

ESPS Peer-review Report**Name of Journal:** World Journal of Cardiology**ESPS Manuscript NO:** 8922**Title:** Perioperative Serum Creatinine Role in Predicting Outcome after Cardiac Surgery beyond Acute Kidney Injury**Reviewer code:** 00504835**Science editor:** Ling-Ling Wen**Date sent for review:** 2014-01-15 09:37**Date reviewed:** 2014-01-23 00:03

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	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"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS TO AUTHORS

The manuscript by Najafi provides a fairly comprehensive overview on the role of serum creatinine in AKI after cardiac surgery. The review addresses the direct role of creatinine in diagnosis and prediction of AKI, indirect role of creatinine in outcome prediction in cardiac surgery and perspectives. Although the manuscript offers useful contents and significant insight, it can be further improved by correcting the many semantic errors throughout the text (e.g., page 5: Essential role of serum creatinine in cardiac surgery-associated mortality and morbidity). Table 2 in particular appears disorganized and should be modified. References are excessive, should be checked for accuracy and probably be trimmed to include the more credible ones.

ESPS Peer-review Report

Name of Journal: World Journal of Cardiology

ESPS Manuscript NO: 8922

Title: Perioperative Serum Creatinine Role in Predicting Outcome after Cardiac Surgery beyond Acute Kidney Injury

Reviewer code: 02511796

Science editor: Ling-Ling Wen

Date sent for review: 2014-01-15 09:37

Date reviewed: 2014-01-23 12:06

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	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"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input checked="" type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input checked="" type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

Thank you for the submission. This review focuses purely on serum creatinine in AKI. It is extensively reviewed with a vast literature base. It is important area in that it fills a gap in the literature "AKI in CSA". It could thus contribute to the knowledge base in the area. Unfortunately I do not believe in its current format it is worthy of publication, as yet. To get this across the line the author may need to focus on some modifications. The key pointers are that it should be easy to read, adds to the knowledge base in the area (even from a regional perspective) and authoritative (as this is not narrative or commentary):

- redo with improved structure - break it down into better segments - re look at references and use them better - more tables summarizing core data - a table of the most recent or 10 -15 largest studies of CSA-AKI - avoid repetitious statements and points

Also look at

- 1) Cardiac Surgery-Associated Acute Kidney Injury CardioRenal Med 2013;3:178-199
- 2) The epidemiology of cardiac surgery-associated acute kidney injury. J Artif Organs. 2008 Feb;31(2):158-65.
- 3) Cardiorenal Syndrome: New Perspectives in Diagnostics Seminars in Nephrology 2012;32(1):3-17

I would restructure the article as: Perhaps look at reference 3 outline A. Abstract and Introduction B. Epidemiology of AKI in CSA (how big is the problem - 2 paragraphs perhaps even in intro) C. Serum creatinine role in diagnosing in CSA - AKI - Defining CSA-AKI - The pitfalls of GFR calculation in CSA-AKI - Why novel biomarkers are still not as useful as SCr in CSA-AKI - Potential pitfalls of SCr in CSA - age, sex etc. - Establishing a baseline for Renal insufficiency in CSA - are we missing some normals and excluding some abnormals D. Association between SCr and CSA outcomes - Paediatrics - Adult with no baseline Renal insufficiency - Adults with baseline Renal insufficiency - CSA in ESRD

- SCR and specific CSA i) CABG ii) Valve iii) Transplant iv) minimally invasive v) off pump E) The future - i. Risk models for CSA-AKI - ii. Prevention and Treatments on the horizon F) Conclusion ABSTRACT - OK INTRODUCTION:(Needs to be rewritten and rethought) Second Para - "Though the opposite ..." reconstruct this paragraph. Some points are not accurate "....promising results in both prevention and treatment". Please provide a reference here. I do not believe there are proven or promising treatments except careful patient selection and hydration. Statement "..low incidence of CSA-AKI..." this point does not seem accurate. Provide a reference or rebuttal. Last sentence "further inconsistencies..." There have been several authoritative reviews or attempts at met-analysis in AKI perhaps not specifically CSA - please reference them or provide a rebuttal why those are not mentioned. 1 - paragraph does not make sense. SCr is the most important predictor of outcomes and it occurs in both with and without previous renal insufficiency 1-1 Title not accurate - SCr does not play a role in outcomes, as it is a surrogate for outcomes. A better title 'Association of SCr with CSA morbidity and mortality' 1-2 This part is OK. It has been well covered before. A table simplifying the 3 main formulae with pros and cons, reference ranges, limitations, reference key studies 1-3 OK - perhaps expand on whether proteinuria was noted. Suggest solutions also 1-4 OK Can be after the GFR segment 1-2. 1-5 OK perhaps cut down and summarize the key points and why they are not usable at present. Most of the work on these biomarkers were done in CSA. 1-6 This part is OK. A diagram or table to summarize would be good, It also does not fit in at this point. 1-7 OK. Re-look where this should be in the article 2 - The title does not make sense as SCr does not play a role in the outcomes. 3 - OK. Can summarize better and perhaps a small table would be helpful 4 ? No Conclusion Good Luck and Best Wishes.

ESPS Peer-review Report**Name of Journal:** World Journal of Cardiology**ESPS Manuscript NO:** 8922**Title:** Perioperative Serum Creatinine Role in Predicting Outcome after Cardiac Surgery beyond Acute Kidney Injury**Reviewer code:** 00258955**Science editor:** Ling-Ling Wen**Date sent for review:** 2014-01-15 09:37**Date reviewed:** 2014-02-17 23:47

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

This is a well written and comprehensive review of a complex topic; the evaluation and management of renal problems around the time of cardiac surgery, with a specific focus on serum creatinine. My only comments are as follows: 1. There are minor grammatical and punctuation errors throughout the manuscript. 2. At the beginning of the manuscript, I would define the acronyms "RIFLE, AKIM and KDIGO" or make general reference to them as they are defined in detail later. 3. I would supply a conclusion to summarize the manuscript.