

Further stabilization can be obtained by inserting two oblique pins into the dedicated holes, as indicated in the figure below.

**CAUTION**

If the holes for the pegs do not correspond to the ones on the conventional cutting blocks, a complete back up conventional instruments set must be available in the operative room to conclude surgery.
9 FEMORAL FINISHING
Follow the same procedure as described in the Bone Referencing technique (ref.no.99.26.12ICUS).

10 TIBIAL FINISHING
Follow the same procedure as described in the Bone Referencing technique (ref.no.99.26.12ICUS).

11 PATELLA
Follow the same procedure as described in the Bone Referencing technique (ref.no.99.26.12ICUS).

12 TRIALS
Follow the same procedure as described in the Bone Referencing technique (ref.no.99.26.12ICUS).

13 SELECTION OF THE PROSTHETICS COMPONENTS - SIZE MATCHING
Follow the same procedure as described in the Bone Referencing technique (ref.no.99.26.12ICUS).

14 FINAL IMPLANTS
Follow the same procedure as described in the Bone Referencing technique (ref.no.99.26.12ICUS).
The following table summarizes all the available MyKnee MIS cutting blocks versions, depending on the imaging technology (CT based or MRI based) and the knee undergoing surgery (left or right). The references are divided into non-sterile version and sterile version.

<table>
<thead>
<tr>
<th>Description</th>
<th>NON-STERILE Reference N.</th>
<th>STERILE Reference N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MyKnee MIS Femoral Distal Cutting Block - CT - Left - Size 1</td>
<td>4.1211</td>
<td>4.1211S</td>
</tr>
<tr>
<td>MyKnee MIS Femoral Distal Cutting Block - CT - Left - Size 2</td>
<td>4.1212</td>
<td>4.1212S</td>
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# MRI Based Cutting Blocks

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Note for sterilization: in case the instrumentation is not sterile upon delivery, it must be cleaned before use and sterilized in an autoclave respecting the US regulations, directives where applicable and following the instructions for use of the autoclave manufacturer. For detailed instructions please refer to the document “Recommendations for cleaning decontamination and sterilization of Medacta® International reusable orthopedic devices” available at www.medacta.com.

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