The evidence is in...

smith&nephew

TRIGEN® INTERTAN®

Intertrochanteric Antegrade Nail

Lower

risk of implant failure and reoperation

Faster

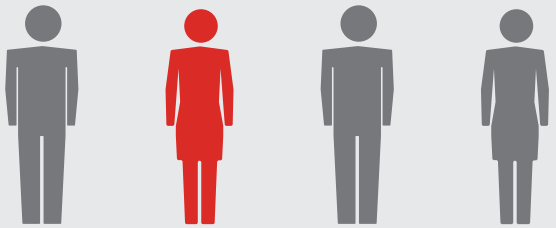
time to fracture union

High

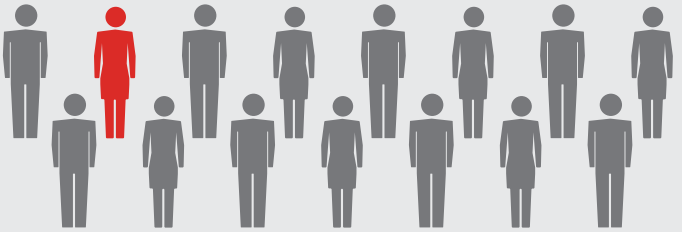
return to pre-fracture status

How satisfied are you with current hip fracture outcomes?

Around **1 in 4** hip fracture patients over the age of 65 die within 12 months[1]



Around 6.6% will require **reoperation** due to complications[15]



And for those who survive:

50% live with reduced ability to walk following fracture union[1]

29% decline in fine motor skills[3]

39% decline in self-reported health[3]

53% decline in mobility[3]

51% decline in daily living activities[3]

Your patients can enjoy life after a hip fracture

The evidence is in! Based on data from more than two-dozen published studies, the TRIGEN® INTERTAN® Intertrochanteric Antegrade Nail allows patients to experience:

Lower risk of implant failure and reoperation

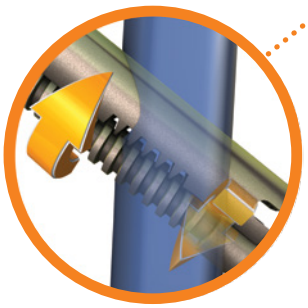
Faster time to fracture union

High return to pre-fracture status

Here's how it works

Maintain compression and eliminate Z-effect

Integrated screws thread together to generate push/pull forces that hold compression after instruments are removed and eliminate Z-effect



Control rotation during reduction

A worm gear mechanism converts rotation to active linear compression while stabilizing the medial fragment

Prevent periprosthetic fractures

A clothes pin distal tip is less rigid to decrease the stress riser and reduce the incidence of anterior thigh pain

Intertrochanteric rotational stability

The trapezoidal shape provides a pressfit in the metaphyseal region and positions more material on the lateral side of the nail where tensile/stretching forces tend to be greatest

Eliminate medial migration

The head of the compression screw pushes medially against the nail and unloads stress forces off the lateral wall

Challenge:

Postoperative complications

4% – 16% complication rates after proximal femur fractures[2,6–7,19]

The TRIGEN® INTERTAN® solution:

Lower risk

of implant failure and reoperation[4–5,8,13–15,17,22,24–26,28]

