Simplifying the Most Clinically Proven Partial Knee in the World

Oxford® Partial Knee with Microplasty® Instrumentation

ZIMMER BIOMET

Your progress. Our promise.™

Microplasty Instrumentation

Innovative, Accurate, Reproducible

Microplasty instrumentation simplifies the surgical technique, providing more accurate and reproducible femoral and tibial implant positioning.[1]

By referencing normal, intact cartilage and the MCL to set the amount of tibial resection, the technique is more bone-conserving compared to Phase 3 Instrumentation. Microplasty instrumentation has resulted in a greater number of 3 mm and 4 mm bearings being implanted (92% vs. 84%; p=0.001)[1] compared to Phase 3 Instrumentation, which has demonstrated better survivorship than 5 mm bearings and thicker[2].

With simplified instrumentation, Microplasty showed a reduction in OR time of almost 9 minutes compared to Phase 3 Instrumentation.[3]

Oxford Microplasty instrumentation has also been shown to reduce the risk of dislocation compared to Phase 3 Instrumentation.[4]

Key Oxford Microplasty Instruments

Anti-Impingement Guide and Anterior Mill

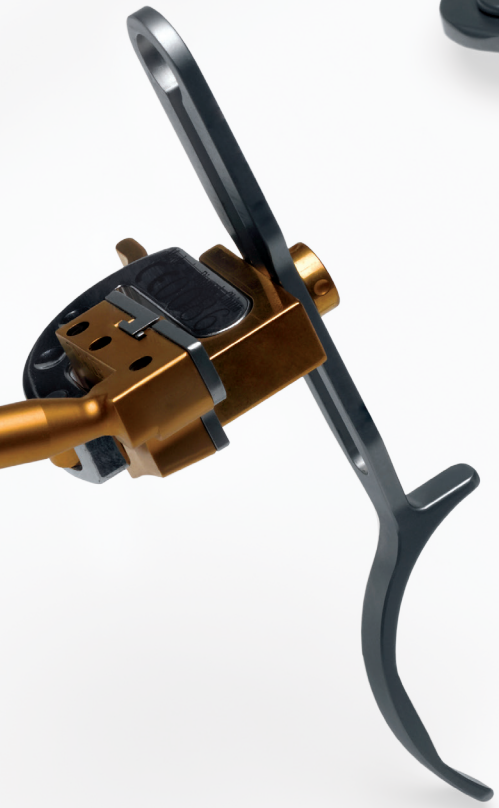
By using the Anterior Mill in combination with the Anti-Impingement Guide it allows for precise removal of impinging osteophytes and anterior bone. This helps avoid impingement and is faster than the chisel method with Phase 3 instrumentation.

Femoral Drill Guide, IM Rod and IM Link

The Femoral Drill Guide linked to the IM rod provides accurate and reproducible femoral alignment[1]

Posterior Resection Guide

Updated Posterior Resection Guide features a captured cut slot, reducing the risk of over or under cutting the posterior femur



Tibia Resection Guide, G-Clamp and Femoral Sizing Spoon

Unique Tibial Resection Guide that uses patients' normal MCL tension to determine the level of tibial resection

Patient Satisfaction and Survivorship Data

Satisfaction

A recent multi-center study[5] found Oxford Partial Knee Replacement (PKR) patients were...

- **2.7 times more likely to be satisfied** than Total Knee Replacement (TKR) patients with their ability to perform activities of daily living
- **1.8 times more likely to report** that their knee felt normal compared to TKR patients

Survivorship

Now compare this satisfaction data with data from the England and Wales National Joint Register (NJR) which showed 87.5% survivorship of PKA at 10 years compared with 96.6% in cemented TKA.[6]

There's more to consider than just survivorship when deciding between PKA and TKA.

It is generally believed that the higher revision rate of PKR is due to a higher percentage of patients with poor results (OKS < 20). However a review of the New Zealand Joint Register by Goodfellow, J. *et al,*[7] shows that TKR actually has a higher proportion (1.6x) of patients with poor results than PKR.

Revision Threshold

An alternative explanation is that the threshold for revision is different for PKR and TKR. Data from the NZJR shows that if the outcome following TKR is very poor (OKS < 20) then 12% are revised whereas if the outcome following PKR is similarly poor then 63% are revised.[7] This clearly shows that the threshold for revision of TKR is higher than for PKR.

