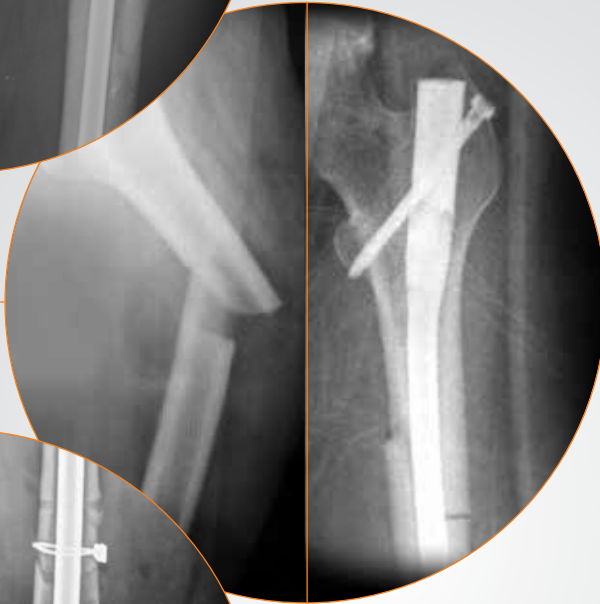
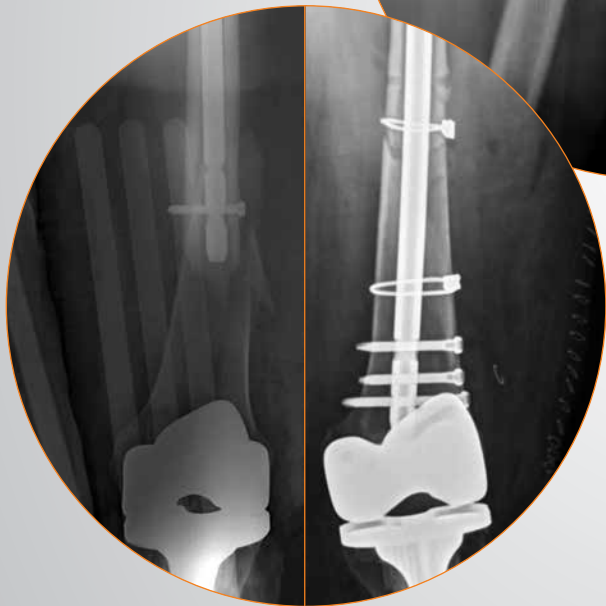


Proximal



Mid-shaft



Distal



Optimized versatility

Extending Trochanteric Antegrade
Nailing indications

 **smith&nephew**

TRIGEN[®]
META-TAN[®]

Trochanteric Antegrade Nail

Supporting healthcare professionals

Proximal femur fractures



Challenges

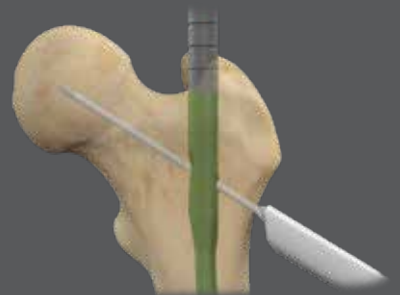
- Previous generation femoral antegrade nails do not provide continuous fracture compression
- Difficult to place two "separate" recon screws in the neck and head of the femur



TRIGEN[◊] META-TAN[◊] solution

Designed to provide versatile stability/fixation for proximal fractures:

- The Integrated Compression Screws eliminate the need for fracture dynamization by providing active compression with the option to create a fixed angle construct
- The Integrated Compression Screws require a single insertion portal eliminating the need to locate the optimal location for two "separate" recon screws



TRIGEN[◇] META-TAN[◇] proximal nail features



Stability to resist interfragmentary motion in the proximal femur

Integrated compression screws

- Gain and maintain compression
- Control rotation intraoperatively and postoperatively
- The unique thread form on the lag screw offers greater pull out strength compared to a traditional lag screw¹

