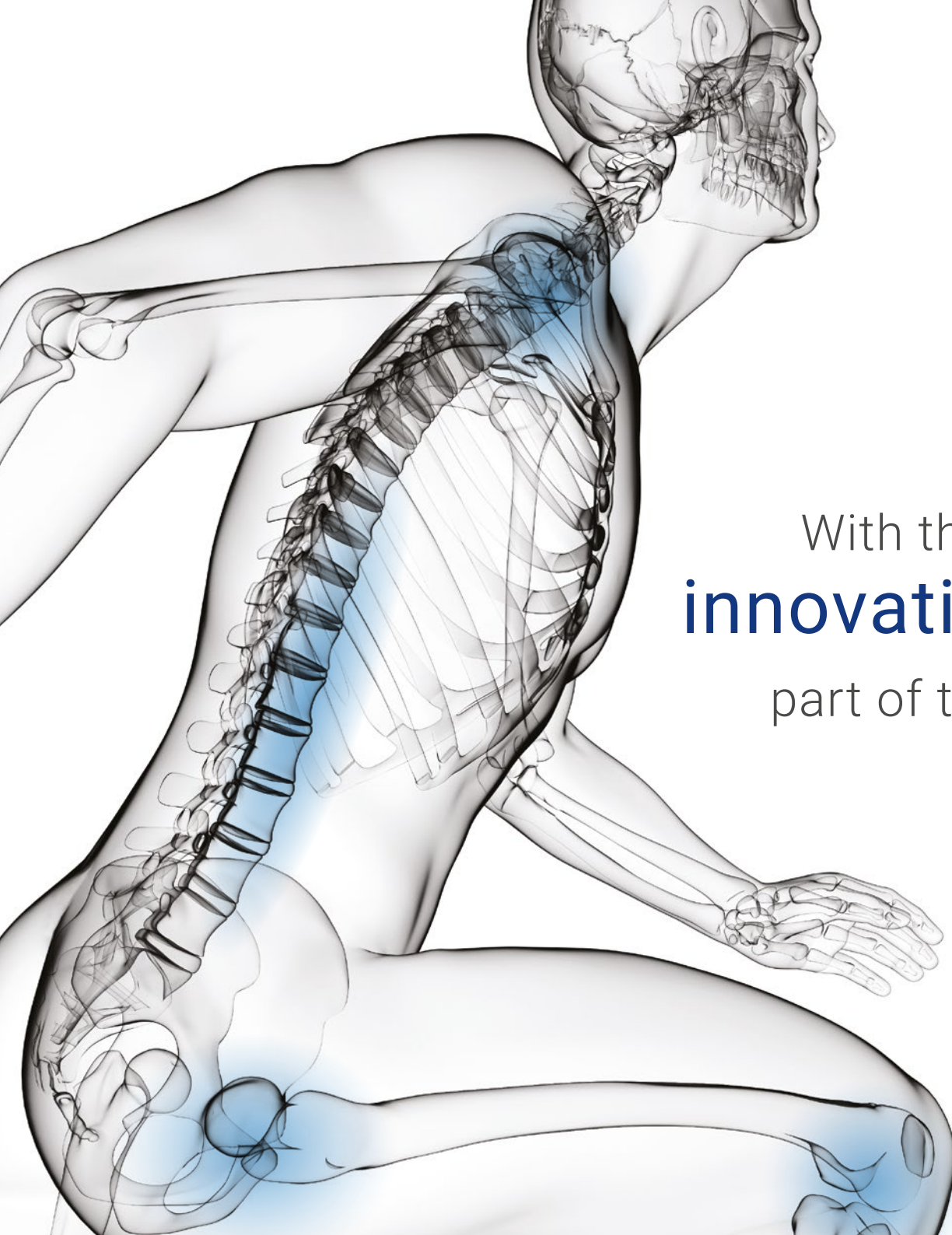


**AMIS<sup>®</sup>** *Experience*  
ANTERIOR MINIMALLY INVASIVE SURGERY  
IN HIP REPLACEMENT



The **AMIS Experience** is much  
more than a surgical technique

it is a **complete set of services** that  
delivers **healthcare efficiency** with  
**no additional costs**



With the **patient** in mind, our  
**innovations** are designed to become  
part of their **life experience**

## *Contents*

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# AMIS Experience

The **anterior approach** is the only approach that follows both an **intermuscular** and **internervous** path, potentially **reducing the risk of damage to periarticular structures**, including muscles, tendons, vessels and nerves. Its use in Total Hip Replacement goes back many years<sup>1</sup> and advantages have been extensively reported in the literature<sup>2</sup>. However, we recognise that it can be challenging to adopt<sup>3</sup>.

Convinced of the **value** of the **anterior approach** for **improving patient wellbeing**, but at the same time acknowledging the potential challenges, an international group of expert surgeons (now the AMIS Education Board), in collaboration with Medacta, set out to optimize and **standardize** the anterior approach, to make it more **straightforward** and **enhance its reproducibility**.

The result of this collaboration was the **AMIS (Anterior Minimally Invasive Surgery)** technique, created in 2004, along with the development of dedicated instrumentation to facilitate the procedure.

[AMIS.MEDACTA.COM](https://amis.medacta.com)

When it was clear that the AMIS had the potential to deliver important clinical advantages, effective and comprehensive education of the technique became the goal.

