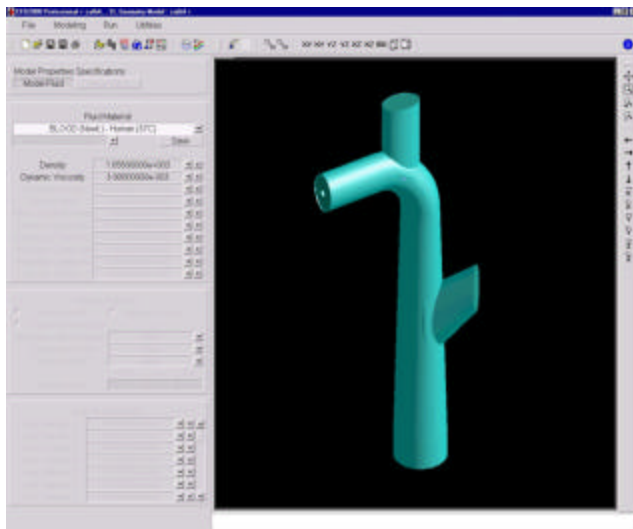


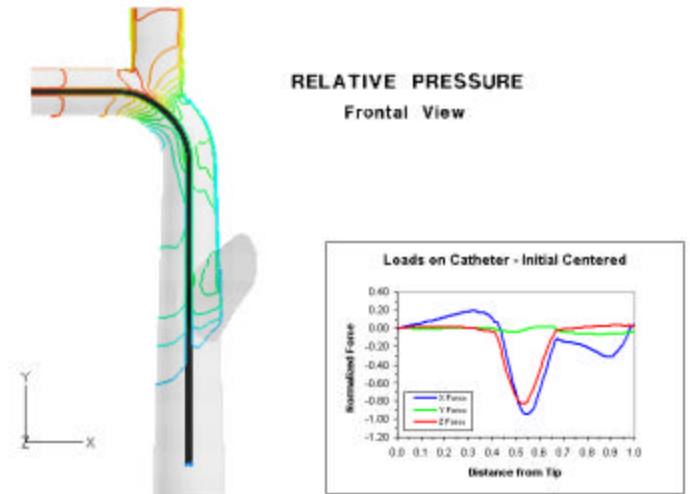
Assessing Catheter Placement in Superior Vena Cava

Adaptive Research
A division of Simunet Corporation

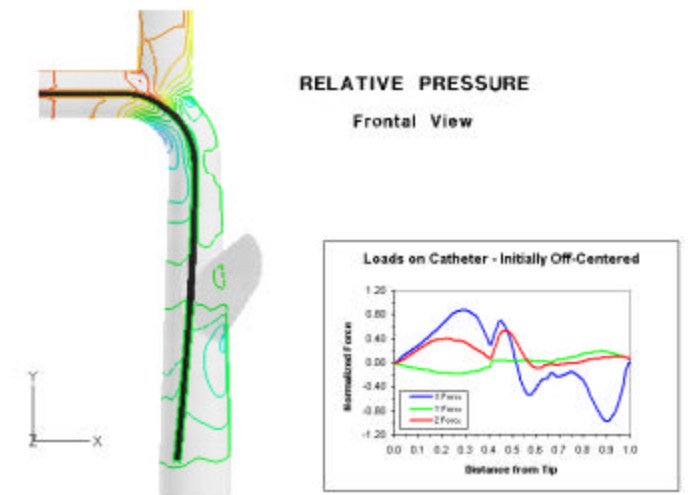
Computational Fluid Dynamics provides a non-invasive tool to assess catheter placement in the central venous system. Numerical simulations of blood flow around the catheter can be used to predict pressure and viscous forces acting on the device. This type of information is critical to evaluate catheter displacements inside the vein and possible damage to the vessel wall. CFD techniques produce fluid-structure interaction data usually not available directly from in vivo or in vitro measurements



CFD2000 User Interface



Catheter initially centered
 Resulting Pressure Loads



Catheter initially off-centered
 Resulting Pressure Loads

STORM®/CFD2000®

A powerful computational fluid dynamics software program developed by Adaptive Research. STORM/CFD2000 solves real-world engineering problems by simulating virtually any physical process involving fluid flow and heat transfer.