Furthermore, PKRs have been proven to be easier to revise[7]. Fortunately, there are ways to reduce the revision rate of PKR through utlization[8-10] and training & education.[16]

If TKR had a very poor outcome, then only

12%

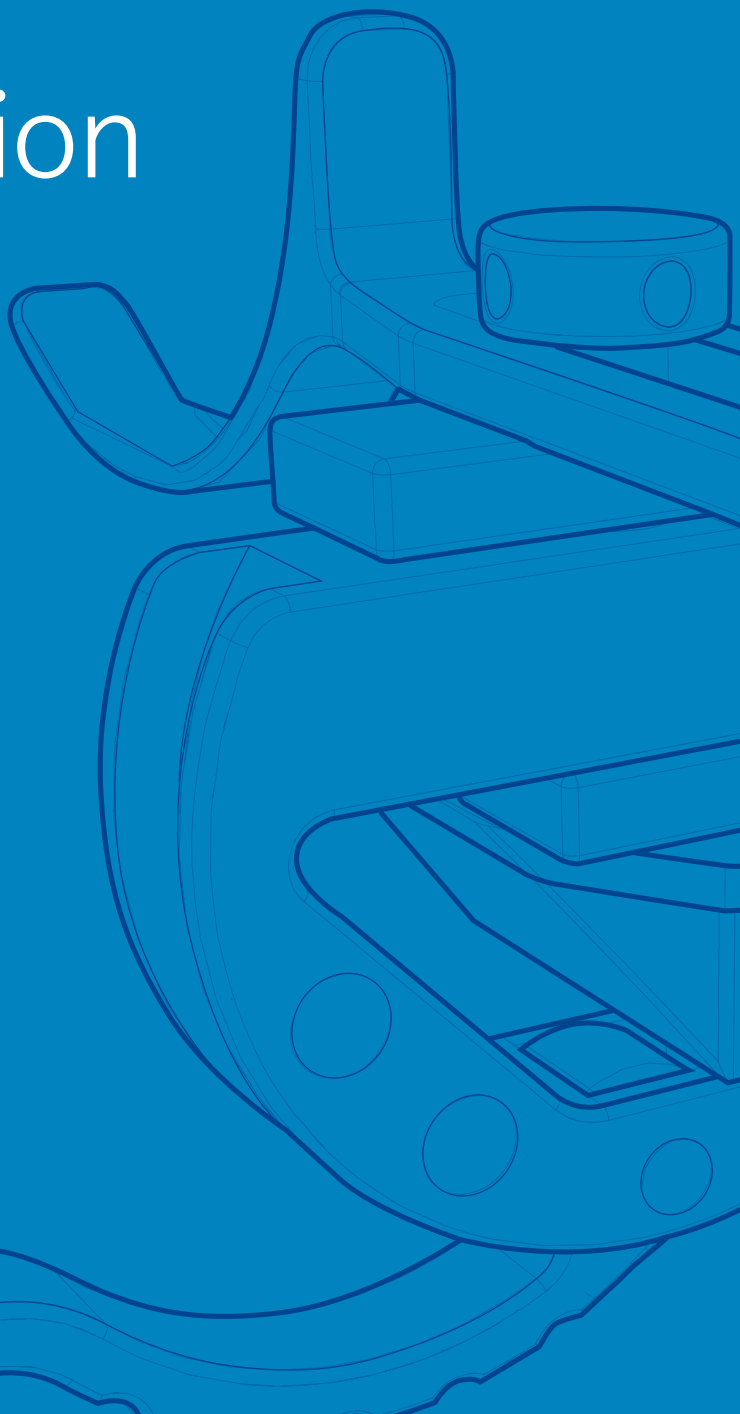
are revised[7]

If PKR had a very poor outcome, then

63%

are revised[7]

Closing the Revision Gap



Utilization

The revision gap between PKR and TKR reported in NJRs[6] can be reduced with increased utilization of PKRs.

