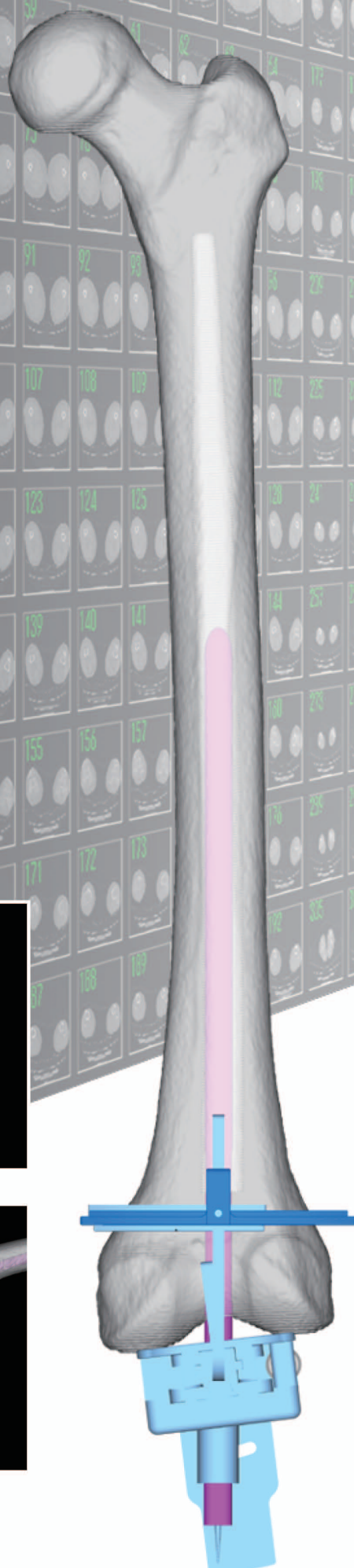
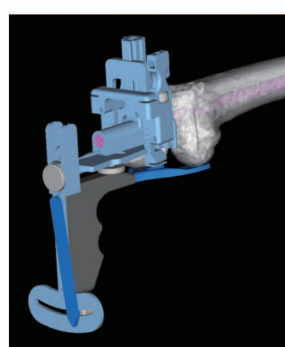
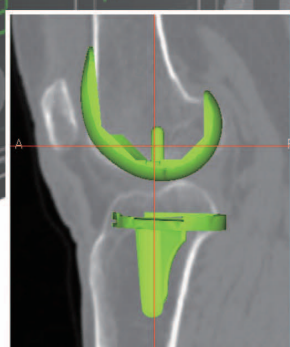
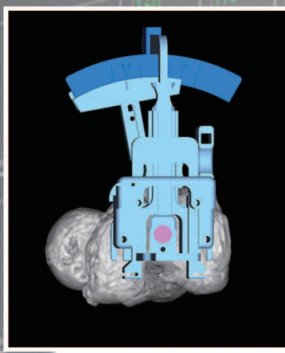
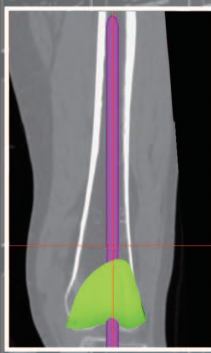
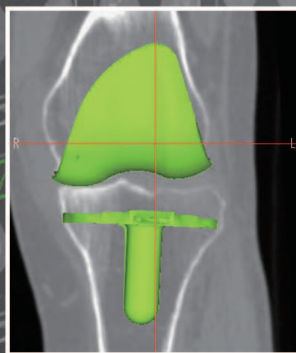


