Reviewer's report

Title: Relevance of tumor infiltrating lymphocytes in breast cancer

Version: 1 Date: 21 May 2015

Reviewer: Joseph Sparano

Reviewer's report:

This is an informative and well written review regarding the relevance of tumor infiltrating lymphocytes in breast cancer. The current version of the manuscript includes no tables and only 1 figure which is referenced and discussed in the conclusion section. The review provides a rich source of detailed information that would benefit from summarizing some of the key points in the forms of figures and tables.

Recommended revisions:

1. Please provide a figure summarizing some of the key points made in the review regarding the interaction between the microenvironment and tumor. For example, the top of page 4 describes cells that are protective against tumor growth (TH1 cells, CD8+ cytotoxic T cells, NK cells, M1 macrophages, dendritic cells) and cells that promote tumor growth (OFXP3+ cells, Th2 cells, M2 macrophages, MDSC), and mechanisms by which tumor cells suppress TILS. A figure would help reinforce/clarify this complex relationship.

2. Please provide a table summarizing relationship between TILS and response to neoadjuvant chemotherapy described on page 6-7. It is recommend that information regarding relation between TILs and prognosis in patients with operable breast cancer treated with adjuvant chemotherapy also be discussed in the text and summarized in the table.

3. Figure 1 does not acknowledge/include a strategy of combining neoadjuvant chemotherapy with immune checkpoint blockade preoperatively to enhance pCR. Consideration should be given to moving this figure earlier in the article so that the various strategies described in the figure are discussed in the text. The strategies summarized in the figure dont seem to correspond well to what is described in the text.

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.