Oxford Partial Knee
The Oxford Partial Knee is the most widely used and clinically proven partial knee system in the world, offering industry leading approaches to personalized patient care for increased OR efficiencies and reproducible results. Replacing just the affected medial compartment allows a more natural fit, improved range of motion and is a more bone conserving operation than total knee arthroplasty (TKA).

The Oxford Partial Knee System is available in the following variety of combinations; cemented, cementless, medial, lateral, and TiNbN components for the treatment of your patients.

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

Mobile Meniscal Bearing
- Mobile bearing designed to remain fully congruent with femoral component throughout entire range of motion
- Increased wear resistance with ArCom Direct Compression Molded polyethylene

Tibial Component
Anatomical shape for optimal bone coverage

Cementless Fixation
The Oxford Partial Knee for medial compartment replacement is now available with Porous Plasma Spray (PPS) & 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 additional early fixation by using hydroxyapatite (HA) coating
- Reduces the incidence of radio lucencies seen under the tibial components on screened radiographs
- Eliminates possible known failure mechanisms caused by poor cementing technique
- Reduces operating time as it eliminates cement preparation and curing time
- Available in 5 femoral component sizes for optimised patient fit
Published Clinical Results

Oxford Partial Knee

Benefits of Partial Knees Include:

• A more natural fit than TKA, with only the affected medial compartment being replaced³
• Improved range of motion compared to TKA²³-²⁵
• Preserves more healthy bone than TKA²⁵
• Better functionality²⁷ and more natural motion than TKA²⁵
• Faster recovery and shorter hospital stay than TKA²³
• Substantial cost savings over TKA (according to an independent study)²⁵
• Fewer and less severe complications including decreased risk of infection and morbidity compared with TKA²⁵-²⁸

