

FDA Clears Siemens Application for Qualitative Assessment of Cerebral Blood Flow during Interventional Procedures

With *syngo* Neuro PBV, interventional radiologists can obtain more information directly in the interventional angiography suite and make more immediate treatment decisions.

Malvern, Pa., July 21, 2011 — Today, Siemens Healthcare announced that *syngo*[®] Neuro PBV IR (Parenchymal Blood Volume Interventional Radiology) has received U.S. Food and Drug Administration (FDA) 510(k) marketing clearance. The software package is intended to provide visual assistance to physicians in the diagnosis and treatment of vessel malformations (such as aneurysms, arteriovenous malformations and stenoses). In neuroradiology, this feature assists physicians in the treatment of stroke patients by displaying a color-coded qualitative map of cerebral tissue directly in the angiography suite. *syngo* Neuro PBV IR further expands the Siemens imaging application portfolio for the Artis zee line of interventional X-ray systems for radiology and cardiology.

Stroke results from decreased blood flow in the brain and can cause irreparable damage to cerebral tissue. Early treatment of a stroke can help minimize damage to brain tissue. Treatment generally involves minimally invasive techniques, such as image-guided, catheter-based interventions where blood clots are either dissolved with medication or mechanically removed. *syngo* Neuro PBV uses cone-beam computed tomography (CT) technology (*syngo* DynaCT) to produce a qualitative colorized image similar to CT perfusion. It is designed for the visualization of contrast-enhanced blood distribution in the arterial and venous vessels in the head using color-coded relative values for diagnosis.

“Neurovascular imaging has evolved from simple anatomical 2D rendition of blood vessels to 3D spatial visualization and, with the Neuro PBV, to physiological functional imaging of the brain,” said Michel E. Mawad, MD, Baylor College of Medicine, Houston. “Neuro PBV is a promising technique that will add valuable information about the viability of the brain and should help guide the interventionalist in the decision-making process of revascularization procedures.”

Parenchymal blood volume information is acquired with two C-arm rotations around the patient and a steady-state contrast injection. The system applies sophisticated processing algorithms to generate a neurological PBV map. The information is available at bedside, in less than 40 seconds, without the need for any further user interaction.

The **Siemens Healthcare Sector** is one of the world's largest suppliers to the healthcare industry and a trendsetter in medical imaging, laboratory diagnostics, medical information technology and hearing aids. Siemens offers its customers products and solutions for the entire range of patient care from a single source – from prevention and early detection to diagnosis, and on to treatment and aftercare. By optimizing clinical workflows for the most common diseases, Siemens also makes healthcare faster, better and more cost-effective. Siemens Healthcare employs some 48,000 employees worldwide and operates around the world. In fiscal year 2010 (to September 30), the Sector posted revenue of 12.4 billion euros and profit of around 750 million euros. For further information please visit: www.siemens.com/healthcare.

###