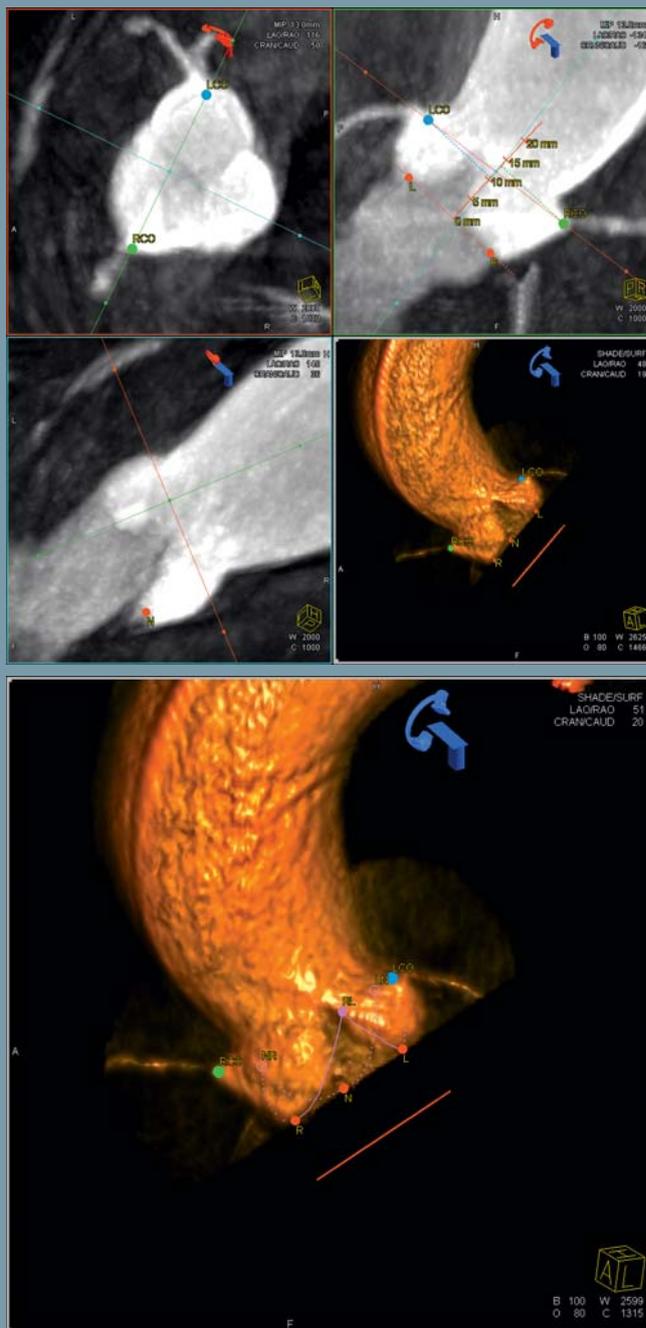


New Hope for Patients with Severe Aortic Stenosis

An estimated 45,000 patients have received TAVI (Transcatheter Aortic Valve Implantation, also referred to as TAVR, Transcatheter Aortic Valve Replacement, in the U.S.) worldwide, but experience with the procedure in the United States lags far behind that in Europe. With FDA approval of the new Edwards Sapiens transcatheter heart valve in November 2011, U.S. hospitals can now also take advantage of the procedure and offer new treatment options to patients with severe aortic stenosis. Only a couple of weeks later, the FDA cleared the new Siemens *syngo* Aortic ValveGuide software for the Artis zee and Artis zeego interventional imaging systems. The new software automatically reconstructs a 3D representation of the aortic root from cross-sectional *syngo* DynaCT images acquired with the angiography system. With the aid of anatomical landmarks in the 3D vessel representation, *syngo* Aortic ValveGuide calculates the exact perpendicular view on the aortic root. The C-arm adjusts to the corresponding angulations for live fluoroscopy, enabling the physician to precisely position the new valve. Prior to *syngo* Aortic ValveGuide, users had to rely on preprocedural (or intraprocedural) CT, manually co-recording it with live fluoroscopy and overlaying it onto a live fluoroscopy image to determine the correct angulation. This process required additional steps and highly skilled personnel. Siemens has already gathered extensive clinical experience with the new application in Europe. Now, U.S. customers can also profit from precise guidance and an improved workflow for TAVI procedures. William O'Neill, M.D., Chief Medical Officer at the University of Miami Health System, uses *syngo* DynaCT to evaluate the anatomy of the aortic root and the position of the coronary ostia. "The overlay of the intra-procedural 3D image over live fluoroscopy gives us an additional level of confidence for the valve implantation," explains O'Neill. "The automated workflow of the *syngo* Aortic ValveGuide makes the procedure easier – and the indication of a perpendicular view plane helps to make it even safer."



3D view of the segmented aortic root with landmarks showing a correct angle for valve implantation.