

Innovation in hip arthroplasty

# AMIS BIKINI

Advanced Minimally Invasive  
Approach to the Hip



## Suffering from hip pain?

If you ever wake up in the morning and just don't feel like getting out of bed because of **hip pain, you're certainly not alone.**

## Are you considering Total Hip Replacement?

There are a number of solutions, surgical and non-surgical, to treat your disease. Depending on your condition, your doctor may suggest that you undergo a **total hip replacement** (substitution of damaged bone with a hip prosthesis).



# AMIS BIKINI

## AMIS Bikini may be your solution

The **AMIS (Anterior Minimally Invasive Surgery) Bikini** follows an **intermuscular and internervous** pathway, but utilizes a skin incision performed within the skin fold of the “bikini line”, or frontal groin crease.

The result is an **aesthetically pleasing scar** along the natural creases in the skin that can be potentially hidden when wearing underwear or swimwear.

Moreover, potential additional advantages related to this kind of incision are an **enhanced wound healing environment** and a **lower rate of wound complications**<sup>[1,2,3,4]</sup>.

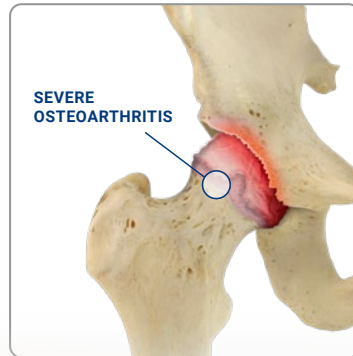
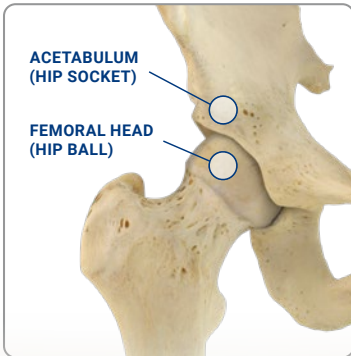
## The AMIS Bikini represents the natural evolution of the AMIS approach

The AMIS approach potentially causes less surgical trauma than other techniques for total hip replacement. In fact, the anterior approach is a true minimally invasive surgical technique where **no muscles are cut and nerves are undamaged**.

## What is osteoarthritis?

The hip joint is formed by the articulation of the rounded head of the femur and the cup-like acetabulum of the pelvis. The main cause of hip joint diseases is the wear of the articular cartilage - osteoarthritis. This wear is perceived as **pain**.

Hip pain limits your daily activities, affects your mood, your health and **your general well-being**. In the case of advanced osteoarthritis, your doctor may suggest that you undergo a total hip replacement.



## What is a Total Hip Replacement?

Total hip replacement surgery substitutes the damaged bone and cartilage of the joint with **metallic**, **polyethylene** (a plastic material), or **ceramic** components.

A hip prosthesis is an artificial articulation composed of a **femoral stem** with a **head** (sphere), a socket **cup**, and an acetabular **liner**.

- ① The **femoral stem** is made of metal (usually a titanium or stainless-steel alloy).
- ② The **head** is made of ceramic or metal.
- ③ The **cup** is usually made of metal (a titanium alloy or stainless steel).
- ④ The **liner** is made of polyethylene or ceramic.



## Why an AMIS Bikini Total Hip Replacement?

The **AMIS Bikini** is a true minimally invasive surgical technique. In fact, the anterior approach is a technique which follows the natural direction of your muscles and nerves planes to reduce the risk of injury to muscles, tendons, vessels and nerves.<sup>[5]</sup>

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

1. **Better aesthetic appearance.**<sup>[1,2,3,4]</sup>
2. **Enhanced wound healing environment and lower rate of wound complications (also indicated for patient with high BMI).**<sup>[1,2,3,4]</sup>



# The AMIS Bikini is the natural evolution of the AMIS

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The AMIS approach is a **true intermuscular and internervous minimally invasive surgical technique**.

## AMIS KEEPS NERVES UNDAMAGED AND DOES NOT CUT MUSCLES

AMIS can potentially provide you with the following benefits:

### 1. **Decreased post-operative pain**<sup>[6]</sup>

The AMIS approach can reduce the post-operative pain because muscles are not cut.

### 2. **Significantly shortened rehabilitation**<sup>[7]</sup>

Rehabilitation can usually start the day of the operation or the day after, subject to your doctor's approval, based on your post-operative condition.

### 3. **Shorter hospitalization**<sup>[8]</sup>

The AMIS technique usually significantly reduces the duration of hospital stay.

### 4. **Small skin scar**<sup>[9]</sup>

With AMIS, the skin incision is often shorter than with "conventional" surgery.

### 5. **Faster return to daily activities**<sup>[10]</sup>

The AMIS technique allows you to return to daily activities in a shorter time frame.

### 6. **Decrease in blood loss**<sup>[8]</sup>

The preservation of muscles and vessels potentially reduces blood loss.

### 7. **Reduced risk of dislocation (separation of the hip ball and socket)**<sup>[6,8,10]</sup>

The risk of dislocation is reduced because the anterior approach is performed from the front of your body and dislocation is mainly related to posterior hip structure damage.

### 8. **Prevention of limping**<sup>[11]</sup>

Minimizing muscle and nerve damage reduces the chance of limping.



## Current approaches and AMIS

The surgeon can access the hip joint by different paths called “surgical approaches”.

### THE MISLEADING CONCEPT OF MINIMALLY INVASIVE SURGERY

There are a number of **approaches** advertised as minimally invasive which **are only reduced skin incision techniques** and are **associated with** the same **muscle and nerve injury** as “conventional” approaches.

### AMIS: THE TRUE MINIMALLY INVASIVE SURGERY

AMIS, Anterior Minimally Invasive Surgery, **is characterized by the protection of muscles and nerves** encountered during the surgery to the hip joint capsule and potentially offering a reduced skin incision.



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- <sup>[6]</sup> Vasina PG, Rossi R, Giudice GM, Palumbi P. Hip arthroplasty through the anterior minimally invasive approach. Sphera 2010;6(12) – Speciale Ortopedia.
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If you have any concerns about your new hip,  
don't hesitate to contact your doctor and...

...enjoy your new hip!



**Medacta International SA**  
Strada Regina - 6874 Castel San Pietro - Switzerland  
Phone +41 91 696 60 60 - Fax +41 91 696 60 66  
info@medacta.ch