

Medtronic Viva® Cardiac Resynchronization Therapy-Pacemaker Now Available in Europe

New Device Automatically Adapts to Patient Needs, Continuously Optimizes Therapy, Improves Response Rate and Reduces Heart Failure Hospitalizations

MINNEAPOLIS, MAY 1, 2014 - Medtronic, Inc. (NYSE:MDT) today announced CE (*Conformité Européenne*) Mark receipt and the European launch of its newest cardiac resynchronization therapy-pacemaker, Viva® CRT-P. The Viva CRT-P is not approved for sale in the United States.

The Viva CRT-P includes the Medtronic-exclusive AdaptivCRT® software, which is the only algorithm demonstrated to improve heart failure patients' response to the therapy¹ and reduce the risk of atrial fibrillation² (as compared to conventional biventricular therapy).

The AdaptivCRT algorithm works by preserving normal heart rhythms and automatically adjusting to the patient's needs every minute, creating a customized therapy for each patient.³ Independent studies have validated the benefits of the algorithm, including:

- AdaptivCRT increases CRT response rate by 12 percent¹;
- Patients with AdaptivCRT have a demonstrated 21 percent reduction in heart failure hospitalization and a reduced risk of death²;
- Patients with AdaptivCRT have a 46 percent reduced risk of AF².

Viva CRT-P also features advanced diagnostics tools, such as OptiVol® Fluid Status Monitoring and Cardiac Compass® Report, which provide unmatched levels of insight into patients' physiological condition. These tools are proven to identify patients at risk for rehospitalization within 30 days of discharge, a critical quality measure.⁴

"The diagnostic capabilities of this smart device help improve function throughout the continuum of care," said David Steinhaus, M.D., vice president and general manager, Heart Failure, and medical director for the Cardiac Rhythm Disease Management business at Medtronic. "This represents a win for both patients and physicians and, when coupled with additional longevity, provides another layer of distinct value over a longer period."

Medtronic CRT devices have been safely and effectively used for more than a decade to treat patients with heart failure. Patients for whom this is an appropriate therapy include those with mild symptomatic, moderate or severe heart failure, as well as those with atrioventricular block who are expected to require a high degree of pacing and have a reduced ejection fraction, a measure of pumping function.

Each year, cardiovascular disease (CVD) causes more than 1.9 million deaths in the European Union.⁵ Repeated heart failure hospitalizations are associated with increased mortality.

In collaboration with leading clinicians, researchers and scientists worldwide, Medtronic offers the broadest range of innovative medical technology for the interventional and surgical treatment of cardiovascular disease and cardiac arrhythmias. The company strives to offer products and services that deliver clinical and economic value to healthcare consumers and providers around the world.

About Medtronic

Medtronic, Inc. (www.medtronic.com), headquartered in Minneapolis, is the global leader in medical technology - alleviating pain, restoring health, and extending life for millions of people around the world.

Any forward-looking statements are subject to risks and uncertainties such as those described in Medtronic's periodic reports on

file with the Securities and Exchange Commission. Actual results may differ materially from anticipated results.

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1 Birnie D, Lemke B, Aonuma K, et al. Clinical outcomes with synchronized left ventricular pacing: Analysis of the adaptive CRT trial. *Heart Rhythm*. September 2013;10(9):1368-1374.

2 Martin D, Lemke B, Aonuma K, et al. Clinical Outcomes with Adaptive Cardiac Resynchronization Therapy: Long-term Outcomes of the Adaptive CRT Trial. *HFSA Late Breakers*. September 23, 2013.

3 Abraham WT, Fisher WG, Smith AL, et al. Cardiac resynchronization in chronic heart failure. *N Engl J Med*. June 13, 2002;346(24): 1845-1853.

4 Medtronic Viva CRT-P manual.

5 European Heart Network and European Society of Cardiology, *European Cardiovascular Disease Statistics*, September 2012

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