Reviewer's report

Title: Changed adipocytokine concentrations in colorectal tumor patients and morbidly obese patients compared to healthy controls

Version: 2 Date: 31 July 2012

Reviewer: Gerd Bobe

Reviewer's report:

The manuscript has been much improved.

Major Compulsory Revisions:

1) Please change throughout the manuscript "adipose tissue derived hormones" to "adipose tissue expressed hormones". The reason for this change is that leptin, resistin, and adiponectin are strongly expressed in adipose tissue but are also expressed in other tissues. Thus, the plasma concentrations originate only partly from adipose tissue.

2) I'm not convinced that your data support your conclusions at the end of pages 5 and 15 that adipocyte derived hormones and proinflammatory cytokines/chemokines contribute to colorectal tumorigenesis. The reason is that the more adipose tissue specific leptin and adiponectin differ in concentrations between CRC and MO patients, while the proinflammatory cytokines/chemokines are similar. In my view, your data indicate that MO and CRC have both chronic low-grade inflammation as part of their etiology.

3) I strongly discourage you to state at the end of page 5 that "white adipose tissue derived hormones increase the risk for CRC tumorigenesis and tumor progression". Your data indicate similarities in the cytokine/chemokine profile of CRC and MO patients but you do not have any data that would provide even association between obesity and CRC or even more causality. I would recommend "Our results suggest that both MO and CRC have low-grade inflammation as part of their etiology".

4) Page 12 second last line: Please change to "Adiponectin may be a molecular marker for obesity and CRC, but..."

5) Page 13 line 5: Please change to "however, we report, as do other [34, 35], no association between plasma adiponectin concentrations and CRC."

6) Page 15 line 3: Please speculate why PAI-1 was proportionally more elevated in MO patients and MCP-1 was proportionally more elevated in CRC patients.

7) Page 15 after line 4: Please speculate why cytokine/chemokines/PAI have a similar profile in MO and CRC patients, while the profile for MO and CRC patients differ for the adipokines leptin and adiponectin.
8) Page 15 last two sentence: Please remove the last two sentence because you reiterate the same in the conclusion section.

9) Page 16 line 4 to 6: Please remove "provided a reliable adipokine profile in three different groups (CRC patients, MO patients and healthy BD as control group) and". You did not test the reliability of the adipokine profile.

Minor Essential Revisions:
1) Please revise throughout the manuscript: Sentences are not started with an abbreviation.

2) Please revise throughout the manuscript: A paragraph should consist of at least two sentences.

3) Page 7 first sentence: Please change to "Fasting blood sample from MO and CRC patients were collected preoperatively at 7 AM."

4) Page 7 line 11: Please change "antibody-coupled" to "antibody-coupled".

5) Page 8 line 9: Please change to "declared at p < 0.05". I think "p < 0.005" was a mistake.

6) Page 9 line 1: Please change "are" to "were".

7) Page 9 line 8: Please change "difference" to "differences".

8) Page 11: Please change to "are comparable in MO and CRC patient. In contrast, PAI-1 was higher in MO than CRC patients, and MCP-1 was higher in CRC than MO patients."

9) Page 12 line 8: Please change "are" to "were".

10) Page 12 last sentence: Please change "diminished" to "decreased".

11) Throughout the manuscript: Please avoid using hyphenations for insertions.

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

Statistical review: Yes, and I have assessed the statistics in my report.

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