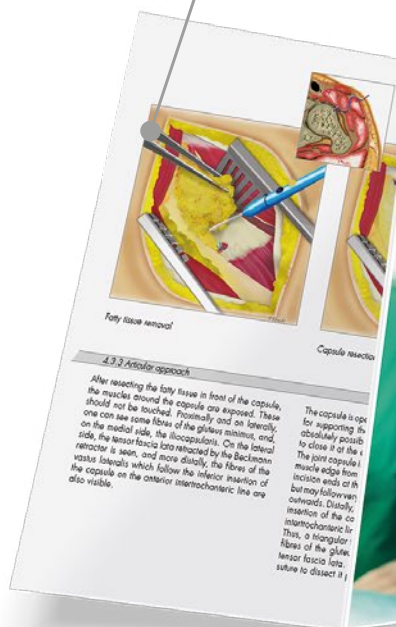
The **M.O.R.E. (Medacta Orthopaedic Research and Education) Institute** was created and, together with the AMIS Education Board, became responsible for the **development** and **continuous improvement** of the **AMIS Education Program**, with a mission to:

- provide ongoing surgeon training and proctorship
- encourage the sharing of experiences between surgeons
- reduce challenges in the early phase of the learning curve as much as possible



**M.O.R.E.**  
I N S T I T U T E

## SURGICAL TECHNIQUE



## MEDICAL EDUCATION



## DEDICATED IMPLANTS



## ADVANCED INSTRUMENTATION



## TOOLS AND SERVICES





## More than an **Anterior Approach**

---

### **SURGICAL TECHNIQUE**

AMIS is an evolution of the anterior approach: simpler, more reproducible and less invasive<sup>4</sup>

### **MEDICAL EDUCATION**

The M.O.R.E. AMIS Education Program has proven to be of the highest standard of extensive medical education, capable of effectively easing the learning curve

### **DEDICATED IMPLANTS**

Specifically designed to facilitate implantation through the anterior approach, with success evidenced by clinical outcomes and customer satisfaction

### **ADVANCED INSTRUMENTATION**

Developed specifically to make the AMIS technique easier and more reproducible

### **TOOLS & SERVICES**

Extras provided by Medacta to further support the surgeon

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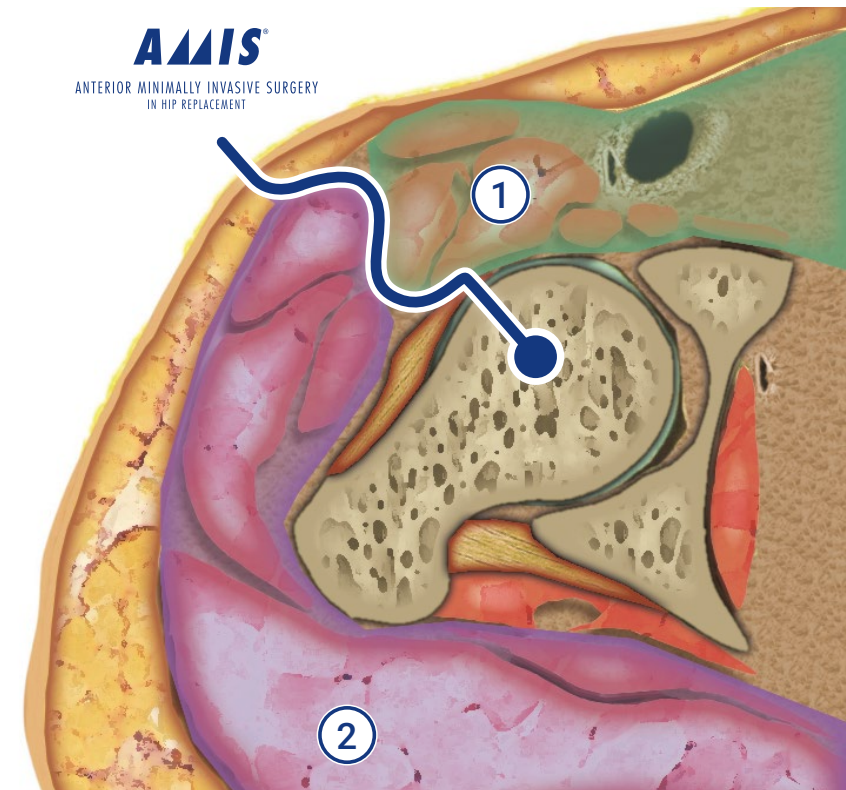
[AMIS.MEDACTA.COM](http://AMIS.MEDACTA.COM)

# Surgical Technique

The **AMIS technique** is a **minimally invasive anterior approach**, following an **INTERMUSCULAR AND INTERNERVOUS** pathway, protecting and preserving periarticular structures.

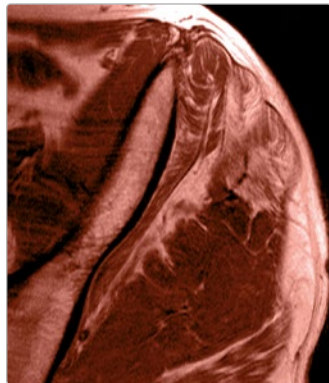
Consequently, the AMIS technique potentially delivers the following advantages for the patient:

- **Significantly shortened rehabilitation**<sup>5</sup>
- **Faster return to daily activities**<sup>4</sup>
- **Decreased post-operative pain**<sup>6</sup>
- **Immediate post-operative muscle tone preservation**<sup>7</sup>
- **Decrease in blood loss**<sup>7</sup>
- **Shorter hospitalization**<sup>7</sup>
- **Reduced risk of dislocation**<sup>4,6,7</sup>

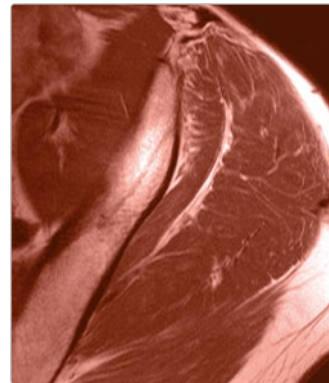


1. Femoral nerve    2. Gluteal nerve

MRI one year post-op<sup>8</sup>



Conventional approach



AMIS approach

These advantages are predominantly experienced by the patient in the short-term, however, the approach may deliver potential MEDIUM - TO LONG -TERM BENEFITS<sup>8,9</sup>.

