

# Oxford® Partial Knee



## A Definitive Implant

Research shows that surgeons utilizing Partial Knee Arthroplasty (PKA) for at least 20% of their annual knee replacements experienced a decrease in their revision rate.<sup>1</sup> One study indicated that 47.6% of knee replacement patients, out of a consecutive series of 200, are candidates for PKA.<sup>2</sup>

With over 40 years' clinical heritage, the Oxford Partial Knee is the most widely used,<sup>3</sup> clinically proven<sup>4,5</sup> partial knee system in the world. PKA patients have demonstrated increased patient satisfaction,<sup>6\*</sup> better self perceived functionality<sup>7</sup> and fewer postoperative complications<sup>8\*</sup> compared to total knee patients.

- Partial knee patients have also been found to be more likely to forget their artificial joint in daily life and consequently may be more satisfied.<sup>6</sup>
- A multi-center study demonstrated decreased morbidity and complications of PKA compared to TKA<sup>8\*</sup>
- Proven and reproducible technique with Microplasty<sup>®</sup> Instrumentation<sup>9</sup>
- Retention of the ACL is reported to result in better proprioception<sup>10</sup>
- Best-in-class continuous education programme
- PKA is a cost effective<sup>2,11,12</sup> treatment for unicompartmental osteoarthritis



\* Study included Oxford Partial Knees as well as other 'non-Biomet' partial knees

### 1 Femoral Component

- Conforming, spherical design minimizes contact stress throughout entire range of motion
- Curved inner geometry designed for minimal bone removal

### 2 Mobile Meniscal Bearing

- Mobile bearing designed to remain fully congruent with the femoral and tibial components throughout the entire range of motion<sup>13</sup>
- Proven wear resistance with ArCom<sup>®</sup> Direct Compression Molded Polyethylene<sup>14</sup>

### 3 Tibial Component

- Anatomical shape designed for optimal bone coverage

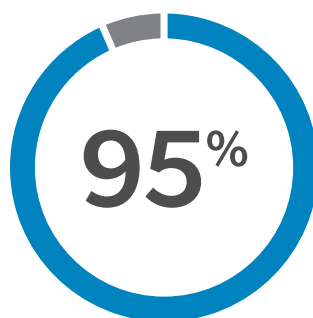
### Cementless Fixation

The Oxford Partial Knee for medial compartment replacement is now available with PPS<sup>®</sup> Porous Plasma Spray & Hydroxyapatite (HA) coating for cementless fixation.

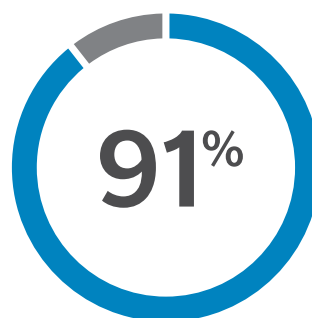


- Offers twin-peg femoral design to allow for additional rotational stability
- Plasma sprayed porous titanium coating provides mechanical interlock with the substrate
- Provides improved fixation<sup>15</sup>
- Reduces the incidence of radiolucencies seen under the tibial components on screened radiographs<sup>15-17</sup>
- Designed to eliminate possible known failure mechanisms caused by poor cementing technique
- Reduces operating time as it eliminates cement preparation and curing time<sup>15</sup>
- In a multicenter study of 1,000 patients, the cementless Oxford Partial Knee has demonstrated a 97.2% survivorship at 6 years.<sup>18</sup>

### Cemented Survivorship

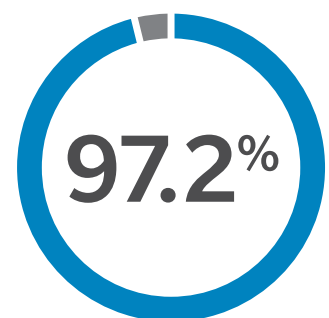


at 15 years<sup>19</sup>



at 20 years<sup>4</sup>

### Cementless Survivorship



at 6 years<sup>18</sup>

## Oxford Partial Knee Microplasty Instrumentation

Microplasty Instrumentation simplifies the surgical technique, providing for accurate and reproducible implant positioning.<sup>9</sup>

