Patient-Specific Modeling Method for Predicting Outcomes of Cardiac Resynchronization Therapy

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TECHNOLOGY DESCRIPTION

Cardiac resynchronization therapy (CRT), typically using biventricular electrical pacing, is indicated for about 30% of patients with congestive heart failure, whose condition is complicated by electrical dyssynchrony. Use of a pacemaker for electrical resynchronization can reduce morbidity and mortality in these patients, but 30%-50% of patient receiving CRT are clinical or echocardiographic non-responders. Current efforts to select patients rely on clinical guidelines. There are no specific measurements that are recommended to predict likely CRT responders.

UCSD Inventors have come up with a process that can predict a patient's response to CRT using only baseline measures and modeling software to produce two or more measures that, in combination, have potential to be much more strongly predictive of CRT response than available alternatives.

PUBLICATION ABSTRACT

Abstract on line

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	20160262635	09/15/2016	2014-137

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OTHER INFORMATION

KEYWORDS

physiological modeling, cardiac resynchronization, congestive heart failure

CATEGORIZED AS

- **Computer**
  - Software
- **Medical**
  - Disease: Cardiovascular and Circulatory System
  - Therapeutics

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