Literature shows that with the AMIS approach:

- **Patients feel no residual trochanteric pain or limping**<sup>8</sup>
- **There is a reduced risk of muscle degeneration**<sup>8</sup>
- **There are potential advantages for revision surgery**<sup>9,10</sup>

## The **AMIS technique** is seen as an **evolution** of the **anterior approach**

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It is quite **different to other MIS anterior approaches**.  
This **unique procedure** is differentiated by specific surgical steps:

### **Avoidance of an excessive use of retractors**

Reduced risk of damaging soft tissue and less need for extra instruments

### **Easier osteotomy of the femoral head**

No need to dislocate the hip or perform a double osteotomy

### **Possible capsule preservation**

Patients may feel their hip is more stable

### **Easier femoral exposure, with fewer releases**

Simplified surgical technique, with improved joint stability

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The **AMIS Experience** allows the surgeon to truly **maximize** the benefits of using the **anterior approach**

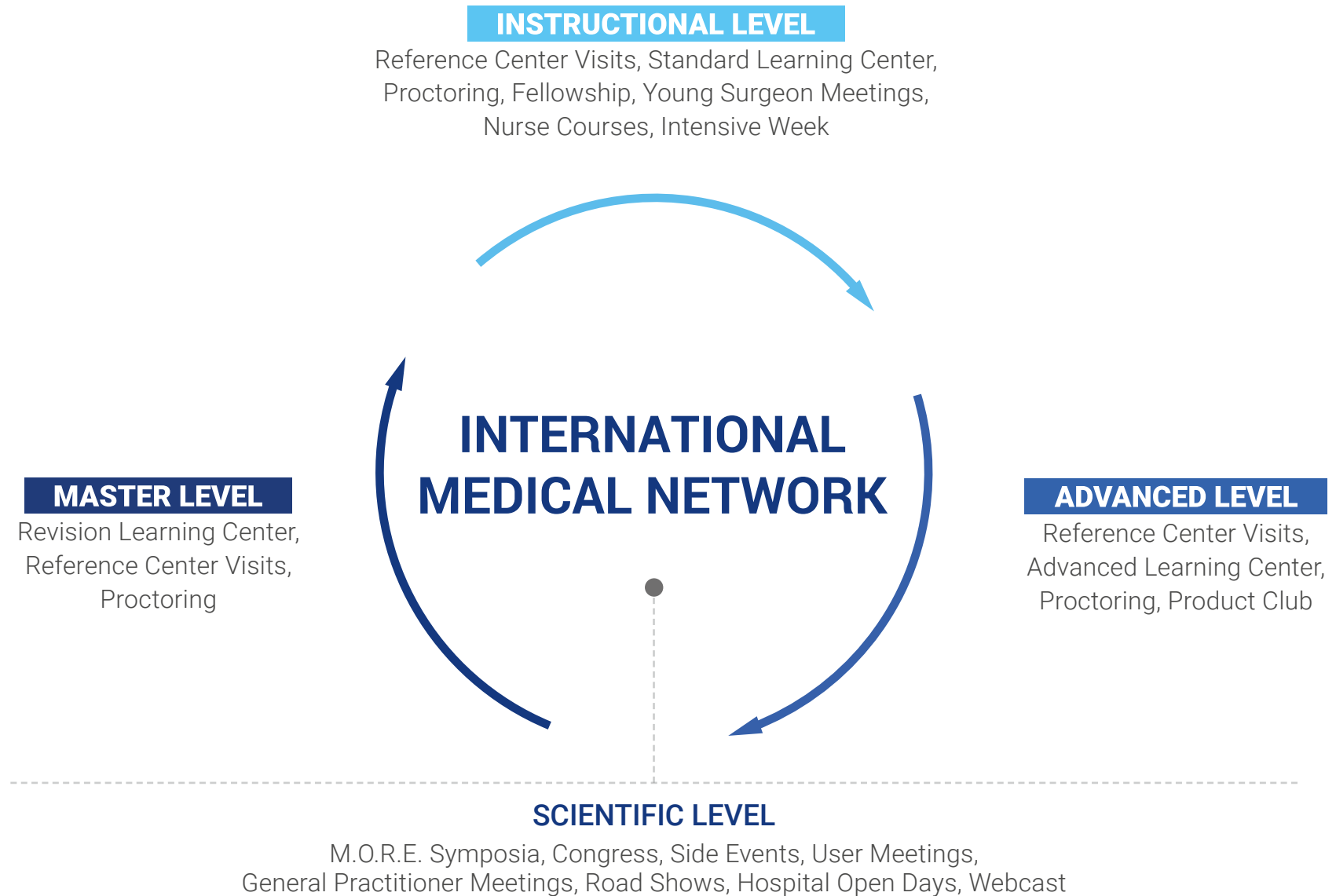
# Medical Education

The M.O.R.E. Institute offers effective and continuous education to surgeons, with an aim to **improve patient outcomes** and **surgical proficiency**.

Close collaboration between Experts and the M.O.R.E. Institute has resulted in the on-going development and evolution of the Educational programme.

The M.O.R.E. Institute was founded on, and encourages the concept of, **sharing experiences** across the international medical community. It has become a **unique** and **global** education platform, **tailored** to the individual's needs.