The soft-tissue referencing Microplasty Instrumentation references the posterior femoral condyle to set the amount of tibial resection. This bone-conserving approach to tibial preparation resulted in a greater number of thinner, 3 mm and 4 mm, bearings implanted (92% vs. 84%;  $p=0.001$ )<sup>9</sup> compared to Phase 3 Instrumentation, which has demonstrated better survivorship than bearings 5 mm or thicker.<sup>5</sup>

- Proprietary tibial resection guide that uses patients' normal MCL tension to determine level of tibial resection
- Spherical mill and spigots have been designed to provide a simplified approach to balancing the flexion and extension gaps
  - Size specific femoral instrumentation allows precise 1 mm incremental bone removal
- The femoral drill guide linked to the IM rod provides for accurate and reproducible alignment<sup>9</sup>
- The design of the anterior mill, in combination with the anti-impingement guide, is intended to allow for precise removal of impinging osteophytes and anterior bone
- Microplasty Instrumentation has shown an average reduction in OR time of 9 minutes when compared to Phase 3 Instrumentation<sup>20</sup>
- Oxford Microplasty Instrumentation has also been shown to reduce the risk of dislocation compared to Phase 3 Instrumentation<sup>21</sup>





## Clinically Proven

Sources	Type	N at study start*	Survivorship
Bergeson, A., et al. Medial mobile bearing unicompartmental knee arthroplasty early survivorship and analysis of failures in 1000 consecutive cases. <i>Journal of Arthroplasty</i> . 2013. <sup>22</sup>	Publication	1,000 knees	95.2% at a mean of 44.4 months
Jones, L., et al. 10 year survivorship of the medial oxford unicompartmental knee arthroplasty. A 1000 patient non-designer series- the effect of surgical grade and supervision. <i>Osteoarthritis and Cartilage</i> . 20:S290-S291. 2012. <sup>23</sup>	Publication	1,085 knees	91% at 10 years
Keys, G., Ul-Abiddin, Z., Toh E. Analysis of first forty Oxford medial unicompartmental knee replacements from a small district hospital in UK. <i>Knee</i> . 11:375-377. 2004. <sup>24</sup>	Publication	40 knees	95.5% at mean of 10 years
Lim, H., et al. Oxford phase 3 unicompartmental knee replacement in Korean patients. <i>Journal of Bone and Joint Surgery</i> . 94-B(8). 2012. <sup>25</sup>	Publication	400 knees	94% at 10 years (cumulative survival)
Lisowski, L., et al. Ten- to 15-year results of the Oxford Phase III mobile unicompartmental knee arthroplasty. <i>Bone Joint J</i> 2016; (10 Suppl B):41-7. <sup>26</sup>	Publication	138 knees	90.6% at 15 years
Lombardi, A., et al. Is recovery faster for mobile-bearing unicompartmental than total knee arthroplasty? <i>Clinical Orthopedics and Related Research</i> . 467(6):1450-7. 2009. <sup>27</sup>	Publication	115 knees	94% at a mean of 30 months
Matharu, G., et al. The Oxford medial unicompartmental knee replacement: survival and the effect of age and gender. <i>The Knee</i> . 913-917. 2012. <sup>28</sup>	Publication	459 knees	93% at 8 years (cumulative survival)
Murray, D., et al. The Oxford medial unicompartmental arthroplasty: a ten-year survival study. <i>Journal of Bone and Joint Surgery</i> . 80-B:983-989. 1998. <sup>29</sup>	Publication	143 knees	97.7% at 10 years (cumulative survival)
Pandit, H., et al. The clinical outcome of minimally invasive Phase 3 Oxford unicompartmental knee arthroplasty. A 15-year follow-up of 1000 UKAs. <i>The Bone and Joint Journal</i> . 97-B:1493-1500. 2015. <sup>5</sup>	Publication	1,000 knees	91% at 15 years
Pandit, H., et al. Minimally invasive Oxford phase 3 unicompartmental knee replacement. Results of 1000 cases. <i>The Bone and Joint Journal</i> . 93-B:198-204. 2011. <sup>30</sup>	Publication	1,000 knees	96% at 10 years (cumulative survival)
Price, A., Waite, J. Svard, U. Long-term clinical results of the medial Oxford unicompartmental knee arthroplasty. <i>Clinical Orthopaedics and Related Research</i> . 435:171-180. 2005. <sup>31</sup>	Publication	439 knees	93.9% at 15 years (cumulative survival)
Price, AJ., Svard, U. A second decade lifetable survival analysis of the Oxford unicompartmental knee arthroplasty. <i>Clinical Orthopaedics and Related Research</i> . 469:174-179. 2011. <sup>4</sup>	Publication	682 knees	91.0% at 20 years (cumulative survival)

