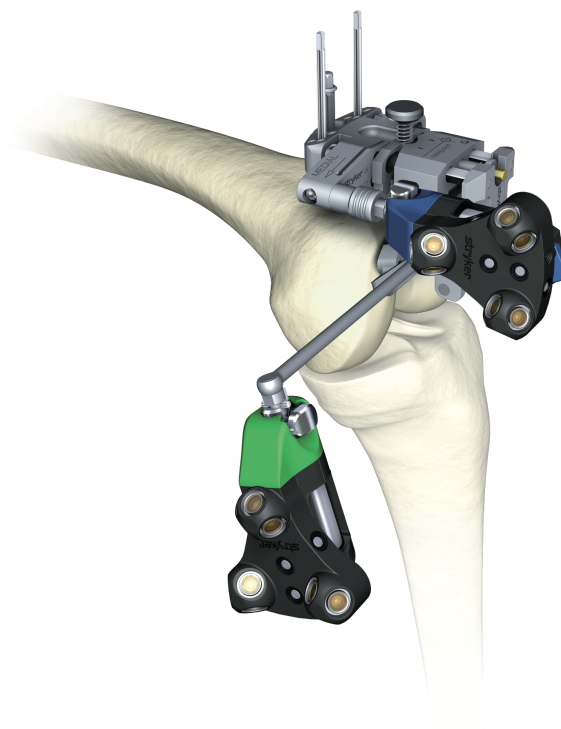


OrthoMap® Express Knee Navigation



OrthoMap Express Knee – Points of Interest

- Less invasive: no need for tracker pins in the shafts of the femur or tibia
- A “simplified” navigation solution: navigate distal femur and proximal tibia cuts; cut-check-only feature included
- Open platform: works with any implant system



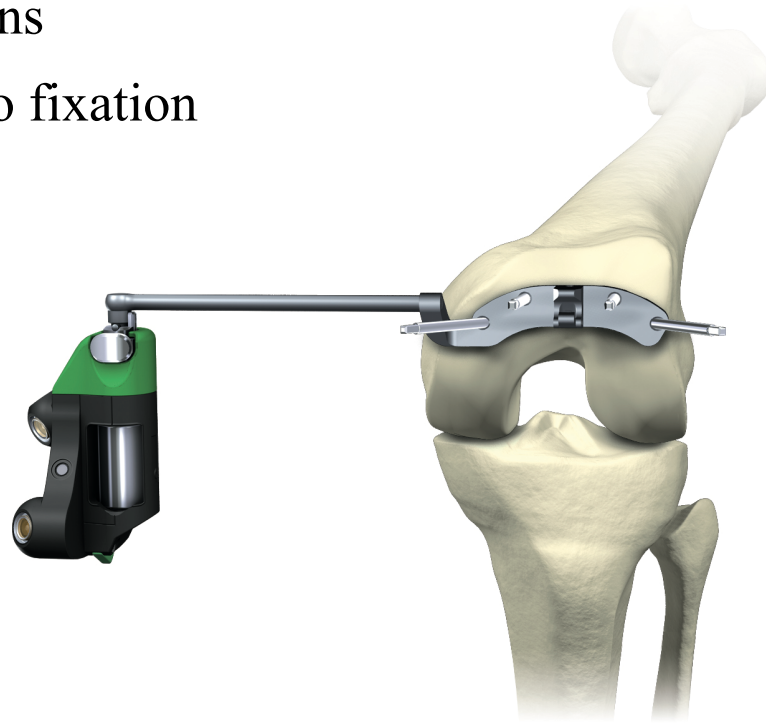
Express Knee – The Overall Procedure

- Incision – all standard techniques for exposing the knee joint may be applied
- Prepare femur
 - Attach fixation plate to distal femur
 - Register femur
 - Navigate and resect distal femur
 - Distal femur cut verification
 - Option to align femoral rotation (requires additional registration points)
- Prepare tibia
 - Attach fixation plate to proximal tibia
 - Register tibia
 - Navigate and resect proximal tibia
 - Proximal tibia cut verification
- Proceed with conventional TKA



