# KineMatch® PFR

Simple Solution. Proven Results.

## **Custom-Fit Patello-Femoral Replacement**

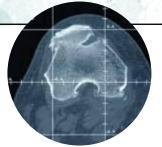
Superb Clinical Results<sup>4,7,8</sup>

No Resection of Femoral Bone

Simple and Fast Surgical Technique <sup>5</sup>

Reduced Post-Operative Morbidity <sup>3</sup>

CT-Based to Match Patient Anatomy

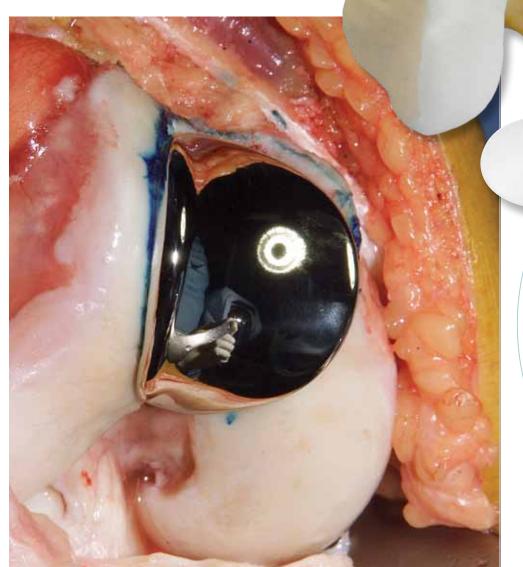


As Easy As...

1. CT Scan

2. Virtual Model of Patient Anatomy

3. Implant & Drill-Guide custom-made for patient anatomy





### A technology you and your patients will appreciate

#### KineMatch® Custom-Fit Patello-Femoral Replacement (PFR)

Designed specifically for the small but challenging group of patients with isolated, end-stage patello-femoral disease, the *KineMatch* PFR offers a uniquely effective and conservative resurfacing solution. Because the device is precisely manufactured to fit the patient's anatomy using CT data, no resection of femoral bone is required, thus preserving bone stock for the future. The design of the front (articulating) and back (bone fitting) sides of the implant are "decoupled" so that optimization of an intimate, bone-sparing fit, as well as proper kinematics and control of patella tracking, can be achieved. Overstuffing is avoided¹ with a deep groove that accommodates the patella, while thicker medial and lateral margins provide stability.² The patellar groove can be rebuilt, even in a patient with a relatively "flat" trochlea.¹ The *KineMatch* all poly patella is used in conjunction with the Custom-Fit *KineMatch* femoral component.

The *KineMatch* device is implanted in a simple and reliable surgical procedure with minimal joint disruption.<sup>5</sup> A custom-fit drill template, having the same exact femoral trochlea fit and perimeter shape as the actual implant, is provided for each case. The custom template is used to mark the implant margin for cartilage removal and then to guide drilling of the femoral component peg holes. The CoCr femoral and UHMWPe patella implants are fixed using bone cement.

Because the *KineMatch* surgery involves very little bone resection and avoids violation of the intramedullary space, this device is particularly well suited to an "episode of care" reimbursement model because post-operative pain, morbidity and rehab are often significantly reduced as compared to treatment with either standard PFR devices or TKA.<sup>3</sup>

#### Benefits of KineMatch Custom-Fit PFR

- Addresses intractable patello-femoral disease when other treatment options have failed.
- Accurate, fast and reliable femoral component placement.
- Replicates normal kinematics by re-establishing the patient's trochlear groove alignment and depth, which in turn maintains proper patella offset for efficient quadriceps function.
- Eliminates femoral bone resection by utilizing CT modeling technology to achieve a custom fit to the patient's femoral anatomy for both the drill guide and implant.
- Reduces problems of soft tissue impingement often seen with "off-theshelf" patello-femoral implant designs due to their improper fit.
- May reduce post-operative pain, morbidity and physical therapy requirements as compared to alternate treatment options.



Custom CT-based drill template

In addition to the CT-based implant and drill template, a CT bone model is provided for each case to confirm the design and plan for osteophyte removal when required.

#### **Clinically Proven Results**

The *KineMatch* device has achieved unparalleled clinical results. In 25 consecutive implantations in 22 patients (3 bilateral), with a mean 73 month (32-119 mo.) follow-up, all implants were in place and functioning well. Using the Knee Society scoring system, there were 18 excellent and 7 good results with a mean functional score of 89 points and mean objective score of 91 points. No patients required additional surgery.<sup>4</sup> At an average of 11.3 years, all 25 implants were still in place and all patients reported being 'Very Satisfied'.<sup>8</sup>

