The Signature System and the Vanguard Total Knee

- Offers 10 femoral and 9 tibial sizes with complete interchangeability providing custom fit for the largest percentage of the patient population
- Designed to allow 145° of flexion with no additional bone resection
- Narrow anterior cortex to avoid overhang in smaller sized femurs
- Patella friendly design with a long deep trochlear groove, without the need of additional bone resection
- Thin, rounded femoral edges to allow pain free articulation with the soft tissues
- 3 levels of Cruciate retaining and 2 levels of Posterior stabilised inserts
• Offers 10 femoral and 9 tibial sizes with complete interchangeability providing custom fit for the largest percentage of the patient population
• Designed to allow 145° of flexion with no additional bone resection
• Narrow anterior cortex to avoid overhang in smaller sized femurs
• Patella friendly design with a long deep trochlear groove, without the need of additional bone resection
• Thin, rounded femoral edges to allow pain-free articulation with the soft tissues
• 3 levels of Cruciate retaining and 2 levels of Posterior stabilised inserts
Signature
Personalised Arthritis Care
**Signature** Personalised Arthritis Care

Surgeon designed. Patient matched.

The Signature System and the Vanguard Total Knee

Combining the precision of patient specific positioning guides developed from MRI with the most flexible knee on the market allows for a custom-fit of the femoral and tibial components independently to address the largest possible percentage of the population.

- All of the alignment and accuracy benefits of navigation without the additional OR time, fixation of the arrays or capital investment
- MRI Scan leads to patient specific plan of implant size and positioning
- Surgeon has ability to alter the plan before approval of the Signature guides and their manufacture
- In the OR the patient specific Signature guides find their unique position on the patients anatomy, providing exact pin placement for the distal femoral resection guide, 4-in-1 cutting block and the proximal tibial cutting guide

Signature Planning Landmarks

A  Anterior/Posterior Axis
B  Epicondylar Axis
C  Distal Femoral Mechanical Axis Landmark
D  Lateral Distal Femoral Condyle
E  Medial Distal Femoral Condyle
F  Posterior Condylar Axis
G  Lateral Plateau
H  Proximal Tibial Mechanical Axis Landmark
I  Medial Plateau
J  Medial One-third of the Tibial Tubercle

**Signature Workflow Timeline**

1. MRI Validation
2. MRI Scan
Signature User Interface

- Data from the patient MRI generates a preoperative plan shown below
- The user friendly planning software allows the surgeon to fine tune the preliminary plan
- Final guides will incorporate the surgeons saved preoperative alterations
Signature Positioning Guides

Femoral Positioning Guides Establish:
- Distal femoral resection level (9mm default)
- Distal femoral resection
  - Valgus angle (perpendicular to femoral mechanical axis default)
  - Flexion angle (3 degree default)
- Femoral component rotation (epicondylar axis default)
- Anterior/posterior position (9mm posterior condylar resection default)
- Femoral component sizing

Tibial Positioning Guides Establish:
- Proximal tibial resection level (10mm default)
- Proximal tibial resection
  - Varus/valgus angle (perpendicular to tibial mechanical axis default)
  - Tibial slope angle (3 degree default)