Evidence in focus

Arthroplasty registry analysis

SmithNephew

POLAR3^o Total Hip Solution delivers higher than class average patient satisfaction and improvements in PROMs with excellent mid-term survivorship

Overview

- Bespoke implant report produced by the UK NJR (National Joint Registry) summarising usage and outcomes associated with POLAR3, the combination of POLARSTEM^{\$}, OXINIUM^{\$} femoral head, highly cross-linked polyethylene (XLPE) bearing and R3^o cup
- The analysis is based on data collected by the NJR and PROMs data collected by NHS Digital*
- Reported POLAR3 usage between July 2007 and August 2021 for
 - 16,633 total hip replacements (THR)
 - 15,107 total patients
 - 374 implanting surgeons at 91 centres

Results

- Patients with POLAR3 were significantly more satisfied (p<0.001; Figure) and reported signficantly better PROMs (p<0.001; Table) than the class average for uncemented stems
- Patients with POLAR3 reported significantly better success outcomes (p<0.001) than the class average for uncemented stems when rating their pre-operative and 6-month postoperative problems
- Survivorship for POLAR3 at 10 years was 97.6%

Table. Adjusted health gain scores (95% CI) at 6 months post THR[†]

PROMs	POLAR3	All NJR uncemented stems	p value
Oxford Hip Score	23.1 (22.9–23.3)	21.7 (21.6–21.7)	
EQ-5D	0.473 (0.466–0.479)	0.444 (0.443-0.445)	p<0.001
EQ-VAS	14.7 (14.2–15.2)	12.4 (12.3–12.5)	

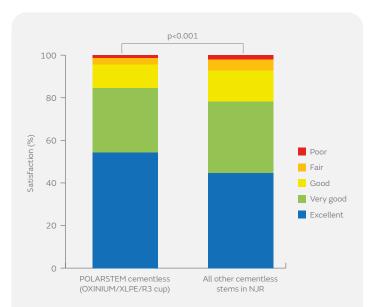


Figure. Answer to 6-months general health question: How would you describe the results of your operation? Scores are not case-mix adjusted

Conclusions

POLAR3 delivers significantly higher patient satisfaction, success outcomes and improvements in PROMs compared to the class

Considerations

The data used for this analysis was obtained from the NJR Supplier Feedback System. The Healthcare Quality Improvement Partnership ('HQIP') and/or the National Joint Registry ('NJR') take no responsibility for the accuracy, currency, reliability and correctness of any data used or referred to in this report, nor for the accuracy, currency, reliability and correctness of links or references to other information sources and disclaims all warranties in relation to such data, links and references to the maximum extent permitted by legislation.

[†]Using case-mix adjusted scores allows for a more accurate comparison between groups by taking into account variations in patient characteristics.

Source: National Joint Registry for England, Wales and Northern Ireland: POLARSTEM cementless (OXINIUM/XLPE/R3 cup) implant bespoke summary report. 5 November 2021. Copy available upon request.