# M.O.R.E. Opportunities



## INSTRUCTIONAL LEVEL



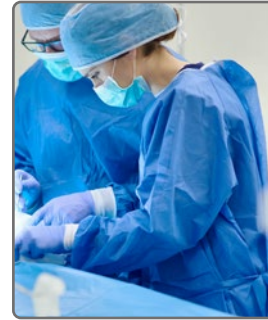
### EVALUATE

Surgical Technique

### EXPLORE

Medacta Products/  
Services

By visiting a **Reference Centre**



### EXPERIENCE

a network of Experts, with  
mentoring of initial cases

### EVOLVE

with the M.O.R.E. continuous  
education program

By taking advantage of **Proctoring**

1

2

3



### DEEPEN

the scientific knowledge  
of the Anterior Approach

### PRACTICE

the technique during assisted  
cadaver workshops

By attending a **Learning Centre**

## ADVANCED LEVEL

## MASTER LEVEL



### SHARE

your experience, improve  
your technique and widen  
patient selection

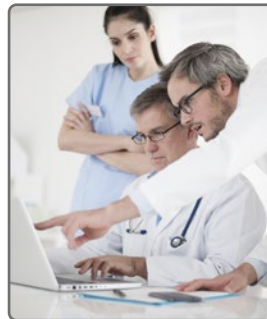
By meeting with **Experts**

4

5

# EXPECT MORE

with an Education Path  
tailored to your needs



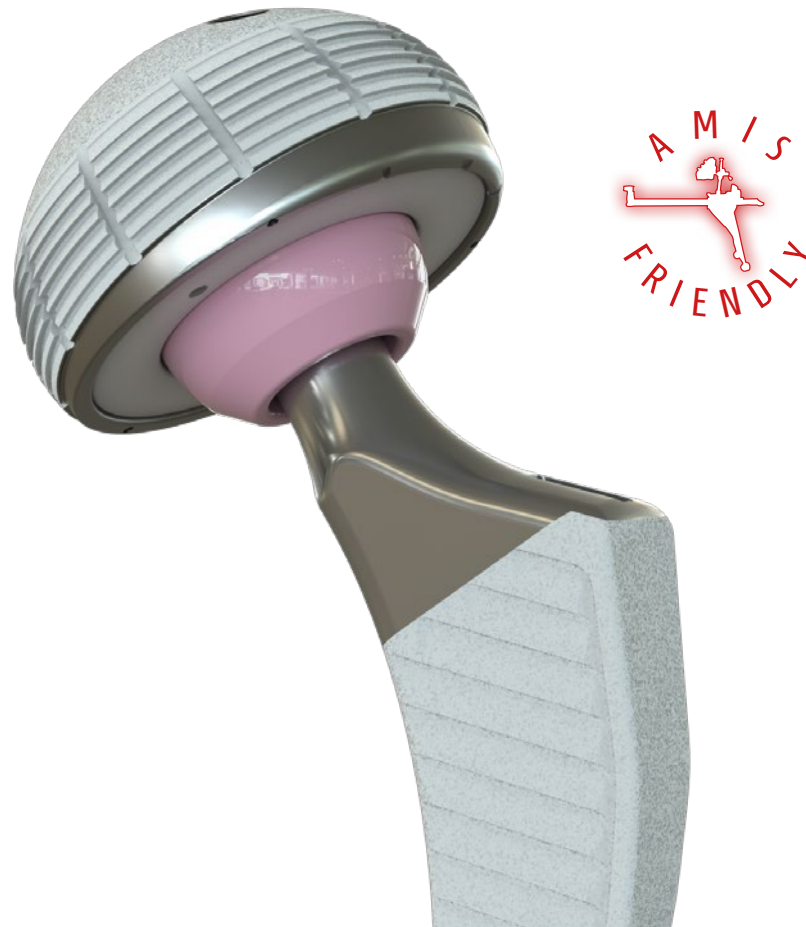
### MASTER

the AMIS Surgical Technique  
and Medacta Products

By focusing on **Revision Cases**

# Dedicated **Implants**

Medacta implants are designed to be **AMIS friendly** and reduce potential challenges during implantation. They are well established and **their reliability is supported by clinical evidence and customer success.**





## A comprehensive system of rectangular tapered stems

Medacta's P-Family Hip System, which includes Quadra-P, AMIStem-P and SMS, is a family of tapered rectangular stems. P-stems feature **proximal coating** and **progressive neck lengths**, with a range of stem lengths and canal filling dimensions which give clinicians the ability **to match** an implant to the **patient's bone morphology**.



## AMIS<sup>®</sup>Stem SYSTEM



**98,4%**

Survival rate at minimum 8 years\*  
All cases done with AMIS<sup>®</sup>Stem-H  
through AMIS approach<sup>11</sup>

First stem specifically  
designed for AMIS

## QUADRA<sup>®</sup> SYSTEM



**99,6%**

Survival rate at minimum 10 years\*  
All cases done with QUADRA-H  
through AMIS approach<sup>12</sup>

More than 15 years  
of clinical success

## MiniAX<sup>®</sup>



**100%**

Survival rate at minimum 5 years\*  
All cases done through  
AMIS approach<sup>13</sup>

More than 10 years  
of clinical success

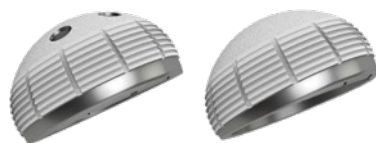
## MasterLoc<sup>®</sup>



Progressive triple offset  
with reduced distal geometry

Follows the flat tapered wedge  
philosophy with a long history  
of clinical success<sup>14</sup>

## VERSAFITCUP<sup>®</sup> CC TRIO FAMILY



**99,6%**

Survival rate at minimum 10 years\*  
All cases done through  
AMIS approach<sup>12</sup>

More than 15 years  
of clinical success

## pact<sup>®</sup> SYSTEM



**98,8%**

Survival rate at minimum 2 years\*  
All cases done through  
AMIS approach<sup>15</sup>

Hemispherical cup with a highly  
porous coating - Mectagrip

## VERSAFITCUP<sup>®</sup> DM



**100%**

Survival rate at minimum 5 years\*  
All cases done through  
AMIS approach<sup>16</sup>

