



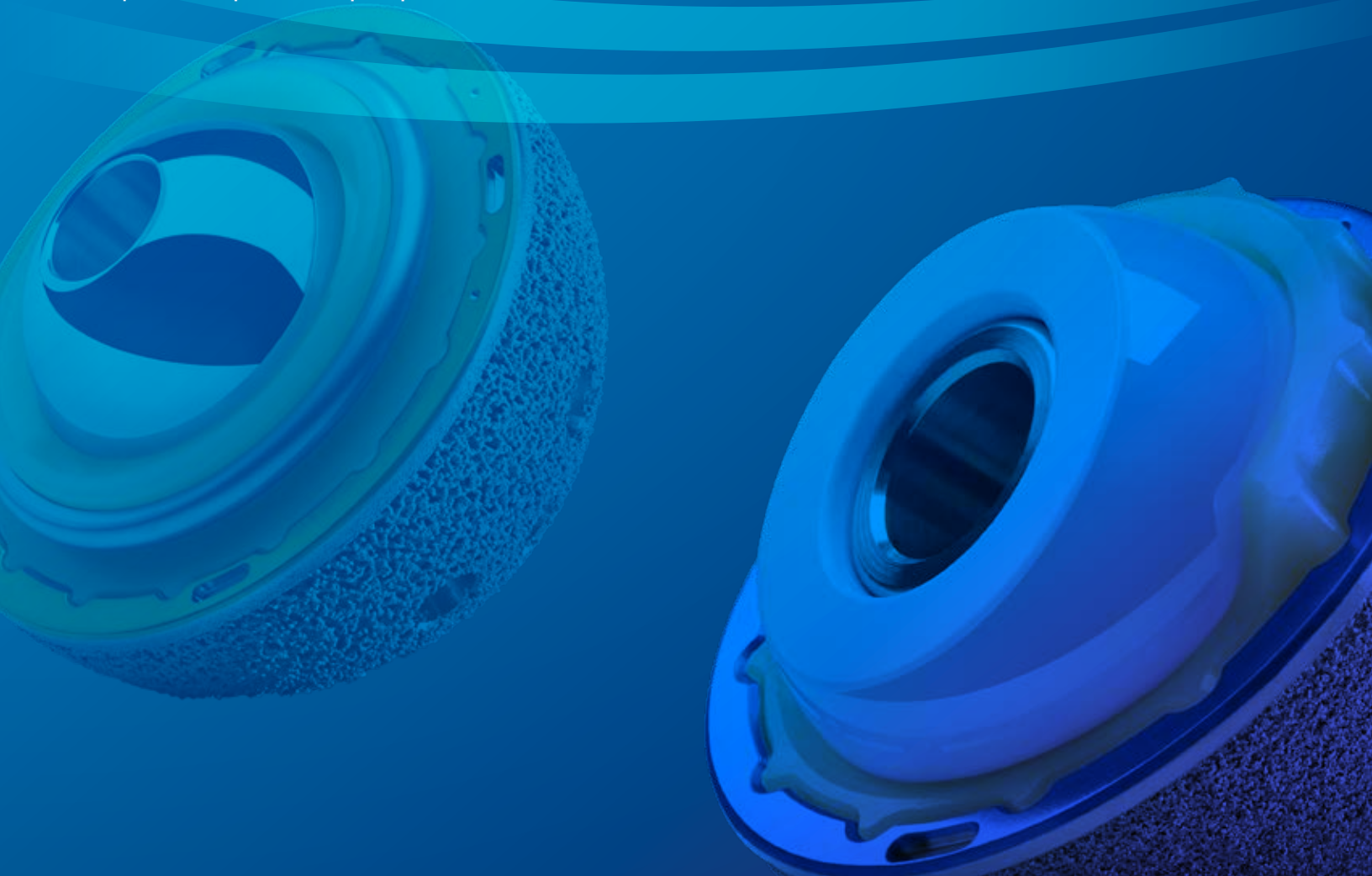
**G7<sup>®</sup>**  
Acetabular System

# 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.

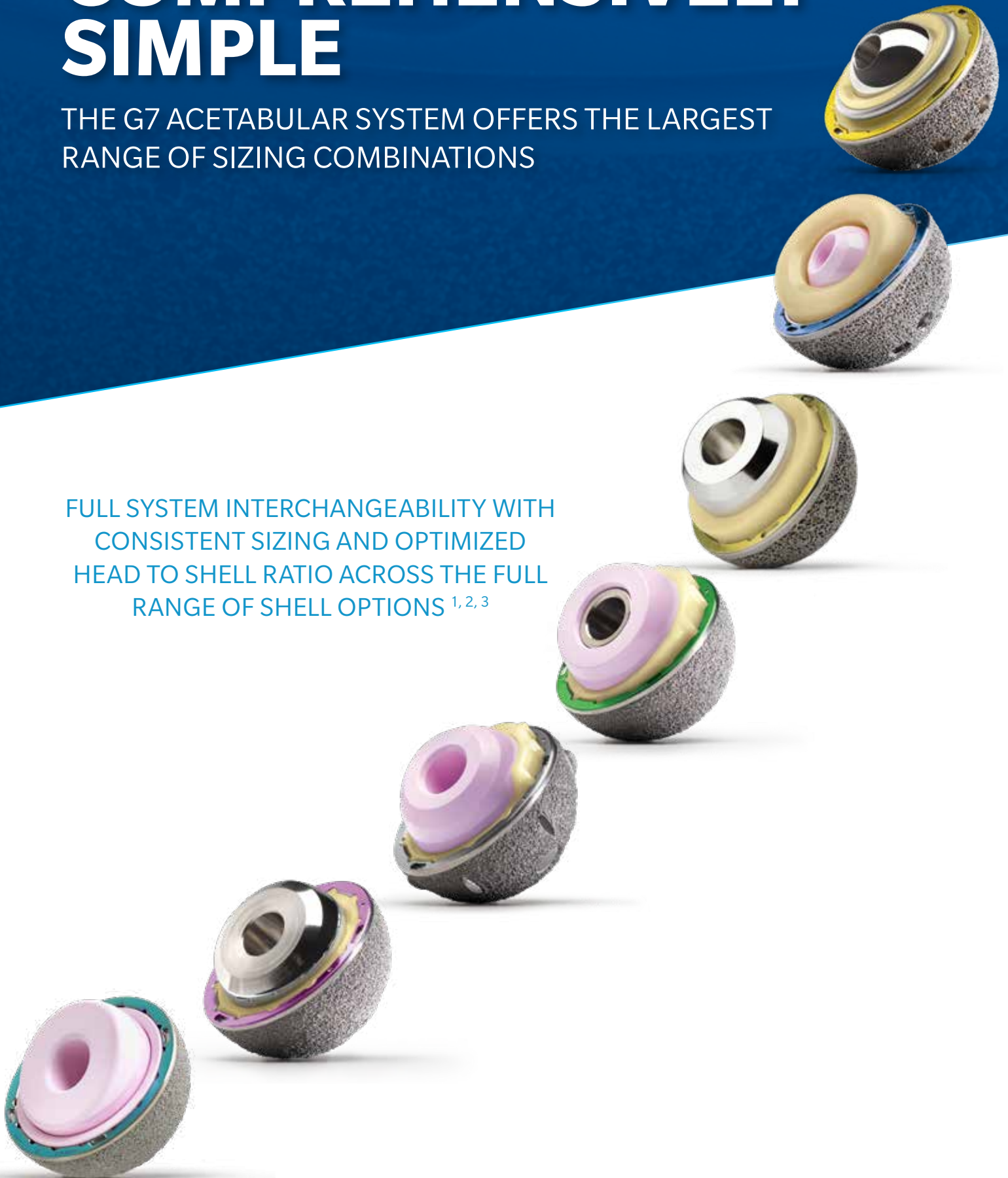




# COMPREHENSIVELY SIMPLE

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 <sup>1,2,3</sup>



