Reviewer’s report

Title: Galectin 3: association to neurohumoral activity, echocardiographic parameters and renal function in outpatients with heart failure.

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Reviewer: Antoni Bayes-Genisa

Reviewer's report:

Review of Galectin 3 in outpatients with heart failure and the relationship to neurohumoral activity, echocardiographic parameters and renal function by Freja Gaborit et al. This manuscript overall has no soul. It approaches three concepts in one paper: gal-3 and cardiac function by echo, Gal-3 and biomarkers, and Gal-3 and kidney function, without providing any novelty in any of them; neither new mechanistic approach nor original information. Nowadays it is increasingly clear that Gal-3 is probably more reflective of renal dysfunction than cardiac dysfunction. Moreover, the authors already acknowledge that the positive association of Gal-3 with natriuretic peptides is anticipated and confirms previous reports.

Major comments:

- Title inaccurate - provide more info on correlation with hs-CRP. Please provide data on hs-troponins, conventional troponins are of no use in HF.

- Single center study with a insufficient sample size.149 patients with reduced left ventricular ejection fraction. A total of 27 patients were excluded from the analyses due to missing venous blood samples or a missing Gal-3 value. As a result 120 patients with complete data were included in this study.

- Explanatory variables (covariates) were chosen from available 178 established confounders: eGFR, age and gender. The authors should incorporate treatment with MRAs, beta-blockers and ACEI/ARBs. Cox multivariable regression analysis recommended.

- How do the authors explain higher MRA use in the subgroup of patients with higher Gal-3.
Minor comments

- Tune down perspectives section.

**Are the methods appropriate and well described?**

If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**

If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**

If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**

If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**

Please indicate the quality of language in the manuscript:

Acceptable

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