More than 15 years  
of clinical success

## pact<sup>®</sup> DM



State-of-the-art instrumentation

Hemispherical double mobility  
cup with a highly porous  
coating - Mectagrip

# Advanced **Instrumentation**

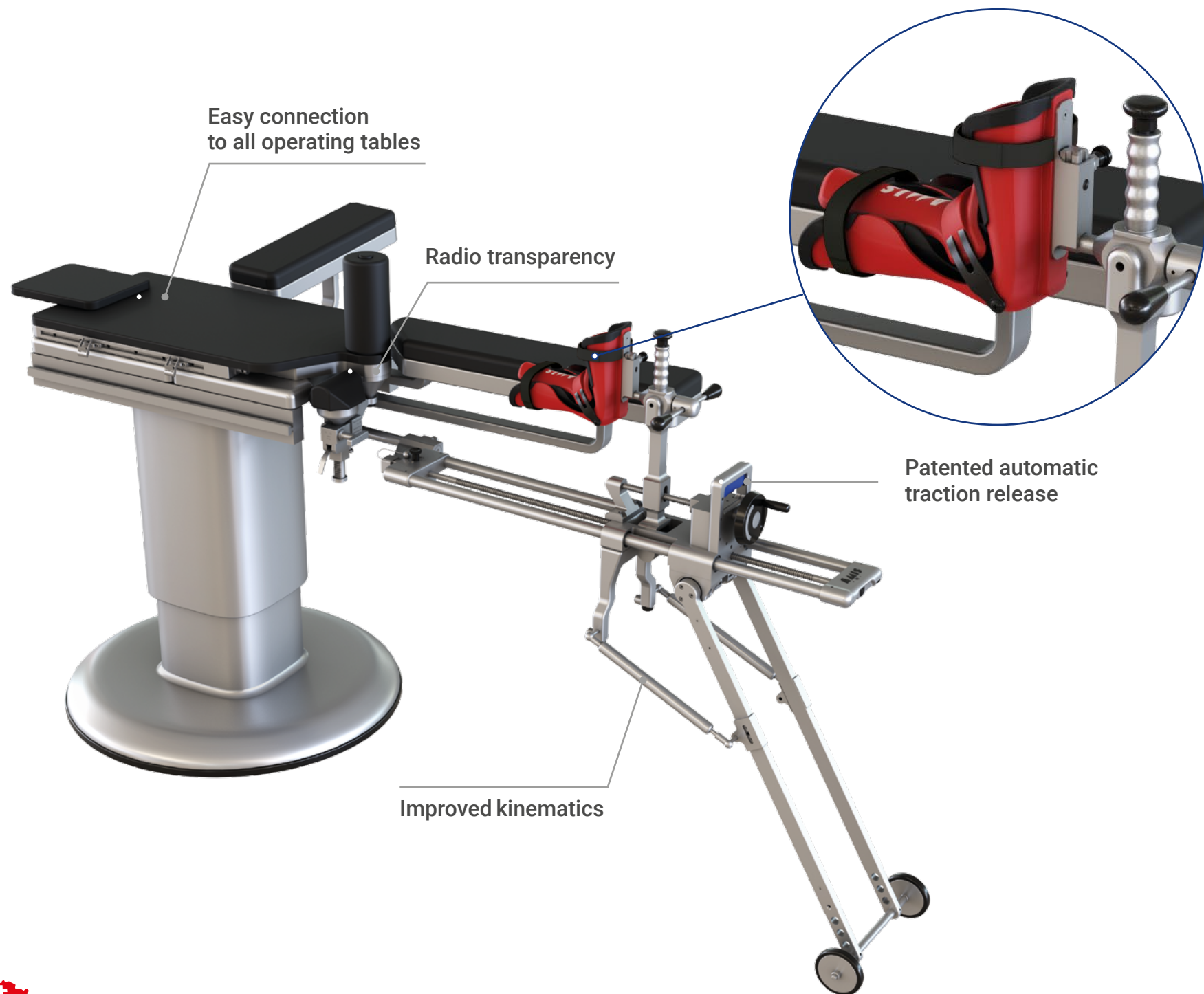
The **AMIS specific instrumentation** streamlines, **simplifies and facilitates reproducibility** of the anterior approach.

## **AMIS MOBILE LEG POSITIONER - THE NEVER SLEEPING ASSISTANT**

This orthopaedic table extension is the main facilitator of the AMIS technique: it provides for an easy and stable leg positioning, which allows a simple and reproducible procedure.

Benefits:

- **Patented automatic traction release**
- **NO additional costs**
- **Easy connection to all operating tables**
- **Radio transparency**
- **Ease of use**
- **Improved kinematics**
  - Deep hyperextension
  - Optimal rotation centre
  - Excellent rotational stability
- **AMIS shoe, easy to assemble**



In addition to the AMIS Mobile Leg Positioner, the set of AMIS instruments are included at **NO** additional **cost**:



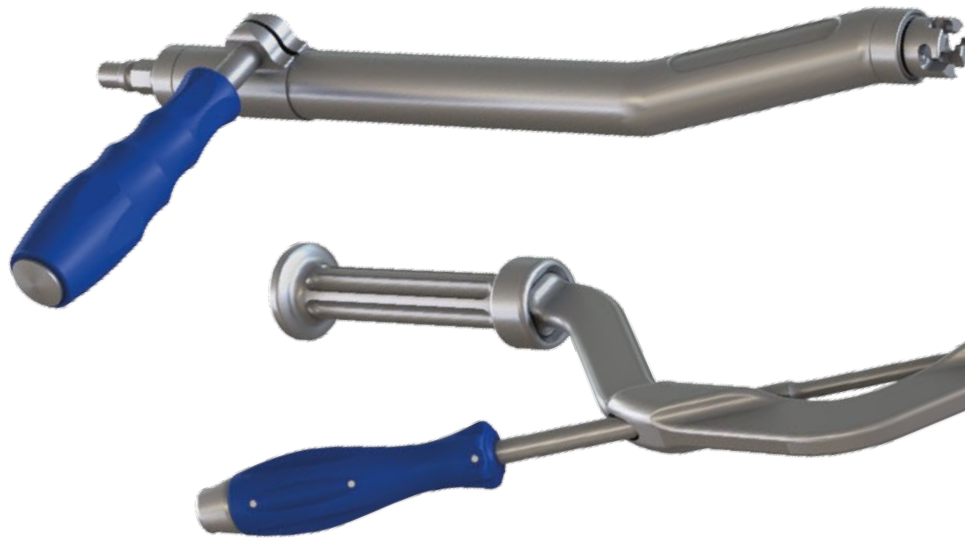
### SELF-RETAINING RETRACTORS

Avoids the excessive use of Hohmann or Cobra retractors, reducing the risk of soft tissue damage

