

## Significantly shorter length of stay and higher return to pre-fracture status with TRIGEN<sup>®</sup> INTERTAN<sup>®</sup> compared with a single lag screw cephalomedullary nail

Patients with intertrochanteric fractures treated with INTERTAN also showed reduced pain and better functional outcomes at six months, according to a prospective randomised trial



### Study design

- A prospective, randomised, single-centre study of patients with intertrochanteric fractures who received either INTERTAN integrated screws (55 patients; mean age, 81.6 years) or Gamma3™ (Stryker) single lag screws (49 patients; mean age, 82.0 years)
- Patients were followed up at six weeks, three months, six months, and five years postoperatively



### Key results

- Patients receiving INTERTAN had significantly shorter ( $p=0.03$ ) hospital stays than those receiving a single lag screw (Figure)
- As measured by Harris Hip Score, INTERTAN showed improved pain at six weeks (26.5), three months (35.8), and six months (36.7) postoperatively
- At six months:
  - All patients in the INTERTAN group recovered their pre-fracture status (as defined by SF-36), compared with just 80% of the single lag screw group ( $p<0.001$ )
  - The INTERTAN group had a significant improvement ( $p<0.005$ ) in recovery of functional level at six months compared with the single lag screw group (24.4 vs 20.1; as defined by modified Harris Hip Score)

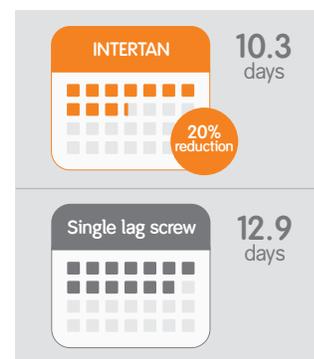


Figure. Mean hospital stay



### Conclusion

One of the leading objectives in the treatment of intertrochanteric fractures is the achievement of early mobilisation and recovery. Results from this prospective, randomised trial indicate that intertrochanteric fixation using INTERTAN led to a significantly shorter hospital stay, improved functional outcomes, and higher return to pre-fracture status at six months, compared with a single lag screw cephalomedullary nail. Differences between the groups were not statistically significant at the final five-year follow up.



### Considerations

- As is common with studies in an elderly population in which mortality rates are high, there was a notable loss to follow up; only 31.7% of the overall study population was available for final five-year follow up



### Study citation

\*Berger-Groch J, Rupprecht M, Schoepper S, Schroeder M, Rueger JM, Hoffmann M. Five-year outcome analysis of intertrochanteric femur fractures: a prospective randomized trial comparing a 2-screw and a single-screw cephalomedullary nail. *J Orthop Trauma*. 2016;30:483-488.