# 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 <sup>11</sup>

## 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 <sup>4, 14, 15</sup>

## Stability

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



# FREEDOM CONSTRAINED

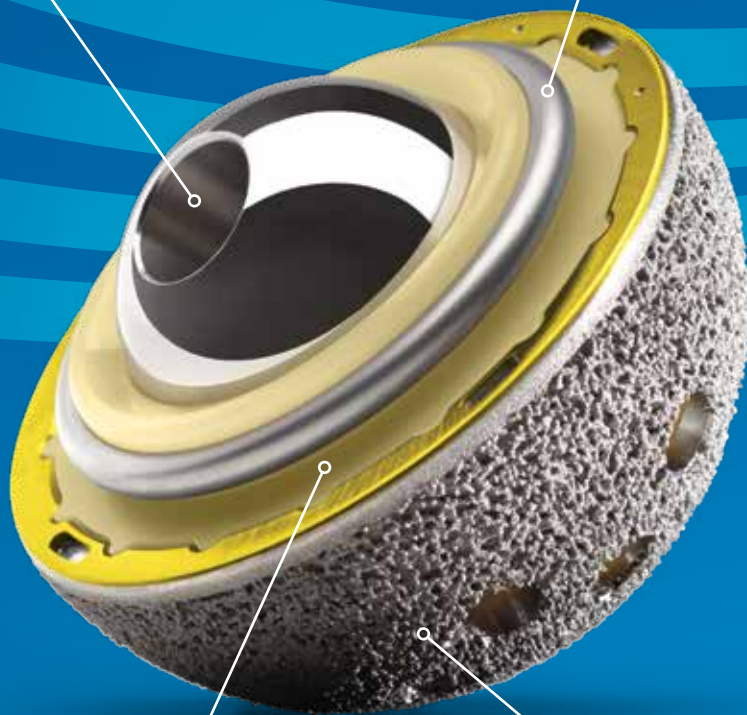
DESIGNED TO COUNTER THE DISTRACTIVE FORCES  
THAT CAN LEAD TO RECURRENT HIP DISLOCATION

