



Oxford® Partial Knee

BIOMET®

Oxford® Partial Knee

A Definitive Implant

With over 35 year's clinical experience, the Oxford® Partial Knee is the most widely used¹ and proven partial knee system in the world.

- A multi-center study² found that Oxford® PKR patients were 1.8 times more likely to report that their knee felt normal and 2.7 times more satisfied with their ability to perform activities of daily living compared to TKA patients**
- A survey³ showed that Oxford® partial knee patients are happier with their knee replacements than total knee patients
- A multi-centre study demonstrated decreased morbidity and complications of PKA compared to TKA^{4*}
- Proven⁵, safe and reproducible technique¹
- Better functionality⁶ and more natural motion⁷ compared to TKA
- Best-in-class continuous education program

Tibial Component

Anatomical shape for optimal bone coverage



*Not all partial knees in this study were Oxford knees

** Adjusted odds ratio controlled for gender, age, minority, income, and center, $p < 0.05$, multivariate analysis

Femoral Component

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

Mobile Meniscal Bearing

- Only true mobile meniscal bearing knee system approved for use in the U.S.
- Mobile bearing designed to remain fully congruent with femoral component throughout entire range of motion⁸
- Increased wear resistance with ArCom® Direct Compression Molded polyethylene^{9,10}

The most widely used¹ and clinically proven partial knee system in the world.

Clinical Survivorship

92.4% at 10 Years^{5, 11-16}

94.0% at 15 Years^{5, 15, 16}

91.0% at 20 Years¹⁶

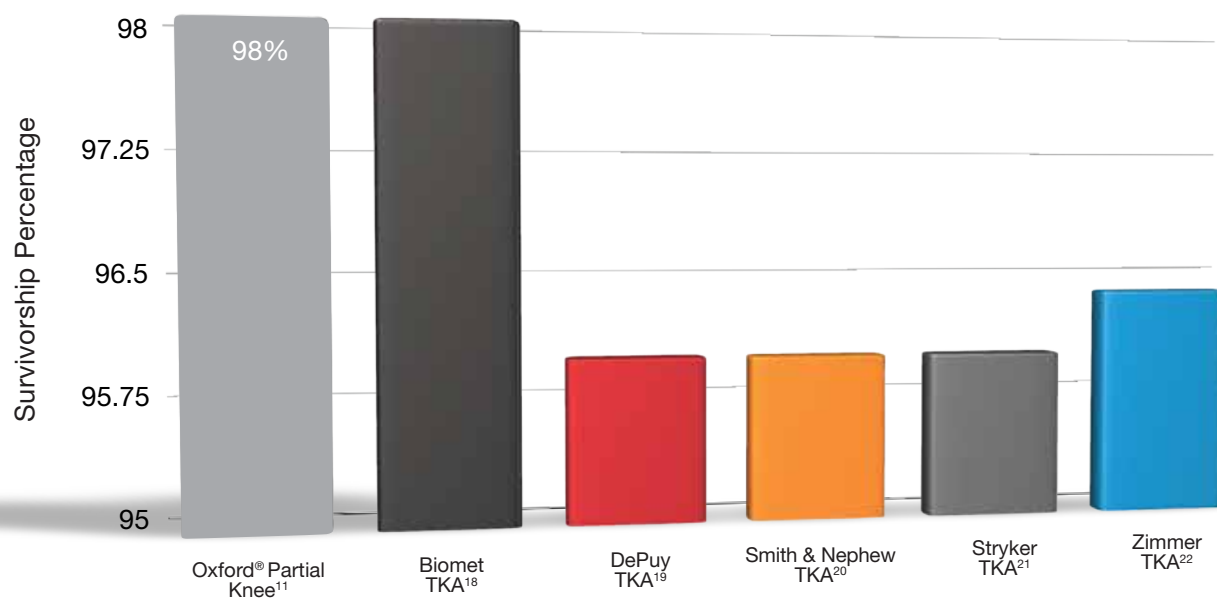


Oxford® Partial Knee

Clinical Performance

The long-term clinical performance of the Oxford® Partial Knee is supported by world-wide clinical studies.¹⁷ The Oxford® Partial Knee has comparable, if not better, long-term survivorship results than competitive total knee arthroplasties.^{11, 18-22} It is the only partial knee replacement that rivals the clinical heritage of total knee replacements.^{11, 18-22}

Clinical Survivorship at 10 Years



Overview of Oxford® Unicompartamental Knee Arthroplasty
Gaurav Khanna, MD; Bruce A. Levy, MD¹⁷
Oxford® Unicompartamental Knee Replacement: Literature Review. *Orthopedics Supplement*. 30(5): 12. 2007.

