REDEFINING THR: THE AMIS SYNERGY

The **anterior approach**, supported by years of clinical experience[16], is the only technique that follows an **intermuscular** and **internervous** path, potentially reducing the risk of damage to periarticular structures such as muscles, tendons, vessels and nerves. Convinced of the value of the anterior approach for improving **patient wellbeing**, but at the same time acknowledging the potential challenges in its adoption, **an international group of expert surgeons**, 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. Today, the AMIS technique has evolved into the **AMIS Experience** and is now more than just a surgical technique. The AMIS Experience is a complete set of services that delivers **healthcare efficiencies**, including economic and commercial advantages, to the hospital and surgeon. **AMIStem-P** will enter you into Medacta International's world of the **AMIS Experience**.

AMIS® Experience
ANTERIOR MINIMALLY INVASIVE SURGERY
IN HIP REPLACEMENT

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swiss made

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AMIStem-P Leaflet
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AMIStem-P SYSTEM

THE LOGICAL EVOLUTION OF HIP STEM DESIGN

HERITAGE MEETS PROGRESS

Brochure

Joint | Spine | Sports Med

AMISTEM-P: HERITAGE MEETS PROGRESS

AMIStem-P is the evolution of a **successful** and **proven** femoral stem concept, originally born to simplify the **AMIS** approach without compromising **implant stability**.

On the basis of the **remarkable clinical heritage** of **AMIStem-H**[1,2,3], **AMIStem-P** was developed with the goal of providing an **improved load transfer** through the application of a **state-of-the-art coating (MectaGrip)** on the proximal part of the stem.

SPECIFICALLY DESIGNED FOR AMIS

AMIStem-P maintains the same geometry as the AMIStem-H. Its triple tapered design characterized by a reduced lateral flare and an **optimized length**, which allows for an **easier stem implantation** and **reduced bone removal.**

SUCCESSFUL CLINICAL HERITAGE

AMIStem-H's solid clinical history[1,2,3] laid the groundwork for the development of **AMIStem-P**.

98,4% [3]
Survival rate for aseptic loosening at 8 years

PERFORMANCE COATING

MectaGrip coating aims to provide an **enhanced proximal fill** at the metaphyseal level, and a **mechanically stronger bone implant interface**, this results in potentially **improved load transfer**.[4] The whole endosteal part of the stem is **Hydroxyapatite** coated.[5,6,7,8,9]

MEETING TODAY'S CHALLENGES

Young and **active** patients are the toughest challenge in THA today. The revision rate for patients younger than 55 years is significantly higher across pathologies[17].
Mechanically stronger bone implant interface will help meet these challenges allowing **higher loads** to be transferred.

EXTENSIVE PRODUCT RANGE

Literature tells us that femoral offset should increase progressively with stem size.[10] AMIStem's comprehensive product range and **anatomically progressing head centers** help an **efficient restoration of the joint biomechanics** in an increasing patient population.

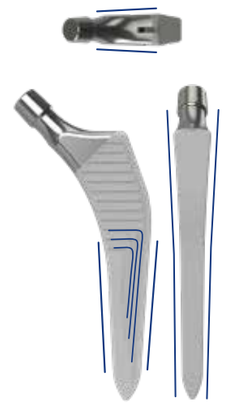
DESIGN FEATURES

NECK

The mirror polished surface helps **minimize soft tissue damage** and liner wear.

SHAPE

The triple tapered design provides **axial** and **rotational stability**.[11,12]
The trapezoidal shaped cross-section is designed to help promote effective stability and facilitate preservation of bone vascularization, since the diaphysis is not completely filled.[13,14,15]



TIP

The bullet-shaped distal tip facilitates insertion and decreases risk of damaging the inner cortex.

SURFACE TREATMENT

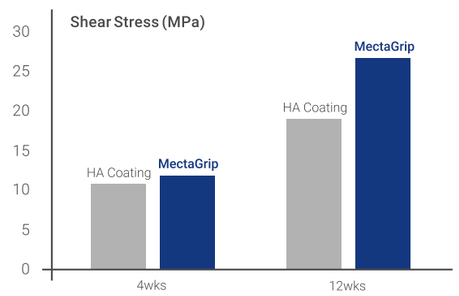
AMIStem-P & AMIStem-P Collared: macrostructures help **increase stability** and enhance contact surface area by 10-15%.[12]
AMIStem-C: mirror polished surface helps to prevent the formation of cracks or gaps in the cement mantle.[6]

COLLARED OPTION

Helps to prevent subsidence in patients with Dorr Type C bone and helps increase rotational stability.

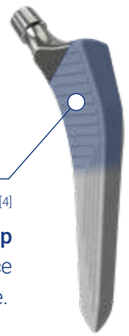
MATERIAL

AMIStem-P is made of **Titanium Niobium Alloy** (ISO 5832-11) and **sandblasted** along its length, producing a surface with 2.5 to 6µm roughness. Successively a layer of **MectaGrip**, 300µm of pure **Titanium** deposited through **Plasma Spray** technology, is applied on the proximal 50% of the stem. **Finally, 80µm of Hydroxyapatite (HA) is applied to the entire length of the stem**.



MECTAGRIP

Professor William Walsh's animal study[4] demonstrates how a surface treated with **MectaGrip** coating can achieve a stronger bone implant interface compared to a surface treated with Hydroxyapatite alone.



PRODUCT RANGE

Neck length increases size by size to allow for **anatomical head center growth.**[10]
Vertical offset does not change when adding lateral offset for each size implant, thus **leg length is not affected** when changing from standard to lateralized.

AMIStem-P	11 Standard sizes (from 00 to 9) with a 135° CCD angle 9 Lateralized sizes (from 0 to 8) with a 127° CCD angle
AMIStem-P collared	11 Standard sizes (from 00 to 9) with a 135° CCD angle 9 Lateralized sizes (from 0 to 8) with a 127° CCD angle
AMIStem-C	9 Standard sizes (from 0 to 8) with a 135° neck-shaft angle 9 Lateralized sizes (from 0 to 8) with a 127° neck-shaft angle