More than

4x lower

rate of reoperation

TRIGEN INTERTAN

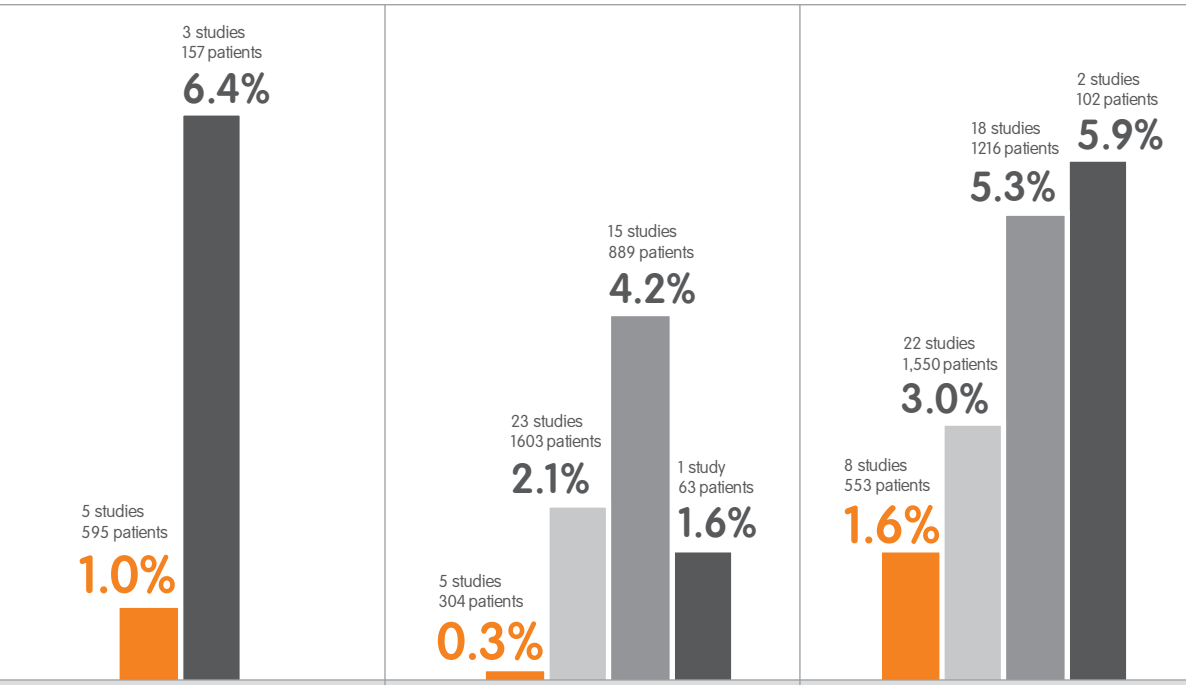
average **1.5%** [4–5,8,13–14,17,22,24–26,28]

All other hip fracture treatments*

average **6.6%** [15]

*In a systematic review of 19 randomized control trials (since 1999)

TRIGEN INTERTAN compared to two large meta-analyses of Gamma3 and Sliding Hip Screw (SHS):



Lower fixation failures

Lower nonunion rate

Lower cutout occurrence

*10 trials enrolling 985 patients[4-5,8,12,17,22,24-26,28]

**43 trials enrolling 6,911 patients[27]

***14 trials enrolling 2,003 patients[10]

Lower risk of implant failure and reoperation

Challenge:
Varus collapse

Varus collapse of the femoral head and neck → Lag screw cutout → Revision surgery

The TRIGEN® INTERTAN® solution:

Significantly less varus collapse[6,16,21]

84% less
initial rotation and varus collapse[6]

In a biomechanical simulated gait study comparing TRIGEN INTERTAN and Gamma3

2.5x less
varus collapse when compared to the single screw device[21]

In a retrospective clinical study comparing TRIGEN INTERTAN and Gamma3

Challenge:
Peri-implant fractures

Rigid distal tip → Secondary shaft fractures at the distal tip of the nail → Revision surgery

The TRIGEN INTERTAN solution:

Low risk of secondary femoral fractures with the use of a short nail[17,26]

Effective
in reducing the potential role of the tip of the short nail as a stress riser[26]

Quote taken from a single prospective comparative study

No
femoral shaft fractures[17]

In a single study with radiographic analysis of the TRIGEN INTERTAN nail at healing

Disclaimer: The results of in vitro simulation testing have not been proven to predict clinical performance.

Challenge:

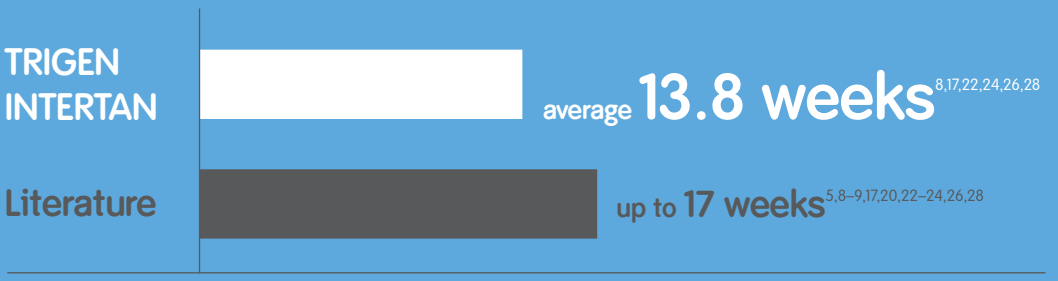
Delayed healing and non-unions

Insufficient stabilization → Excessive micromotion of the fracture site → Delayed healing and non-union

