Reviewer’s report

Title: Growth of human gastric cancer cells in nude mice is delayed by a ketogenic diet supplemented with omega-3 fatty acids and medium-chain triglycerides

Version: 4 Date: 11 March 2008

Reviewer: Thomas Seyfried

Reviewer’s report:

The authors have adequately addressed my previous concerns. I would only urge the authors to use extreme caution in their data interpretation and recommendations for using the unrestricted ketogenic diet as a new cancer therapy. It is important to mention that xenograft mouse models do not represent the situation in the natural world of the cancer patient.

We have unpublished data indicating that unrestricted consumption of the ketogenic diet can greatly exacerbate metastatic cancer in natural syngeneic and immunocompetent models of the disease. It appears that excessive fat consumption enhances inflammation and tumor cell invasiveness possibly by provoking the immune system. This would not occur in xenograft models. Fish oil and calorically restricted diets appear to reduce inflammation. While we are all interested in improving human health, especially related to cancer and cachexia, we do not want to recommend therapies that are potentially harmful to patients.

What next?: Accept after discretionary revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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.