



**VERILAST<sup>◇</sup>**

Oxidized Zirconium with XLPE

# The perfect equation for hips



**OXINIUM<sup>◇</sup>**  
Oxidized Zirconium  
(proprietary ceramicised metal)



**XLPE**  
(Smith & Nephew  
unique formula)



**VERILAST<sup>◇</sup>**  
for Hips  
(Smith & Nephew Technology)

*Ceramicised metal has unmatched survivorship versus all other bearing options.*

VERILAST Technology for Hips  
answers all of your concerns

Fracture > > > > > >

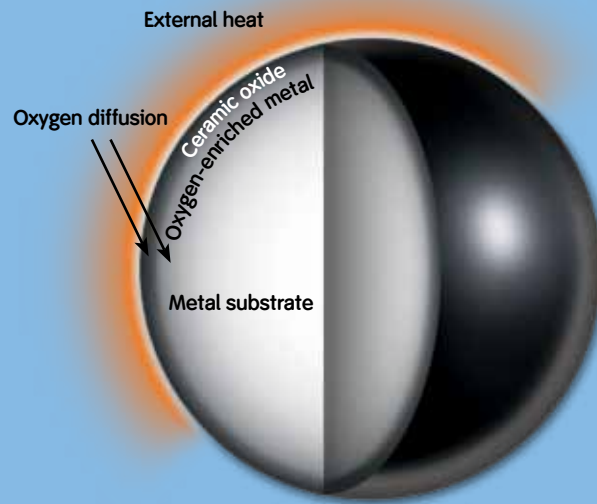


Metal allergies > > >

Osteolysis > > > > >

### VERILAST® Technology for Hips: no ceramic type fracture, chipping or squeaking

The ceramicised surface of OXINIUM® heads is not a coating, so it cannot chip or flake. The original metal surface is transformed into a ceramic through thermal processing – it is not a coating. As a result, OXINIUM material provides ceramic-like wear properties without the ceramic-like fracture risk.<sup>1,2,3</sup>



Method of producing OXINIUM heads

### VERILAST Technology for Hips: a biocompatible solution for metal-sensitive patients

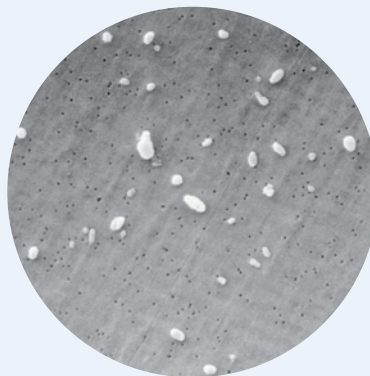
Some patients are more sensitive to metal implants. Nickel allergy has been demonstrated in up to 20% of patients with well-functioning implants and up to 55% of patients with poorly functioning implants.<sup>6</sup>



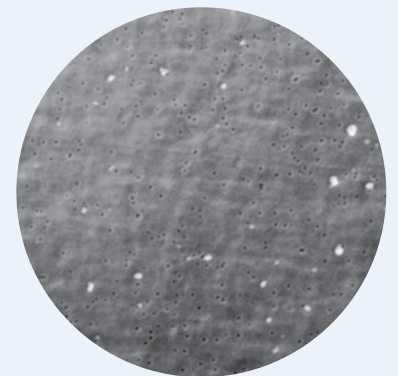
Metal sensitivity skin rash reaction to an orthopaedic implant

### VERILAST Technology for Hips: lower risk of osteolysis

Smith & Nephew XLPE acetabular liners utilize a unique formula to produce less wear particles than other cross-linked polyethylenes.<sup>12,13,14</sup> When combined with OXINIUM heads, VERILAST Technology for Hips produces less wear debris than XLPE with standard CoCr heads.



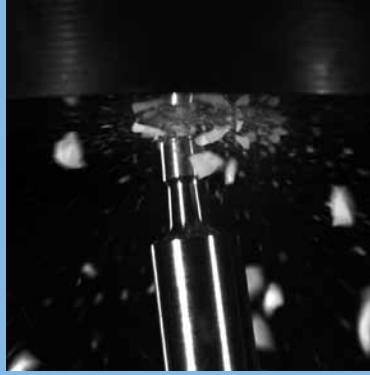
Wear debris from roughened CoCr on XLPE



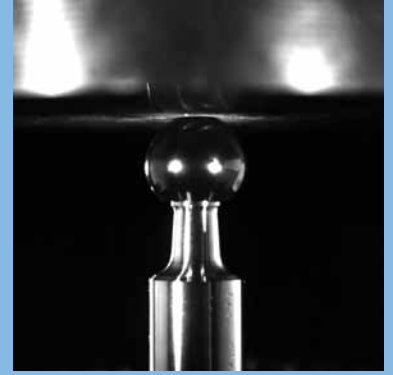
Wear debris from roughened VERILAST Technology for Hips

The ceramicised surface of OXINIUM® heads is integral with the metal alloy which allows OXINIUM heads to provide ceramic wear performance without the risk of fracture.<sup>2,4,5</sup>

Whether it is fracture, chipping or squeaking that you are concerned about, VERILAST® Technology for Hips address all of these concerns.