## 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 instability<sup>12</sup>

## Stability

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

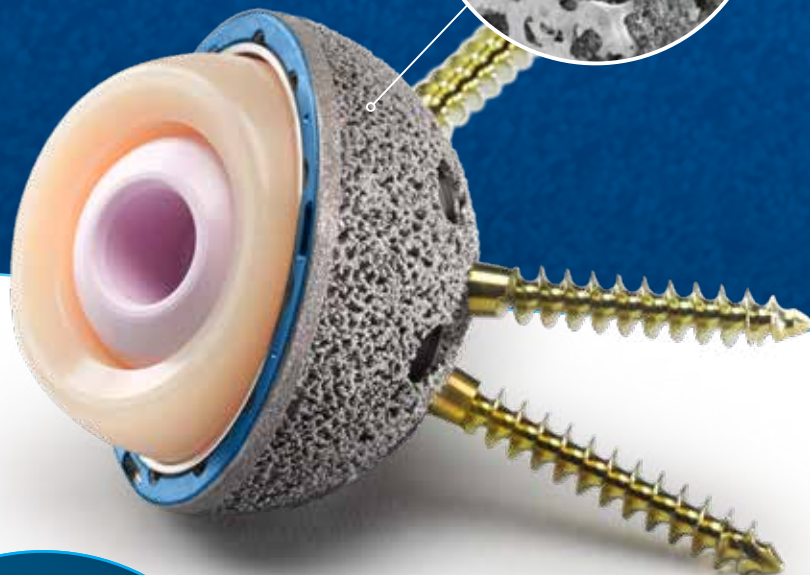
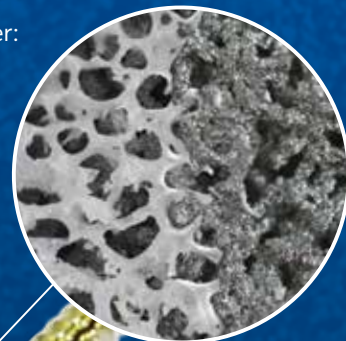
# HIGH PERFORMANCE TECHNOLOGY

## 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 microns<sup>13</sup>
- > Approximately 70% porosity<sup>13</sup>
- > Material strength between that of cancellous and cortical bone<sup>13</sup>

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:<sup>5-9</sup>

### Exceptional Oxidative Stability<sup>6, 9, 10</sup>

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

### Ultra-low Wear<sup>6, 7</sup>

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.<sup>16</sup>

### Improved Mechanical Strength<sup>5, 8, 9</sup>

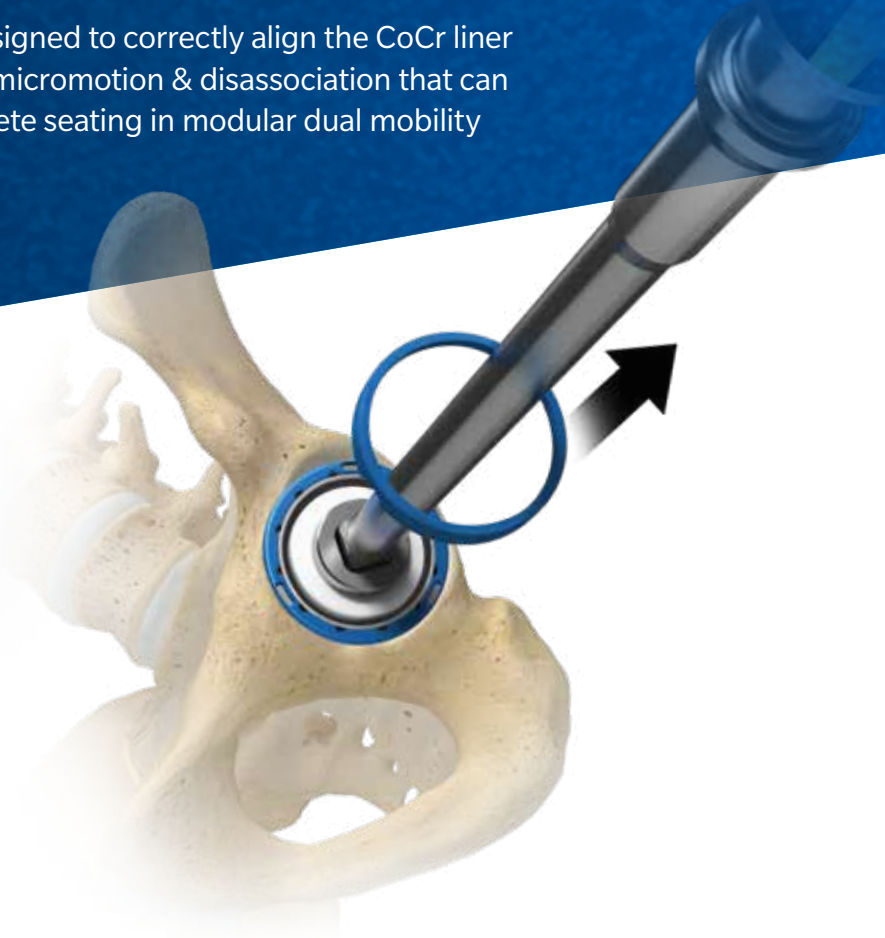
Long term, Vivacit-E HXLPE's material strength has been shown to be stable even after extreme lengths of accelerated aging.

