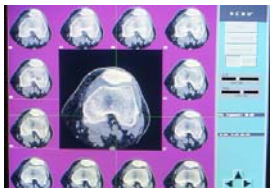
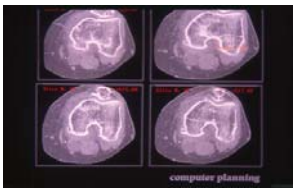
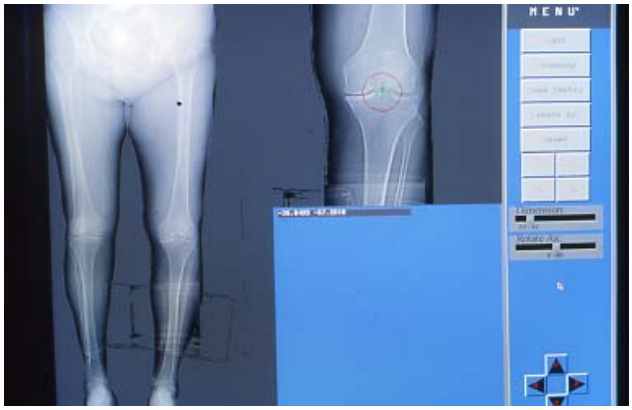
PLANNING SOFTWARE FOR TKA

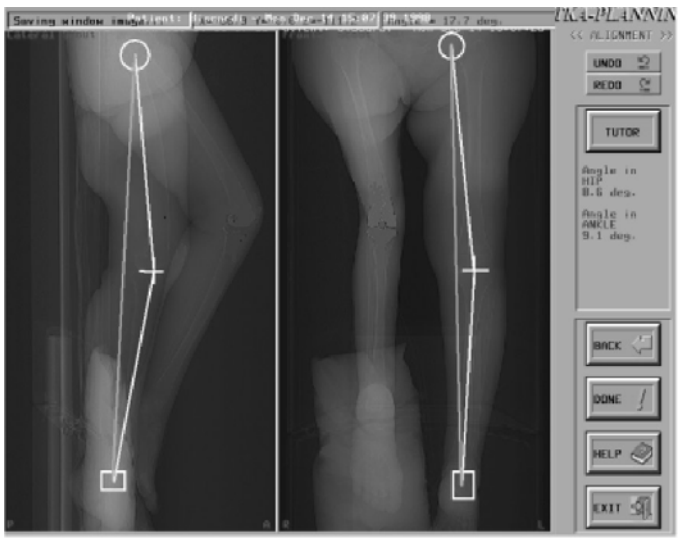
1) CT-based planning software for TKA for SUN (1994) and Silicon Graphics INDIGO (1996)





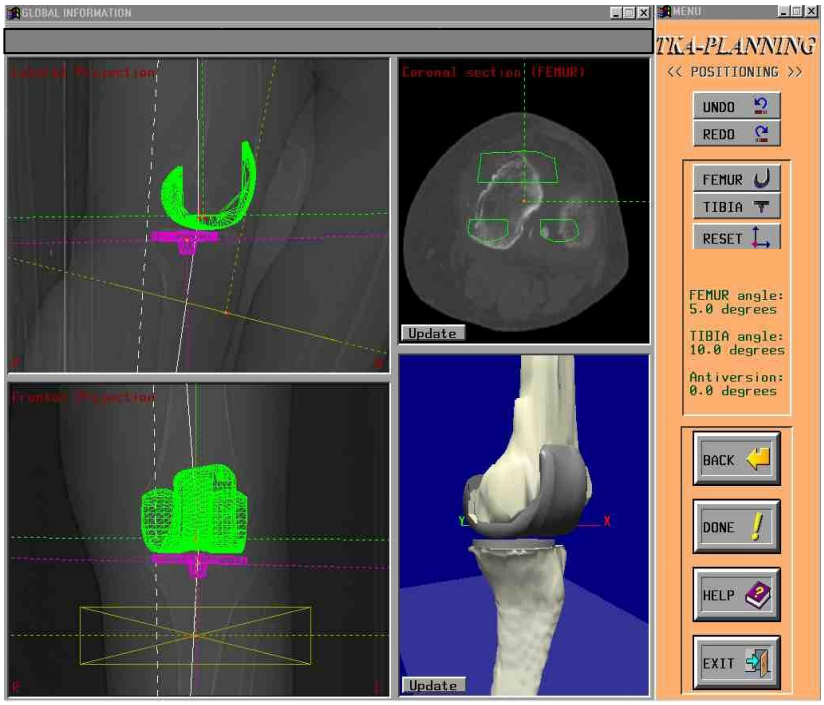


2) CT-based planning software for TKA for PC (1998)

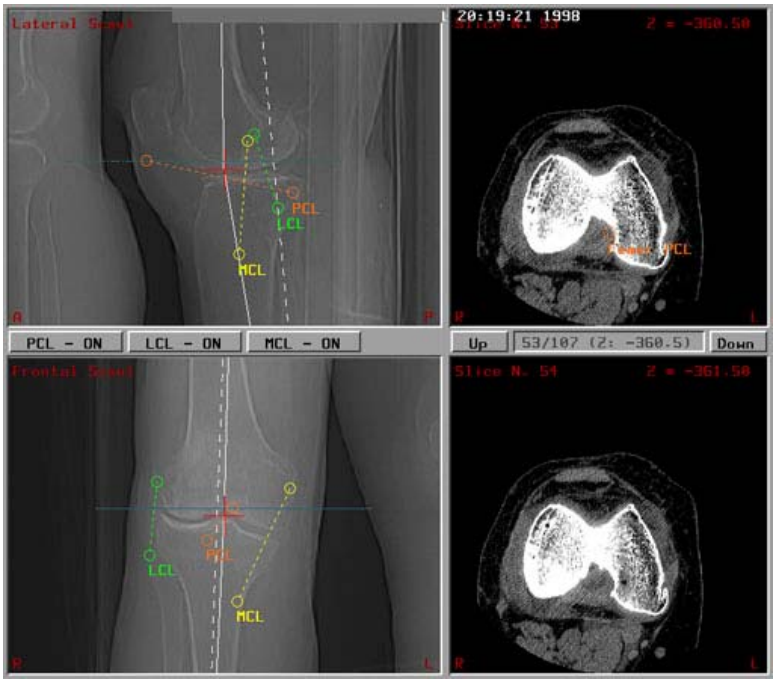


Alignment phase. The surgeon identifies the ‘ideal’ limb mechanical axis (the line connecting the hip center and the ankle center passing through the knee center) in the two scout views of the

patient limbs. The interface consists of the frontal and the lateral scouts of the limb shown together with a command menu, with buttons corresponding to the expected user's actions.



Positioning phase: the surgeon defines the placement and size of the two prosthetic components. The interface includes four data windows: the frontal and the lateral projection of the joint, a window displaying sections of the bone computed in any user's desired position and orientation and a window with the 3D reconstruction of the joint.



Ligament insertion identification phase

2D simulation to verify the accuracy of the proposed implant and if ligament release is necessary or not, done with two different prosthesis models