



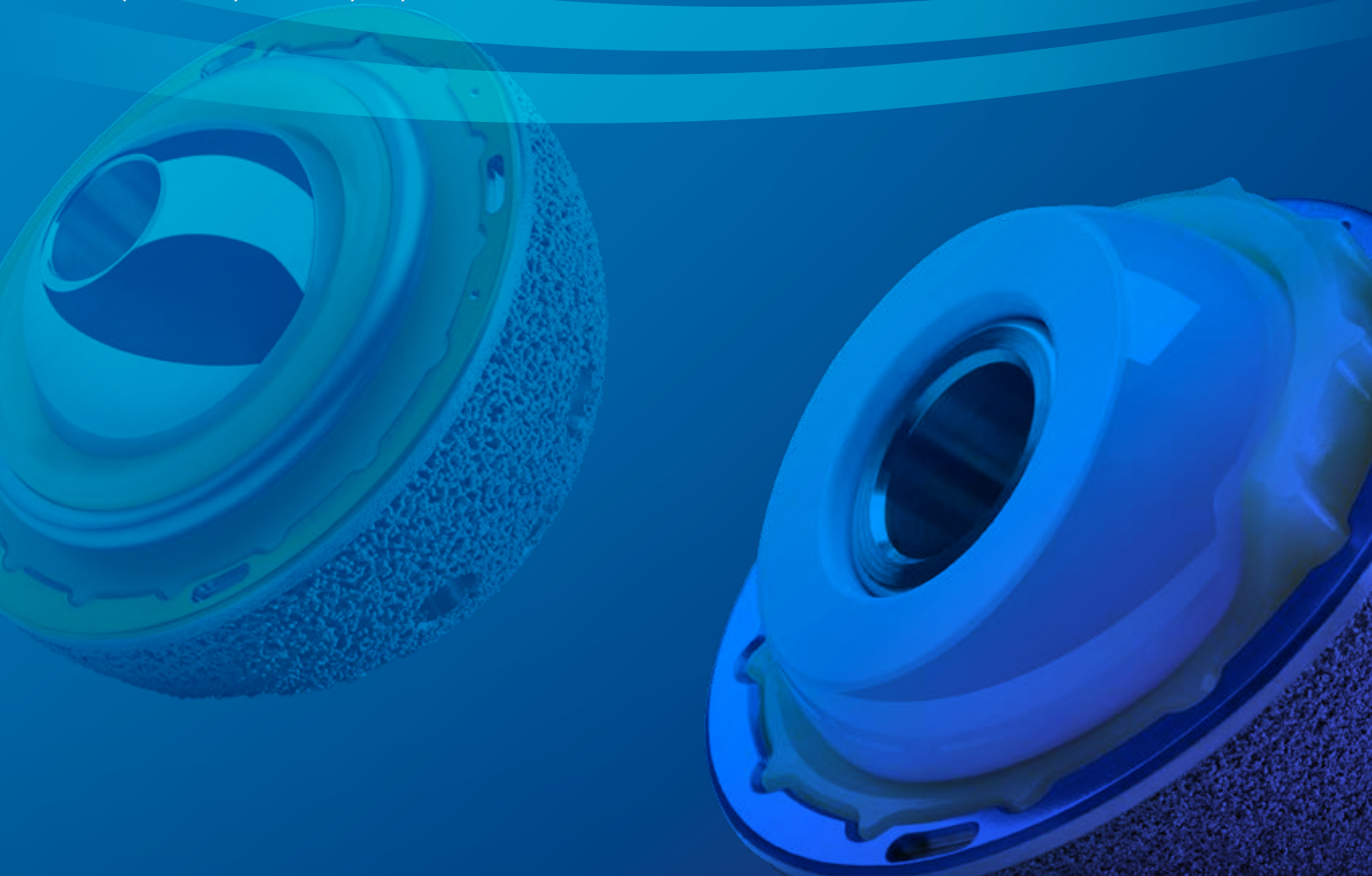
G7[®]
Acetabular System

SIMPLICITY. EFFICIENCY. PERFORMANCE.

The G7 acetabular system is specifically designed to simplify implant and instrument delivery for optimized operative efficiency and maximized clinical performance.

