

Miniature cardiac device for long-term remote monitoring

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Scripps Green Hospital has become the first hospital in the United States to implant the world's smallest implantable cardiac monitoring device. Scripps Clinic cardiologist John Rogers, M.D., successfully completed the first implant of the Reveal LINQ™ Insetable Cardiac Monitor (ICM) in 71-year-old San Diego resident Chuck Beal on Saturday.

Cleared by the Food and Drug Administration (FDA) on Feb. 19, the LINQ™ ICM from Medtronic is approximately one-third the size of an AAA battery, making it more than 80 percent smaller than other ICMs currently available.

Beal, the owner of San Diego-based Beal Racing, has a lengthy history of heart palpitations, and is at an elevated risk for stroke following a previous [heart valve replacement](#), making him a prime candidate for the LINQ ICM.

"Mr. Beal was given a local anesthetic and the device was inserted under the skin of the chest

wall. The entire process took about 10 minutes and he was able to go home immediately after," said Dr. Rogers. "The monitor is so discreet that it is unlikely that he will even know it is there and he can go about his life without interruption or discomfort from the device."

In addition to its continuous and wireless monitoring capabilities, the system provides remote monitoring through the Carelink® Network. Through the Carelink Network, physicians can request notifications to alert them if their patients have had cardiac events. The Reveal LINQ ICM is indicated for patients who experience symptoms such as dizziness, palpitation, syncope (fainting) and chest pain that may suggest a cardiac arrhythmia, and for patients at increased risk for [cardiac arrhythmias](#).

"I thought it was pretty exciting to be the first person to have the device implanted in me," said Beal. "I feel much better knowing that my heart rhythm is being monitored at all times and that ultimately I may be able to reduce some of the medications that I am currently taking."

Placed just beneath the skin through a small incision of less than 1 centimeter in the upper left side of the chest, the Reveal LINQ ICM is often nearly invisible to the naked eye once inserted. The device is placed using a minimally invasive insertion procedure, which simplifies the experience for both physicians and their patients. The Reveal LINQ ICM is MR-Conditional, allowing patients to undergo [magnetic resonance imaging](#) (MRI) if needed.

Provided by The Scripps Research Institute

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