Authors	Year	n	Age (years)	Disease	Knee Score	Follow-up (y)	% Survivorship (y)	Mode of Failure
Goodfellow <i>et al</i> ²³	1988	103 (27 lateral)	70 (range: 54–86)	Medial or lateral OA	None Given	3 (2–5)	91.0	9 revisions (5 component loosening, 3 bearing dislocation, 1 disease progression)
Carr <i>et al</i> ²⁴	1993	121	69 (range: 57–81)	Medial OA	40.1 (OKS)	3.8	99.0	1 revision (component loosening)
Murray <i>et al</i> ¹¹	1998	143	71 (range: 35–91)	Anteromedial OA	None Given	7.6 (6–14)	98.0 (10)	5 revisions (2 component loosening, 2 lateral OA, 1 unexplained pain)
Vorlat <i>et al</i> ²⁵	2000	41 (3 lateral)	62 (range 46–84)	Medial or lateral OA	87.0 (HSS)	5 (2–8)	93.0	3 revisions (2 lateral OA, 1 component malalignment)
Svard <i>et al</i> ¹⁵	2001	124	70 (range: 51–86)	Anteromedial OA	None Given	12.5 (10.1–15.6)	95.0 (10)	6 revisions (3 bearing dislocation, 2 component loosening, 1 infection)
Emerson <i>et al</i> ²⁶	2002	50	63 (range: 38–85)	Medial OA	92 (AKS)	6.8 (2–13)	93.0 (10)	7 revisions (4 lateral OA, 1 bearing impingement, 1 inflammatory arthritis, 1 component loosening)
Keys <i>et al</i> ¹²	2004	40	68 (range: 0–80)	Medial OA	None Given	7.5 (6–10)	100 (10)	None
Rajasekhar <i>et al</i> ¹³	2004	135	71 (range: 53–88)	Medial OA	92.2 (AKS)	5.8 (2–12)	94.0 (10)	5 revisions (2 component loosening, 1 component loosening/bearing dislocation, 1 bearing dislocation, 1 unexplained pain)
Langdown <i>et al</i> ²⁷	2005	29	71 (46–85)	AVN	38.0 (OKS)	5.2 (1–13)	100 (10)	None
Price <i>et al</i> ²⁸	2005	52	pts <60: 56 (range: 35–60)	Medial OA	94.0 (HSS)	10	91.0 (10)	4 revisions (2 lateral OA, 1 component loosening, 1 bearing fracture)
		512	pts >60: 71 (range: 60–95)	Medial OA	86.0 (HSS)	10	96.0 (10)	20 revisions (8 lateral OA, 5 component loosening, 3 deep infection, 3 bearing dislocation, 1 unexplained pain)
Verdonk <i>et al</i> ²⁹	2005	97 (10 lateral)	61 (range: 46–84)	Medial or lateral OA	None Given	6.8 (2–14)	86.0	14 revisions (5 component loosening, 3 bearing dislocation, 3 lateral OA, 2 unexplained pain, 1 supracondylar femur fracture)
Price <i>et al</i> ¹⁶	2005	439	70 (range: 49–95)	Medial OA	86.0 (HSS)	15	93.1 (15)	23 revisions (7 lateral OA, 5 component loosening, 5 bearing dislocation, 2 infection, 2 unexplained pain, 1 component loosening/bearing dislocation, 1 bearing fracture)
Vorlat <i>et al</i> ³⁰	2006	149	66 (range: 46–89)	Medial OA	None Given	5.5 (1–10)	84.0 (10)	24 revisions (9 lateral OA, 6 component loosening, 4 bearing dislocation, 2 bearing fracture, 1 tibial subsidence, 1 instability, 1 unknown)
Kort <i>et al</i> ³¹	2006	46	56 (range: 43–60)	Medial OA	90.5 (AKS)	(2–6)	96.0	2 revisions (1 tibial loosening/femoral malalignment, 1 femoral malalignment)
Luscombe <i>et al</i> ³²	2006	78	63 (range: 41–79)	Medial OA	38.3 (OKS)	2	95.0	4 revisions (1 unexplained pain, 1 deep infection, 1 component loosening, 1 bearing dislocation)
Pandit <i>et al</i> ³³	2006	688	66 (range: 33–89)	Anteromedial OA (667) AVN (21)	39.0 (OKS)	7	97.3	9 revisions (4 deep infection, 3 bearing dislocation, 2 unexplained pain)
Price and Svard ⁵	2010	682	69.7 (range: 48–94)	Anteromedial OA, Secondary OA, Osteonecrosis	None Given	5.9 (0.5–22)	98 (10) 91 (20)	29 revisions (10 lateral arthrosis, 9 component loosening, 5 infection, 2 bearing dislocations, 3 unexplained pain)