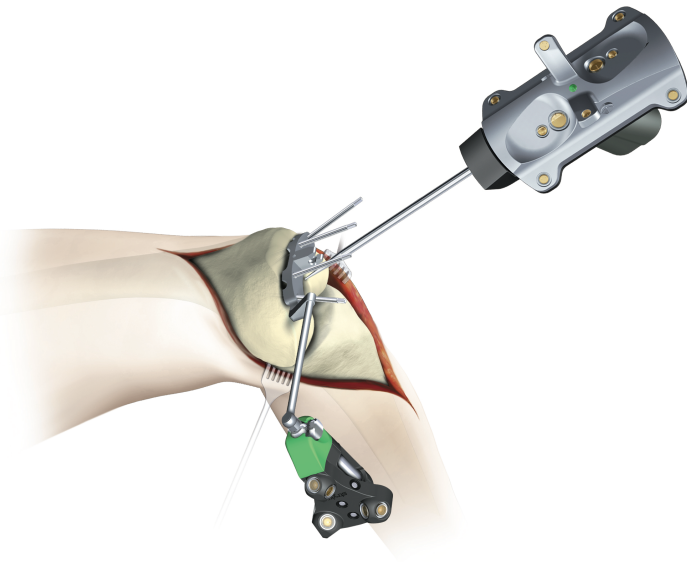
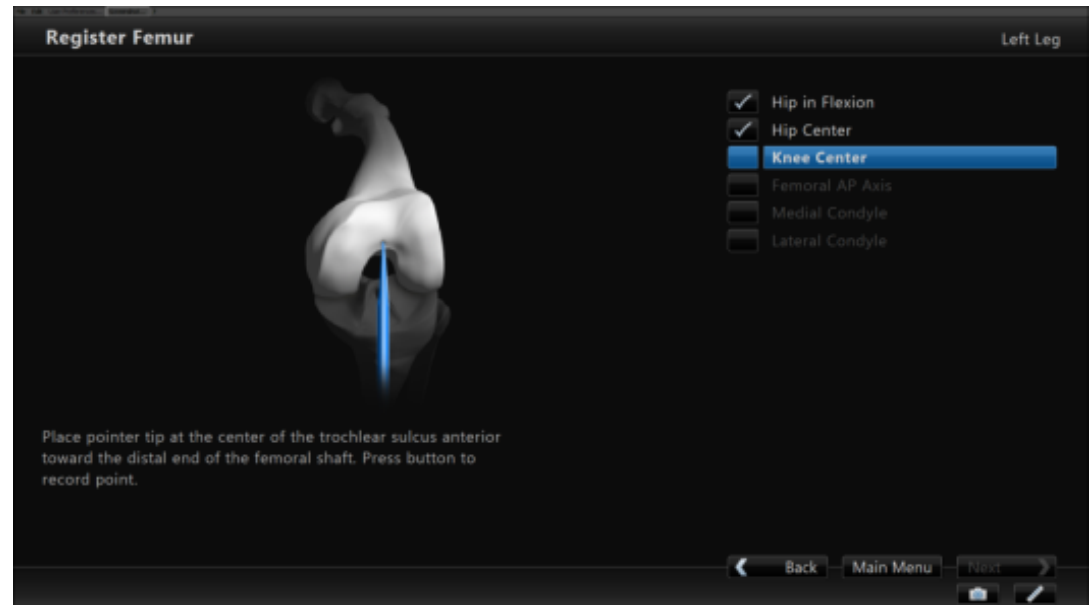
Femur Preparation

- Tracker attachment on articular surface with four 1/8" pins
- Mount femoral tracker to fixation plate



