

A close-up photograph of the Vanguard Complete Knee System components. The image shows a white femoral component on the left, a black tibial component in the center, and a metallic tibial insert on the right. The components are set against a black background, highlighting their shapes and textures.

VANGUARD
COMPLETE KNEE SYSTEM

System Summary

BIOMET[®]

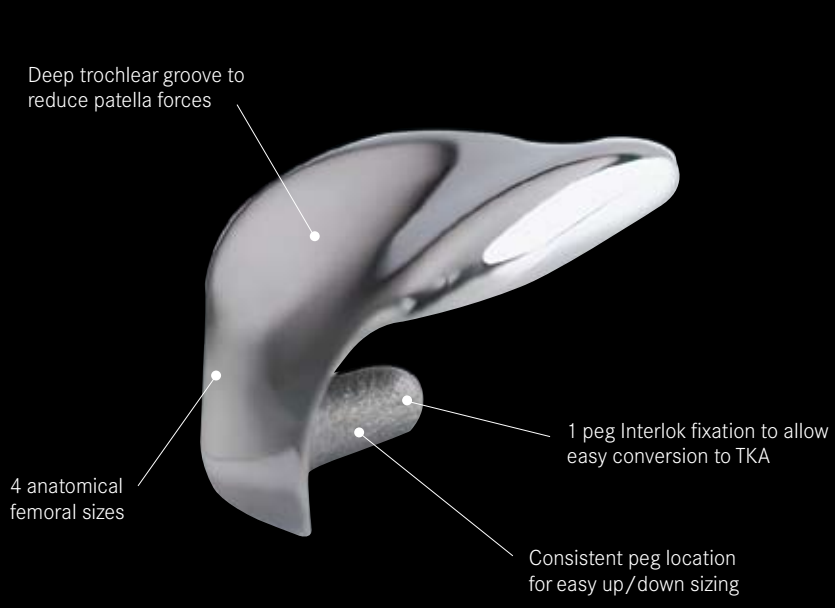
Instrumentation Options

With the introduction of Microplasty and Premier instrumentation platforms and advancements such as our patented Slidex Technology, the Vanguard Complete Knee System is the surgeon's ally in exceeding the demands of today's joint replacement patient.



Biomet UK Ltd., as the manufacturer of this device, does not practice medicine and does not recommend any particular surgical technique for use on a specific patient. The surgeon who performs any implant procedure is responsible for determining and utilising the appropriate techniques for implanting prosthesis in each individual patient.

Biomet UK Ltd. is not responsible for selection of the appropriate surgical technique, nor does it advocate a particular technique to be utilised on an individual patient.



Narrow frontal profile to decrease the risk of overhang especially in narrow femurs

