LETTERS TO THE EDITOR

doi:10.1002/ejhf.452
Online publish-ahead-of-print 3 December 2015

Response to: Hyperkalaemia in heart failure: binding the patient to improved treatment?

We appreciate the insightful and balanced Editorial[1] by Dr Konstam regarding our study.[2] However, we wish to take issue with one of his statements and its implications. The Editorial states, "Over 4 weeks, in each trial, patients were allowed to have serum potassium levels as high as 6.2 mmol/L (HARMONIZE) or 6.5 mmol/L (OPAL-HK) without intervention and, apparently, they tolerated these levels without difficulty," as well as the follow-up statement, "These findings strongly suggest that down-titration of RAASi in response to lower levels of hyperkalaemia may be unnecessarily conservative for most patients as long as potassium levels and kidney function are carefully monitored."[1] We would like to point out that in OPAL-HK,[3] during the first 3 weeks of the study, patients were treated using a dosing algorithm that required increasing the patiromer dose or discontinuing the renin-angiotensin-aldosterone system inhibitor (RAASi) if serum potassium was observed to be 5.5 to <6.5 mmol/L. Patients were only allowed to maintain a serum potassium in this range during a relatively short period (up to ~9 days) of dose adjustment of either patiromer or their RAASi.[3] While there were no apparent deaths related to a serum potassium ≥5.5 mmol/L during the initial 4-week treatment phase of this relatively small study,[2] this does not suggest that these levels of serum potassium or even levels as low as 5.1 mmol/L can be safely tolerated without intervention. There is increasing evidence that in patients with comorbidities—such as chronic kidney disease, heart failure, and/or diabetes mellitus—especially those over 65 years of age and those who have recently experienced a myocardial infarction, a serum potassium >5.0 mmol/L is associated with an increased risk of death.[4] Of particular importance is a study of VA patients in which increased mortality was found within 1 day of observing a serum potassium ≥5.5 mmol/L.[5] We would caution against allowing patients with even mild hyperkalaemia to remain without appropriate intervention. We would, however, agree with Dr Konstam's statement that, "With the availability of these newer, safer, more tolerable potassium-binding agents and the demonstrated potential for retaining higher doses of RAASi, it is important to take the next step and explore a connection between the pharmacodynamics of these agents and reduced morbidity and mortality through well-designed, prospective randomized clinical trials in patients with heart failure."[1]

Acknowledgements

Editorial assistance was provided by Brian J. Catton, PharmD, of AlphaBioCom, LLC.

Conflicts of interest: B.P. reports consulting fees from Pfizer, Inc.; Bayer AG; AstraZeneca plc; Stealth Biotherapeutics, Inc.; Sarfez Pharmaceuticals, Inc.; Merck; SD Pharmaceuticals; and Eli Lilly and Company. He also reports consulting fees and holds stock from Relypsa, Inc.; AuraSense Therapeutics; PharmaIN; Tricida, Inc.; scPharmaceuticals, Inc.; and DaVinci BioSciences, LLC; and is on a Data Safety Monitoring Board for Novartis AG; Johnson & Johnson; and Oxygen Biotherapeutics. M.R.W. has received consulting fees from Akebia Therapeutics, Inc.; Amgen; Astra; Boston Scientific; Janssen Pharmaceutica; Lexicon Pharmaceuticals; Merck Sharp & Dohme; Relypsa, Inc.; Sandoz; and Sanofi.

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