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.<sup>16</sup>

# 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.<sup>10</sup>

10M  
10 million cycle fatigue test<sup>10</sup>



No signs of fretting corrosion<sup>10</sup>



No deformations<sup>10</sup>



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



# 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**

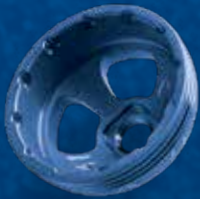
Securely holds instruments while reducing overall case weight

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



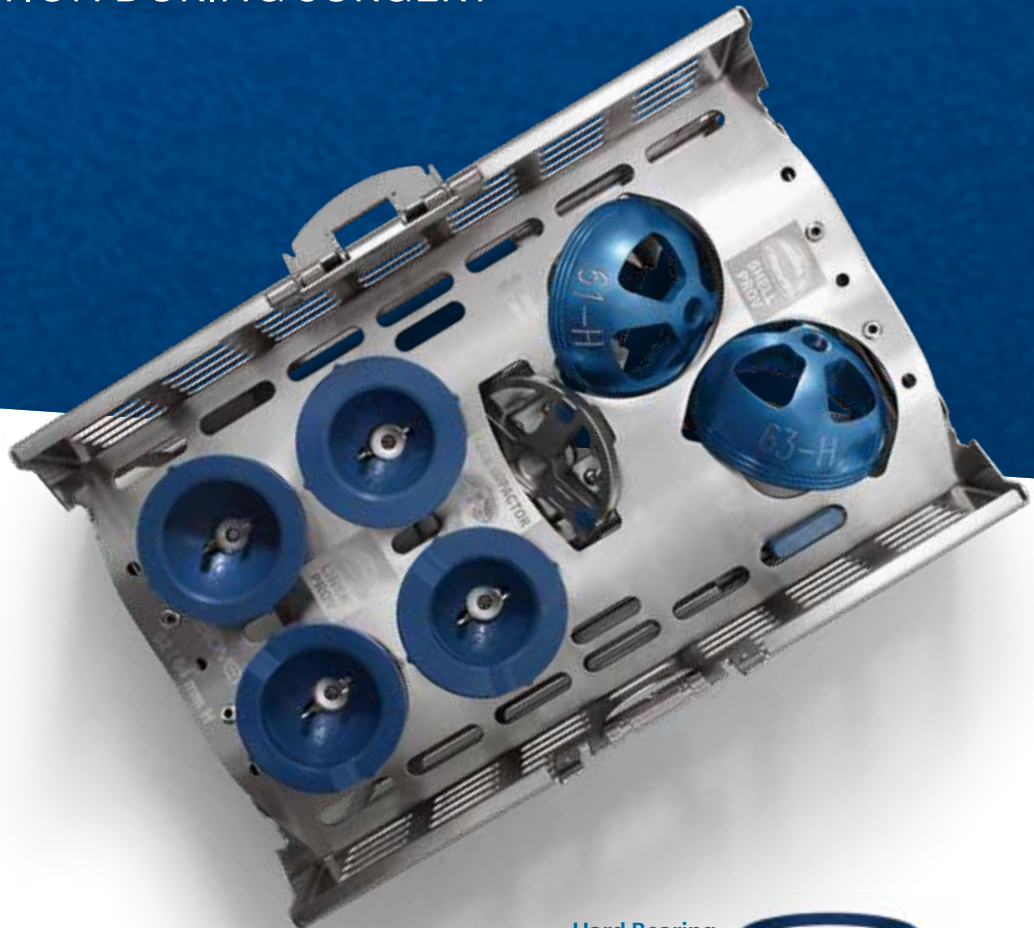
Liner Packaging



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



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\* Laboratory testing is not necessarily indicative of clinical performance.

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