

# Persona<sup>®</sup>

PARTIAL KNEE





# REDEFINING PERSONALIZATION IN FIXED BEARING PARTIAL KNEE DESIGN

Zimmer Biomet is the leading company in partial knee arthroplasty<sup>1-3</sup> with over 45 years of experience, offering a comprehensive range of anatomic and innovative PKA solutions.

## Persona Partial Knee offers:

- Personalized, compartment-specific implant shapes based on the Persona<sup>®</sup> Total Knee
- Precise, efficient instrumentation
- Proven Vivacit-E Vitamin-E<sup>®</sup> Polyethylene technology<sup>4-8</sup>

## Clinically Proven Legacy<sup>9,10</sup>

The Persona Partial Knee carries forward design elements of the Zimmer Miller Galante (M/G) Uni, which showed 98% survivorship at 10 years and 90% and at 20 years.<sup>9</sup>

643 Persona Partial Knees were implanted, and two-year results demonstrated:<sup>11</sup>

- 97.84% at 3 years follow-up
- 97.1% of patients were satisfied or very satisfied with the results of surgery

In an RSA study the Persona Partial Knee demonstrated good clinical results and low migration of both the femoral and tibial component at 2 years follow-up.<sup>33</sup>



More than 2,600 Persona Partial Knees have been recorded in the national registry of England, Wales, and Northern Ireland reporting a 3 year revision rate of 0.72%. Which is the lowest revision rate at for any partial knee 3 years.<sup>34</sup>

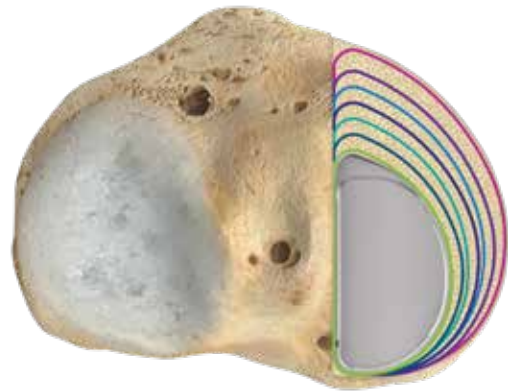
# PRECISE. PERSONALIZED. PROVEN.

## Femoral Component

- Compartment-specific shape
- Consistent AP growth and shape throughout seven femoral sizing options
- Extended posterior condyle safely accommodates high flexion up to 155°



Yellow outline indicates the Zimmer M/G Uni



## Tibial Component

- Compartment-specific shape with seven anatomic tibial profiles
- Two peg and keel fixation that has a proven<sup>9,10</sup> track record going back to the Zimmer M/G Uni\*

Persona Partial Knee surgeon developers and engineers studied the morphology of thousands of bones, representing a diverse global population, using ZiBRA™ virtual resection technology. Using this technology led to:

- Improved sizing options and shape of the tibia aim for a better fit, with decreased overhang medially and decreased underhang posteriorly, compared to previous designs<sup>12</sup>
- The anatomic shape of the tibial implant increases tibial coverage<sup>12</sup> aimed at preventing subsidence



### Vivacit-E Vitamin-E Polyethylene

- Vivacit-E Polyethylene is actively stabilized with Vitamin-E to help protect against oxidation and maintain wear resistance and strength throughout the life of the implant
- Vivacit-E has been shown to have exceptional oxidative stability,<sup>4,7</sup> ultra-low wear,<sup>5,7</sup> and enhanced strength<sup>8</sup>
- Addresses differing patient anatomies with 8, 9, 10, 11, 12 and 14 mm thicknesses available
- Anterior and posterior locking tabs facilitate a secure fit with the tibial tray



# PRECISE, EFFICIENT INSTRUMENTATION

Precise and efficient instrumentation facilitates accurate alignment and under-correction of the leg with a simple spacer block technique.

