

## ESPS PEER-REVIEW REPORT

**Name of journal:** World Journal of Cardiology

**ESPS manuscript NO:** 30794

**Title:** Combined assessment of myocardial damage and electrical disturbance in chronic heart failure

**Reviewer's code:** 00214267

**Reviewer's country:** China

**Science editor:** Jin-Xin Kong

**Date sent for review:** 2016-10-23 18:40

**Date reviewed:** 2016-10-30 09:30

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input checked="" type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		[Y] No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		[Y] No	

## COMMENTS TO AUTHORS

Kadowaki S et al. performed a prospective single center study included 322 chronic heart failure (CHF) patients to evaluate whether a combined measurement of biochemical [(heart-type fatty acid binding protein (H-FABP)] and electrophysiological (QRS prolongation) markers can be used to risk-stratify patients with CHF, the results showed either high H-FABP levels or QRS prolongation was independent predictor of cardiac events that included cardiac death, myocardial infarction or sudden cardiac death, and progressive heart failure requiring rehospitalization, whereas high H-FABP + QRS prolongation confers the highest risk for cardiac events in patients with CHF. The subject is clinically of interest, and the methodology is sound and well described. I have the following minor points: 1. The authors should give a more detailed description of follow up, eg. visit cycle, related examination, etc. 2. The mean HF duration of the patients need to be provided.

## ESPS PEER-REVIEW REPORT

**Name of journal:** World Journal of Cardiology

**ESPS manuscript NO:** 30794

**Title:** Combined assessment of myocardial damage and electrical disturbance in chronic heart failure

**Reviewer's code:** 00225245

**Reviewer's country:** Czech Republic

**Science editor:** Jin-Xin Kong

**Date sent for review:** 2016-10-23 18:40

**Date reviewed:** 2016-10-31 22:46

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input checked="" type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		BPG Search:	<input type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

## COMMENTS TO AUTHORS

Very nice paper.

## ESPS PEER-REVIEW REPORT

**Name of journal:** World Journal of Cardiology

**ESPS manuscript NO:** 30794

**Title:** Combined assessment of myocardial damage and electrical disturbance in chronic heart failure

**Reviewer's code:** 00259032

**Reviewer's country:** United Kingdom

**Science editor:** Jin-Xin Kong

**Date sent for review:** 2016-10-23 18:40

**Date reviewed:** 2016-11-28 21:42

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		[Y] No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		[Y] No	

## COMMENTS TO AUTHORS

Thank you for asking me to review this Combined assessment of myocardial damage and electrical disturbance in chronic heart failure. The manuscript was very easy to follow and well written. It does deal with a subject of importance but I do have several comments that I would like to make. Abstract In the abstract and paper the Primary endpoint of the study which appeared to be composite of Cardiovascular death and hospitalisation for heart failure and as such the primary endpoint needs to be more specifically stated. Similarly in the in the results it would clearer if they stated that there were 117 primary endpoints which included '27 cardiac deaths and 90 re-hospitalizations for worsening CHF.' The definition of a prolonged QRS used in their study of >120ms should be stated in the abstract. I would then state that 'Multivariate analysis demonstrated that high H-FABP levels (hazard ratio 1.745,  $p = 0.021$ ) and QRS prolongation (hazard ratio 1.612,  $p = 0.0258$ ) were independent predictors of the primary endpoint'. Introduction The authors make a big statement without any reference to this: 'The role of biomarkers in the evaluation and risk stratification of patients with CHF continues to increase in importance.' This sentence

should be referenced eg with some BNP evidence    Methods I am confused by the inclusion criteria. Are the authors stating that patients with new LBBB were excluded or any LBBB? I don't fully understand why patients with LBBB would be excluded and if so you could be excluding >25% of potential patients limiting the utility of H-FABP. Who were the patients with QRS >120 were they RBBB? Were patients with CRTs included? Again under the methods instead of 'The end points were cardiac death, defined as death due to progressive heart failure, myocardial infarction or sudden cardiac death, and progressive heart failure requiring prehospitalization I would be more specific and state that the primary endpoint was cardiovascular death (defined as heart failure, myocardial infarction or sudden cardiac death) and heart failure hospitalization. Results I find it strange that patients with hospitalized HF were included yet >50% were NYHA II. I am not sure why NYHA Class II and II should increase the hazard ration for the primary endpoint. Do the authors mean NYHA IV vs II and III rather than as quoted as II/III vs IV? Where did the H-FABP cut off of  $\leq 4.5$  ng/ml come from as it was 4.3 in one other authors previous studies? Discussion In the discussion the authors really need to explain why BNP failed to predict outcomes in this study despite the known excellent data to support its prognostic utility form other studies. H-FABP measurement is time consuming and at present more rapid measures of assessment and data from a larger clinical study needs to be available for it to be considered for mainstream clinical practice. Also the AUC was modest at best and this is not mentioned. I found the discussion quite short and the translational advantages were not discussed nor was the specificity of the marker which is new to me. Is this an epimarker for something else or specific for Heart failure over Myocardial infarction of other types of ACS. References Reference 2 (Funk M, Krumholz HM. Epidemiologic and economic impact of advanced heart failure. J Cardiovasc Nurs. 1996;10:1-10. [PMID: 8656234]) is outdated for the comments that The authors are trying to make re reduction in clinical endpoints with HF: Please change this reference to a more contemporary reference: Figures I am not sure as to the point of showing an r of <0.1 in figures 1 for BNP and H-FABP with QRS. Other comments I was wondering whether the authors have considered looking simply at Heart rate and H-FABP given that Heart rate is so simple to measure and is already a very well established markers of HF outcomes. That way they could include patients with all types of bun