Why precision is powerful
A new answer for isolated patellofemoral OA

First generation PFJ implants had sharp, constraining trochlear grooves and were prone to complications such as maltracking and catching of the patella.\(^9\) Interest in less invasive procedures that retain the ACL for superior kinematics has increased, particularly among surgeons treating younger, more active patients. Second generation implants improved upon implant design, but instrumentation continued to be less sophisticated, relying on freehand preparation which can be highly variable. Given the relative rarity of isolated patellofemoral OA, a straightforward, easy-to-use technique is critical.

The JOURNEY™ PFJ System addresses the needs of surgeons performing this procedure with a simple, highly reproducible technique and an anatomic implant optimized for patellar tracking. The JOURNEY PFJ System offers surgeons looking for a less invasive, more bone and ligament sparing treatment option for more active patients the combination of proven performance and powerful precision.
Does isolated patellofemoral disease exist? What are the treatment options?

Although more rare than bi-compartmental or tri-compartmental osteoarthritis, isolated patellofemoral osteoarthritis (PFOA) may not be as uncommon as once thought. (graphs 1 and 2)

Patellofemoral pain can interfere with the activities of daily living, causing pain during stair climbing and chair rise. Patella (3).

Non-operative treatment options such as NSAIDs, bracing, and physical therapy often have little affect on advanced PFOA. Among operative treatment options, patellectomy weakens quadriceps strength, may cause instability and has a reported success rate as low as 50.6

While TKA is unparalleled as a procedure for pain relief and longevity, it is a large operation for isolated patellofemoral disease. The literature cites the loss of bone, meniscus, and ligaments as detriments, particularly for younger, more active patients.7

“Although TKR may be done to treat patellofemoral arthritis, excision of intact femoral and tibial articular condyles, the menisci and the cruciate ligaments may, in the future, be looked back on as being akin to vandalism.”8
Proven performance

Trochlear groove
The JOURNEY® PFJ has a deepened and lateraled trochlear groove for optimized patellar tracking. It is based upon the clinically successful GENESIS® II Total Knee System’s trochlear groove, which has excellent published results for patellar tracking and low lateral release rates at five and ten years and uses the GENESIS II patella implant options.10,11

Advanced bearing surface
The JOURNEY PFJ femoral implant is made of OXINIUM™ Oxidized Zirconium. This advanced bearing material has been shown to be 4900 times more resistant to abrasion than CoCr in lab testing.12 OXINIUM technology also has a coefficient of friction that is up to half that of cobalt chrome.13 Because of these qualities, patella resurfacing is optional and at the discretion of the surgeon.

Anatomic fit
The development of handed TKA femoral components allowed for more accurate fit and better patellar tracking. Surgeons using patellofemoral implants should not settle for anything less, which is why the JOURNEY PFJ system features asymmetric components for truly anatomic fit and superior patellar tracking.

Fixation
The distal peg is convergent in order to enhance fixation. The pegs for all four sizes are constant, so changes in implant sizes to optimize fit can be made through trialing.
Powerful precision

Accurate alignment
Studies have noted the importance of aligning the patellofemoral implant in external rotation to optimize patellar tracking and reduce laterally displacing forces. External rotation is set using a tibial or femoral alignment instrument for correct alignment.

Resurfacing trochlear instrumentation
Unlike other systems on the market, the JOURNEY™ PFJ system does not require freehanding of the trochlear groove, but instead uses a proprietary, precise reamer for simple and accurate bone preparation.

Simple technique
1. Anterior cut
2. Size femur and mark trochlear boundary
3. Ream trochlear groove
4. Check depth
5. Trial implantation
6. Resurface patella if desired
References


12 Hunter, G and Long, M. Abrasive wear of oxidized Zr-2.5Nb, CoCrMo, and Ti-6Al-4V against bone cement" 6th World Biomaterials Cong Trans, Society for Biomaterials, Minneapolis, MN 1998, p. 528.