



The Minimally Invasive 'Signature' **Custom Fit Knee Replacement**

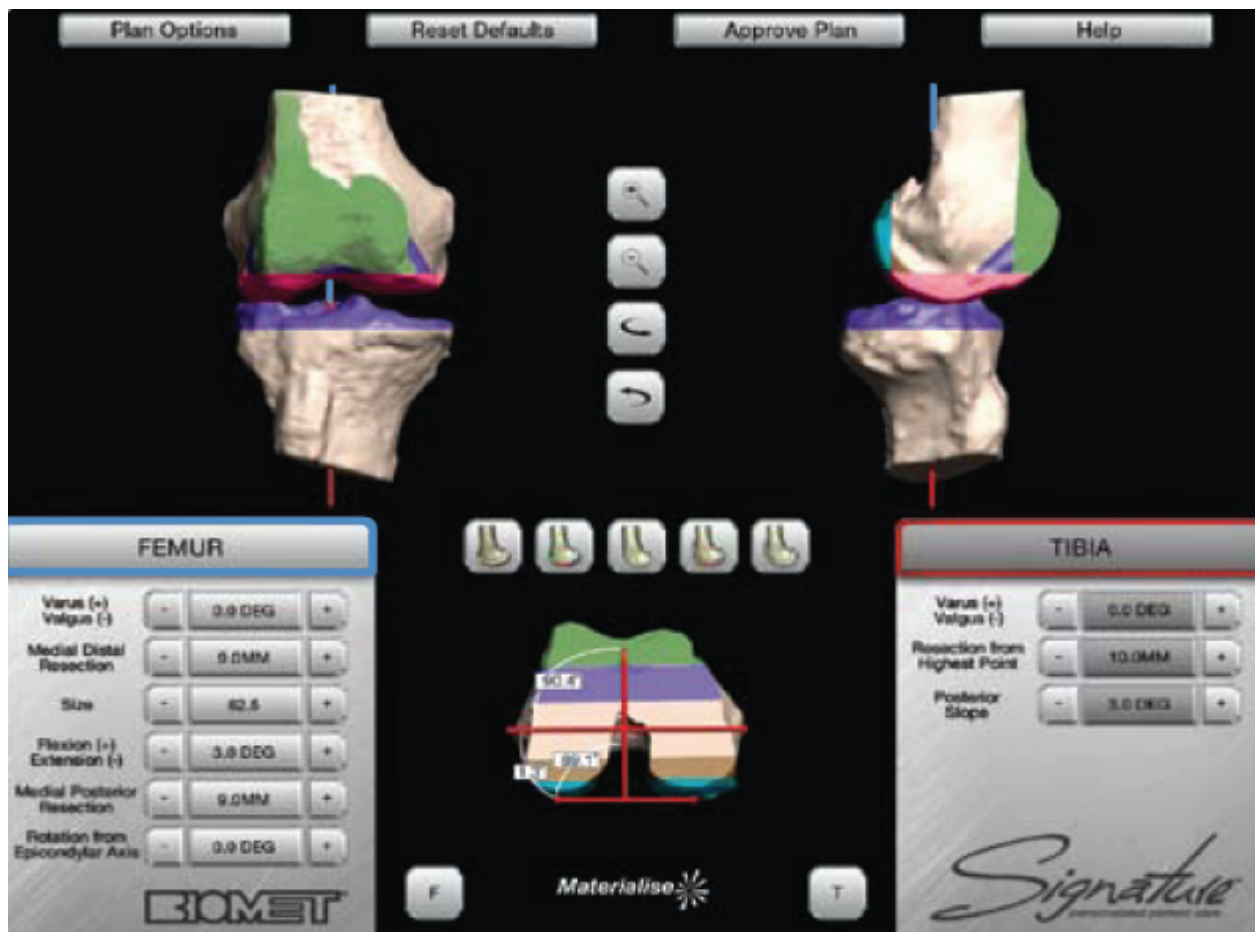
Bone and Joint Specialists is excited to announce the introduction of the Signature Custom Fit knee replacement. This new technology is designed to fit your specific anatomy. Because each person has different anatomy, the 'signature knee' custom makes the instrumentation for you and only you. This is done for every individual using MRI with 3D reconstructive images to directly match your anatomy (fig 1). These images are sent to the company which in turn makes a custom anatomic guide for your surgeon during the surgery. The knee replacement you receive is therefore specific for you. This, in conjunction with minimally invasive surgery, offers several advantages:

- a. Quicker recovery time
- b. More natural feeling
- c. Greater range of motion
- d. Preserve more bone and ligaments
- e. Shorter time in surgery

Drs. Bartholomew and Kohen were among the first orthopedic surgeons in Michigan to perform this exciting new procedure.

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Fig.1 Shows the computer generated model of the preoperative plan for a custom total knee replacement. The shaded color areas are the proposed bone resection to prepare for the knee implant. After the computer generated images are formed and customized for your individual anatomy, they are then approved by the surgeon. After approval, the knee is sent to the company (materialise in Belgium), and the custom knee blocks are then made.





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The custom blocks look like the figures below and are used for your surgery. This allows your surgeon to cut (shave) the bone precisely to match your anatomy. This is also a much less invasive technique which preserves bone and is less painful than traditional total knee.



Combined with a rapid recovery, the signature custom total knee has revolutionized knee replacement surgery.

Ask us if the Signature Custom Knee is right for you.