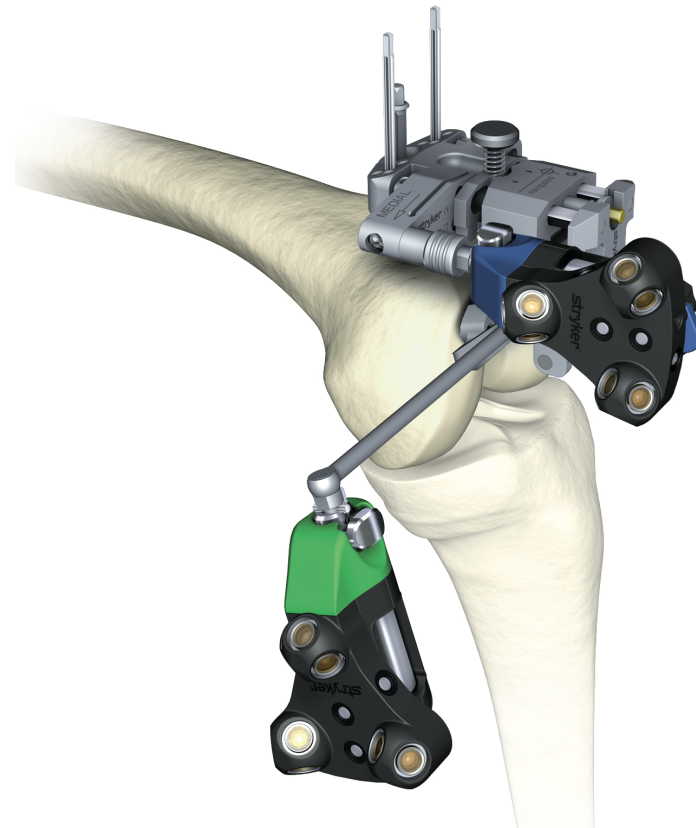
Femur Registration

- Requires six landmark registration points
 - Hip in Flexion
 - Hip Center
 - Knee Center
 - Femoral AP Axis
 - Medial Condyle
 - Lateral Condyle



Resect Distal Femur

- Attach Dedicated Mini Jig to the fixation plate. The cutting plane is tracked using the blue tracker.



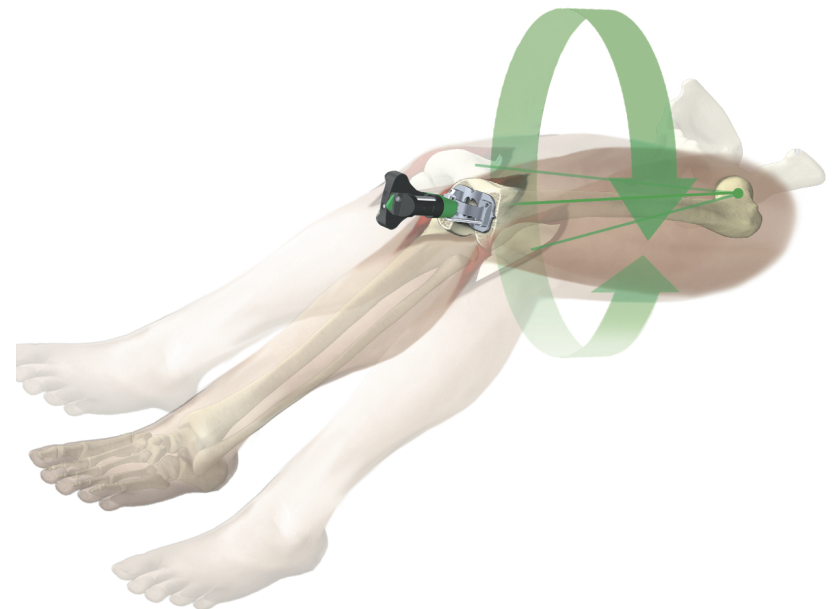
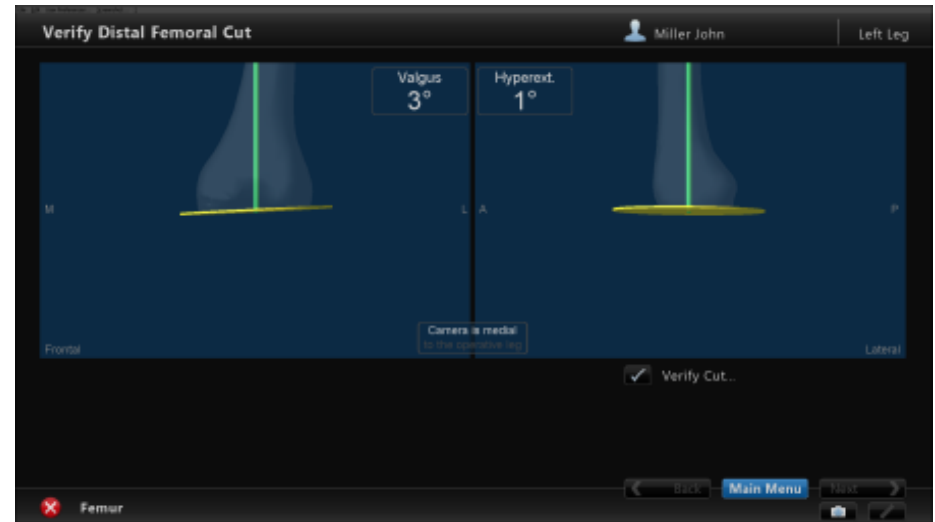
Resect Distal Femur