The interchangeability of the system enables you to use any liner with any shell, with consistent sizes throughout the system while providing offerings that cover the full continuum of constraint.

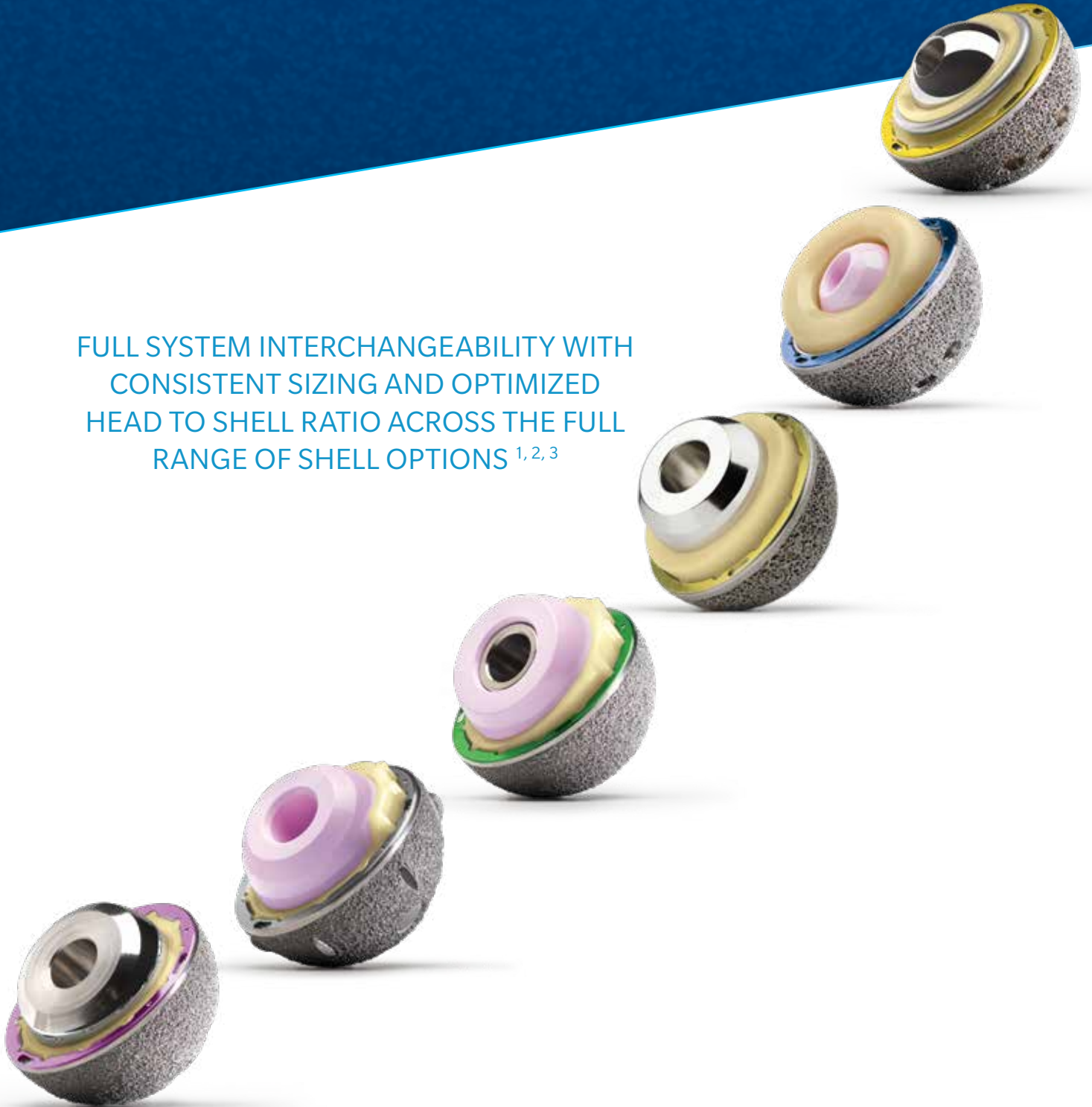
With a comprehensive implant offering and full system interchangeability, G7 maximizes treatment options through a highly flexible, system-based approach to patient specific hip replacement.



