Letter to the Editor

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Update in diagnosis and management of primary aldosteronism: reply to a Letter to the Editor

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To the Editor,

We have carefully read the comments by Dr. Alain Gay [1] regarding our current review article, in which we describe the investigation and treatment options of primary aldosteronism [2]. Dr. Gay has questioned the statement about the more intense natriuretic effect of finerenone as compared to the other mineralocorticoid receptor antagonists (MRA). We characterized finerenone as having more natriuretic effects than spironolactone and eplerenone, as stated by other authors [3]. We appreciate Dr. Gay's comment and strongly agree that in the studies quoted, natriuresis was not an investigated parameter [4, 5]. As a matter of fact, that statement was a speculation based on pharmacodynamics and pharmacokinetics studies that show finerenone to be >500-fold more selective for the mineralocorticoid receptor and to present a 3–10-fold higher potency and efficacy with IC50 (concentration of antagonist required to inhibit 50% activation of receptor) of 18 nmol/L [6, 7].

In healthy rats, the natriuretic activity of finerenone was tested as a head-to-head comparison of potency and efficacy with the steroidal MRA eplerenone. Both MRAs dose-dependently induced urinary sodium excretion. The application of 1 mg/kg finerenone resulted in similar natriuretic responses as 10 and 30 mg/kg eplerenone, whereas 10 mg/kg finerenone had a comparable natriuretic efficacy as 100 mg/kg eplerenone, suggesting that finerenone represents a more potent MRA [7, 8].

We also thank Dr. Gay for updating us with the information that the FINESSE study, which we mentioned in our review, was not started, being, instead, replaced by the ongoing FIGARO and FIDELIO studies.

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