Reviewer's report

Title: The predictive role of preoperative serum albumin levels in glioblastoma patients

Version: 3  Date: 31 October 2014

Reviewer: Aaron Mammoser

Reviewer's report:

I have no Major Compulsory Revisions to recommend.

Minor Essential Revisions

1) Throughout the manuscript it seems to me the authors are using "predictive" synonymously with "prognostic." To the best of my understanding of the manuscript, serum albumin levels are being described as prognostic, as they are affecting overall survival but are not necessarily predictive of treatment response. The references they used to justify "predictive" are actually referring to serum albumin as a "predictor of survival," which to me would suggest a prognostic factor. If I'm correct in this, I would recommend that the authors clarify this in the manuscript. If I'm incorrect in this, I would recommend that the authors better delineate how they believe serum albumin is predictive (e.g. Her2/neu status predictive of response to trastuzumab).

2) 121-123: serum albumin levels are described as being used as continuous variables for the statistical calculations, however in numerous places results are being reported with serum albumin described as a categorical variable. This would benefit from clarification.

3) when describing the tumor resection status (125), the categories are broken down as biopsy, subtotal resection with less than 30% residual tumor, and gross total resection. Is the reader to assume that a subtotal resection with greater than 30% residual tumor was considered a biopsy? This would benefit from clarification.

Discretionary Revisions

1) In looking through the specifics about the patient population, 65% were under 60 years of age, 57% had a KPS in the 70-100 range, and 45% had a gross total resection, with another 48% having a subtotal resection with less than 30% residual tumor, and yet the two-year survival for the population as a whole with only 4%, and was only about 16% in patients who completed all of their adjuvant treatment. This is considerably less than the approximately 27% reported in the EORTC/Stupp trial (reference 1). I was wondering what the authors thought might be the explanation for this.

2) If there is any way of determining why patients in the partial adjuvant treatment group received only partial treatment, it may help to answer the question of
whether this was related more to serum albumin levels reflective of nutritional status vs. affecting underlying tumor progression (for example, if group X had serum albumin levels of Y and tended to get partial treatment secondary to tumor progression vs. group A who had serum albumin levels of B and tended to get partial treatment secondary to treatment intolerance).

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.