**3D Total Knee Arthroplasty
Pre-Operative Planning
Jig-Simulation**

ZedView

JIGENTM

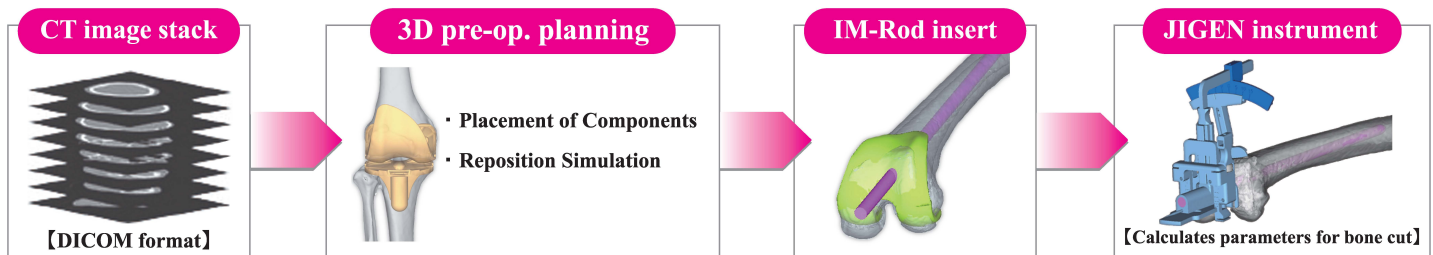
Jig-Engaged 3D Planning System



 **LEXI**

Summary

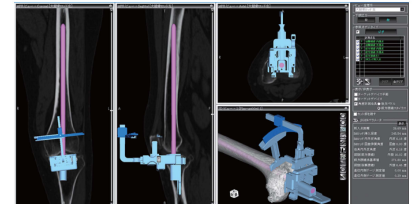
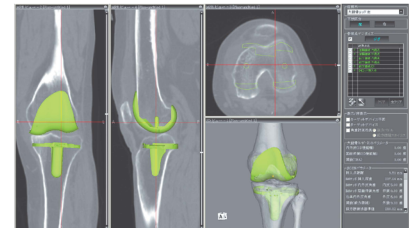
JIGEN realizes ideal accurate installations of artificial joints with easy and simple operations, while its price and cost are far lower than conventional navigation systems for Total Knee Arthroplasty. It generates 3D image and Axial, Coronal and Sagittal 2D images from CT slice images and, by watching those images, surgeons can visually and also numerically control the medial/lateral and anterior/posterior positions and rotations and varus/valgus and flexion/extension angles for placing the artificial joints at their best positions. Placements of Intra Medullary Rod (IM Rod) and bone cutting jig can also accurately be simulated in 3D before surgery, and the 3D parameters are automatically calculated by JIGEN system. The accurately planned bone resections and artificial joint installations can be achieved with the engaging jigs specially developed for JIGEN by our partner manufacturers.



Features and Functions

- 3-Dimensional and also 2-Dimensional Pre-Operative Planning using CT image stack
- Initial rotation of femur component can be specified with Trans-Epicondylar Axis (TEA) or Posterier-Condylar Axis (PCA).
- The best sizes and positions of components can easily be selected and managed, by watching 3D and Axial/ Sagittal/ Coronal CT images in any specified coordinate system.
- Rotation, Flexion/Extension and Varus/Valgus can visually be checked at any time.
- The bone resection positions are automatically calculated from the component positions in 3D.
- Automatic segmentation and reconstruction of 3D bone models
- Reposition simulation for FTA change, A-P and M-L movements, etc.
- Placements of IM Rod and specially developed bone cutting jig can be simulated in 3D.
- Only 15 minutes for pre-operative planning
- Excellently accurate 3D pre-operative planning and jig placement simulation with the special jig

*A-P: Anterior-Posterior, M-L: Medial-Lateral



Special Instrument for JIGEN TKA

- Comparable accuracy to the conventional navigation systems with far lower price and much simpler operations
- No complicated registration work as in the navigation systems with invasive tracker pins
- No bulky electronic equipments in your operation room as in the navigation systems
- Patient's operative field directly viewable; no need to split your attention between your patient and LCD monitors
- Easy to learn the surgical procedure/ instrumentation similar to the regular manual method



ArthroDesign.Ltd

* Jig available from ArthroDesign, Ltd.