Liddle, AD. *et al*[8] found that surgeons utilising PKR for **under 20%** of their annual knee replacements experienced a **dramatic increase in their revision rate**

A review of the NZJR by Treggonig *et al* found surgeons **at least 12 PKRs** per year are found to have a **decreased revision rate**[9]

Similarly a study by Badawy, M *et al*[10] found a **lower risk of revision** in hospitals performing **more than 40 PKAs per year** compared to those performing under 10 PKAs per year

47.6% candidates for PKA[15]

8% current utilization of PKR[12,13]

PKA Candidacy

When using criteria published by Kozinn & Scott in 1989 only 5% of patients are candidates for PKA.[11] This may partly explain why there is low utilization of PKA today, with it only being used for 8% of knee replacements worldwide.[12,13]

In 2015, Scott[14] revisited the 1989 criteria. Using published data, he and 5 co-authors concluded that the indications allow for a much broader utilization.

One study showed that 47.6% of all knee replacement patients are candidates for PKA.[15]

Training & Education

Training and education can make a huge impact in reducing revision rates. The Swedish Knee Arthroplasty Register (SKAR) found that "increased training of surgeons [on the Oxford PKR] showed improved results."[16]

Zimmer Biomet makes it easy for you to become an Oxford PKR Trained Surgeon, through our ongoing lifetime education program.

Oxford Partial Knee Advanced Instructional Courses

This FDA-required course provides the opportunity to learn more about the indications for the Oxford PKR and to practice the surgical technique, featuring Microplasty instrumentation.

Oxford Partial Knee Master Courses

For more experienced users of the Oxford PKR, classes are available locally throughout the year. For upcoming courses visit biometosa.com

Oxford Partial Knee Visitation Program

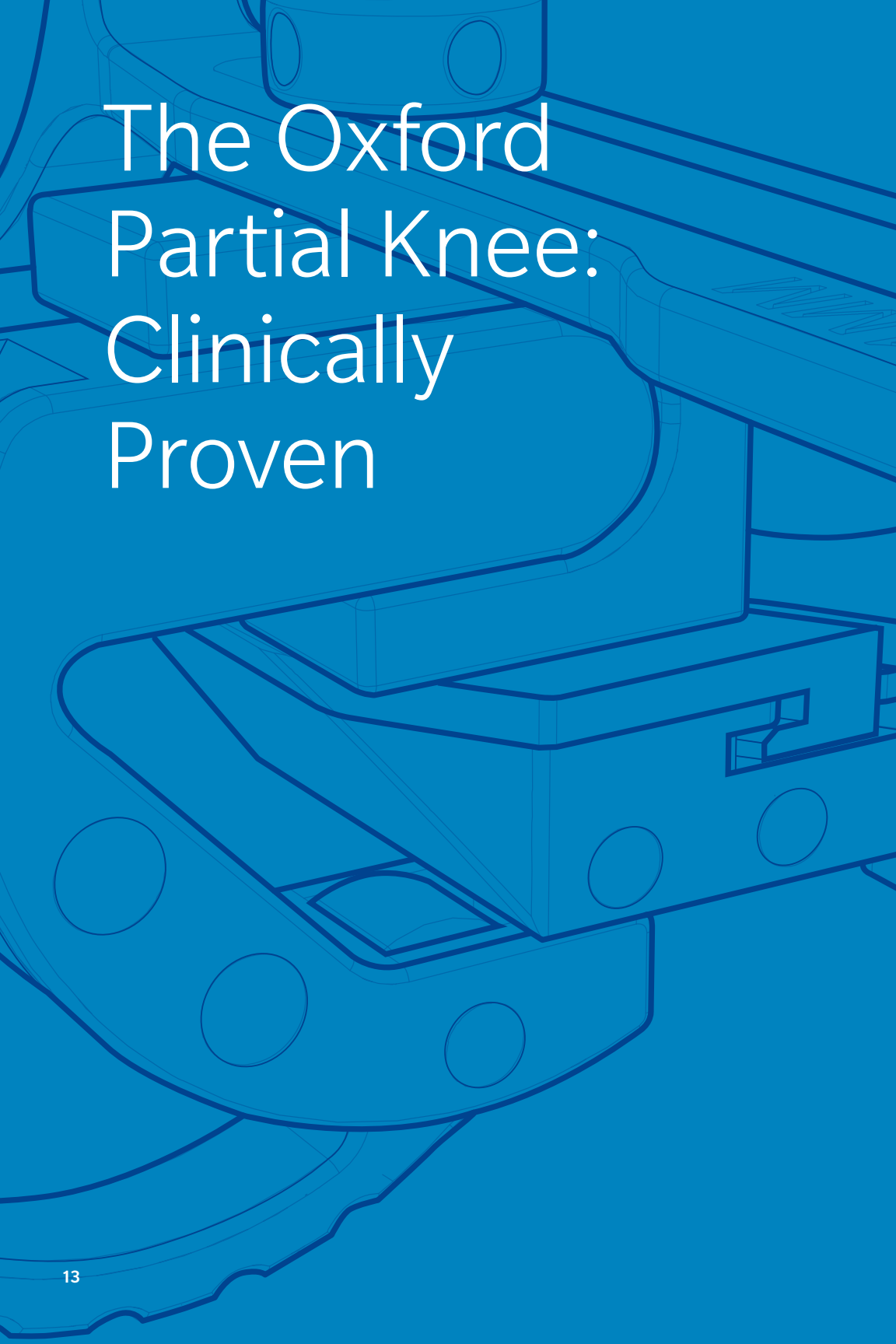
View live surgeries in a hospital setting and discuss implant design rationale.

