Transcatheter Mitral Valve Replacement Technology
Committed to developing solutions for the treatment of mitral valve regurgitation, Medtronic is investigating the Intrepid™ mitral valve replacement (TMVR) system.

How the Intrepid TMVR System Works
The Intrepid TMVR system features a novel dual stent design that combines heart valve and self-expanding technologies to facilitate mitral valve replacement through a catheter-based technique. Compressed inside a hollow catheter and inserted between the ribs to enter the heart, the new replacement valve is expanded directly into the mitral valve to address the backflow of blood from the left ventricle into the left atrium, or mitral regurgitation.

The inner stent houses the valve, which is made from bovine tissue and is intended for maintaining blood flow. The outer stent is intended for securing the implant within the diseased mitral valve, which is constantly in motion during the regular beating of the heart. The outer stent is designed to attach and conform to the native annulus without the need for additional sutures or tethers.

Serving Unmet Patient Needs
There are an estimated 4 million patients with mitral regurgitation in the United States.¹² Because the mitral valve is a complex anatomic structure, and because of the multiple comorbidities often associated with these patients, there are limited medical therapies available to patients to correct their mitral regurgitation. Through the APOLOLO Trial, Medtronic will study the potential for the Intrepid TMVR system to benefit patients who have severe symptomatic mitral regurgitation, and who are either a candidate for, or ineligible for, conventional mitral valve surgery.

First-ever Mitral Valve Replacement Pivotal Trial
Medtronic is the first company with TMVR technology to begin a pivotal trial following FDA approval of its Investigational Device Exemption (IDE) application and first patient implant in October 2017. The trial will evaluate the performance of the Intrepid TMVR system across up to 60 clinical sites globally. The Intrepid TMVR system is available for investigational use only and it is not approved for use outside of clinical studies.

CAUTION: Investigational device.
Limited by Federal Law (USA) to Investigational Use;
Exclusively for Clinical Investigation.