Swept back trochlear groove for increased mid flexion stability

Patella Femoral Replacement

Vanguard Series A Patella

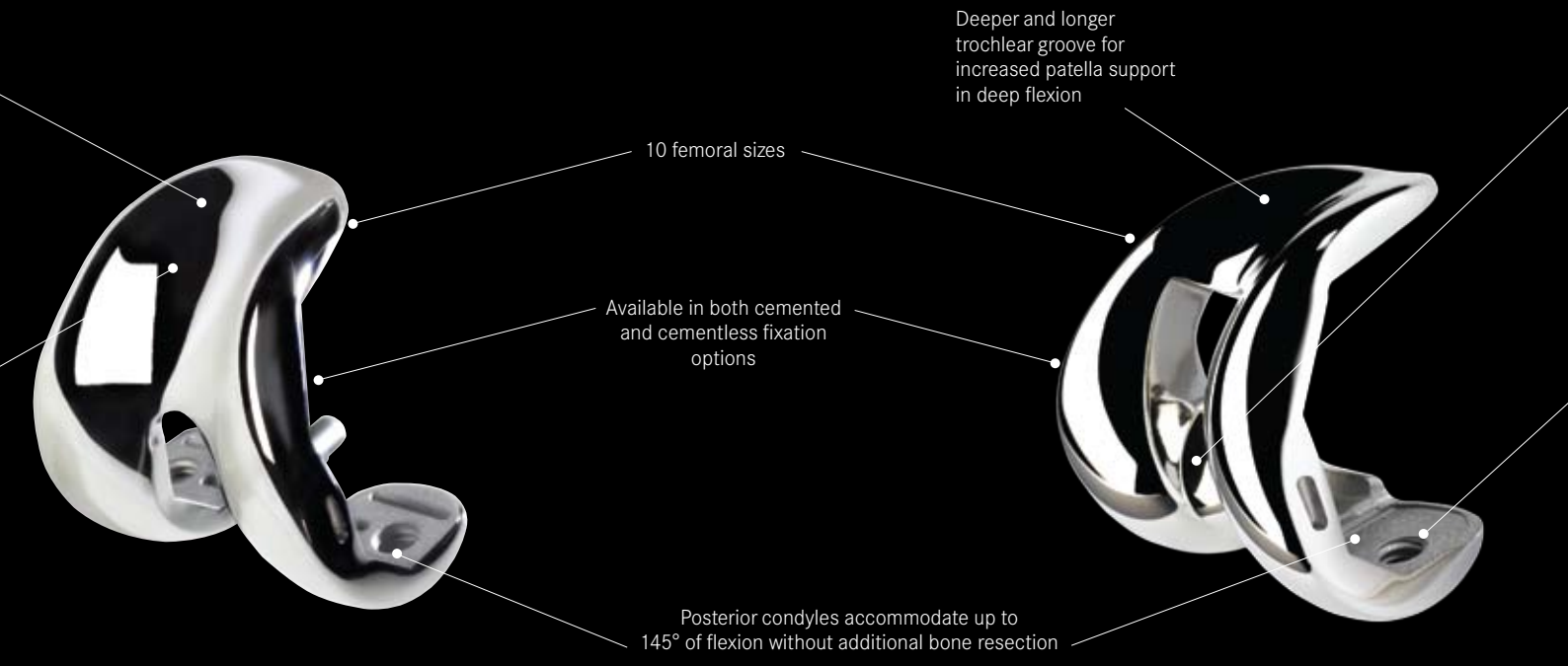


- ArCom direct compression moulded polyethylene for superior wear properties¹
- A true domed patella; a more forgiving design to rotational stresses and malalignment⁵
- Choice of 1 peg and 3 peg fixation options
- 2 thickness options

Cruciate Retaining



- 3° posterior slope
- 15° internal/external rotation
- All bearings are made from clinically proven direct compression moulded ArCom polyethylene¹



Primary Cruciate Retaining

Primary Posterior

Cruciate Retaining Lipped



- No posterior slope
- 5° internal/external rotation
- 1:1 articulating surface allows complete size interchangeability between femur and tibia

Anterior Stabilised



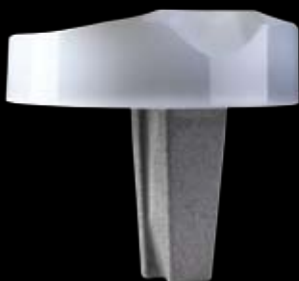
- Prominent 10mm anterior lip
- 6° internal/external rotation
- All bearing options grow proportionally in 4mm M/L increments

Posterior Stabilised



- Rounded post to minimise forces on the post, reducing wear
- 15° internal/external rotation
- Bearing thickness options grow in 2mm increments

Vanguard Monobloc System



- The Monobloc tibial bearing options grow proportionally in 4mm M/L increments
- One piece moulded tibial tray eliminates the risk of micromotion^{2,3,4}
- Utilises cruciate retaining bearing with 3° posterior slope
- Available in both Finned and I-Beam tibial stems

Vanguard Modular System



Advanced cam and post engagement avoids contact during gait

Broad posterior condyles grow proportionally in size providing greater support in deep flexion

Sided tibial augments available in 6mm, 10mm and 16mm blocks

5° valgus stem angle

Distal femoral augments available in 5mm, 10mm, 15mm thickness options

Posterior femoral augments available in 5mm and 10mm thickness options

Tibial tray available in neutral, 2.5mm and 5mm offsets

Revision

Posterior Stabilised Plus



- The PS plus bearing is indicated for use in a primary situation when more stability is desired to resist rotation and varus/valgus lift-off
- 2° internal/external rotation
- Patella tendon relief is incorporated into all tibial bearings facilitating high flexion

SSK PS



- Enhanced post height minimises risk of dislocation
- 15° internal/external rotation

SSK PSC



- Broad, wide post maximises constraint in deep flexion
- 0.5° internal/external rotation

- Fully interchangeable with Vanguard bearing options
- Polished surface to reduce risk of undersurface wear
- 9 tibial sizes
- Available in both Finned and I-Beam tibial stems



References:

1. Meding J. 4.4mm of Tibial Polyethylene: A Ten-Year Follow-Up Study. *CORR*, 388, 112-117.
2. Ritter, M.A. et al. Long-Term Follow-up of Anatomic Graduated Components Posterior Cruciate-Retaining Total Knee Replacement. *Clinical Orthopaedics and Related Research*. 388: 51-57, 2001.
3. Insall, J. et al. The Posterior Stabilized Total Knee Prosthesis. *Journal of Bone and Joint Surgery*. 77(11):1713-20, 1995.
4. Engh, G.A. What is the Clinical Scope of Implant Wear in the Knee and How Has it Changed it Since 1995? In Wright, T.M. and Goodman, S.B. (eds). *Implant Wear in Total Joint Replacement*. Rosemont, IL, AAOS 8-12, 2001.
5. Aglietti P, et al. Patella Resurfacing in *Total Knee Replacement: Functional Evaluation and Complications*. *Knee Surg Sports Traumatol Arthrosc* 2001. 9 Suppl 1: S27 - 33