COMPREHENSIVELY SIMPLE

THE G7 ACETABULAR SYSTEM OFFERS THE LARGEST
RANGE OF SIZING COMBINATIONS

FULL SYSTEM INTERCHANGEABILITY WITH
CONSISTENT SIZING AND OPTIMIZED
HEAD TO SHELL RATIO ACROSS THE FULL
RANGE OF SHELL OPTIONS ^{1,2,3}



DUAL MOBILITY

PROVIDING STABILITY AND HIGH RANGE OF MOTION
WITHOUT THE NEED TO CONSTRAIN THE HEAD



Reduced Wear

Smaller diameter heads, like the inner head in this construct, have been clinically proven to lead to lower rates of wear ¹¹

Seating and Alignment

Hard bearing inserter ring helps ensure the CoCr liner is aligned properly during implantation to help limit micro-motion

Dislocation Resistance

Large diameter heads, like the polyethylene bearing in this construct, have been clinically shown to increase jump height which makes it more difficult for the head to dislocate ^{4, 14, 15}

Stability

Optimized 40mm bearing to 50mm shell ratio with option to convert to a constrained liner if needed

FREEDOM CONSTRAINED

DESIGNED TO COUNTER THE DISTRACTIVE FORCES
THAT CAN LEAD TO RECURRENT HIP DISLOCATION

Simplified Reduction

Circumferential flats on Freedom heads allow for in-vivo reduction and pre-assembled Freedom® liners and rings

Enhanced Constraint

Preassembled constraining ring increases resistance to lever-out forces without need to assemble in-vivo



Reduced Risk of Impingement and Instability

Increased ranges of motion, as found in the Freedom constrained liner at 114 degrees, have been clinically shown to reduce the risk of impingement and instability¹²

Stability

Interchangeability between all G7 components allows surgeons to customize stability to the patient's needs

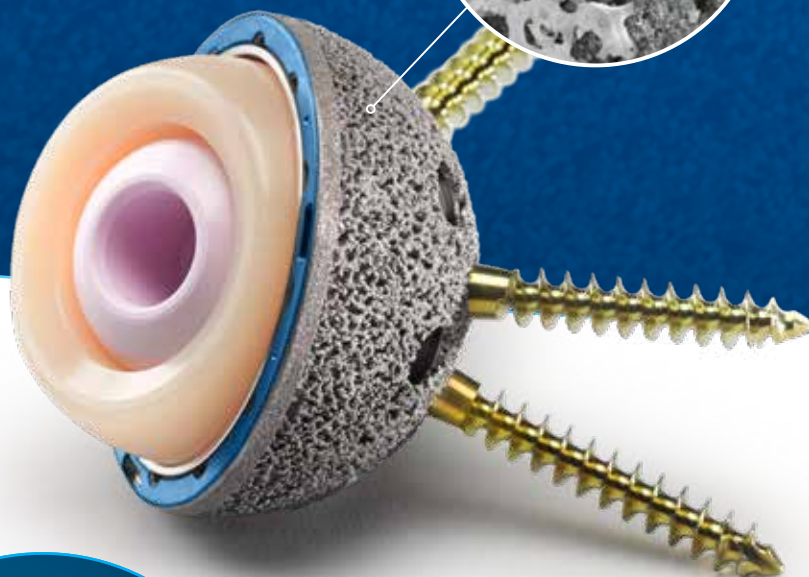
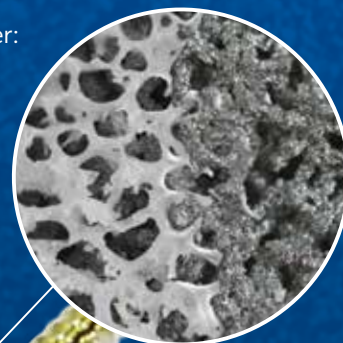
HIGH PERFORMANCE TECHNOLOGY

OSSEOTI - A PROPRIETARY ADDITIVE MANUFACTURING TECHNOLOGY

OsseoTi Porous Metal technology uses digitized human CT data to mimic the architecture of human cancellous bone and a proprietary additive manufacturing (3D printing) process to deliver:

- > Average pore size of 475 microns¹³
- > Approximately 70% porosity¹³
- > Material strength between that of cancellous and cortical bone¹³

OsseoTi enables surgeons to realize the benefits of highly porous technology without compromising head to shell ratio.