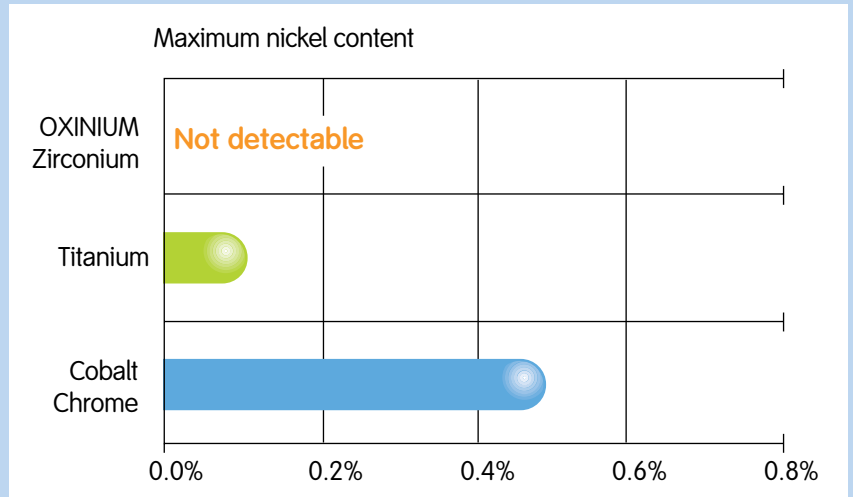
Ceramic heads fracture



OXINIUM heads do not fracture

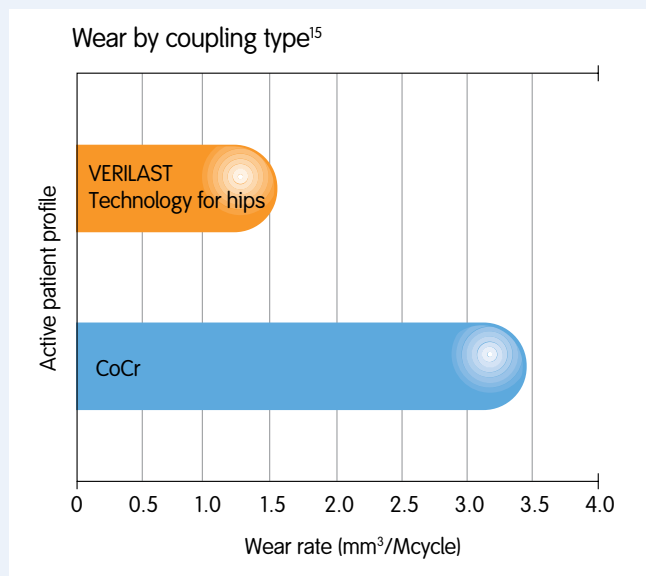
OXINIUM material has no detectable nickel content. Compared to the traditional metal used in hip implants, the Zirconium and Niobium contained in OXINIUM material are more biocompatible. This makes VERILAST Technology for Hips an appropriate choice for patients with metal sensitivities.<sup>7,8,9,10,11</sup>

Whether it's metal sensitivity or metal ions you are concerned about, VERILAST Technology for Hips on XLPE liners address both of these issues.



Simulator results utilizing the active high demand patient profile demonstrate that VERILAST Technology for Hips outperforms CoCr heads on XLPE. OXINIUM heads minimize the material-related risks associated with other advanced bearings, while meeting the requirements of active patients.

Whether it is the demands of active patients or prosthesis longevity that you are concerned about, VERILAST Technology for Hips is a great choice.<sup>16</sup>



## Choose VERILAST<sup>®</sup> Technology

As an orthopaedic surgeon, you have a variety of options when choosing a hip implant best suited to your patients. However, you also deal with an unfortunate list of tradeoffs with most bearing couples. Then there's VERILAST Technology for Hips. The coupling of OXINIUM<sup>®</sup> material on XLPE is the only technology that eliminates the concerns faced with other bearing combinations.

- No risk of ceramic type fracture, chipping or squeaking
- Biocompatible solution for metal sensitive patients
- Less polyethylene wear debris compared to standard cobalt chrome heads

In addition, OXINIUM<sup>®</sup> heads and XLPE liners are available in a wide variety of head sizes and neck offsets, which allow you the intraoperative flexibility to help restore a full range of motion.



## References

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