

POLARSTEM[◇] with R3[◇] is the best performing stem-cup combination in the world's largest national joint registry¹



As the demand for total hip arthroplasty (THA) continues to grow due to an aging population, longer and more active lives and a propensity to treat younger patients, so too does the incidence of THA revisions.^{2,3}

Patients who undergo revision THA often have increased intra-operative technical difficulties, post-operative complications and poorer outcomes requiring higher resource utilisation than primary THA.⁴⁻⁶ Strategies to reduce the clinical and economic burden of revision THA could include the use of primary implants with lower cumulative revision rates.^{3,4}

POLARSTEM in combination with R3 has demonstrated the highest survivorship at 7 years regardless of fixation method¹

Highest survivorship



99.02%

for any cup-stem combination regardless of fixation method¹

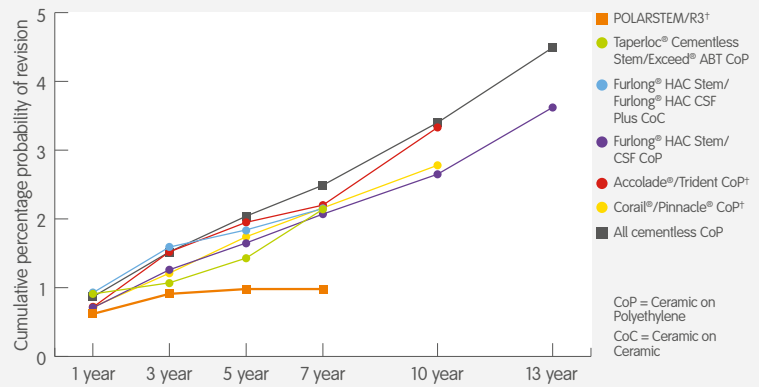
Lowest revision rate



0.98%

for any cementless cup-stem combination¹

Cumulative revision rates for the six most implanted cementless THA prostheses by best performing bearing combinations¹



POLARSTEM Cementless Femoral Component: NJREW Implant Summary Report⁷

At 8 years, compared to class average (all bearing types), POLARSTEM demonstrated:

46% reduction in femoral revisions – all reasons (p<0.001)⁷

61% reduction in stem aseptic loosening (p<0.01)⁷

36% reduction in dislocation/subluxation (p<0.05)⁷

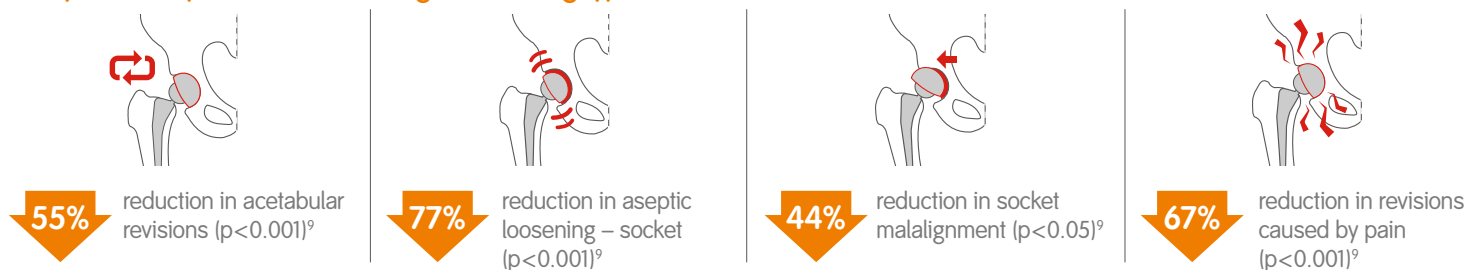
55% reduction in revisions caused by pain (p<0.01)⁷

A reduction in pain has been shown to correlate with increased patient satisfaction⁸

41% After exclusion of Metal-on-Metal, POLARSTEM still showed a significant 41% reduction in femoral revision rates when compared with the class average for cementless THA (p<0.001)⁷



R3 Cementless Acetabular Component: NJREW Implant Summary Report⁹

At 8 years, compared to class average (all bearing types), R3 demonstrated:



45% After exclusion of Metal-on-Metal, R3 still showed a significant 45% reduction in acetabular revision rates when compared with the class average for cementless THA ($p < 0.001$)⁹

Results from recent studies support the stand-out survivorship trends seen in the NJREW

 <p>Cyres et al, 2018¹⁰ 99.1% stem survivorship at 10 years 502 THAs with POLARSTEM femoral component and POLARCUP[®] acetabular component</p>	 <p>Teoh et al, 2018¹¹ 98.89% cup survivorship at 5 years 293 THAs with R3 acetabular component 97% (n=283) cementless THA with POLARSTEM femoral component 3% (n=10) hybrid combination</p>
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POLAR3: Different by design

The unique design features of POLARSTEM, R3 and VERILAST[®] may translate into the clinical benefits reported in the registry

<p>POLARSTEM Cementless Stem System</p>  <p>15 years of clinical heritage</p> <ul style="list-style-type: none"> • 7A* ODEP rating¹² • >250,000 implantations <p>Unique design Widened proximal taper providing stability designed to reduce the incidence of subsidence^{13,14}</p> <p>The shortened stem length and narrow distal tip allow for ease of implantation through any surgical approach^{15,16}</p> <p>Advanced coating The stem design incorporates the advanced surface roughness of Titanium Plasma spray with a hydroxyapatite coating¹⁷</p>	<p>R3 Acetabular System</p>  <p>11 years of clinical heritage</p> <ul style="list-style-type: none"> • 7A* ODEP rating¹² • >1 million implantations <p>STIKTITE[®] stability When compared with more traditional porous coatings, STIKTITE coating has greater porosity providing a higher coefficient of friction for an immediate “scratch-fit” feel and better initial implant fixation^{18,19}</p> <p>Improved initial fixation limits micromotion potentiating enhanced bony ingrowth^{18,19}</p>	<p>VERILAST Technology for Hips</p>  <p>14 years of clinical heritage</p> <ul style="list-style-type: none"> • >1 million implantations of OXINIUM[®] components <p>Excellent wear performance The exclusive combination of OXINIUM[®] oxidized zirconium alloy and highly cross-linked polyethylene has excellent wear performance in laboratory and clinical studies²⁰⁻²³</p> <p>Low levels of taper corrosion OXINIUM implants have been shown to undergo substantially lower levels of taper corrosion compared to metal femoral heads^{24,25}</p> <p>Biocompatibility The OXINIUM material contains very low levels of the metals nickel, cobalt and chromium compared to cobalt chromium molybdenum implants^{26,27}</p> <p>Patients who may not tolerate other bearing materials may tolerate an OXINIUM component²⁸⁻³⁰</p>
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