Author's response to reviews

Title: High sensitive troponin T and heart fatty acid binding protein: novel biomarker in heart failure with normal ejection fraction?: A cross-sectional study

Authors:

Wilfried Dinh (wilfried.dinh@googlemail.com)
Werner Nickl (w.nickl@contilia.de)
Reiner Füth (reiner.fueth@helios-kliniken.de)
Mark Lankisch (mark.lankisch@helios-kliniken.de)
Georg Hess (georg.hess@t-online.de)
Dietmar Zdunek (dietmar.zdunek@t-online.de)
Thomas Scheffold (th.scheffold@t-online.de)
Michael Coll Barroso (mc@corovital.de)
Klaus Tiroch (klaus.tiroch@helios-kliniken.de)
Dan Ziegler (dan.ziegler@ddz.uni-duesseldorf.de)
Melchior Seyfarth (melchior.seyfarth@helios-klinikenn.de)

Version: 2 Date: 24 June 2011

Author's response to reviews: see over
“High sensitive troponin T and heart fatty acid binding protein: novel biomarker in heart failure with normal ejection fraction?: A cross-sectional study”

Wilfried Dinh, Werner Nickl, Reiner Füth, Mark Lankisch, Georg Hess, Dietmar Zdunek, Thomas Scheffold, Michael Coll Barroso, Klaus Tiroch, Dan Ziegler and Melchior Seyfarth”

Dear Dr. Manginas,

Thank you very much for the review of the above mentioned manuscript. We appreciate yours and the reviewers’ comments and critique. Enclosed please find our detailed response to the reviewers’ comments. In addition, we highlighted the corrections in the revision of our main manuscript.

Editor/Associate Editor comments:

“Please rename Background to Abstract”

We renamed “Background” to “Abstract

“Please rename Introduction to background”

We renamed “Introduction” to “Background”

“Tables as additional files: We notice that you have included tables as additional files. If you want the tables to be visible within the final published manuscript please include them in the manuscript in a tables section following the references. Alternatively, please cite the files as Additional file 1 etc., and include an additional files section in the manuscript.”

We have included the tables in the main manuscript following the references, because we prefer the tables to be visible within the final publishes manuscript.

“Figure cropping: It is important for the final layout of the manuscript that the figures are cropped as closely as possible to minimise white space around the image. For more information, see the instructions for authors: http://www.biomedcentral.com/info/ifora/figures.”

We have cropped and minimized the figures before first submission.

In addition, after carefully paying attention to the manuscript, we changed the affiliations like shown in the revision of the manuscript. The affiliations in the revision are correct.
Reviewer comments:

Reviewer: 1

1. In the abstract, "CAD" should be spelled out.

We spelled out coronary heart disease and did not use CAD in the abstract.

2. In the introduction, indeed randomized trials in HFnEF have failed to reduce mortality but the relevant references should be added.


3. In the introduction, coronary morphology should be replaced with coronary anatomy.

We replaced the term “morphology” by “anatomy”.

4. In the limitations, for risk stratification follow-up and association of the biomarkers with clinical events is needed; this should be added.

We included the sentence “Furthermore, for risk stratification, follow-up and association of the biomarkers with clinical events is needed” in the limitations.

5. In the references, I suggest to use the 2008 European guidelines instead of the 2005 American guidelines.

We do not think that it makes any difference with regard to content, so we decided to cite the American guidelines.

6. In the references, most references are not complete; they should be completed.

We carefully checked all references and feel that they are complete now.

Reviewer: 2

Major Compulsory Revisions

1. Given the subject matter, the authors should discuss more, that HFnEF-Patients were older, had more CAD, had higher blood pressures, higher myocardial mass and more diabetes and pre-diabetes.

We mentioned this fact in the limitations: “Furthermore, the rates of CAD and cardiovascular risk factors were high in this study population.”

2. Given the subject matter, the authors should
   a. equalize the results in the main paper and the summary (“…whereas hsTnT was not significantly different between the LVDD and controls (p=0.068)”
We equalize the results in the main paper and the summary: “The association is in proportion to the severity of the disease. Furthermore, hFABP was significantly different in subjects with normal DF and asymptomatic LVDD, whereas whereas hsTnT was not significantly different between the LVDD and controls.”

3. given the small numbers, the authors should
a. be more careful in drawing conclusions, particularly with respect to prognosis and recommendations to the biomarkers impact on treatment

We mentioned this important fact in the study limitations: “Lastly, we did not perform serial measurements and only focused on baseline values. Accordingly, our cross sectional study design does not permit any conclusions on causality.”

b. think to remove the subgroups of CAD and non-CAD in table 3

Because of the fact that CAD is an important contributor to both LVDD and CAD, we think that it is important to show the subgroup results because the association between CAD and hs Trop T was independent of CAD.

4. In the introduction more explanations to h-FABP, its source, biochemistry, kinetics should be provided


5. The hs-Troponin-Test is explained extensively, whereas the assay for h-FABP is not described


Minor Essential Revisions

1. Data on the results of the oGTT are interesting but are not further discussed or contribute to different analysis

a) Data are of limited significance because only 95 out of 130 were tested

b) I would suggest to divide in Diabetes and Non-Diabetes

We agree with the reviewer that the oGTT data are interesting, but the results were not the main focus of our manuscript. Given the relatively small number of subjects included into the study, a subgroup- analysis would not provide enough statistical power. Furthermore,
we did not define a subgroup analysis in the study protocol, therefore, we would not be able to permit any conclusions on causality

2. “...diagnostic criteria as recommended by the European Society of Cardiology were met.” A reference should be provided


3. Not CAD patients should be described more accurately. Where they free from atherosclerotic disease or had they plaque with diameter stenosis <50%. This may be a difference

We defined CAD in the result section: “We included 130 patients with normal EF ≥ 50% (median age 67 [59-73] years, 49% woman) in the study, 62% of whom had stable CAD (defined as coronary stenosis > 50% in ≥ 1 coronary artery) without the need for coronary revascularization.”

4. Citations 13, 14, 27, 28 are incomplete

We carefully checked and corrected the references.

We hope that the revised version is acceptable for publication in BMC Cardiovascular Disorders

Thank you very much for handling this manuscript

Yours sincerely

Dr. Wilfried Dinh
Internist/Kardiologe
F.E.S.C.
CoroVital-
Institut for Sports Medicine
Arrenberger Street 20
42117 Wuppertal
++49-151-41935896
Wilfried.dinh@googlemail.com