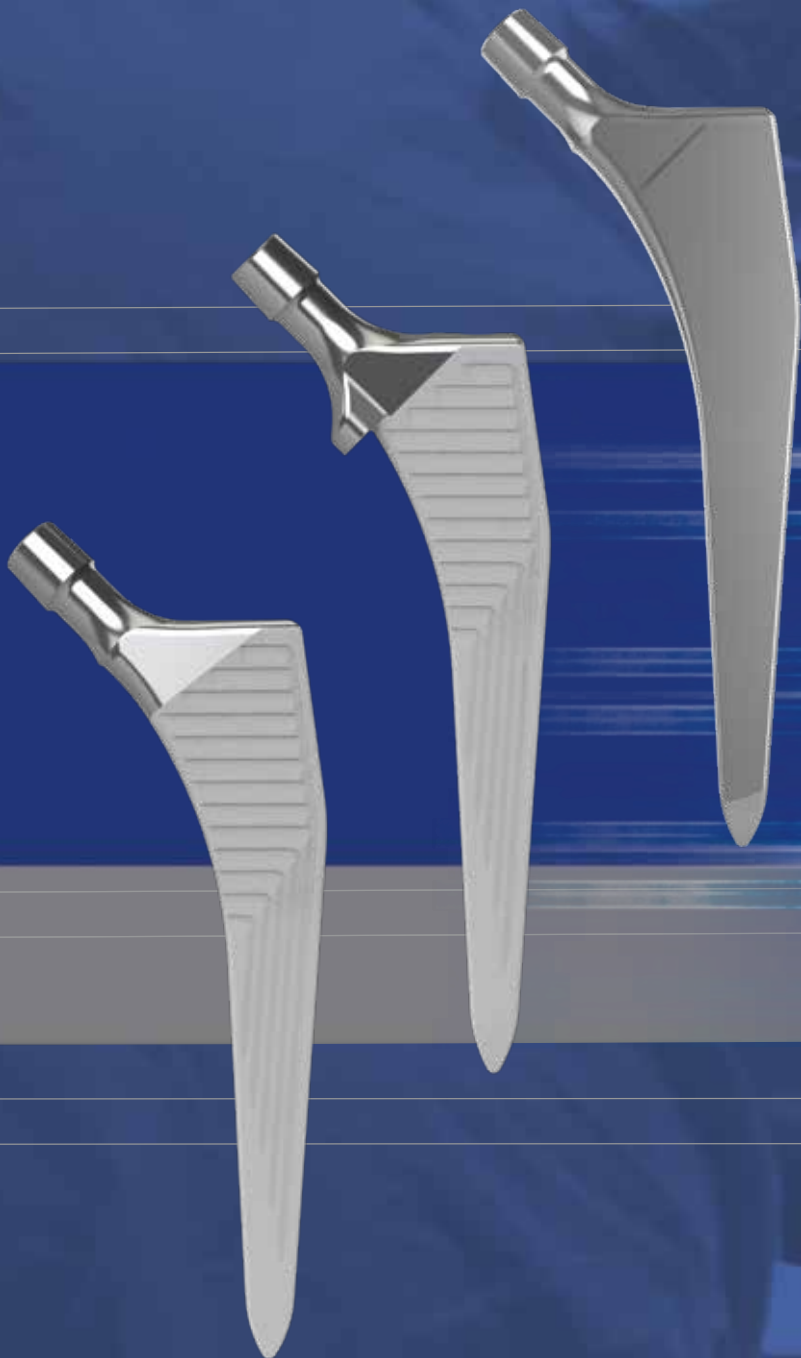


# QUADRA-P

HIP SYSTEM

HERITAGE MEETS PROGRESS



Brochure

Joint

Spine

Sports Med

## QUADRA-P: HERITAGE MEETS PROGRESS

The **Quadra-P System** offers a **complete set of stems developed** preserving the characteristics important to the clinical success of Quadra-H while incorporating proven innovative key features **to address the modern challenges in THA.**