VIVACIT-E® - TESTED FOR A LIFETIME OF WEAR RESISTANCE

Vivacit-E HXLPE is specifically designed to maximize performance through a proprietary process providing:⁵⁻⁹

Exceptional Oxidative Stability^{6, 9, 10}

The vitamin E in Vivacit-E HXLPE is a powerful antioxidant that continuously quenches harmful free radicals to prevent oxidative degradation.¹

Ultra-low Wear^{6, 7}

Vivacit-E HXLPE is irradiated to an equivalent of 10 MRad with warm electron beam (e-beam) irradiation, resulting in an ultra-low wear HXLPE that has been tested out to 100 million cycles (Mc) in a 40 mm hip wear simulator test.¹⁶

Improved Mechanical Strength^{5, 8, 9}

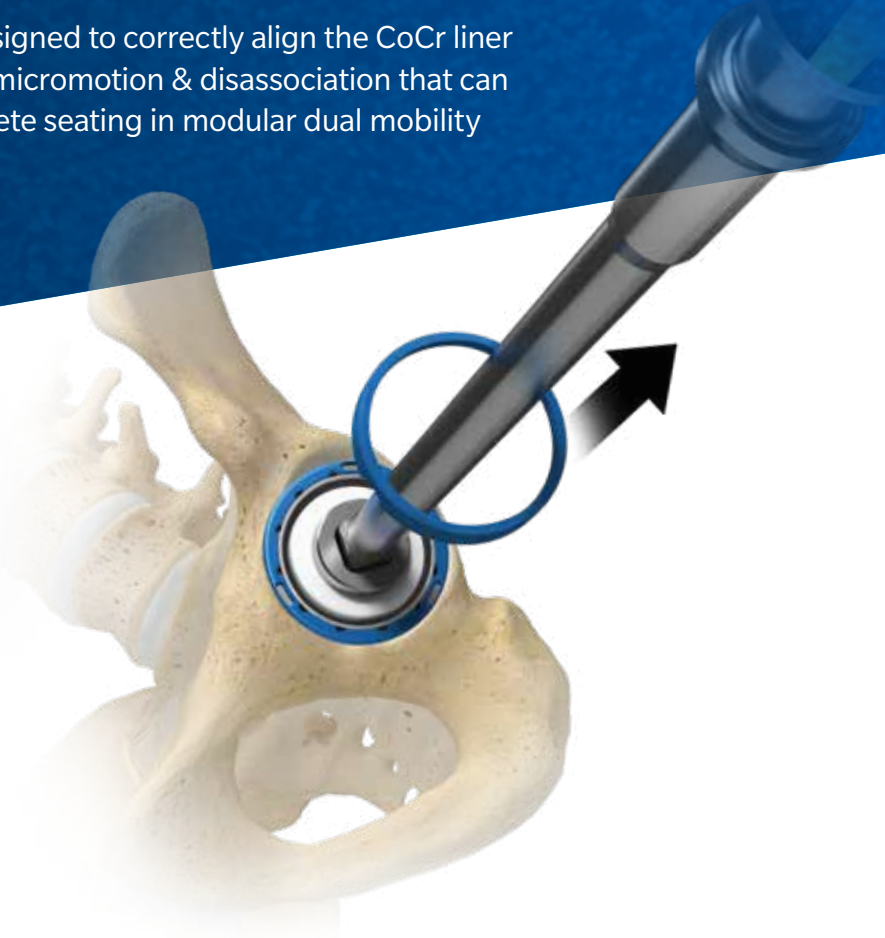
Long term, Vivacit-E HXLPE's material strength has been shown to be stable even after extreme lengths of accelerated aging.

Vivacit-E HXLPE has been laboratory tested to 100 million cycles to mimic the number of walking steps a patient will typically take during a lifetime following a total joint replacement.¹⁶

DESIGNED FOR PERFORMANCE

DUAL MOBILITY: DESIGN FEATURES THAT MATTER

The Hard Bearing Inserter Ring is designed to correctly align the CoCr liner within the G7 shell to help avoid the micromotion & disassociation that can result from malalignment or incomplete seating in modular dual mobility constructs.