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® System continues to advance partial knee arthroplasty with Microplasty® Instrumentation. This instrumentation platform includes innovative tools to help the surgeon with accuracy and reproducibility.





Uniting Precision with Efficiency

The Oxford® Knee coupled with Microplasty® Instrumentation provides surgeons with the tools to allow for precise and accurate results 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 1 mm incremental bone removal

References

1. Data on file
2. A Minimalist Approach for Compartment Pathology: Uni, Bi or Tri, Spring CCJR 2013, Michael Berend, M.D. Presentation #32.
3. Biomet Oxford vs. TKA Satisfaction Survey. March, 2012.
4. Brown, NM, *et al.* Total Knee Arthroplasty Has Higher Postoperative Morbidity Than Unicompartmental Knee Arthroplasty: A Multicenter Analysis. *The Journal of Arthroplasty*. (2012)
5. Price AJ, Svard U.: A second decade lifetable survival analysis of the Oxford unicompartmental knee arthroplasty. *Clin Orthop Relat Res*. 2011 Jan;469(1): 174-9.
6. Lygre, SHL *et al.* Pain and Function in Patients After Primary Unicompartmental and Total Knee Arthroplasty. *JBJS Am*. 2010; 92:2890-2897.
7. Cobb, J, *et al.* Functional Assessment of knee arthroplasty using an instrumented treadmill. Imperial College of London. March 8, 2012. Presentation.
8. Goodfellow, J. and O'Connor, J. The Mechanics of the Knee and Prosthesis Design. *Journal of Bone and Joint Surgery (Br)*. 60(3):358-69, 1978.
9. Bankston, A. *et al.* Comparison of Polyethylene Wear in Machined Versus Molded Polyethylene. *Clinical Orthopaedics and Related Research*. 317: 37-43, 1995.
10. Clarke, I. *et al.* Hip Simulator Wear Testing ArCom® vs. Extruded Bar Polyethylene. Presentation. 7th Annual Conference on Techniques & Science for Successful Joint Arthroplasty. 1995.
11. Murray, D. *et al.* The Oxford Medial Unicompartmental Arthroplasty. A Ten-Year Survival Study. *Journal of Bone and Joint Surgery*. 80:983-989. 1998.
12. Keys, G. *et al.* Analysis of First Forty Oxford Medial Unicompartmental Knee Replacements from a Small District Hospital in UK. *Knee*. 11:375-377. 2004.
13. Rajasekhar, C. *et al.* Unicompartmental Knee Arthroplasty. 2- to 12-year Results in a Community Hospital. *Journal of Bone and Joint Surgery Br*. 86:983-985. 2004.
14. Emerson RH Jr, Higgins LL. Unicompartmental knee arthroplasty with the Oxford prosthesis in patients with medial compartment arthritis. *J Bone Joint Surg Am*. 2008 Jan;90(1):118-22.
15. Svard, U. and Price, A. Oxford Medial 1. Unicompartmental Knee Arthroplasty. A Survival Analysis of an Independent Series. *Journal of Bone and Joint Surgery Br*. 83:191-194. 2001.
16. Price, A. *et al.* Long-term Clinical Results of the Medial Oxford Unicompartmental Knee Arthroplasty. *Clinical Orthopaedics and Related Research*. 435:171-180. 2005
17. Khanna, G. and Levy, B. Oxford Unicompartmental Knee Replacement: Literature Review. *Orthopedics Supplement*. 30(5): 12. 2007.