Overview of Oxford Unicompartmental Knee Arthroplasty

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Age (years)</th>
<th>Disease</th>
<th>Knee Score</th>
<th>Follow-up (y)</th>
<th>% Survivorship (y)</th>
<th>Mode of Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodfellow et al</td>
<td>1988</td>
<td>1998</td>
<td>27-35</td>
<td>Medial or lateral OA</td>
<td>None Given</td>
<td>5 [2–5]</td>
<td>91.0</td>
<td>2 revisions, 3 component loosening, 2 bearing dislocation, 1 disease progression</td>
</tr>
<tr>
<td>Vold et al</td>
<td>2000</td>
<td>2000</td>
<td>60-65</td>
<td>Medial or lateral OA</td>
<td>87.0 (HSQ)</td>
<td>5 [2–8]</td>
<td>93.0</td>
<td>3 revisions, 2 lateral OA, 1 component malalignment</td>
</tr>
<tr>
<td>Swart et al</td>
<td>2007</td>
<td>2007</td>
<td>51-60</td>
<td>Anteromedial OA</td>
<td>None Given</td>
<td>12.6 [10.1–15.0]</td>
<td>95.0 [10]</td>
<td>6 revisions, 2 bearing dislocation, 1 component loosening, 1 infection</td>
</tr>
<tr>
<td>Emerson et al</td>
<td>2002</td>
<td>2002</td>
<td>38-65</td>
<td>Medial OA</td>
<td>82 (AKS)</td>
<td>6.6 [2–13]</td>
<td>93.0 [10]</td>
<td>7 revisions, 6 lateral OA, 1 bearing malalignment, 1 inflammatory arthritis, 1 component loosening</td>
</tr>
<tr>
<td>Rays et al</td>
<td>2004</td>
<td>2004</td>
<td>50-80</td>
<td>Medial OA</td>
<td>None Given</td>
<td>7.5 [8–10]</td>
<td>100.0 [10]</td>
<td>None</td>
</tr>
<tr>
<td>Rappaport et al</td>
<td>2004</td>
<td>2004</td>
<td>53-68</td>
<td>Medial OA</td>
<td>82.2 (AKS)</td>
<td>5.8 [2–13]</td>
<td>94.0 [10]</td>
<td>5 revisions, 2 component loosening, 1 component loosening/bearing dislocation, 1 bearing dislocation, 1 unexplained pain</td>
</tr>
<tr>
<td>Langdown et al</td>
<td>2005</td>
<td>2005</td>
<td>60-80</td>
<td>AVN</td>
<td>88.0 (OKS)</td>
<td>5.2 [1–13]</td>
<td>100.0 [10]</td>
<td>None</td>
</tr>
<tr>
<td>Price et al</td>
<td>2005</td>
<td>2005</td>
<td>50–65</td>
<td>Medial OA</td>
<td>94.0 (HSQ)</td>
<td>10</td>
<td>91.0 [10]</td>
<td>20 revisions, 8 lateral OA, 5 component loosening, 3 deep infection, 3 bearing dislocation, 1 unexplained pain</td>
</tr>
<tr>
<td>Verdonk et al</td>
<td>2005</td>
<td>2005</td>
<td>71–73</td>
<td>Medial OA</td>
<td>68.0 (HSQ)</td>
<td>10</td>
<td>96.0 [10]</td>
<td>14 revisions, 8 component loosening, 3 bearing dislocation, 3 lateral OA, 2 unexplained pain, 1 supracondylar femur fracture</td>
</tr>
<tr>
<td>Price et al</td>
<td>2005</td>
<td>2005</td>
<td>60–65</td>
<td>Medial OA</td>
<td>85.0 (OKS)</td>
<td>15</td>
<td>93.1 [15]</td>
<td>23 revisions, 7 lateral OA, 5 component loosening, 5 bearing dislocation, 2 infection, 2 unexplained pain, 1 component loosening/bearing dislocation, 3 bearing fracture</td>
</tr>
<tr>
<td>Vold et al</td>
<td>2006</td>
<td>2006</td>
<td>60–65</td>
<td>Medial OA</td>
<td>None Given</td>
<td>5.5 [1–13]</td>
<td>84.0 [10]</td>
<td>24 revisions, 9 lateral OA, 6 component loosening, 4 bearing dislocation, 2 bearing fracture, 1 joint subsidence, 1 instability, 1 unknown</td>
</tr>
<tr>
<td>Kast et al</td>
<td>2006</td>
<td>2006</td>
<td>60–65</td>
<td>Medial OA</td>
<td>80.5 (AKS)</td>
<td>4–6</td>
<td>86.0</td>
<td>2 revisions, 1 fibular loosening/femoral malalignment, 1 femoral malalignment</td>
</tr>
<tr>
<td>Lusscombe et al</td>
<td>2006</td>
<td>2006</td>
<td>41–78</td>
<td>Medial OA</td>
<td>85.5 (OKS)</td>
<td>2</td>
<td>86.0</td>
<td>4 revisions, 1 unexplained pain, 3 deep infection, 1 component loosening, 1 bearing dislocation</td>
</tr>
<tr>
<td>Pandit et al</td>
<td>2006</td>
<td>2006</td>
<td>55–65</td>
<td>Anteromedial OA (buttress) AVN</td>
<td>87.0 (OKS)</td>
<td>7</td>
<td>97.3</td>
<td>9 revisions, 8 deep infection, 3 bearing dislocation, 2 unexplained pain</td>
</tr>
</tbody>
</table>

Survivorship:
- 92.4% at minimum 10 years²³-²⁹
- 94% at minimum 15 years²⁷-²⁹
- 91% at minimum 20 years²⁹

Abbreviations: AKS=American Knee Score, AVN=Avascular Necrosis, HSS=Hospital for Special Surgery, OA=Osteoarthritis, and OKS=Oxford Knee Score.
Oxford Partial Knee

Microplasty Partial Knee Instrumentation

The Oxford Partial Knee System continues to advance partial knee arthroplasty with Microplasty Instrumentation. This instrumentation platform includes innovative tools to help with ease of use, precision, efficiency and reproducibility.

Uniting Precision, Efficiency and Reproducibility

The Oxford Partial Knee coupled with Microplasty Instrumentation provides surgeons with the tools to allow for ease of use, precision, efficiency and reproducibility for each patient:

- Spherical mill and spigots provide a simplified approach to balancing the flexion and extension gaps
- Minimal incision to avoid quadriceps disruption
- Size specific femoral instrumentation for precise 1mm incremental bone removal
- Supports patient demand with accurate reproducible results
References


5. Pandit, H et al. Cemented and Cementless Fixation of Unicompartmental Knee Replacement: A Randomised Controlled Trial.


