BioSpectrum the business of Bio & Health Sciences ASIA EDITION

Smith+Nephew launches hip replacement surgery tool in Japan

20 September 2022 | News

Features proprietary OXINIUM DH material; eliminates Cobalt Chrome alloy reducing wear and corrosion risks

UK-based Smith+Nephew has launched its OR3O Dual Mobility System for use in primary and revision hip arthroplasty (hip replacement surgery) in Japan. Compared with traditional solutions, dual mobility implants have a small diameter femoral head that locks into a larger polyethylene insert - increasing stability, reducing dislocation risk, and offering improved range of motion.

While most competitive devices utilize a Cobalt Chrome (CoCr) liner along with CoCr or ceramic head balls, OR3O incorporates Smith+Nephew's latest advanced bearing surface, OXINIUM DH, for its liner and proprietary OXINIUM on XLPE for its femoral head and polyethylene inserts. This eliminates both the modular CoCr liner and/or CoCr head ball from the construct - reducing wear and corrosion risks that have been associated with the alloy.

OXINIUM DH (Diffusion Hardened) is a unique variation of Smith+Nephew's OXINIUM Technology platform that increases the depth of hardening through an additive manufacturing process.

The modular dual mobility segment was introduced to Japan in 2013 and has continued to grow globally. Post-operative dislocation is the second most common reason for revision of a total hip replacement globally and remains a serious concern for surgeons when performing total hip arthroplasty. Studies have shown dual mobility is uniquely positioned to manage dislocation, better than metal-on-metal or ceramic-on-ceramic large head series.