Set screw (optional)

- Creates fixed angle construct



Trapezoidal proximal shape

Designed with more material on the lateral side of the nail where tensile forces are the greatest

Versatility to treat hip fractures in patients with good bone stock or smaller femoral canals

- Proximal dimensions dependent on nail diameter
- Combined Integrated Compression Screws diameter is 13.5mm

Nail Diameter	9mm	10mm	11.5mm	13mm
	12.7mm	12.7mm	12.7mm	14mm
	14.1mm	14.1mm	14.4mm	14.6mm

Mid-shaft femur fractures



Challenges

- Undersized nails fixed with perpendicular screws risk nail medialization
- Anatomical variability in femoral bows
- Appropriate femoral canal sizing



TRIGEN[◊] META-TAN[◊] solution

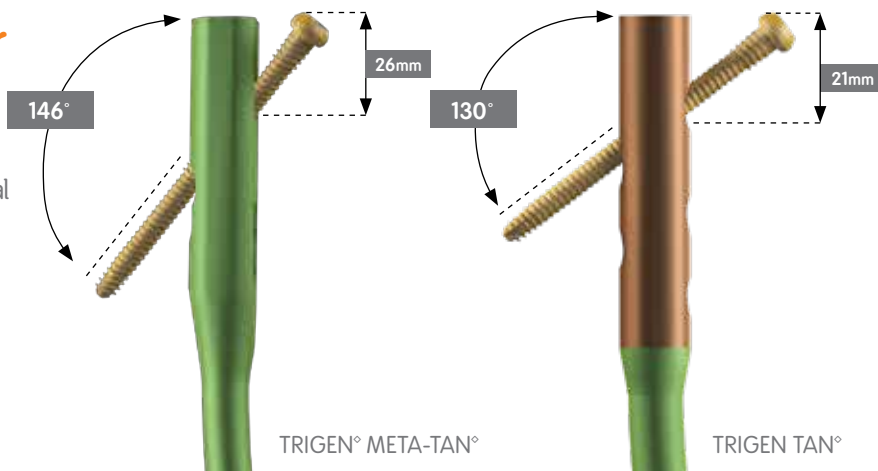
Designed to provide versatile stability/fixation for mid-shaft fractures:

- With an increased femoral mode screw angle, coupled with retroversion, the femoral screw locking option eliminates the possibility of proximal nail toggle, and reduces the risk of interfering with the femoral neck
 - Length dependent AP bows and the 9mm diameter option provide additional anatomical matching while reducing the risk of distal metaphyseal anterior impingement
-

Mid-shaft fractures

Stable fixation in the greater and lesser trochanter

The increased femoral mode screw angle and 12° of retroversion is designed to provide greater anatomical fixation in the greater to lesser trochanter without excessive countersinking of the nail.



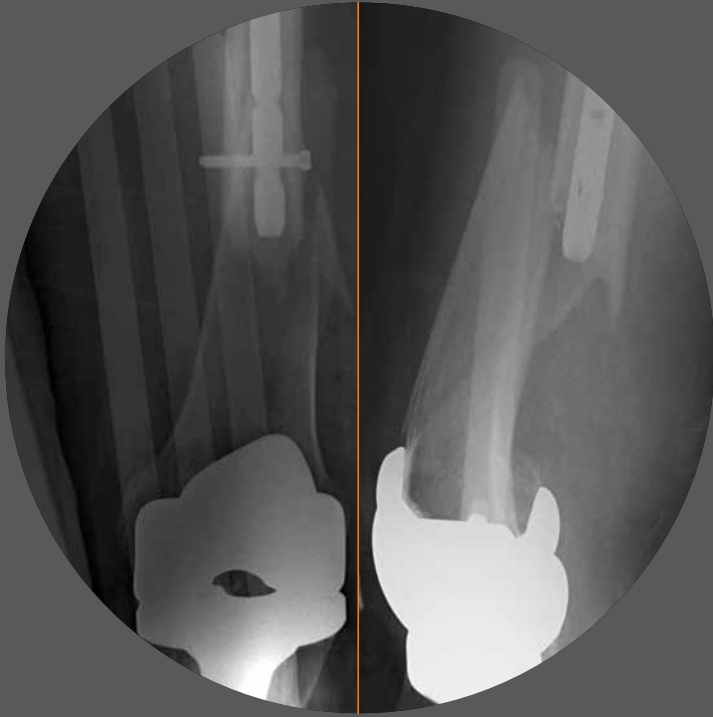
Versatile options for varying patient anatomy



