Reviewer's report

Title: Effect of octanoic acid-rich formula on plasma ghrelin levels in cachectic patients with chronic respiratory disease

Version: 1 Date: 26 March 2009

Reviewer: Cyril CY Bowers

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Major Compulsory Revisions-none

Minor Essential Revisions

1-Participants: 1-Since chronic respiratory disease (CRD) has multiple causes that may be pulmonary or systemic in origin and systemic disorders may influence the ghrelin system function differently, there is a need to better understand the clinical disorder of the patients. The duration of the patients illness and any estimate of pulmonary impairment would be valuable.

2-Study Protocol: BMI of the controls is 20.4±5.7 but the actual BMI for each patient group (n=19, n=4) should be calculated. Also, use BMI rather than BW on the Table. If there is any plasma left, assay the leptin levels. This would be helpful to relate to the low fat mass and also may be relevant to the octanoic acid effect.

3-Blood Sampling and Assays: Include the range and mean±SD of the normal acyl and desacyl ghrelin levels vs the CRD.

4-Discussion: Since the literature is replete with confusion about ghrelin levels, it probably would be best to refer to acyl and desacyl ghrelin levels and not total ghrelin which in this manuscript is the calculated sum of the individually determined molecules. Also, add some comment about the implications of the 24h profile in the discussion.

5-Table: The title could be extended to clarify the patient population, i.e., Changes in parameters before and after 2 week once daily oral administration of octanoic acid formula to older cachetic patients with chronic respiratory disease. The legend could read as follows. Age: range 62-78yo; sex: 8W, 11M; oral 400ml octanoic acid formula administered once daily after breakfast during ab libitum food intake. Fasting blood samples collected before and at the end of 2 weeks. Also, expand Figure 1 legend with these details.

6-After the above changes, the authors need to revise the manuscript appropriately for possible additions/deletions/modifications. There are several places that the English will need to be corrected/revised.

Discretionary Revisions-None

Level of interest: An article of importance in its field
**Quality of written English:** Needs some language corrections before being published

**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. Cyril Y. Bowers, MD