## ✚ Evidence in focus

**Publication summary:** Zhang C, et al. *J Int Med Res* (2018)*

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# Significantly lower postoperative failure rate with TRIGEN◊ INTERTAN◊ Intertrochanteric Antegrade Nail compared with Proximal Femoral Nail Antirotation (PFNA) for managing intertrochanteric femur fractures in elderly osteoporotic patients

## ✚ Plus points

**67.6%**
Relative reduction in postoperative failure rate with TRIGEN INTERTAN versus PFNA (p=0.004)

**Significant reduction in postoperative periprosthetic fracture rate** with TRIGEN INTERTAN versus PFNA (68.7%, p=0.028)

## Overview

- Retrospective, single-centre study comparing functional and radiographic outcomes in elderly, osteoporotic patients (mean age 72.3 years) from a consecutive cohort
- Patients received surgical treatment of primary intertrochanteric femur fractures with:
  - TRIGEN INTERTAN (n=162)
  - PFNA (n=165; DePuy Synthes, Warsaw, IN, USA)
- Postoperative failure was defined as periprosthetic fracture or revision of the nail, including conversion to arthroplasty
- Mean follow-up: 43.5 months

## Results

- TRIGEN INTERTAN demonstrated a significantly lower rate of postoperative failure compared with PFNA (p=0.004; Figure)
  - The incidence of postoperative periprosthetic fractures was significantly lower with TRIGEN INTERTAN compared with PFNA (2.5 vs 7.9%; p=0.028)
  - The incidence of revision following cut-outs was significantly lower with TRIGEN INTERTAN compared with PFNA (1.2 vs 5.5%; p=0.034)
- Mean Harris Hip Score improved significantly with TRIGEN INTERTAN over the first 12 months (p<0.001), with similar results for PFNA

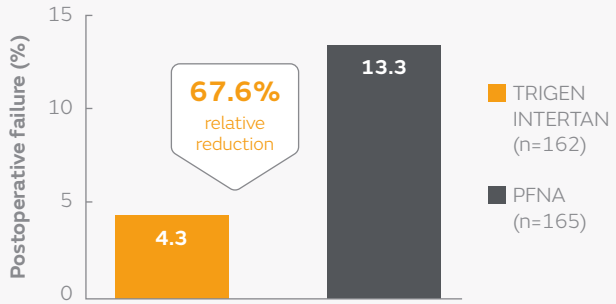


*Figure. Rate of postoperative failure by surgical treatment type*

## Conclusions

TRIGEN INTERTAN showed significantly better outcomes in managing osteoporotic intertrochanteric femur fractures in elderly patients in terms of periprosthetic fracture and revision compared with PFNA.

## Citation

*Zhang C, Xu B, Liang G, et al. Optimizing stability in AO/OTA 31-A2 intertrochanteric fracture fixation in older patients with osteoporosis. *J Int Med Res.* 2018;46(5):1767–1778.

Available at: Journal of International Medical Research

Smith & Nephew, Inc. 1450 Brooks Road, Memphis, TN 38116, USA.
25383-en V1 0820. Published August 2020. 