Reviewer’s report

Title: Circulating free plasma tumor DNA in patients with advanced gastric cancer receiving systemic chemotherapy

Version: 0 Date: 15 Oct 2018

Reviewer: Eric Weimer

Reviewer's report:

Normando et al describe their pilot study evaluating cell free tumor DNA as a biomarker in advanced gastric cancer patients. The authors show that there was a significant difference between tDNA and DFS only with the second sample.

Of note, there is a typo in the Abstract, first sentence in the Results section (missing P in statistical notation).

The authors mention serologic biomarkers currently being used for gastric cancer monitoring but do not show any correlation with existing biomarkers. For tDNA to be an effective biomarker it would presumably rise prior to other serologic markers. Without this comparison it is impossible to draw a conclusion about the effectiveness of tDNA in this regard.

More importantly, the cfDNA samples were collected in EDTA tubes which have a known issue of degradation of genomic DNA into cfDNA fragment sizes. The sample would have more appropriately been collected into Streck tubes which stabilize cellular DNA and prevent degradation. Since EDTA tubes were used, this key difference should be mentioned in the discussion of the results as it has significant impact on the proportion of cfDNA obtained.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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I am able to assess the statistics

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