### RADIO-TRANSPARENT SOLUTIONS

To make fluoroscopy easier





### OFFSET REAMERS AND CUP IMPACTOR

For easier access to the hip joint

### AMIS BROACH HANDLE

Designed at 45° to avoid the need for extra femoral releases to effectively expose the femur



As we continue to develop and improve the AMIS technique, the AMIS instrumentation consequently evolves. **It is Medacta's commitment to keep developing solutions that will continue to develop the learning curve, reduce possible technical complications and optimize reproducibility of the procedure.**

# Tools & Services

Medacta is committed to finding **innovative solutions** that can contribute to **improving and enhancing patient care and experience**, in addition to delivering **economic value** to the healthcare system. Medacta has developed several additional solutions/services to support the AMIS surgeons and add value to their practice.

## MYPRACTICE DEVELOPMENT PLAN

A unique package of services to enable surgeons to organise educational meetings with patients, general practitioners and caregivers. It **assists surgeons in the promotion of their practice and patient education**, with a series of patient-oriented documents and marketing tools.





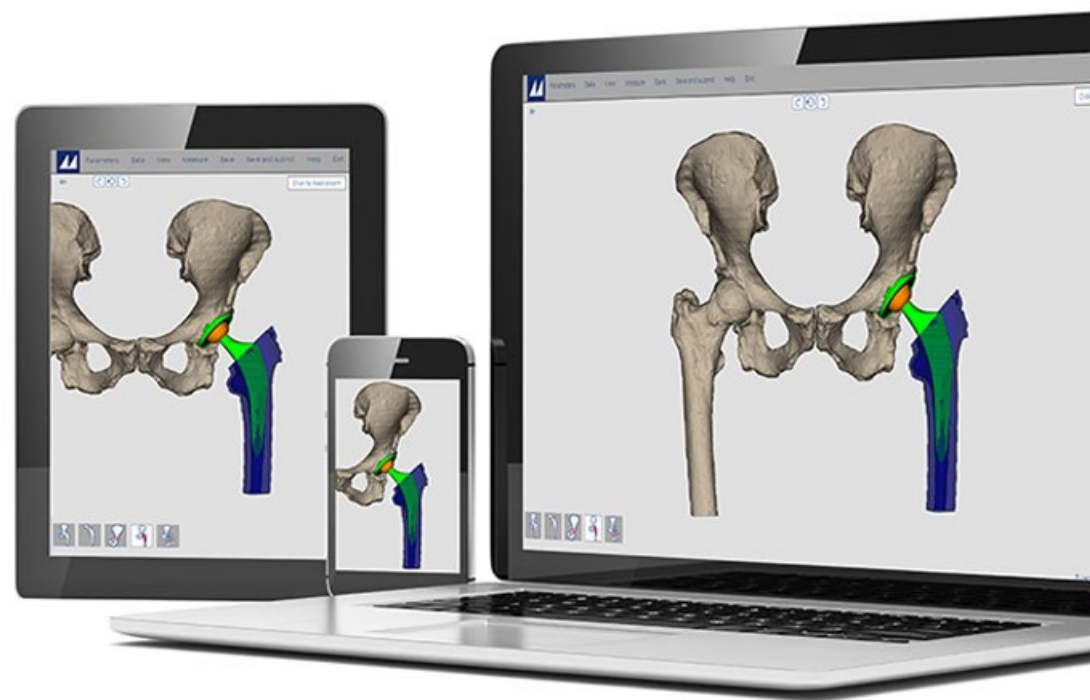
## MYHIP - 3D PRINTED, PATIENT-SPECIFIC SOLUTIONS\*

MyHip has been developed to improve **accuracy in implant sizing and positioning**, potentially **reducing the risk of complications for Hip Replacement Surgery**.

This solution consists of a **3D preoperative planning platform** (with complete **online management**) and **patient-specific guides** for both the femoral and acetabular stages of the procedure. The 3D planning platform enables the surgeon to **predict possible challenges** before surgery.

The complete in-house development guarantees a **personal technician** for each surgeon and **only 3 weeks of lead time**.

[MYHIP.MEDACTA.COM](http://MYHIP.MEDACTA.COM)



\*Availability depending on  
country-specific registrations



## MYHIP PLANNER - 3D PREOPERATIVE PLANNING SOFTWARE FOR THR\*

An intuitive and reliable platform with advanced analytical features empowering the surgical decision-making process.

