

# Editorial for "Heart Failure Update and Advances in 2021"

This series of *Annals of Translational Medicine* introduces a collection of review articles on the full spectrum of heart failure (HF), given the tremendous growth that the field has experienced over the recent years. The crucial role of guideline directed medical therapy (GDMT) instituted at the primary care level is along with the role of advanced therapies for refractory cases, as both are interconnected and are two poles of a continuum.

Starting with the basic concepts and management in the care of HF patients, Espinoza *et al.* present a detailed update on the rationale of established HF pharmacotherapies, emerging agents such as vericiguat or sodium-glucose transport protein and the role of precision medicine in HF management. Expanding specifically into the latest addition in the treatment arsenal for HF with reduced ejection fraction, Cruz *et al.* delve deep into the pharmacology and current position of angiotensin receptor-neprilysin inhibitors, not only for HF but also in other cardiovascular diseases. Suri & Pamboukian present a comprehensive review of renal physiology, diuretic pharmacology and the best evidence-based strategies to achieve euvolemia in patients with HF.

Paz *et al.* explain the current understanding of HF with preserved ejection fraction and walk us through the existing evidence behind the pharmacotherapies that have promise or that have proven ineffective in management of this challenging population. In a specific HF with preserved ejection fraction population, Cruz & Tallaj describe the advances in pharmacotherapy for transthyretin cardiac amyloid, a disease that remains greatly underdiagnosed in the community.

Given the growth in advanced HF mechanical therapies, particularly durable left ventricular assist devices (LVAD), we included two topics regarding the pharmacologic therapy of patients on LVAD support. Loyaga-Rendon *et al.* describe in detail the rationale of antiplatelet and anticoagulation strategies, as well as their management during the highly prevalent thrombotic and hemorrhagic complications in LVAD therapy. Pirlamarla *et al.* present the pathophysiology of pulmonary hypertension in patients with HF, and the evidence behind the use of pulmonary vasodilators in patients with LVAD support. We believe that the articles on these variety of topics will assist clinicians in the care of HF patients across the spectrum. The

editors are sincerely thankful for the excellent contributions of all authors in the series. We hope you enjoy the interesting, updated reviews included in the series, and let them translate to improved patient care. We are certain the series will provide new insights and motivate further research in the topic.

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Debabrata Mukherjee



Jose B. Cruz Rodriguez

Debabrata Mukherjee, MD, MS (Email: Debabrata.Mukherjee@ttuhsc.edu) Jose B. Cruz Rodriguez, MD, MPH (Email: Benjamin.Cruz@ttuhsc.edu) Division of Cardiovascular Diseases, Texas Tech University Health Science Center El Paso, El Paso, Texas, USA. Submitted Nov 06, 2020. Accepted for publication Dec 18, 2020. doi: 10.21037/atm-2020-hf-09 View this article at: http://dx.doi.org/10.21037/atm-2020-hf-09

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