TFN-ADVANCED™ Proximal Femoral Nailing System

Designed to reduce the risk of post-operative complications associated with hip fractures by providing **surgical options to enhance stability in poor bone, improved anatomic fit and increased implant strength.**

The TFNA system is also designed to provide a range of options to support surgical preferences and patient anatomies, including choice of augmentable blade or screw head elements, various locking options and a range of nail sizes.

EPIDEMIOLOGY

HIP FRACTURE RATES are expected to rise, from **4M** today to up to **6.3M** in **2050**[1]

HIP FRACTURES ARE FREQUENTLY SERIOUS OSTEOPOROTIC FRACTURES[2,3]

<50% have the same walking ability they had prior to the fracture

Mortality rates can be as high as **34%**

1 year after hip fracture[4]

CLINICAL COMPLICATIONS

AS MANY AS **8%** of patients experience **LOSS OF FIXATION OR CUT-OUT**

which frequently requires **REOPERATION**[5]

NON ANATOMICAL NAIL FIT such as

DISTAL CORTICAL IMPINGEMENT in up to **25%** of cases, which may lead to a **fracture at the distal nail tip** and subsequent revision surgery[16]

NAIL BREAKAGE may occur in as many as **5%** of patients and requires revision surgery[18]

DESIGN EVIDENCE

Head elements designed for **INCREASED RESISTANCE TO CUT-OUT***

HELICAL BLADE

COMPRESSES BONE — **3x** MORE DURING INSERTION[6]

Supporting clinical studies[7,8,9]

Greater **ROTATIONAL STABILITY** — **3x** MORE CYCLES TO FAILURE[10]*

Resistant to **VARUS COLLAPSE** — **60%** HIGHER LOAD TO FAILURE[10]*

AUGMENTATION

Increased resistance to **MIGRATION IN POOR BONE**

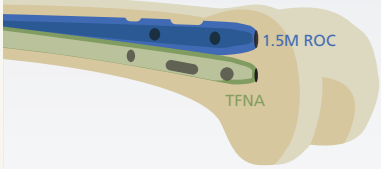
346% MORE CYCLES TO VARUS COLLAPSE[11,12]**

244% INCREASE IN RESISTANCE TO CUT-OUT[11,12]**

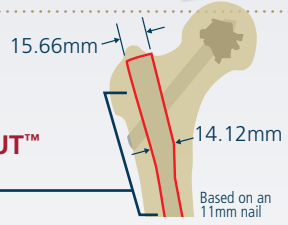
0 REVISIONS DUE TO MECHANICAL FAILURE

In three prospective multicenter trials[13-15]†

ANATOMIC 1.0M RADIUS OF CURVATURE based on a multiethnic 3D computational study[17]



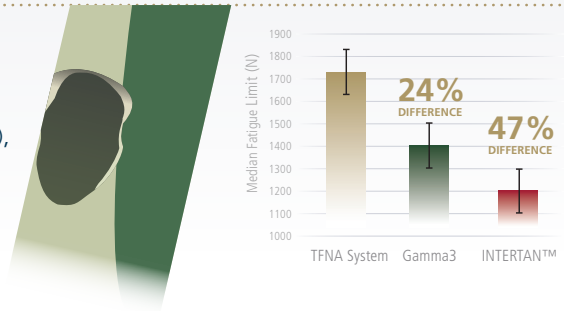
LATERAL RELIEF CUT™ DESIGN



& SMALL PROXIMAL DIAMETER

Preserves bone in insertion area due to reduced critical width

BUMP CUT™ Design combined with a unique high strength Titanium Alloy (TiMo), contributes to **improved implant fatigue strength,** in addition to a small proximal diameter[19]



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*Compared to a lag screw
**Compared to constructs with non-augmented head elements
† Data is for augmentation used with PFNA, a predecessor nailing system available outside of the United States
††Bench test results may not be indicative of clinical performance

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