The software is **designed to define the optimal surgical strategy** according to each patient's anatomy, hip joint biomechanics and functional needs, potentially **improving surgical outcomes and patient satisfaction**.<sup>23</sup>

[MYHIP-PLANNER.MEDACTA.COM](http://MYHIP-PLANNER.MEDACTA.COM)



\*Availability depending on country-specific registrations

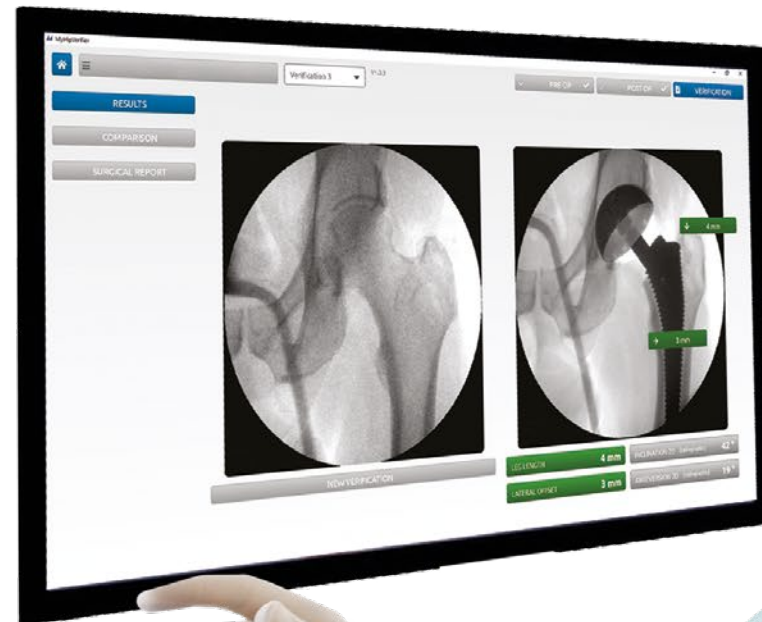
## MYHIP VERIFIER - INTRAOPERATIVE VERIFICATION SOFTWARE FOR THR\*

An easy-to-use, non-invasive platform providing an intraoperative assessment of implant positioning.

The software is designed to **increase confidence and reproducibility**, potentially reducing surgical outliers and **improving patient outcomes and well-being**.

[MYHIP-VERIFIER.MEDACTA.COM](http://MYHIP-VERIFIER.MEDACTA.COM)

\*Availability depending on  
country-specific registrations



## POP - PATIENT OPTIMIZED PATHWAY

POP is an easy-to-use interactive tool designed to **support healthcare professionals** in the delivery of patient education, information, preparation, rehabilitation, follow-up and monitoring, before, during and after surgery.

Furthermore, it can enable better management of patient **expectations**, increase patient **compliance** and improve the overall **patient care experience**.

[POP.MEDACTA.COM](http://POP.MEDACTA.COM)

MEDICAL TEAM  
INTERFACE



PATIENT  
INTERFACE



# Economic benefits

The **AMIS technique** is a procedure that delivers **economic benefits**, with potential for the hospital to gain **return on investment**.

## NO ADDITIONAL COSTS

Pursuing the **AMIS Experience** comes at **NO additional cost** to either the surgeon or the hospital!

## ECONOMIC SAVINGS

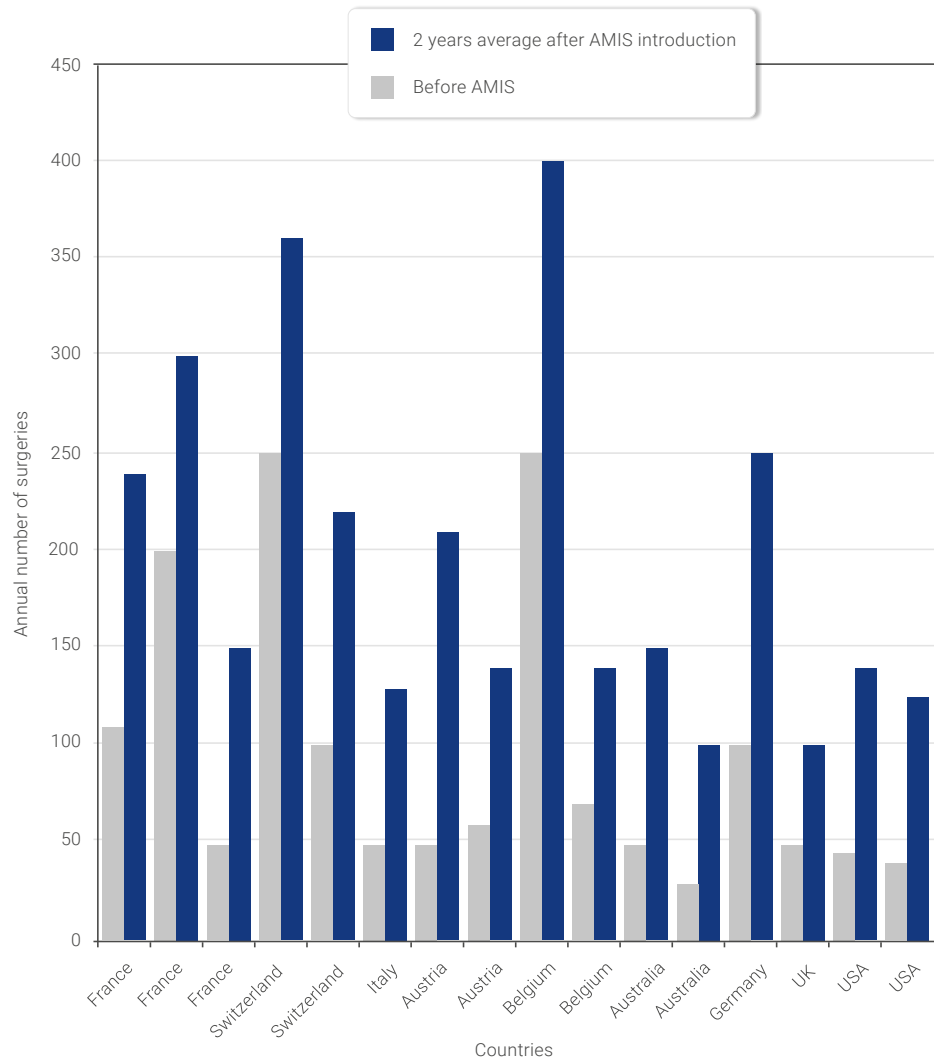
The **clinical benefits** of the AMIS technique potentially **translate into economic benefits**. It is possible to **reduce** the cost of hip replacement **by 40%** using **AMIS** when compared to a standard approach<sup>17</sup>.