Internal in-vitro testing demonstrates the fretting and corrosion resistance of the taper interface between the G7 acetabular shell and the G7 Dual Mobility CoCr liner.¹⁰



10 million cycle fatigue test¹⁰



No signs of fretting corrosion¹⁰



No deformations¹⁰



Debris analysis showed rates **lower** than those clinically reported in patients **three years post THA**¹⁰

INTUITIVELY EFFICIENT INSTRUMENTS

THE EFFICIENT TRAY FACILITATES COST AND TIME SAVINGS, HOLDING ALL GENERAL G7 INSTRUMENTS IN ONE CASE

All Stainless Steel Construction

Designed for fast sterilization and dry times



Perforated Tray

Designed to promote sterilizing steam flow and maximum drainage

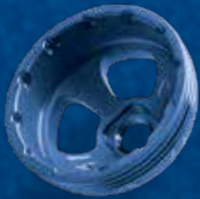
Unique Wave Construction

Securely holds instruments while reducing overall case weight

ALLOWS FOR EASE IN LOCATING INSTRUMENTS AND REDUCED CLUTTER IN THE OPERATING ROOM

PATIENT-SPECIFIC MINI TRAYS

PATENTED COLOR-CODED SYSTEM OPTIMIZES IMPLANT AND INSTRUMENT SELECTION DURING SURGERY



Shell Provisional



Shell Packaging



Shell Implant



Face Plate Impactor

Hard Bearing
Inserter Ring



Liner Provisional



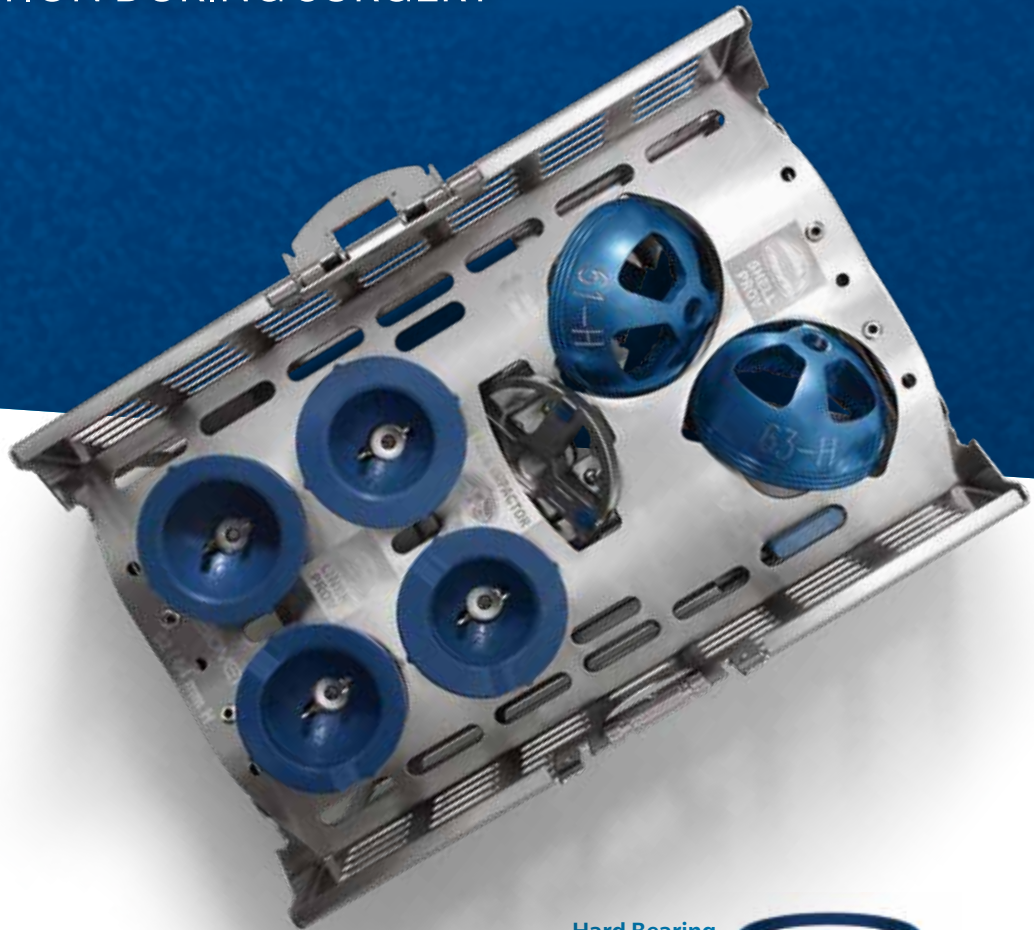
Liner Packaging



Dual Mobility
Provisional



Dual Mobility
Bearing Provisional



PERSONALIZED:

TRANSFORMING THE PRIMARY EPISODE OF CARE, ONE PATIENT AT A TIME

From implants to instruments, surgical systems and support services, each piece of the Zimmer Biomet portfolio has been designed to address the distinct needs of individual patients, while simplifying the surgical work-flow.



Arcos® Stem with G7
Dual Mobility

Taperloc® Complete
Stem with G7

Avenir® Complete Stem
with G7

References

* Laboratory testing is not necessarily indicative of clinical performance.

1. Pinnacle Hip Solutions. Polyethylene Surgical Technique. Part No 0612-83-512. DePuy Orthopaedics, Inc. 2013.
2. R3 Acetabular System. Surgical Technique. (2010). Part No 71381395 (v1.0). Surgical Technique. Part No 71381395. Smith & Nephew, Inc. 2010.
3. Trident Acetabular System. Hemispherical Surgical Protocol. Part No TRIDEN-SP-2. Stryker Corporation. 2015.