- Distal femoral cutting plane is viewed on the virtual model created by the software
- Adjustments to varus/valgus, flexion/extension and resection depth are made in real time



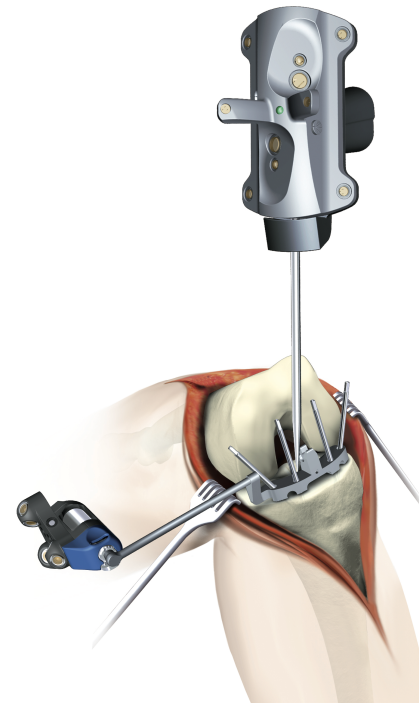
Distal Femur Cut Verification

- Verification of cut via re-registration of the mechanical axis
- Plane probe is pinned in the center of the femur with neutral rotation using two 1/8" headless pins
- Range of motion re-finds the femoral head center