18. Ritter, M. *et al.* Flat-on-Flat, Nonconstrained, Compression-Molded Polyethylene Total Knee Replacement. *Clinical Orthopaedics and Related Research*. 321: 79-85, 1995
19. Duffy, G. *et al.* Cemented Total Knee Arthroplasty Using a Modern Prosthesis in Young Patients With Osteoarthritis. *The Journal of Arthroplasty*. 22(6 Suppl 1): 67-70, 2007.
20. Laskin, R. The Genesis Total Knee Prosthesis. *Clinical Orthopaedics and Related Research*. 388: 95-102, 2001.
21. Malkani, A. *et al.* Total Knee Arthroplasty with the Kinematic Condylar Prosthesis. *Journal of Bone and Joint Surgery*. 77(3):423-31, 1995.
22. Brassard, M. *et al.* Does Modularity Affect Clinical Success? A Comparison with a Minimum 10-year Followup. *Clinical Orthopaedics and Related Research*. 388: 26-32, 2001.
23. Goodfellow, J. *et al.* The Oxford Knee for Unicompartmental Osteoarthritis. The First 103 Cases. *Journal of Bone and Joint Surgery*. 70:692-701. 1998.
24. Carr, A. *et al.* Medial Unicompartmental Arthroplasty: A Survival Study of the Oxford Meniscal Knee. *Clinical Orthopaedics and Related Research*. 295:205-213. 1993.
25. Vorlat, P. *et al.* The Oxford Unicompartmental Knee Prosthesis: A 5-Year Follow-up. *Knee Surgery Sports Traumatology Arthroscopy*. 8:154-158. 2000.
26. Emerson, R. *et al.* Comparison of a Mobile with a Fixed-Bearing Unicompartmental Knee Implant. *Clinical Orthopaedics and Related Research*. 404:62-70. 2002.
27. Langdown, A. *et al.* Oxford Medial Unicompartmental Arthroplasty for Focal Spontaneous Osteonecrosis of the Knee. *Acta Orthopaedica*. 76:688-692. 2005.
28. Price, A. *et al.* Oxford Medial Unicompartmental Knee Arthroplasty in Patients Younger and Older Than 60 Years of Age. *Journal of Bone and Joint Surgery Br*. 87:1488-1492. 2005.
29. Verdonk, R. *et al.* The Oxford Unicompartmental Knee Prosthesis: A 2-14 Year Follow-up. *Knee Surgery Sports Traumatology Arthroscopy*. 13:163-166. 2005.
30. Vorlat, P. *et al.* The Oxford Unicompartmental Knee Prosthesis: An Independent 10-year Survival Analysis. *Knee Surgery Sports Traumatology Arthroscopy*. 14:40-45. 2006.
31. Kort, N. *et al.* The Oxford Phase III Unicompartmental Knee Replacement in Patients Less than 60 Years of Age. *Knee Surgery Sports Traumatology Arthroscopy*. 2006.
32. Luscombe, K. *et al.* Minimally Invasive Oxford Medial Unicompartmental Knee Arthroplasty. A Note of Caution! *International Orthopaedics*. 2006.
33. Pandit, H. *et al.* The Oxford Medial Unicompartmental Knee Replacement Using a Minimally-invasive Approach. *Journal of Bone and Joint Surgery*. 88B: 54-60, 2006.

All trademarks herein are the property of Biomet, Inc. or its subsidiaries unless otherwise indicated.

This material is intended for the sole use and benefit of the Biomet sales force and physicians. It is not to be redistributed, duplicated or disclosed without the express written consent of Biomet.

For product information, including indications, contraindications, warnings, precautions and potential adverse effects, see the package insert and Biomet's website.



One Surgeon. One Patient.®

Responsible Manufacturer
Biomet, Inc.
P.O. Box 587
56 E. Bell Drive
Warsaw, Indiana 46581-0587
USA