Variable AP bows

To account for the natural curvature of both short and long femurs, the anterior bow radius increases as the nail gets longer

Distal femur fractures



Challenges

- Difficult to obtain adequate and stable purchase to treat simple and complex distal fractures of the femur
- Uniplanar fixation can lead to nail toggle and loss of biomechanical alignment



TRIGEN[◇] META-TAN[◇] solution

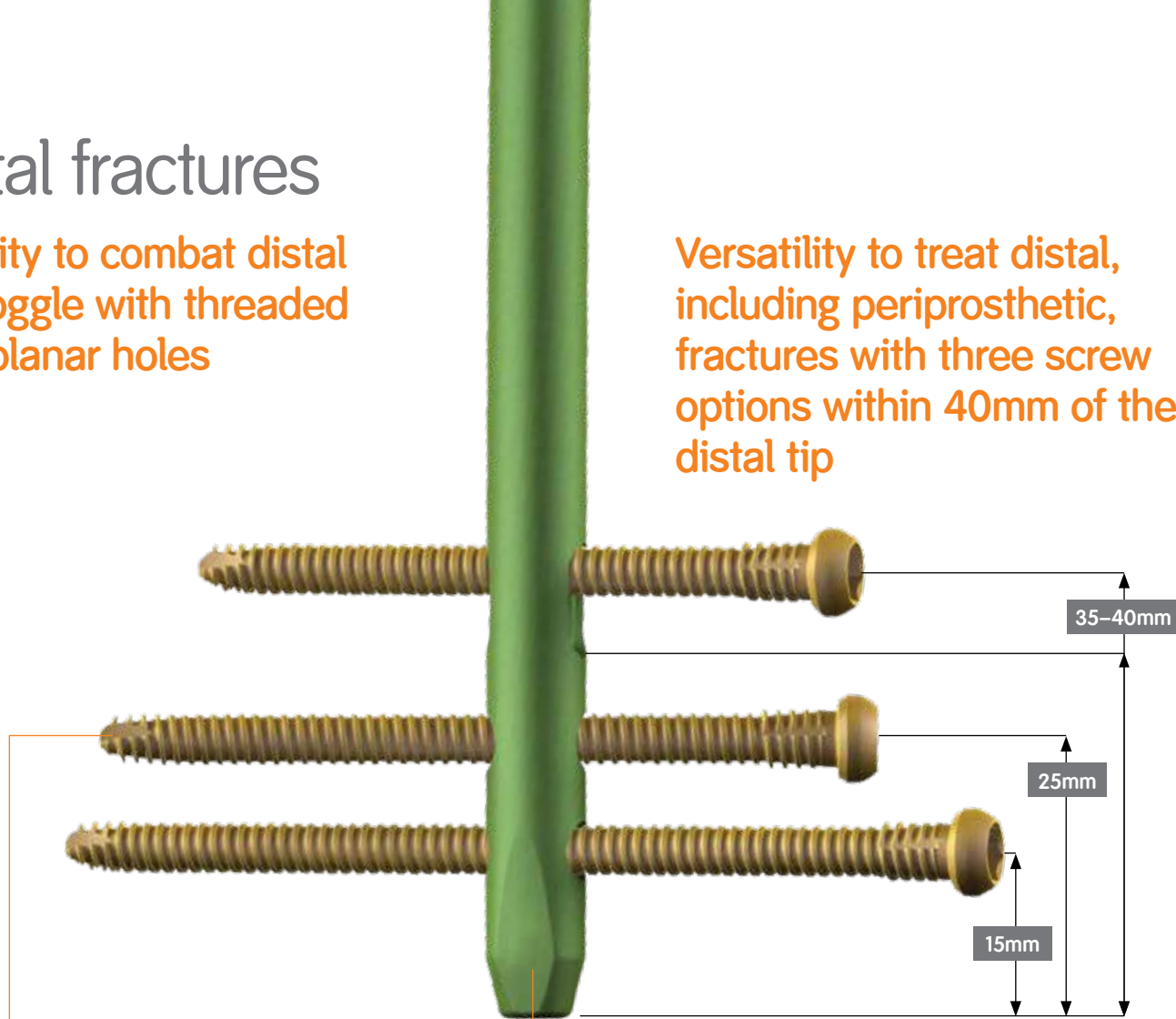
Designed to provide versatile stability/fixation for distal fractures:

