

MEDICAL BREAKTHROUGHS
RESEARCH SUMMARY

TOPIC: CUTTING-EDGE PROCEDURE HEALS ANNE'S DYING HEART
REPORT: **MB #4851**

BACKGROUND: Heart failure is a term used to describe a heart that cannot keep up with its workload and where the body may not get the oxygen it needs. Congestive heart failure is a type of heart failure, although sometimes the two terms are used interchangeably. The body depends on the heart's pumping action to deliver oxygen and nutrient-rich blood to the cells. When the cells are nourished properly, the body can function normally. With heart failure, the weakened heart can't supply the cells with enough blood which results in fatigue and shortness of breath. Some people even have coughing. Activities such as walking, climbing stairs, or carrying groceries can become very difficult.

(Source: <https://www.heart.org/en/health-topics/heart-failure/what-is-heart-failure>)

A BRIDGE TO REMOVAL: Left ventricular assist devices (LVADs) are used to assist the advanced heart failure patient as a bridge to a transplant or as a permanent therapy. Current continuous flow LVADs have become routine therapy for patients with end-stage heart failure, helping to improve quality of life and enhancing survival. There has been a small group of patients where their heart function has improved to the point where the LVAD can be removed. This is referred to as a bridge to recovery. The Texas Heart Institute group has championed a strategy based on normalization of the cardiac cycle to guide eligibility for pump removal. Once hearts are adequately unloaded, patients are evaluated at minimal pump speeds for normalization of aortic valve opening time. With this reconditioning approach, they have removed pumps from over 30 patients.

(Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4283551/>)

FDA APPROVES NEW TREATMENT: The FDA approved Farxiga (dapagliflozin) oral tablets for adults with heart failure with reduced ejection fraction. Farxiga's safety and effectiveness was evaluated in a randomized, double-blind, placebo-controlled study of 4,744 participants. The average age of participants was 66 years, and more participants were male (77%) than female. "Heart failure is a serious health condition that contributes to one in eight deaths in the U.S. and impacts nearly 6.5 million Americans," said Norman Stockbridge, MD, PhD, director of the Division of Cardiology and Nephrology in the FDA's Center for Drug Evaluation and Research. Participants were randomly assigned to receive a once-daily dose of either 10 milligrams of Farxiga or a placebo. After about 18 months, people who received Farxiga had fewer cardiovascular deaths, hospitalizations for heart failure, and urgent heart failure visits than those receiving the placebo.

(Source: <https://www.fda.gov/news-events/press-announcements/fda-approves-new-treatment-type-heart-failure#:~:text=Today%20the%20U.S.%20Food%20and,an%20hospitalization%20for%20heart%20failure.>)

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com