4. Jibodh, SR, et al., Minimum Five Year Outcome and Wear Analysis of Large Diameter Femoral Heads on Highly-Cross-linked Polyethylene Liners, Poster No. 2445, 55th Annual Meeting of the Orthopaedic Research Society, Las Vegas, 2009
5. Zimmer ZRR_WA_2409_11*
6. Zimmer ZRR_WA_2399_11*
7. Zimmer ZRR_WA_2402_11, Rev. 1*
8. Peiserich, M.S. et al. Retention of Mechanical Properties in a Blended Vitamin E Polyethylene After Extreme Oxidative Challenge. Poster No. 1060. ORS Annual Meeting, 2013.*
9. Pletcher, D.L. et al. Vitamin E Grafted HXPE Shows Superior Mechanical Property Retention Compared to Conventional UHMWPE and Sequentially Annealed HXPE. Poster 1868. ORS Annual Meeting, 2014.*
10. Popoola, O. "Evaluation of Fretting and Corrosion at the Shell and Liner Interface of G7 Dual Mobility Hip Implants." 0443.2-GLBL-en-REV1019.*
11. Callaghan, J; Pedersen, D.; Johnston, R.; Brown, T. "Clinical Biomechanics of Wear in Total Hip Arthroplasty." *The Iowa Orthopaedic Journal*. 2003; 23: 1–12
12. Berend, K. et al. A Constrained Device with Increased Range of Motion Prevents Early Dislocation. *Clinical Orthopaedics and Related Research*. Number 447. June 2006
13. OsseoTi Porous Metal For Enhanced Bone Integrationan Animal Study. Gautam Gupta, Ph. D., Study Completed August 2012. BMET0718.0-GBL. Laboratory testing is not necessarily indicative of clinical performance.
14. Beaulé, P; Schmalzried, T; Udomkiat, P; Amstutz, H. "Jumbo Femoral Head for the Treatment of Recurrent Dislocation Following Total Hip Replacement." *JBJS* 84-A, no. 2 (2002): 256-263.
15. Burroughs, B.; Hallstrom, B.; Golladay, G.; Hoeffel, D.; Harris, W. "Range of Motion and Stability in Total Hip Arthroplasty with 28-, 32-, 38-, and 44-mm Femoral Head Sizes." *Journal of Arthroplasty* 20, no. 1 (2005): 11-19.
16. Mimnaugh, K. et al. 100 Million-Cycle Wear Evaluation of crosslinked Vitamin E Grafted Polyethylene (VE-HXPE) Acetabular Liners. Paper No.0403. ORS Annual Meeting. Orlando, Florida. 2016.*

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