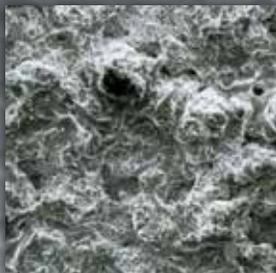


# EXACTECH | HIP

## Primary Femoral Solutions

Developed for primary femoral solutions, the Alteon™ Neck Preserving Femoral Stem shares the proven features of conventional stems. Unlike traditional stems, the Neck Preserving Stem was designed to conserve more bone.



**Stability:** Achieving initial mechanical stability is important to enable biologic fixation.<sup>1</sup>



## ALTEON™

Neck Preserving Femoral Stem

**Neck Preserving:** A conservative treatment option, designed for maintaining the maximum amount of proximal femoral bone.<sup>2</sup>

**Efficiency:** With a curved geometry and broach-only system, the implant is designed to preserve host bone and follow the native anatomy.

## TEST STUDY

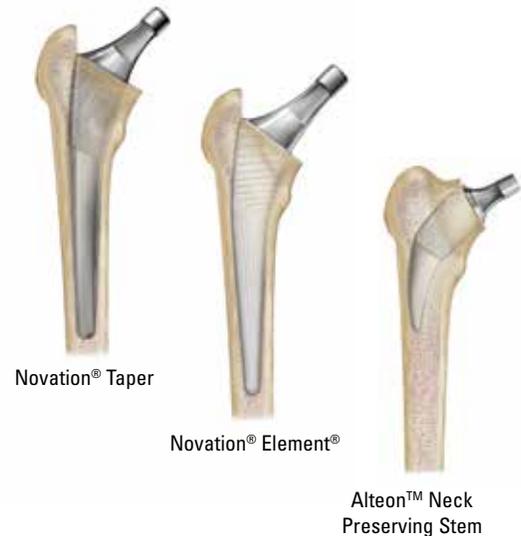
### Quantified Volume and Native Femoral Neck Preserved with Neck Preserving Stem Compared to Two Traditional Total Hip Arthroplasty Stems\*

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#### Abstract

Short femoral stems for total hip arthroplasty (THA) have garnered increased popularity over the last decade due to promising short-term clinical and biomechanical success. Initial findings support claims that metaphyseal fixed short stems preserve proximal bone and neck length facilitating future revision THA if needed, reduce stress shielding by loading the femur proximally leading to improved periprosthetic bone density, are less likely to cause thigh pain due to the absence of diaphyseal loading, and allow for less invasive surgical techniques due to a shorter stem length. Furthermore, it has been suggested that short stems may allow for the preservation of a significant portion of the circumflex artery branches along the femoral neck, promoting rapid osseous ingrowth and an accelerated post-operative recovery. This study represents a preliminary step towards investigating this claim by quantifying the volume of resected bone and the native femoral neck retained for three disparate stem types made by Exactech Inc. (Gainesville, FL): a short neck preserving stem (NPS), a tapered wedge stem (TWS), and a fit-and-fill tapered stem (FFTS).



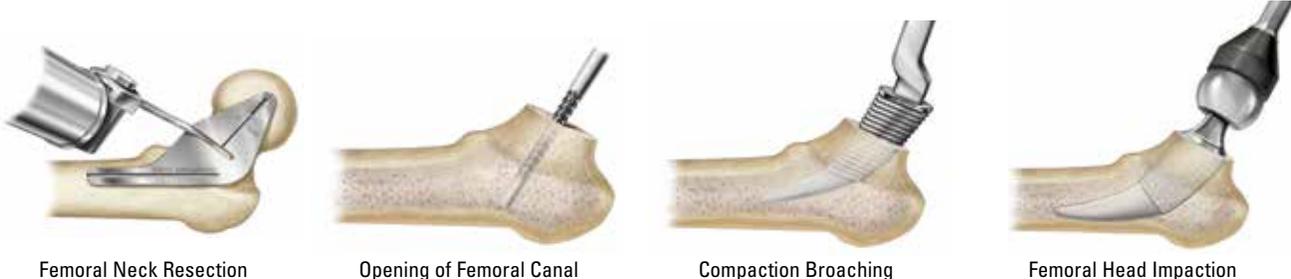
#### SCOPE

Stem Size	Standard Offset	Extended Offset
2	162-00-02	162-01-02
3	162-00-03	162-01-03
4	162-00-04	162-01-04
5	162-00-05	162-01-05
6	162-00-06	162-01-06
7*	162-00-07	162-01-07

\*Special Order Only.

#### OPERATIVE TECHNIQUE HIGHLIGHTS

The images below provide highlights of the efficient technique.



#### REFERENCES

1. Data on file at Exactech. 711-12-80 Titanium Plasma Spray Technical Profile.
2. Data on file at Exactech. TR-2013-071. Quantified Volume and Native Femoral Neck Preserved with Neck Preserving Stem Compared to Two Traditional Total Hip Arthroplasty Stems.

\*Laboratory tests are not necessarily predictive of clinical outcomes.

Exactech, as the manufacturer of this device, does not practice medicine, and is not responsible for recommending the appropriate surgical technique for use on a particular patient. Prior to use of this system, the surgeon should refer to the product package insert for comprehensive warnings, precautions, indications for use, contraindications and adverse effects.

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