Touch Surgery Application

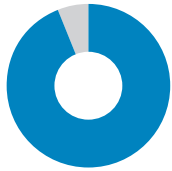
To help surgeons stay current with the Oxford Partial Knee surgical technique, Zimmer Biomet has partnered with Touch Surgery to create an interactive surgical technique simulator featuring the Oxford Microplasty Instrumentation. The app is available on iOS and Android.

Download on the App Store GET IT ON Google Play

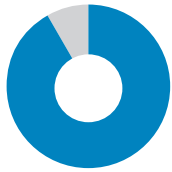
The Oxford Partial Knee: Clinically Proven



The Oxford PKR has over 35 years of clinical experience and is the only partial knee that's been clinically proven in survivorship at minimum 15[17-19] and 20 years.[17]



94% at 15 years[17-19]



91% at 20 years[17]

Benefits of PKA vs. TKA*

Better range of motion
compared to TKA[20,21]

Better functionality
than TKA[22]

Substantial cost savings of approximately $3,261 per knee[15]

Shorter hospital stays[20]
average length of stay in days

Fewer and less severe complications[23]*

At least 0.8 days
average reduction in length of stay in favor of PKA[1,20,23-28]

Additional cost savings
when associated with an accelerated recovery protocol[20]

Lifetime Warranty

Zimmer Biomet strongly believes in the importance of patient satisfaction and the clinical survivorship of the Oxford PKR.

That's why every Oxford Partial Knee implanted on or after April 29, 2013 now comes with the only Lifetime Knee Implant Replacement Warranty† in the U.S. It's your assurance that Zimmer Biomet not only makes a proven partial knee, we stand behind it 100%.

If a patient receives an Oxford Partial Knee and it has to be revised for any reason, Zimmer Biomet will cover the cost of the Zimmer Biomet replacement knee implant.

References

* Some studies included Oxford Partial Knees as well as other 'non-Biomet' partial knees

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† Subject to terms and conditions within the written warranty.

- Applies to Oxford Partial Knees implanted on or after 4-29-2013
- Covers the replacement of Oxford Partial Knee components for any reason
- Covers the cost of the replacement implant only; does not cover hospital costs, co-pays, or other related expenses
- Limited to no more than one complete replacement of the product
- Any additional costs associated with surgery or follow-up are not covered – only the implant components

To find out more, visit **www.oxfordpartialknee.com**

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iOS is a trademark of Cisco.

The Oxford Partial Knee is intended for osteoarthritis or avascular necrosis limited to the medial knee compartment and is to be implanted with bone cement. The Oxford Knee is not indicated for use in the lateral compartment or for patients with ligament deficiency. Potential risks include, but are not limited to, loosening, dislocation, fracture, wear, and infection, any of which can require additional surgery. For complete prescribing information, see the package insert and www.zimmerbiomet.com.

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