- 1. Grelsamer R, Cavallaro BS (2014) Does the Kinematch Prosthesis Impair Knee Flexion in Patients with Trochlear Dysplasia? Reconstructive Review 4: 42-45.
- 2. Lombardi AV (2011) Patellofemoral Arthroplasty: Custom Inlay Technique Offers A Patient Specific Approach. Presented at the Annual Meeting of the AAOS.
- 3. Arendt EA et al (2011) Patellofemoral Arthritis. Presented at the ISAKOS Biennial Meeting. Brazil.
- 4. Sisto DJ, Sarin VK (2006) Custom Patellofemoral Arthroplasty of the Knee. J Bone Joint Surg. 88-A: 1475-1480.
- 5. Sisto DJ, Sarin VK (2007) Custom Patellofemoral Arthroplasty of the Knee: surgical technique. J Bone Joint Surg. 89 (Suppl 2, Part 2): 214-25.
- 6. Sisto DJ, Sarin VK (2008) Patellofemoral Arthoplasty with a Customized Trochlear Prosthesis. Orthop Clin N Am. 39: 355-36.
- 7. Sisto DJ, Grelsamer RP, Sarin VK (2012) Patient-Specific Patellofemoral Arthroplasty. In: Recent Advances in Hip and Knee Arthroplasty, Edited by S.K. Fokter. InTech Publishing. Rijeka, Croatia.
- 8. Sisto DJ, Sarin VK (2011) Custom Patello-femoral Arthroplasty of the Knee: An Eleven Year Follow-Up. Presented at the Orthopaedic Research Society Annual Meeting. Long Beach, CA.

#### **Endorsed by Leading Surgeons**

"I have been performing KineMatch custom-fit patello-femoral arthroplasty since 2007. I am very pleased with the rapid pain relief, quick return of range of motion and function, as well as the short operative time and learning curve."

Ronald P. Grelsamer, M.D.
Chief of Patello-Femoral Reconstruction
Mount Sinai Medical Center, New York, NY

Dr. Grelsamer has not received compensation from Kinamed.

"This patient specific design and manufacturing technique ensures accurate and precise anatomic fit while simultaneously providing proper patellofemoral alignment and medial lateral constraint."<sup>2</sup>

Adolph V. Lombardi, Jr., MD, FACS Joint Implant Surgeons, Inc New Albany, Ohio

Dr. Lombardi has not received compensation from Kinamed.

"The KineMatch device has offered a remarkable benefit and return to function for a number of my patients with intractable patello-femoral disease who were otherwise facing the prospect of TKR."

> Domenick J. Sisto, MD Sherman Oaks, California

Dr. Sisto has not received compensation from Kinamed.

## KineMatch® Custom-Fit Patello-Femoral Replacement (PFR) System

Description			Catalog No.
Custom-Fit PFR Implants			
KineMatch PFR Femoral Implant, Left			22-100-1001
KineMatch PFR Femoral Implant, Right			22-100-1002
Patella Implants (Dome, Tri-Peg)	Diameter (mm)	Thickness (mm)	
Patella Implant, Size 1	30	8	20-420-0101
Patella Implant, Size 2	33	9	20-420-0102
Patella Implant, Size 3	36	10	20-420-0103
Patella Implant, Size 4	39	11	20-420-0104
KineMatch Patient-Matched Instrum	nentation		
KineMatch Custom PFR Drill Guide, Left			22-800-2004
KineMatch Custom PFR Drill Guide, Right			22-800-2005
Optional KineMatch Patient-Matche			
KineMatch Custom Autoclavable Bone Model, Right			CUSTOM 260
KineMatch Custom Autoclavable Bone Mo	odel, Left		CUSTOM 261
госhlea Stop Drill, 8mm			22-800-2001
Trochlea Drill Guide Stabilization Pin			22-800-2002
Trochlea Impactor			22-800-2003
Trochlea Fixation Nail Pilot Drill			22-800-2007
Trochlea Drill Guide Fixation Nail			22-800-2008
Гrochlea Pin Puller			22-800-2009
Trochlea Ring Curette, 8mm			22-800-2010
Trochlea Ring Curette, 12mm			22-800-2012
Trochlea Nail Extractor			22-800-2011
Patella Stop Drill, 6mm			22-800-3003
Patella Sizer and Drill Guide, 30/33mm			22-800-3017
Patella Sizer and Drill Guide, 36/39mm			22-800-3018
Patella Resection Guide			22-800-3019
Patella Parallel Action Clamp			22-800-3020
Patella Drill Guide for Parallel Action Clam			22-800-3021
Patella Sizing Rings (3): 33mm, 36mm, 39ı			22-800-3022, -3, -4
Patella Cushion Collar for Parallel Action C	Clamp		22-800-3025
Patella Cushion for Parallel Action Clamp			22-800-3026
Patella Caliper, Pinch			22-800-3027
Patella Trials (4): 30mm, 33mm, 36mm, 39	mm		22-800-4001, -2, -3,
Instrument Tray (Autoclave Case)			22-800-1020



#### For more information:

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