## IMPROVED O.R. EFFICIENCY

The **AMIS technique** **only requires 1 assistant**; the overall cost of the procedure can be reduced by reducing the size of the O.R. team.

## EXCELLENT MARKETING TOOL

The frequently reported benefits of the **AMIS** approach make it a procedure **often requested** by patients. It is possible for **surgeons to double their practice**<sup>18</sup> in an average of two years.



# Surgeon Testimonies

“ I had thought anterior approaches were all kind of the same but when I did the Medacta lab, I realized it was a very different procedure. AMIS was much more controlled – a much better procedure. ”

(Surgeon from USA)

“ The intensity of training with Medacta was much greater and much better. (...) The engagement (with AMIS expert surgeons) was incredibly helpful in speeding up the learning curve. ”

(Surgeon from USA)

“ With AMIS I operate without stress. This technique brings financial advantages for the patient, for the surgeon, for the clinic/hospital and for the insurance. ”

(Surgeon from Germany)

“ I only need one assistant, the post-operative care is considerably less and the stationary treatment and the rehab requirement (outpatient/inpatient) are shorter. (...) In the last 3 years I operated on about 99% of patients with AMIS. ”

(Surgeon from Germany)

“ (since starting with AMIS) My practice has grown immensely. ”

(Surgeon from USA)

# Get MORE from your **AMIS Experience** and discover **AMIS BIKINI**

As part of the AMIS EXPERIENCE offer, AMIS Bikini represents an **ADVANCED level** of our anterior minimally invasive surgical offer that surgeons can experience within the **comprehensive AMIS educational program**.

## **ADVANCED EDUCATIONAL PROGRAM**

With the support of a network of world-renowned experts, we offer several **tailored educational options** to learn with confidence the AMIS Bikini and its advantages, thereby reducing any possible difficulties and challenges related to this technique.





## AMIS BIKINI:

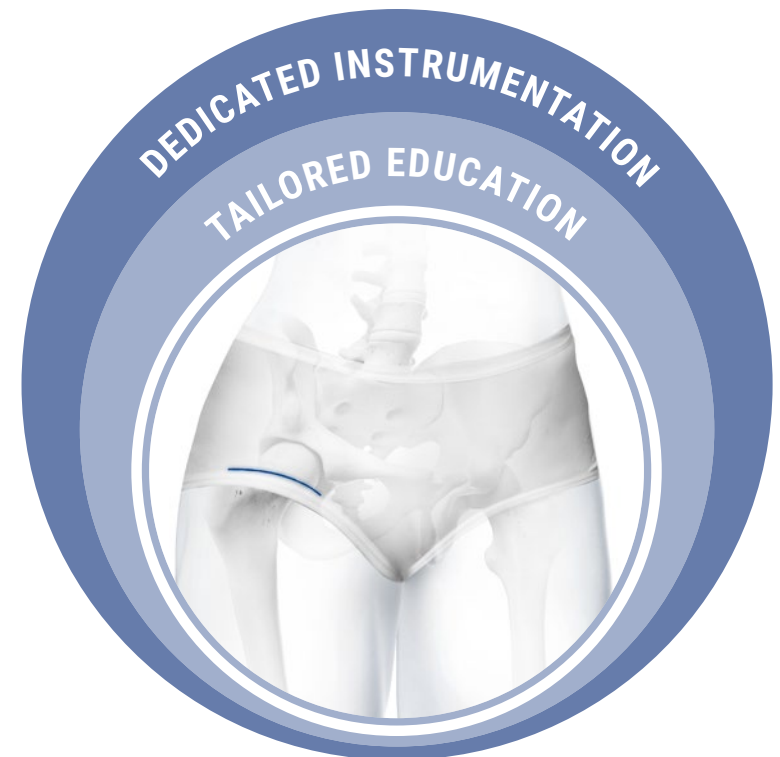
the evolution of the AMIS approach

The AMIS Bikini represents the **natural evolution of the AMIS approach**. This procedure follows the same intermuscular pathway, but utilizes an inguinal skin incision performed within the skin fold of the “bikini line”, or frontal groin crease.

The result is an aesthetically pleasing cosmetic scar along the natural “Langer’s lines” of the skin which can be hidden when wearing underwear or swimwear (e.g., a bikini).

The AMIS Bikini combines all the benefits of the AMIS technique with the additional advantages of the groin crease incision:

- Better cosmetic/aesthetic appearance.<sup>19,20,21,22</sup>
- Enhanced wound healing environment and lower rate of wound complications (also indicated for patients with high BMI).<sup>19,20,21,22</sup>



# Innovative Instrumentation

The dedicated AMIS Bikini instruments have been designed to enable the surgeon to perform an **optimized** and **reproducible** implantation via a bikini incision, further **minimizing the risk of soft tissue damage** with respect to the traditional AMIS instruments.

## AMIS BIKINI BROACH HANDLE

This tool features a unique curvature and offset which allow for fewer instances of impingement or skin irritation when broaching the femur.

The innovative geometrical shape of these handles provide different features that contribute to potentially decreasing the risk of femoral fractures:

- Less impingement
- Better rotational stability (control of anteversion while broaching)
- Less capsular release
- Less hyperextension







### **AMIS BIKINI CHARNLEY BLADE**

The dedicated AMIS Bikini Charnley Blades help to avoid soft tissue injury, especially at the epidermis and dermis level.

### **AMIS BIKINI BECKMANN**

The dedicated AMIS Bikini Beckmann offers stability and the sparing of soft tissues, especially at the epidermis and dermis level.





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**REDEFINING BETTER  
IN ORTHOPAEDICS  
AND SPINE SURGERY**

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