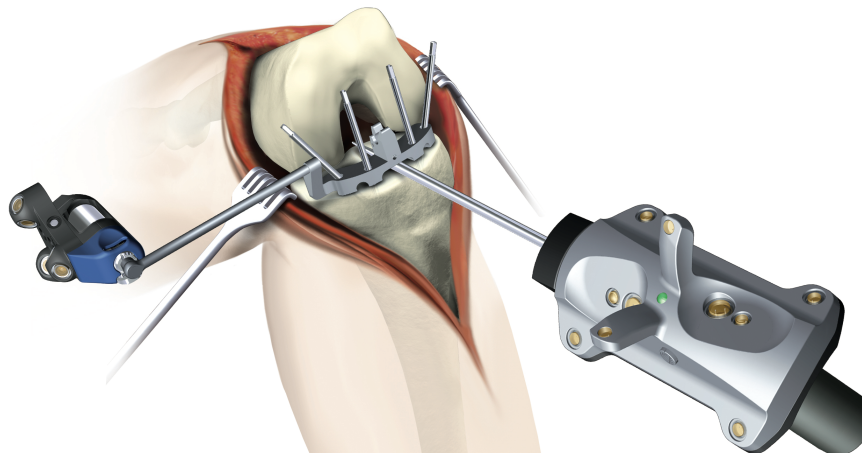
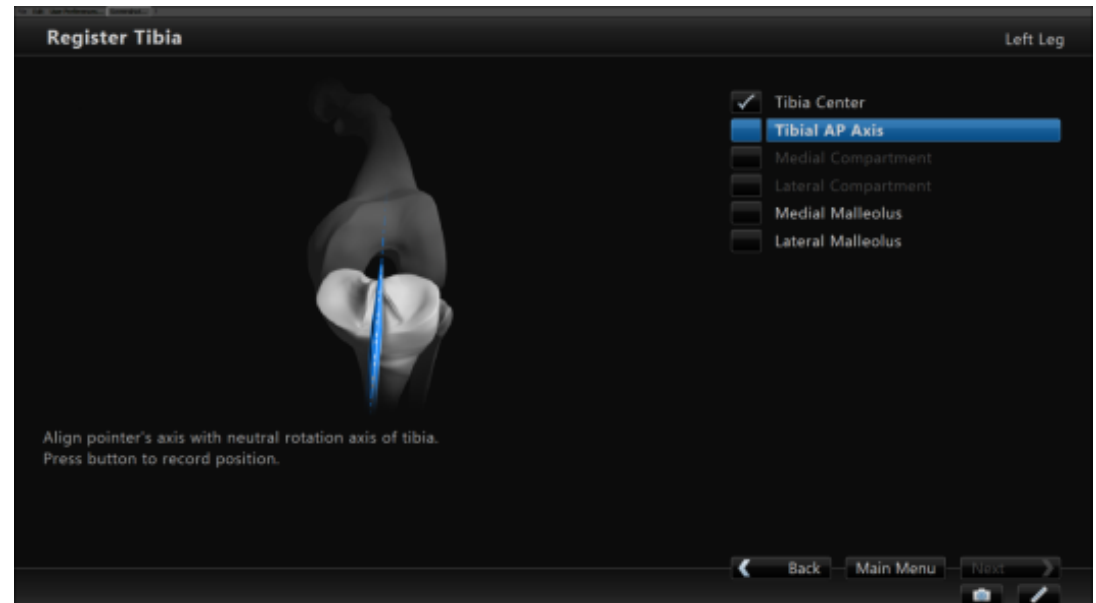
Tibia Preparation

- Fixation plate pinned to the tibial plateau with four 1/8" pins
- Mount tibial tracker to fixation plate