\*All patients are Oxford Partial Knees unless stated otherwise

Sources	Type	N at study start*	Survivorship
Rajasekhar, C., Das, S., Smith, A. Unicompartmental knee arthroplasty. 2- to 12-year results in a community hospital. <i>The Bone and Joint Journal</i> . 86:983-985. 2004. <sup>32</sup>	Publication	135 knees	94.04% at 10 years (cumulative survival)
Svard, U., Price, A. Oxford Medial 1. Unicompartmental Knee Arthroplasty. A Survival Analysis of an Independent Series. <i>Journal of Bone and Joint Surgery</i> . 83: 191-94, 2001. <sup>19</sup>	Publication	124 knees	95.0% at 10 years (cumulative survival)
White, S., Roberts, S., Jones, P, The twin peg Oxford partial knee replacement: the first 100 cases. <i>The Knee</i> . 19(1) 36-40. 2012. <sup>33</sup>	Publication	108 knees	100% at 2 years
White, S., Roberts, S., Kuiper, J. The cemented twin-peg Oxford partial knee replacement survivorship: A cohort study. <i>The Knee</i> . 22(4):333-7. 2015. <sup>34</sup>	Publication	288 knees	98% at 9 years (cumulative survival)
Yoshida, K., <i>et al.</i> Oxford Phase 3 Unicompartmental Knee Arthroplasty in Japan – Clinical Results in Greater Than One Thousand Cases Over Ten Years. <i>The Journal of Arthroplasty</i> . 28(9) 168-171. 2013. <sup>35</sup>	Publication	1,279 knees	94.9% at 10 years (cumulative survival)

## Cementless Results

Sources	Type	N at study start*	Survivorship
Blaney, J., <i>et al.</i> Five-year clinical and radiological outcomes in 257 consecutive cementless Oxford medial unicompartmental knee arthroplasties. <i>Bone Joint J</i> 99.5 (2017): 623-631. <sup>36</sup>	Publication	257 consecutive Cementless Oxford PKR	98.8% at 5 years
Hooper N., <i>et al.</i> The five-year radiological results of the uncemented Oxford medial compartment knee arthroplasty. <i>Bone &amp; Joint Journal</i> . 2015;97(10):1358-1363. <sup>38</sup>	Publication	150 consecutive Cementless Oxford PKR	98.7% at 5 years
Liddle, A. D., <i>et al.</i> "Cementless fixation in Oxford unicompartmental knee replacement: A Multicenter Study of 1000 knees" <i>Bone Joint J</i> 95.2 (2013): 181-187. <sup>18</sup>	Publication	1,000 knees	97.2% at a mean of 6 years
Pandit, H. G., <i>et al.</i> "Five-year experience of cementless Oxford unicompartmental knee replacement." <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> 25.3 (2017): 694-702. <sup>37</sup>	Publication	512 consecutive Cementless Oxford PKR	98.0% at 5 years

\*All patients are Oxford Partial Knees unless stated otherwise

To find out more, visit [www.oxfordpartialknee.com](http://www.oxfordpartialknee.com)

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