Author’s response to reviews

Title: Relating circulating thyroid hormone concentrations to serum interleukins-6 and 10 in association with non-thyroidal illnesses including chronic renal insufficiency,

Authors:

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Version: 3 Date: 23 September 2007

Author’s response to reviews: see over
Dear Prof. Elizabeth C Moylan PhD
Senior Editor
BioMed Central
London, UK

This is our answers to the reviewers’ queries and suggestions regarding the manuscript:

MS: 1574935033146571
Relating circulating Thyroid hormone concentrations to Serum Interleukins-6 and 10 in association with non-thyroidal illnesses including Chronic Renal insufficiency
Hamdy Abo-Zenah, Sabry A Shoeb, Alaa A Sabry and Hesham A Ismail

We hope that the reply is satisfactory to the raised points.

**Reviewer's report**
**Title:** Relating circulating thyroid hormone concentrations to serum interleukins-6 and 10 in association with non-thyroidal illnesses including chronic renal insufficiency
**Version:** 2 **Date:** 16 August 2007
**Reviewer:** George Chrousos

**Reviewer's report:**
General
A well written paper with interesting findings.

**Reply**
Thanks a lot, your kindness has been very much encouraging to us.

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**Major Compulsory Revisions** (that the author must respond to before a decision on publication can be reached)
None.

**Minor Essential Revisions** (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
None detected.

**Discretionary Revisions** (which the author can choose to ignore)
The language needs a little help!

**What next?:** Accept after minor essential revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being Published

**Reply**

We have received a linguistic help from Miss Linda Dudgale to improve the quality of the written English and she has been acknowledged in the manuscript.

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
I declare that I have no competing interests.

**Reply**

No conflict of interest declaration has been included in the revised manuscript.

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**Reviewer's report**

**Title:** Relating circulating thyroid hormone concentrations to serum interleukins-6 and 10 in association with non-thyroidal illnesses including chronic renal insufficiency

**Version:** 2  **Date:** 20 August 2007

**Reviewer:** Ramzi A Ajjan

**Reviewer's report:**

General
The manuscript describes the association between plasma thyroid hormone concentrations and levels of IL-6 and IL-10 in subjects with non-thyroidal illness (NTI). Although this topic has been covered previously, the authors have 3 different groups of subjects with NTI, adding additional information to our existing knowledge in this area.

**Reply**

Dear Sir, your remarks are extremely helpful to us and for sure it will remarkably strengthen the manuscript, thanks.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. The control group seems to have a significantly lower mean age. The inclusion of an age and sex matched control group will strengthen the data.
You are absolutely right; the main age of the control subjects included in the study was 39.5 years. We are sorry for this, as well as the other two, typographic mistake;

A. The reference at the end of paragraph 5 of the discussion in the unrevised manuscript is 23 instead of 25 and its new number in the revised one is 44.
B. The level of IL-10 in table 1 is 74.33 instead of 74133.

2. The authors note that cytokine concentrations were “enormously above the upper limit” of detection (results section paragraph 2), posing a question mark over the validity of the data. Have the authors tried to dilute the samples?

Yes, in order to verify the validity of the data in view of the detected high level of the investigated interleukins and in order to assess the linearity of the assay, we diluted the samples with the appropriate Calibrator Diluent to produce samples with values within the dynamic range of the used assay.

3. In the myocardial infarction (MI) group, was there a relationship between cytokine and/or thyroid hormone levels and severity of MI?

The changes in interleukins levels matched the severity of myocardial damage in MI subgroup of patients as inferred from the significant correlations observed between the cardiac enzyme CK-MB isoenzyme and both IL-6 (r=0.498 and p=0.025) and IL-10 (r=0.467 and p=0.038). Such observation was incorporated to the text in the Result Section.

4. More clinical details on the chronic renal failure group would be useful (creatinine levels, dialysis treatment, cause of renal failure).

None of the CRI patient was replaced by dialysis treatment as their mean estimated glomerular filtration rate, using the abbreviated 4 variable MDRD formula, was 27.6±3 ml/min/1.73 m^2. The leading cause of their chronic renal insufficiency was DM (30%), hypertension (25%), glomerular disease (15%), obstructive nephropathy (10%) and unknown in the remaining (20%). The requested data were included in the Patients section of the manuscript.

5. The authors state that this is a randomized controlled prospective study. However, only a single measurement was made and therefore this is a cross-sectional, observational study.
Reply

Thanks, we have been enlightened by the information and corrected the statement.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. Methods: the section on TSH/T3 and T4 measurements can be shortened as these are well established techniques.

Reply

We have shortened the paragraph of thyroid hormone estimation in the Methodology section as requested.

2. Change rows to columns in Table 2 to make it consistent with Table 1 and easier to read.

Reply

Table 2 has been changed to be consistent with table 1.

3. In Table 1, change 74133 to 74.33

Reply

This and other typographic mistakes were corrected, sorry for that.

4. The introduction and discussion can both be shortened.

Reply

We have done that, as well.

5. There are some typos/inconsistencies/omissions in the references (such as reference 57, 55, 34, 25, 19, 13, 9…etc…)

Reply

Thanks, all the references has been revised and changed according to the instruction for authors to conform to the BMC Medicine Journals style and their number has been reduced from 57 to 50 references after shortening the Introduction and Discussion Sections as requested.

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Discretionary Revisions (which the author can choose to ignore)

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being Published

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Reply

Thanks, we have received a linguistic help from Miss Linda Dudgale and she has been acknowledged in the manuscript.

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
I declare that I have no competing interests

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Reply

We declared that we have no competing interests and the declaration has been included in the revised manuscript.

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Yours Sincerely

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