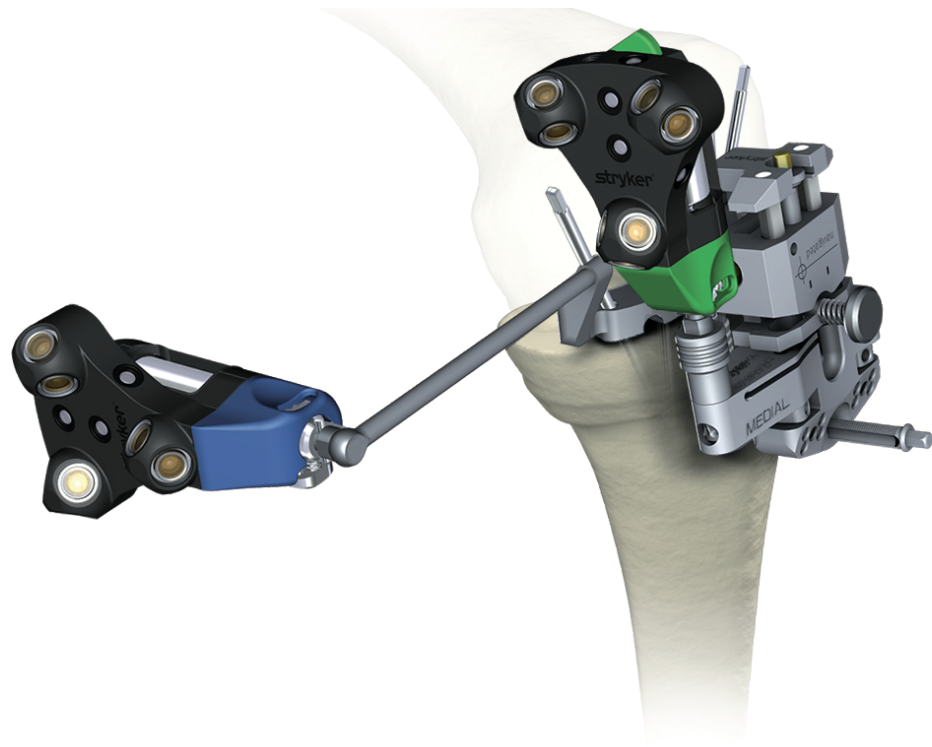
Tibia Registration

- Requires six landmark registration points
 - Tibia Center
 - Tibial AP Axis
 - Medial Compartment
 - Lateral Compartment
 - Medial Malleolus
 - Lateral Malleolus



Resect Proximal Tibia

- Attach Dedicated Mini Jig to the fixation plate. The cutting plane is tracked using the green tracker.



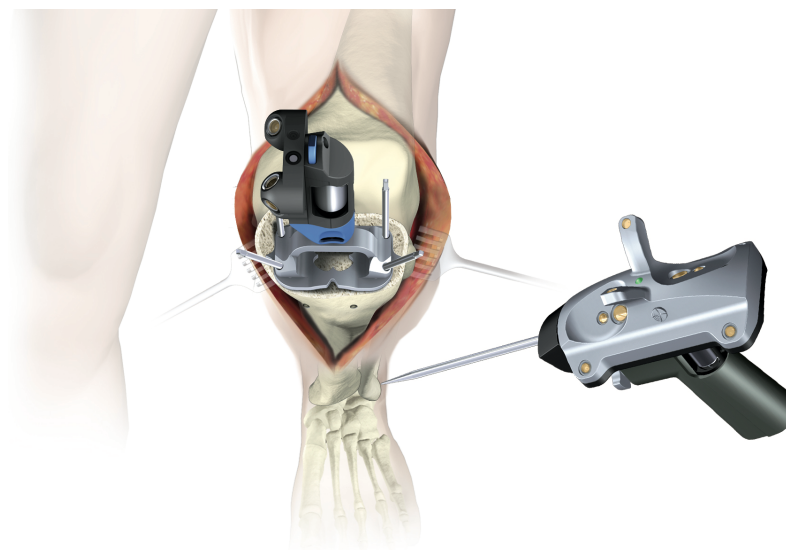
Resect Proximal Tibia

- Proximal tibia cutting plane is viewed on the virtual model created by the software
- Adjustments to varus/valgus, slope and resection depth are made in real time



Proximal Tibia Cut Verification

- Plane probe is pinned in the center of the tibia with neutral rotation using two 1/8" headless pins
- Redigitization of malleoli calculates the tibial mechanical axis
- Display of cut plane relative to the mechanical axis



References

1. OrthoMap Express Knee Navigation Version 2.0 User Manual

The information presented in this presentation is intended to demonstrate a Stryker product. Always refer to the package insert, product label and/or user instructions before using any Stryker product. Products may not be available in all markets. Product availability is subject to the regulatory or medical practices that govern individual markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area.

Stryker Corporation or its divisions or other corporate affiliated entities own, use or have applied for the following trademarks or service marks: OrthoMap, Stryker. All other trademarks are trademarks of their respective owners or holders.

Literature Number: [9100-001-688](#) Rev. None

Copyright © 2012 Stryker