The Tug-of-War Index: Advancing Precision Diagnostics and Treatment for Cardiac Patients

The ToWi-index is a novel diagnostic tool designed to improve cardiac care by delivering precise insights into myocardial function and therapy response. Providing clinicians with better insights into treatment effectiveness across various cardiac conditions, the ToWi-index advances personalized care, optimizes treatment strategies, and improves patient outcomes.

Business Opportunity

The ToWi-index addresses an underserved need in cardiology by providing a powerful tool for assessing treatment efficacy in myocardial inflammation and recovery. Current cardiac imaging solutions lack the sensitivity needed to detect subtle therapy responses, creating a gap that ToWi addresses by offering a more advanced and precise diagnostic. By providing more accurate assessments, the ToWi-index enables physicians to optimize interventions and avoid over- or under-treatment. The ToWi-index holds significant commercial potential in the rapidly growing global cardiac imaging market. It can be integrated seamlessly into existing imaging platforms, opening up opportunities for companies to expand their offerings with this new precision diagnostic. Inven2 seeks partners for co-development or potential licensees of this technology.

Technology Description

The ToWi-index utilizes echocardiography and cardiac magnetic resonance imaging (CMR) to analyze myocardial strain and assess therapy responsiveness. Its unique approach provides clinicians with actionable insights into the effects of anti-inflammatory drugs on cardiac tissue. Initial studies have demonstrated the tool's efficacy in capturing drug-related changes in myocardial function. Integrating the ToWi-index into clinical strain analysis software provides healthcare professionals with a powerful tool for patient monitoring and decision-making. Unlike traditional diagnostic tools focused on ejection fraction (EF), the ToWi-index offers a more detailed analysis of myocardial function, enabling earlier detection of subtle therapy responses. This supports precision medicine, improves patient outcomes, and streamlines clinical workflows through more informed, data-driven decisions.

Intellectual Property

A patent application is pending.

Category

Medical Devices

Partnering/NLS Days 2025

Authors

Chris Rétif

Aina Rengmark

Further information

Chris Rétif

chris.retif@inven2.com

View online