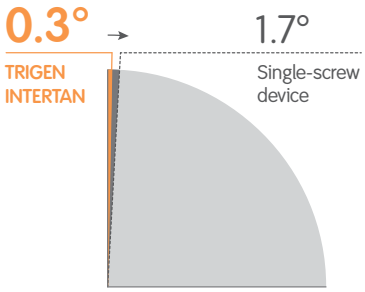
The TRIGEN® INTERTAN® solution:

Faster time to fracture union[5,8–9,17,20,22–24,26,28]

Fracture union up to **3 weeks faster**



Simulated gait

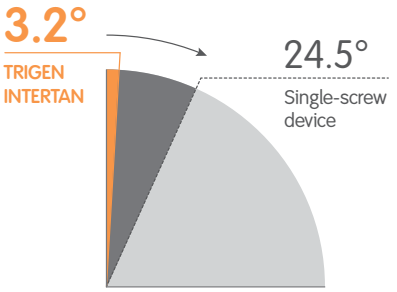


5x greater

initial rotational stability[6]

In a biomechanical simulated gait study comparing TRIGEN INTERTAN and Gamma3

Simulated chair rise

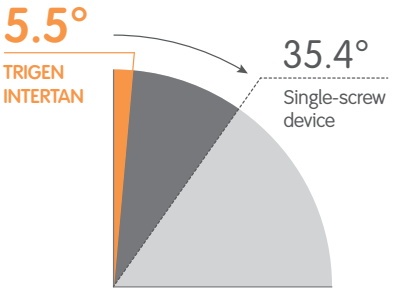


7x less

femoral head rotation[16]

In a biomechanical simulated chair rise study comparing TRIGEN INTERTAN and Gamma3

Simulated chair rise



7x reduction

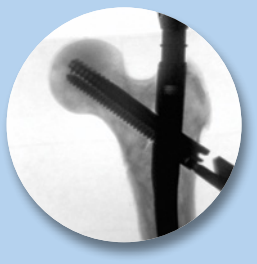
in maximum femoral head rotation[16]

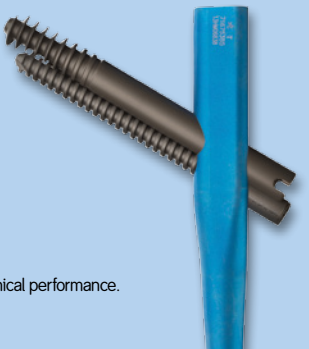
In a biomechanical simulated chair rise study at the end of 4x body weight loading or until failure

No non-unions

in radiographic analysis of the **TRIGEN INTERTAN** nail[5,17,26]

In three clinical studies of the TRIGEN INTERTAN nail





Disclaimer: The results of in vitro simulation testing have not been proven to predict clinical performance.

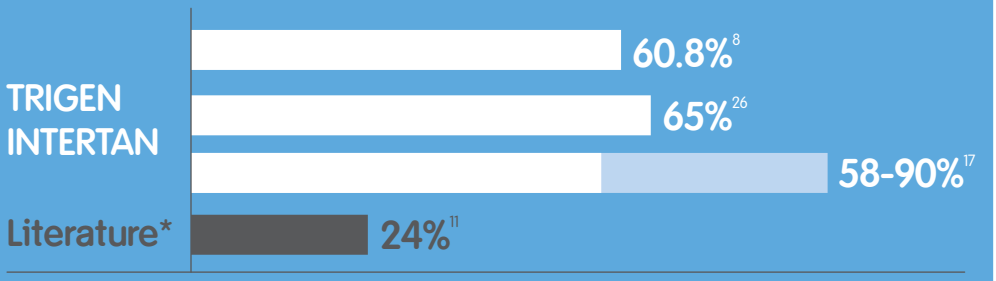
Challenge:
Femoral neck shortening

Femoral neck shortening → Decreases the moment arm of the abductors → Reduced patient function[18]

The TRIGEN® INTERTAN® solution:

High return to pre-fracture status[5,8,12,17,22,24,26,28]

Return to pre-fracture ambulatory status



*Based on a single prospective study of 594 patients

Statistically significant improvement in post-operative pain and mobility[17]

In a single prospective study of the TRIGEN INTERTAN

Low incidence of femoral neck shortening[17,18,21–22]

2x less femoral neck shortening[21]

In a retrospective, comparative clinical study of TRIGEN INTERTAN compared to Gamma3

Less screw backup, femoral shortening, and varus collapse[22]

In a prospective, randomized clinical study of TRIGEN INTERTAN compared to PFNA

No uncontrolled collapse of the neck[17]

In a single prospective study with radiographic analysis of the TRIGEN INTERTAN nail at healing

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