1

## Tibial Resection Guide

- The tibial cut guide allows the surgeon to place the guide on the tibia and orient the vertical saw blade in the preferred M/L location and rotation of the cut
- Tibial resection guides attach to the Persona EM tibial resection tube body

1



2

## Femoral Finishing Guide

- Persona Partial PK Handle eases insertion
- Extended saw slots allow controlled posterior and chamfer resections
- Three fixation screws placed anteriorly on the guide add stability, allowing resections to be made without removing screws

2



3

## Locking Femoral Impactor

- Femoral insertion notches were designed for precise control of femoral component implantation



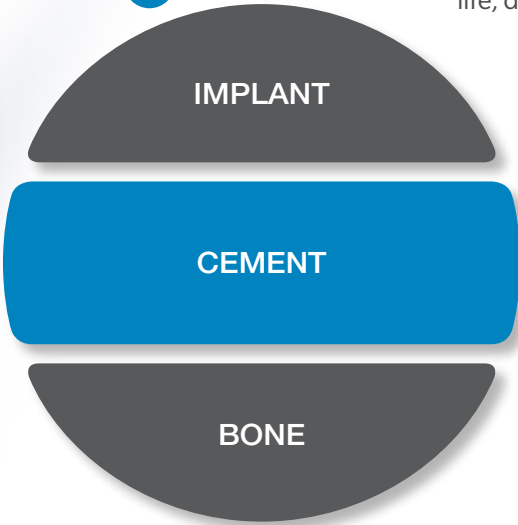


**4 Anatomic Tibial Sizer**

- Facilitates efficient sizing of the tibial component
- Visibility windows allow for one up and one down sizing
- Posterior hook provides an anatomic reference point to ensure precise sizing

**5 Modern Cementing Technique (MCT)<sup>13-17</sup>**

- MCT Knee is a concept that addresses the risk of de-bonding and thus loosening of the implant<sup>13-17</sup>
- The crucial factors are to secure a strong bond and optimal interfaces between implant-cement and cement-bone
- Zimmer Biomet offers solutions supporting early bone cement application on the tibial component, vacuum mixing to reduce porosity and increase fatigue life, delivery and pressurization









# DID YOU KNOW

# AT LEAST 20%

# OF KNEE REPLACEMENTS

# SHOULD BE

# PARTIALS?<sup>18</sup>

Research shows that surgeons utilizing Partial Knee Arthroplasty (PKA) for at least **20% of their annual knee arthroplasties experienced a significant decrease** in their revision rate.<sup>18</sup>

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In fact, a study by Badawy, M. et al. found a **lower risk of revision in hospitals performing more than 40 PKAs per year** compared to those performing under 10 PKAs per year.<sup>19</sup>

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When using criteria published by Kozinn & Scott<sup>20</sup> in 1989 only 5% of patients are candidates for PKA.<sup>21</sup> This may **partly explain why there is low utilization of PKA today, with it only being used for 8% of knee replacements worldwide.**<sup>1,22,23</sup>

In 2015, Scott revisited the 1989 criteria.<sup>24</sup> Using published data, he and five co-authors concluded that some of the **original contraindications from the 1989 study are no longer considered, thereby increasing patient candidacy.**

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More recently, in 2009, **one study showed that 47.6% of all knee replacement patients are candidates for PKA.**<sup>25</sup>

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A randomized, controlled study also showed that significantly **more PKA patients would choose to have their operation again,** compared to TKA patients.<sup>26</sup>

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Other benefits of **PKA vs TKA include retention of the ACL, which is reported to result in improved proprioception,<sup>27,28</sup> better range of motion,<sup>29,30</sup> procedural savings,<sup>25</sup> shorter hospital stays<sup>31</sup> and a lower risk of postoperative complications.<sup>32</sup>**

# INTERACTIVE TRAINING



## Surgeon-to-Surgeon (S2S) Visitation

Visitations are available for health care professionals at any level at approved Persona Partial Knee facilities. The visitation includes a discussion about the surgical steps, design rationale, system benefits, and the process for implant and instrument assembly. Surgeons will also be able to better visualize the surgical flow, having spent time with Zimmer Biomet faculty viewing live surgery.



## Virtual Reality

Virtual Reality (VR) is one of the newest learning options offered by the Zimmer Biomet Institute.

VR provides you with a variety of learning, training, and practice opportunities. The immersive nature of VR is capable of delivering a learning experience that is effective and time saving.

**Please contact your local sales associate for more information.**



## vLearning

The 'video learning' platform provides an interactive and immersive way to learn more about the Persona Partial Knee. It acts as a 'one-stop-resource' for product & procedure topics.

As you watch the surgical video module, you can opt to select from many relevant resources via sidebar pop-ups or through the quick selection menu.

[vLearning is on \[zbinetwork.com\]\(http://vLearning.is.on.zbinetwork.com\)](http://vLearning.is.on.zbinetwork.com)





## References

- \* The M/G trademark is owned by Smith & Nephew
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