- The multi-planar threaded distal locking holes prevent nail toggle and provide enhanced fixation when treating distal fractures of the femur
 - Femoral antegrade nail eliminates need to identify TKA type for treating periprosthetic fractures of the femur
-

Distal fractures

Stability to combat distal nail toggle with threaded multiplanar holes

Versatility to treat distal, including periprosthetic, fractures with three screw options within 40mm of the distal tip



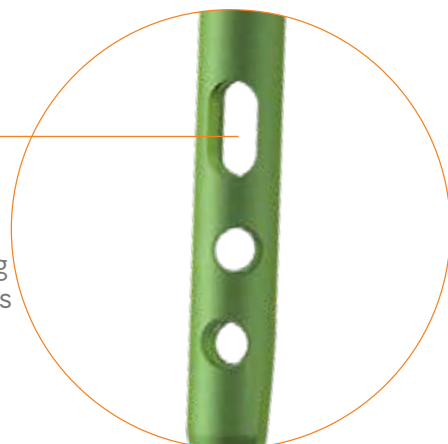
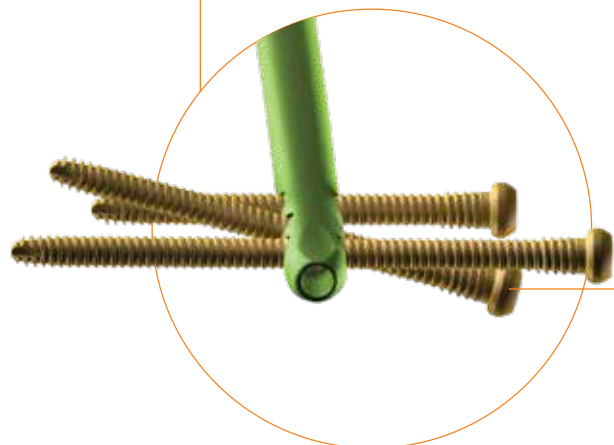
Beveled tip assists with insertion

15° off axis

- Aids to resist nail toggle within the femoral canal
- Allows fixation from posterolateral to anteromedial (easy C-Arm positioning)

Threaded dynamization slot

- Allows for 5mm of dynamization while resisting varus and valgus deformities





Optimized versatility

www.META-TAN.com

Smith & Nephew, Inc.
1450 Brooks Road
Memphis, TN 38116
USA

www.smith-nephew.com
®Trademark of Smith & Nephew.
©2018 Smith & Nephew.
01721 V2 01/18

Supporting healthcare professionals for over 150 years

Reference:

1. Axial Pullout Strength Evaluation of Two Prototype Lag Screw Designs, for Potential Use with the SURESHOT TAN System (OR-09-131)