

**MAQUET CARDIOVASCULAR ANNOUNCES STUDY RESULTS  
SHOWING SIGNIFICANTLY REDUCED STROKE RATE IN CORONARY  
ARTERY BYPASS PATIENTS WHEN AORTIC CLAMPING IS AVOIDED**

*-- HEARTSTRING Proximal Seal System Reduces the Risk of  
Neurological Complications During Coronary Artery Bypass Grafting --*

**Wayne, N.J. – April 27, 2010** – MAQUET Cardiovascular LLC, a leading provider of cardiovascular technologies, today announced that study results published March 25, 2010, in the *Journal of Cardiothoracic Surgery* demonstrated that perioperative strokes can be minimized in coronary artery bypass graft (CABG) patients by utilizing a “clampless” technique consisting of off-pump coronary artery bypass (OPCAB) in combination with the unique HEARTSTRING Proximal Seal System to maintain hemostasis during the attachment of grafts to the aorta (proximal anastomosis).

These findings are based on a retrospective analysis of 414 consecutive patients who underwent OPCAB with one or more proximal

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anastomoses constructed using HEARTSTRING technology at University Hospital Regensburg, Germany. OPCAB has been shown to offer many benefits to patients, especially those at higher risk for complications. However, clamping and other types of mechanical manipulation of the ascending aorta may reduce the potential benefits of OPCAB.

“The objective of this study was to examine the incidence of stroke in patients treated with a clampless approach,” said first author Dr. Michael Hilker, Department of Cardiothoracic Surgery, University Hospital Regensburg. Patients in this study had a stroke rate one-third lower than would have been expected given their risk factors. According to Dr. Hilker, “Our findings demonstrate that a clampless approach to CABG using HEARTSTRING can reduce the stroke rate in a large cohort of patients.”

During CABG, aortic manipulation causes atherosclerotic plaque to break loose and be transported as emboli to the brain via the bloodstream. These emboli are a recognized cause of neurologic injury and cognitive dysfunction. Although cannulation and cross clamping of the aorta are avoided during an OPCAB procedure, a partial or “side-biting” clamp may be used to isolate a portion of the aorta from blood flow

to allow the surgeon to attach the bypass graft. The HEARTSTRING device eliminates the need for a partial clamp by providing a seal that prevents blood from entering the surgical field during construction of the proximal graft to the aorta.

“Stroke is a devastating complication of CABG for patients and their families. We are pleased to be able to offer innovative solutions such as HEARTSTRING technology in order to help clinicians optimize their cardiac surgery outcomes,” said Patrick Walsh, President of MAQUET Cardiovascular’s Cardiac Surgery Business Unit.

**About OPCAB**

Off-pump coronary artery bypass (OPCAB) or "beating-heart" surgery is a form of coronary artery bypass graft (CABG) surgery performed without relying on cardiopulmonary bypass (CPB), or a heart-lung machine. During CABG with CPB the heart is stopped and a heart-lung machine takes over the work of the heart and lungs to oxygenate the body. During OPCAB, the heart is still beating while the graft attachments are made to bypass a blockage. A specialized stabilizing device is used to keep the portion of the heart undergoing the bypass still while the surgeon sews the graft.

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**About MAQUET Cardiovascular**

MAQUET Cardiovascular was formed in 2003 and is a leader in providing innovative products for cardiac surgery, vascular intervention and cardiac support to hospitals and clinics and the cardiac surgeons, interventional cardiologists, perfusionists and other healthcare professionals who care for patients with cardiovascular disease.

MAQUET Cardiovascular is focused on providing clinicians with future-oriented technology that fits into their daily practice and improves the therapeutic management of patients. MAQUET Cardiovascular continues to invest in the development of innovative technologies and solutions that advance clinical practice, improve patient outcomes and enhance quality of life.

MAQUET Cardiovascular provides healthcare professionals with products in four business units: Cardiopulmonary (perfusion products), Cardiac Surgery (clampless beating heart and endoscopic vessel harvesting), Vascular Interventions (grafts for vascular surgery), and Cardiac Assist (intra-aortic balloon counterpulsation therapy).

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### **About The MAQUET Group**

The MAQUET Group is the global market leader for Medical Systems, focusing on the Operating Room (OR), Cath Lab, Intensive Care Unit (ICU) and Patient Transport. The integrated products of MAQUET are specially designed to deliver optimal clinical treatment and therapeutic applications within acute care hospitals. MAQUET provides innovative medical solutions from three Divisions:

- Cardiovascular with products for cardiac assist (intra-aortic balloon counterpulsation therapy), coronary artery bypass surgery, complex aortic surgery reconstruction, peripheral interventions and extracorporeal circulation.
- Critical Care for intensive care ventilators and anesthesia machines
- Surgical Workplaces for OR tables, lights and ceiling service units, flexible room design for OR, Cath Lab and ICU as well as digital OR integration.

MAQUET is a subsidiary of the publicly-listed Swedish GETINGE GROUP, a company with around \$3 billion in revenues (2009 fiscal year) and 12,100 employees worldwide. In 2009 MAQUET itself generated revenues of around \$1.5 billion. The company now has more than 5,000 employees in 36 international sales and service organizations, as well as a network of more than 250 sales representatives. Twelve manufacturing sites are located in 6 countries.

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