

TRIGEN[®] INTERTAN[®] Intertrochanteric Antegrade Nail achieves improved clinical and patient outcomes at a lower cost compared to single screw nails for fixation of unstable intertrochanteric (IT) fractures

TRIGEN INTERTAN nail could save an estimated \$2,700 per patient due to a reduced risk of revision and other complications



Study overview

- An economic model from a US payer perspective was developed comparing TRIGEN INTERTAN nail for the internal fixation of unstable IT fractures to single screw nails: Gamma3™ (Stryker) or PFNA™ (DePuy Synthes)
- Rates of revision and complications were derived from a meta-analysis comparing TRIGEN INTERTAN nail to single screw nails.¹ Previous economic analyses informed costs and the negative impact of revision on patient health-related quality of life



Key results

- Within one year of care, TRIGEN INTERTAN nail saved up to \$2,700 per patient versus single screw nails (Figure 1)
- Per patient estimated mean cost savings with TRIGEN INTERTAN nail were \$1,652 compared to Gamma3 and \$3,280 versus PFNA
- The model estimated greater gains in quality-adjusted life years (QALYs) and avoidance of complications for TRIGEN INTERTAN nail versus single screw nails (Figure 2)

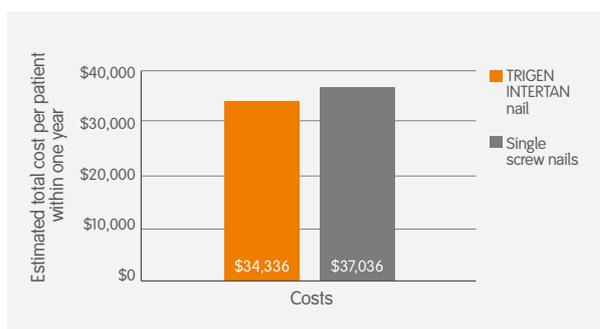


Figure 1. Total cost per patient within one year of care.

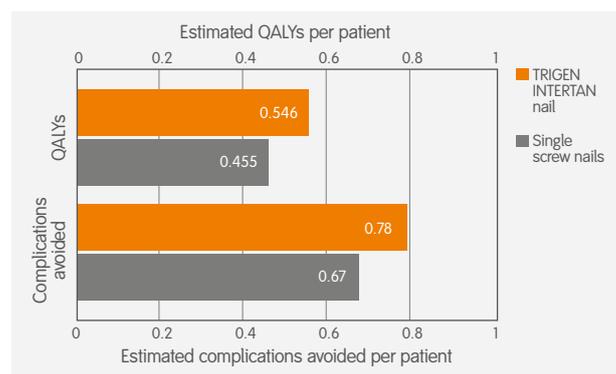


Figure 2. QALYs and complications avoided per patient.



Conclusion

TRIGEN INTERTAN nail is cost-saving and results in improved clinical outcomes versus single screw nails, and its adoption could help clinicians and policy makers to provide quality healthcare with falling budgets.



Considerations

- Although previous economic studies have found cephalomedullary nail fixation to be cost-effective for unstable fractures compared to sliding hip screws, this is the first study to compare different cephalomedullary nails



Study citation

*Nherera LM, Trueman P, Horner A, Johnstone AJ, Watson TJ, Fatoye FA. Comparing the costs and outcomes of an integrated twin compression screw nail (ITCS) with standard of care using a single lag screw or a single helical blade cephalomedullary nail in patients with intertrochanteric hip fractures. *J Orthop Surg Res*. 2018;13:217.

Available at: [Journal of Orthopaedic Surgery and Research](#)

References

- Nherera LM, Trueman P, Horner A, Johnstone AJ, Watson TJ. A meta-analysis of integrated compression screw compared to single screw nails using a single lag screw or single helical blade screw for intertrochanteric hip fractures. *Rheumatol Orthop Med*. 2018;3:1–10.