Knee implant technology that goes the distance

Smith-Nephew

OXINIUM^{\$} Oxidized Zirconium Your knee implant is made with **OXINIUM**° **Oxidized Zirconium**, the award-winning¹ metal alloy available only from Smith+Nephew. OXINIUM implants are designed for strength and durability, and to give patients added confidence in their implant choice. Here's how OXINIUM implants differ from the rest:



Trusted wear performance

The surface of OXINIUM implants is more than **twice as hard and twice as scratchresistant** as the surface of standard implants (those made with cobalt chrome). This helps OXINIUM implants remain strong and durable over time, giving your implant an **excellent wear performance**.²⁻⁵



Biocompatible construction

OXINIUM implants contain nearly **zero amounts of nickel, cobalt and chromium** – the three metals most likely to cause issues in joint replacement patients. Standard implants (those made with cobalt chrome) contain much larger amounts of those metals.⁶⁻⁸



Real life results

OXINIUM implants have been used in **millions of joint replacement surgeries**, so you can have confidence in your OXINIUM knee implant. In fact, one study showed that 10 years after surgery, **98% of OXINIUM knee implants were functioning without need of revision**.^{9*}

*using OXINIUM GENESIS° II implants

Ask your surgeon about the OXINIUM Technology in your knee implant and visit **RediscoverYourGo.com/OXINIUM** to learn more.

References

2005 ASM International Engineering Materials Achievement Award.
Sheth NP, Lementowski P, Hunter G, Garino JP. Clinical applications of oxidized zirconium. J Surg Orthop Adv. 2008;17(1):17-26.
Long M, Riester L, Hunter G, Nano-hardness Measurements of Oxidized Zr-25Nb and Various Orthopaedic Materials. 24th Annual Meeting of the Society for Biomaterials. April 22-26, 1998.
Lee JK, Maruthainar K, Wardle N, Haddad F, Blunn GW. Increased force simulator wear testing of a zirconium xide total knee arthroplasty. Knee. 2009;16(4):269-274.
Shapannagari R, Hines G, Sprague J. Long-term Wear Performance of an Advanced Bearing Technology for TKA. Poster presented at: ORS 2011 Annual Meeting.
A Halba N, Merritt K, Jacobs JJ. Metal Sensitivity in Patients with Orthopaedic Implants. JBJS. 2001;83(3):428-436.
A KTM International Standard Specification for Wrought Zirconium-2.5 Niobium Alloy Gro Surgical Implant Applications (UNS R0901) Designation: F 2384 - 10.
A STM International Standard Specification for Cobalt-28 Chromium-6 Molybdemum Alloy Castings and Casting Alloy for Surgical Implants (UNS R30075): Designation: F 75 – 12.
Innocenti M, Matassi F, Carulli C, Nistri L, Civinini C. Oxidized zirconium femoral component for TKA: A follow-up note of a previous report at a minimum of 10 years. The Knee. 2014;21:858–861.

Important safety information:

Not all patients are candidates for Smith+Nephew products. Knee replacement surgery is intended to relieve knee pain and improve knee functions. However, implants may not produce the same feel or function as your original knee. There are potential risks with knee replacement surgery such as loosening, fracture, dislocation, wear and infection that may result in the need for additional surgery. Longevity of implants depends on many factors, such as types of activities and weight. Do not perform high impact activities such as running and jumping unless your surgeon tells you the bone has healed and these activities are acceptable. Early device failure, breakage or loosening may occur if you do not follow your surgeon's limitations on activity level. Early failure can happen if you do not guard your knee joint from overloading due to activity level, failure to control body weight or accidents such as falls.

Talk to your doctor to determine what treatment may be best for you. The information listed in this brochure is for informational purposes and is not meant as medical advice. For more information, please talk to your surgeon or visit RediscoverYourGo.com.