Reviewer’s report

Title: Efficacy of T-DM1 for leptomeningeal and brain metastases in a HER2 positive metastatic breast cancer patient: new directions for systemic therapy. A case report and literature review

Version: 1 Date: 07 Oct 2017

Reviewer: Akash Patel

Reviewer's report:

The authors present a case report in which a patient with HER2-positive breast cancer metastatic to the brain with leptomeningeal disease was treated systemically with a drug conjugate of Herceptin and DM1 (called T-DM1) with concurrent WBRT. They report that the patient had complete regression of the intracranial disease. While they focus on the small metastatic disease and LMD, they should shift the focus to the response to the LMD, which carries a terrible prognosis. They propose some theories about how this may have happened, and acknowledge that fact that a trial would be necessary to draw and real conclusions. However, since the patient is still on T-DM1 therapy and alive, is it possible to obtain CSF and measure if there are any drug levels in the CSF (suggesting blood brain barrier penetration)?

I would also ask that the figures be edited slightly. So for the most recent MRI, please provide the same cuts as the pre-treatment MRI. I think this will send a more powerful message regarding the patient's response.

There are a number of grammatical errors in the manuscripts that will require editing. A few are listed below:

Line 43 - should read "We previously…"

Line 34 - please re-word the sentence to be more grammatically accurate.

Line 39 - should read "Recent preclinical work demonstrated…”

Line 51 - efficacy should be effect

I think with these corrections, the paper should be considered for acceptance.
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.

Unable to assess

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?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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