

Profemur[®] **Gladiator**

Simply Versatile™



**Accommodates preferences in
surgeon's philosophy on stem
design and implant fixation**

Versatile system

Tapered Wedge Design

Profemur® Gladiator

History

Over the last decades, Total Hip Arthroplasty has become a standard procedure. In order to obtain an optimal result, a perfect reconstruction and balance of the hip are essential. Simultaneous correction of leg length, offset, rotation, varus or valgus deformity seems to be impossible with one single hip system³⁻⁴.

Moreover, because of the diversity in proximal femoral geometry, one single stem design cannot cover all cases. The Profemur® Gladiator® Total Hip System was developed to offer a solution to these individual differences in the anatomy of the femoral canal. In order to deal with this variety in femoral canal index, the Profemur® Gladiator® stems are available in four options: cemented, plasma sprayed, hydroxyapatite collared and hydroxyapatite collarless, using the same set of instruments.

The system has been designed to accommodate surgeons' varied principles and techniques in total hip replacement.

Design Features

Design Philosophy

The Profemur® Gladiator® design is based on the long proven concept of tapered wedge stems. The triple taper aims to ensure secure fit, while the proximal trapezoidal cross-section provides rotational stability¹. Horizontal and vertical macrostructures* to distribute loading forces and promote rotational stability².

Two cementless systems

Gladiator® Plasma Stem

Proximal Titanium plasma spray 0.5mm circumferential thickness to encourage initial stability and potential long-term on-growth.

- Available in standard (135°) or valgus (127°) neck.

Gladiator® HA Stem

Full Hydroxyapatite coating to offer the ideal environment for bony apposition in time.

- Available in standard (135°) or valgus (127°) neck.
- Available in collared and collarless options.

Cemented Options

Available in standard (135°) or valgus (127°) neck. Composite-beam or shape-closed fixation design⁵ Matte finish, forged CoCr Alloy, collared. 5 sizes.

Reduced lateral shoulder to facilitate easy insertion.

Bullet-shaped distal tip to minimize risk of fracture during impaction and potentially reduce point contact to assist thigh comfort.

References

1. Swanson TV "The Tapered Press Fit total Hip Arthroplasty: A European Alternative" The Journal of Arthroplasty, June 2005, vol. 20, suppl. 2: 63-67
2. An Interview with: J.C. Cartillier and J.P. Vidalain – ARTRO Group Maîtrise Orthopédique – January 2000 - No. 90 (French and English version)
3. Georg W Omlor, Hannah Ullrich, Knut Krahmer, Alexander Jung, Günther Aldinger, Peter Aldinger; A stature-specific concept for uncemented, primary total hip arthroplasty; 10-year results in 155 patients using two stem shapes and modular necks; Acta Orthop. 2010 Feb; 81(1): 126-133
4. Traina F, De Clerico M, Biondi F, Pilla F, Tassinari E, Toni A: Sex differences in hip morphology: is stem modularity effective for total hip replacement? J Bone Joint Surg Am. 2009, 91 (Suppl 6): 121-8.
5. Scheerlinck T., Casteleyn P., The design features of cemented femoral hip implants. J Bone Joint Surg [Br] 2006;88-B:1409-18
* for cementless versions

Disclaimer

Individual results and activity levels after surgery vary and depend on many factors including age, weight and prior activity level. There are risks and recovery times associated with surgery and there are certain individuals who should not undergo surgery.