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It is with great pleasure that we introduce to you, our readers, to the first issue of *Cardiac Failure Review* for 2019.

This issue features a range of articles on major areas of advance in heart failure from renowned experts. Some of the most topical areas in the management of heart failure are the effects and treatment of co-morbidities, and none more so than diabetes. In this issue, Thomas A Zelniker and Eugene Braunwald discuss the treatment of heart failure with sodium-glucose cotransporter 2 inhibitors (SGLT2i) and other anti-diabetic drugs following the three recent large trials that have demonstrated a reduction in heart failure hospitalisation and progressive renal failure, and including one, the EMPA-REG OUTCOME trial, that also showed a significant reduction in cardiovascular and total mortality. They conclude that the three tested drugs of the SGLT2i class cause robust reductions in heart failure hospitalisation rates but that only one, empagliflozin, was associated with a clear reduction in mortality. They also summarise another drug class, the GLP-1-RA agents, and suggest that some of this class may be beneficial in reducing atherosclerotic cardiac events in high-risk diabetic patients.

In their article, Hans-Peter Brunner-La Rocca and Sandra Sanders-van Wijk review the use of natriuretic peptides diagnosis and monitoring of patients with established chronic heart failure, a less well-studied setting compared to their role in the evaluation of acutely breathless patients. They conclude that natriuretic peptides are strong prognostic markers also in the chronic setting, but that proving improved patient outcomes when the results of natriuretic peptides level monitoring is used in clinical care decisions has been inconsistent in the trials to date. Sunil K Nadar and Muhammed Mujtaba Shaikh also discuss other biomarkers and their role in routine heart failure clinical care.

Tonje Thorvaldsen and Lars H Lund discuss referral rather than selection for advanced heart failure therapies, and propose strategies for optimising timely referral for advanced heart failure evaluation. Marco Metra et al. discuss the new Heart Failure Association definition of advanced heart failure, which was updated in 2018 and they stress that comorbidities, tachyarrhythmias and heart failure in the setting of preserved ejection fraction are all of increasing importance. Mechanical circulatory support, which continues to progress as a viable effective treatment option with technological advances, a development we all predict will speed up in the years to come. Sajad Shehab and Christopher S Hayward also extend this theme in their article by reviewing the options of left ventricular assist devices and biventricular assist devices in advanced heart failure, and Maria Rosa Costanzo looks at ultrafiltration in acute heart failure and summarises excellently the studies to date and what the future may hold, concluding finally that ultrafiltration remains an attractive alternative to diuretics because it more predictably lessens total body sodium load. She suggests that for future studies, ultrafiltration might be best adjusted according to the patient's individual haemodynamic and renal profile, with a more precision target for the rate, duration and target fluid removal. Another setting we have seen considerably more effort in unravelling is the field of cardio-oncology. In this regard Martin Nicol et al. provide an excellent article on the detection and significance of subclinical left ventricular dysfunction seen during modern chemotherapeutic regimens.

Lastly, but importantly, Jacqueline H Morris and Leway Chen review the literature on exercise training and heart failure, and Izabella Uchmanowicz et al. discuss heart failure and the associated problems when it coincides with the frailty syndrome, a feature we see much more of as the populations of the world progressively age.

We hope you enjoy the reading this latest issue of *Cardiac Failure Review*. ■