



ADVISE Study Results Demonstrate the Instant Wave-Free Ratio™, a Vasodilator-Free Measure of Stenosis Severity, is Comparable to FFR

Volcano Corporation and Imperial College London Support Study Presented During Late Breaking Clinical Trial Session at TCT 2011

SAN DIEGO, Nov. 14, 2011 /PRNewswire/ -- Volcano Corporation (NASDAQ: VOLC), a leading developer and manufacturer of precision guidance therapy tools designed to enhance the treatment of coronary and peripheral vascular disease, and Imperial College London jointly announced the results of the ADVISE (ADenosine Vasodilator Independent Stenosis Evaluation) study during a Late Breaking Clinical Trial session at the Transcatheter Therapeutics Conference (TCT 2011) in San Francisco. The results have also been accepted for publication in the Journal of the American College of Cardiology.

ADVISE assessed the ability of an investigational product called instant wave-Free Ratio™ (iFR™), to provide a measurement of the severity of a coronary stenosis that is similar to fractional flow reserve (FFR), the gold standard for assessing ischemia, without the need for pharmacologic vasodilation. iFR was developed by physician-scientists at Imperial College London in partnership with Volcano Corporation.

"FFR is a widely accepted and valuable tool that provides physicians with a clear measurement of the severity of a coronary lesion and helps guide treatment decisions, including whether or not to place a stent to treat stable angina," said ADVISE principal investigator Dr. Justin Davies, an interventional cardiologist at National Heart and Lung Institute at Imperial College London. "However, there are barriers to widespread use of FFR, including the need to inject a vasodilator like adenosine to simulate heart function in an exercise state. The use of adenosine by physicians and staff can increase time, cost and complexity of the procedure, not to mention produce some level of patient discomfort. This new approach provides a pharmaceutical-free assessment of the functional severity of a discrete lesion that correlates very closely with FFR."

ADVISE, an international multi-center study, assessed 157 stenoses in 131 patients to validate the iFR technology. Wave intensity analysis identified a wave-free period during which intracoronary resistance at rest is similar in variability and magnitude (CV:0.08±0.06 and 284±147mmHg.s/m) to that during FFR (CV:0.08±0.06 and 302±315mmHg.s/m, p=NS for both). The resting distal to proximal pressure ratio during this period, the iFR, correlated closely with FFR (r=0.9, p<0.001) with excellent diagnostic efficiency (receiver operating characteristic area under curve of 93%, at FFR<0.8), specificity, sensitivity, negative and positive predictive values of 91%, 85%, 85% and 91%, respectively. Overall diagnostic accuracy was 88%.

"The instant wave-Free Ratio (iFR) is calculated during a period in the cardiac cycle when intra-coronary resistance is naturally constant and minimized, similar to what is achieved during hyperemia with vasodilators such as adenosine over the entire cardiac cycle. We call this the 'wave-free period,' as forward- and backward-traveling wave activity has ceased," said Dr. Davies.

"In an environment where decision-making in the cath lab is increasingly questioned, Volcano is committed to delivering tools that give physicians what we call the 'moment of proof': a quantifiable measure of lesion severity that is more precise than angiography and justifies the use of a stent based on each patient's individual physiology," said Joe Burnett, EVP and General Manager of Functional Management for Volcano.

"The FAME study investigators did a tremendous job building the evidence required to move the FFR guidelines and drive physician adoption worldwide and we believe we still have plenty of opportunity ahead to improve the technology and to access more patients," said Scott Huennekens, President and CEO of Volcano. "Volcano and our partners at Imperial College London share a goal of driving the next wave of iFR/FFR adoption and developing solutions that will enable physicians to manage their patients functionally, obtain an assessment of vessel function both before and after the intervention, and confirm their strategy and document the result permanently in the patient record."

About Volcano Corporation

Volcano Corporation is revolutionizing the medical device industry with a broad suite of technologies that make imaging and therapy simpler, more informative and less invasive. Our products empower physicians around the world with a new generation of analytical tools that deliver more meaningful information—using light and sound as the guiding elements. Founded in cardiovascular care and expanding into other specialties, Volcano is changing the assumption about what is possible in

improving patient outcomes by combining imaging and therapy together. For more information, visit the company's website at www.volcanocorp.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Any statements in this release that are not historical facts may be considered "forward-looking statements." Forward-looking statements are based on management's current expectations and are subject to risks and uncertainties which may cause Volcano's results to differ materially and adversely from the statements contained herein. Some of the potential risks and uncertainties that could cause actual results to differ include the uncertain process of obtaining regulatory approval or clearance for Volcano's products or devices, including risks that such process could be significantly delayed; pace and extent of market adoption of the company's products and technologies, growth strategies, timing and achievement of product development milestones, the impact and benefits of market development, product introductions, unexpected new data, safety and technical issues, market conditions, dependence on third parties, and other risks inherent to medical device development and commercialization. These and additional risks and uncertainties are more fully described in Volcano's filings made with the Securities and Exchange Commission, including our recent quarterly report on Form 10-Q. Undue reliance should not be placed on forward-looking statements which speak only as of the date they are made. Volcano undertakes no obligation to update any forward-looking statements to reflect new information, events or circumstances after the date they are made, or to reflect the occurrence of unanticipated events.

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