



Introduction

Introduction to Interventional Therapies for Heart Failure: The Technology and Heart Failure Therapeutics Meeting (THT 2022)

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Major advances in medical therapies have recently been achieved for heart failure patients with varying left ventricular ejection fractions. Nevertheless, many patients still suffer with poor quality of life and poor exercise tolerance, are hospitalized for heart failure exacerbations, and are at significant risk for mortality. Device-based therapies have long been anticipated to fill the clinical gaps left behind when medical therapies are inadequate.

Many devices to treat heart failure have been under development over the past 20 years, but few have achieved regulatory approval, and only 2 devices have received high levels of recommendation in guideline documents for use in heart failure: cardiac resynchronization therapy and implantable cardiac defibrillators. As the social and economic burdens of heart failure increase, the pace of innovation and quest for breakthroughs in device development have intensified. In many instances, these innovative devices require advanced cardiovascular imaging and complex interventional procedures for implantation. As a result, interventional cardiologists and imagers (particularly those involved with structural procedures) have the requisite skillset to implant these devices and participate in clinical trials. But a team approach is required for care of these medically complex patients before and after receiving these types of therapies. Hence, heart failure specialists have a significant role to play as well.

Accordingly, we identified the need for a forum in which clinical cardiologists, interventionalists, cardiac imagers, and heart failure specialists could interact, share knowledge, and learn about many of the emerging technologies in the field.

The Technologies for Heart Failure Therapeutics (THT; <https://tht2022.crfconnect.com/>) meeting was created to address this unmet need, and the inaugural session was held in February 2022 in New York City. The meeting was based on the principles of past successful educational meetings of the Cardiovascular Research Foundation, such as Transcatheter Cardiovascular Therapeutics and Transcatheter Valve Therapies. Roughly 600 people attended in person, and more than 2000 individuals participated online; participants spanned a wide range of subspecialties. The latest in drug- and device-based therapies for heart failure patients were reviewed in more than 24 hours of content. The “heart team” took center stage during these presentations, and speakers emphasized that the collaboration between heart

failure cardiologists and structural interventionalists extends beyond discussions of valvular heart disease. In this vein, the concept of a new subspecialty, namely, Interventional Heart Failure, which was introduced several years ago, is becoming increasingly relevant.

The highlights of the THT meeting, consisting of a series of review and original research articles, are featured in the current and subsequent issues of *Structural Heart* in a special section entitled “Interventional Therapies for Heart Failure.” These articles cover a broad range of topics that give our readership a foundation in current therapies and diagnostic tools, an overview of technologies in development, and deeper dives into specific technologies for which new data were presented at THT.

One thing that should become apparent after reading these articles is that the domain of the structural interventionalist is currently expanding beyond percutaneous valve therapies into the realm of specific heart failure therapies. Until the field of interventional heart failure is more clearly defined, structuralists will be increasingly called on to participate in studies of heart failure devices. Close collaboration with heart failure specialists and clinical cardiologists via the heart team approach will be key to the success of these efforts.

As we look forward to THT 2023 (to be held in Boston from March 20 to 22, 2023), we want to acknowledge the tremendous effort by the staff at the Cardiovascular Research Foundation’s Center for Education, the course co-directors, and the entire THT faculty for the success of THT 2022.

Funding

The authors have no funding to report.

Disclosure statement

DB reports institutional grant support from Abiomed, Ancora Heart, and Edwards Life Sciences and receiving consulting fees from Abbott Laboratories, AquaPass, BioMind, CardioDyme, Corvia Medical, Impulse Dynamics, Orchestra Biomed, Inc, preCARDIA, and Therox/Zoll. MIB is supported by an ACC/Merck Research Fellowship and has received consulting fees from Artract Medical and Osprey Medical.

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