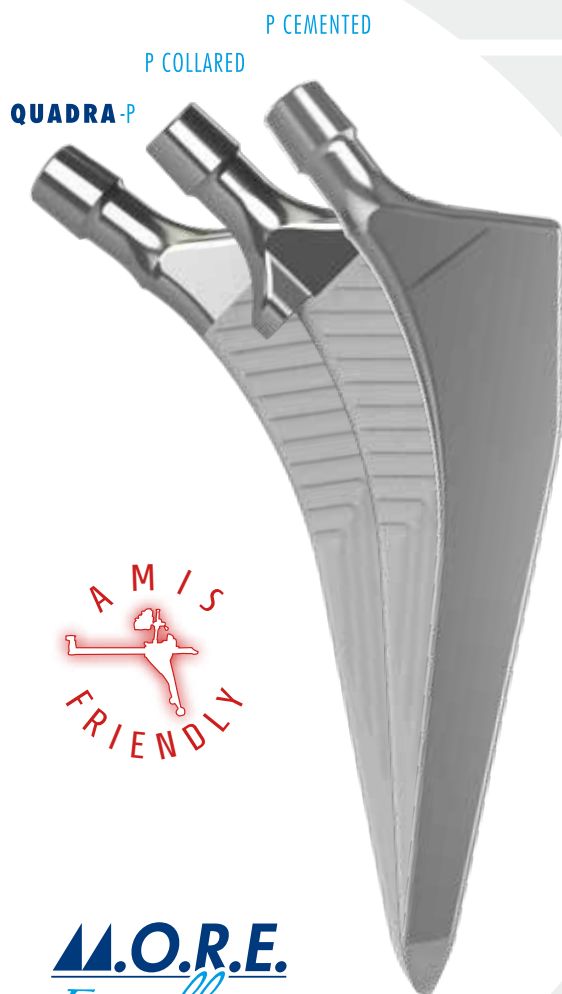
### SUCCESSFUL CLINICAL HERITAGE

QUADRA-H's solid clinical history laid the grounds for the development of **QUADRA-P.**

**99,6%**  
SURVIVAL RATE  
at minimum 10 years\*  
All cases done with  
QUADRA-H through  
AMIS approach<sup>[2]</sup>

ODEP  
**10A\***

\*aseptic loosening as endpoint



### PERFORMANCE COATING

The MectaGrip coating on the Quadra-P and Quadra-P Collared aims to provide an **enhanced proximal fill** at metaphyseal level, and a **mechanically stronger bone implant interface**, resulting in potentially **improved load transfer**<sup>[4]</sup>.

### MEETING TODAY'S CHALLENGES

Literature shows that **young and active patients** can be considered the challenge of modern arthroplasty<sup>[17]</sup>. To **address the high demands** coming from **very active and younger patients**, **QUADRA-P & QUADRA-P Collared** feature **proximal MectaGrip coating** providing:

- A **stronger bone-implant interface**, that will higher loads to be transferred
- An **optimized distribution of the loads**, thanks to the proximal position of the **MectaGrip** coating

### PROGRESSIVE HEAD CENTER GROWTH

Neck lengths throughout the **Quadra-P System** increase size by size, based on AMiStem's experience. This allows for **progressive head center growth** and to more **efficiently restore the hip joint biomechanics** in a growing patient population.

# CHALLENGES

## DESIGN FEATURES

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

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

**TIP:** Double tapered distal tip reduces the risk of stress peak in the diaphysis.



### MACROSTRUCTURES:

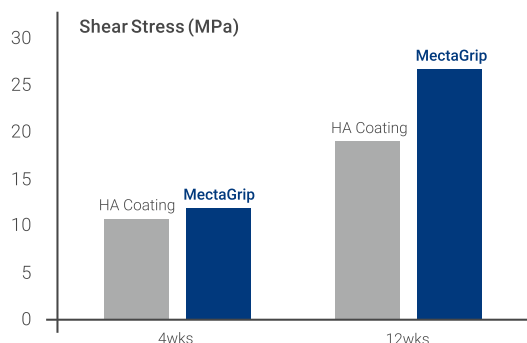
**QUADRA-P & QUADRA-P Collared:** horizontal and vertical macrostructures increase contact surface area by 10-15%<sup>[13]</sup> increasing axial and rotational stability.

**COLLARED OPTION:** additional help to stabilize the stem.

**CEMENTED OPTION:** mirror polished surface helps to prevent the formation of cracks or gaps in the cement mantle<sup>[6]</sup>.

## MATERIAL

**QUADRA-P & QUADRA-P Collared** are made of **Titanium Niobium Alloy** (ISO 5832-11) and **sandblasted** along its length. Successively 300µm of **MectaGrip**, pure **Titanium** deposited through **Plasma Spray** technology, are applied on the proximal 50% of the stem. **Finally, 80µm of Hydroxyapatite (HA) are applied to the entire length of the stem.**



### MECTAGRIP

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



**QUADRA-P Cemented** is made of High Nitrogen Sainless Steel (ISO 5832-9) and mirror polished along its length.

## PRODUCT RANGE

**QUADRA-P System** is a complete range of products implantable with a single instrument platform allowing for intra-op flexibility. Vertical offset does not change when adding lateral offset for each size implant, thus **leg length is not affected** when changing from standard (135° neck-shaft angle) to lateralized (127° neck-shaft angle).

### QUADRA-P

12 Standard sizes (from 00 to 10)  
11 Lateralized sizes (from 0 to 10)

### QUADRA-P Collared

12 Standard sizes (from 00 to 10)  
11 Lateralized sizes (from 0 to 10)

### QUADRA-P Cemented

9 Standard sizes (from 0 to 8)  
9 Lateralized sizes (from 0 to 8)

## REDEFINING THR: THE AMIS SYNERGY

The **anterior approach**, supported by years of clinical experience<sup>[16]</sup>, 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. **QUADRA-P** will enter you into Medacta International's world of the **AMIS Experience**.

### AMIS<sup>®</sup> Experience

ANTERIOR MINIMALLY INVASIVE SURGERY  
IN HIP REPLACEMENT



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swiss  
made

