Reviewer’s report

Title: Worse survival in breast cancer in elderly may not be due to underutilization of medical procedures as observed upon changing healthcare system in Poland

Version: 1 Date: 05 Apr 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses one or several testable research questions? (Brief or other article types: is there a clear objective?)

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with sufficient technical rigor to allow confidence in the results?

Yes - experiments and analyses were performed appropriately

STATISTICS - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

No - there are major issues
OVERALL MANUSCRIPT POTENTIAL - Has the author addressed your concerns sufficiently for you to now recommend the work as a technically sound contribution? If not, can further revisions be made to make the work technically sound?

Maybe - with major revisions

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: Table 1 is still challenging to interpret and revealing a contradictory message to the authors' interpretation. On Page 7, Line 2 to 8, the authors state that 'Strikingly, we have not found evidence for less frequent use of most of the important medical procedures associated with breast cancer that we followed in the group of age above 65 years of life (Tab. 1).' However, in Table 1, statistical analyses identified very strong statistically significant differences in the aspect of outpatient visits (p = 0.000003), surgical procedures (p = 0.000292) and outpatient chemotherapies (p = 0.000001) as compared between 65- and 65+women. The main culprit is the too simplistic presentation of data in Table 1.

Although the authors repetitively state that limitations of the study have been added. The current version of the revised manuscript finds no changes.

In the Discussion, the authors spent too many efforts on the issues of sentinel node biopsy. However, it is obvious that the generalizability of those concepts to the current studied population is questionable simply because the size of the breast tumors, neoadjuvant treatment, and overall preoperative clinical stage were all unknown. Also, the discussion of radiotherapy and surgery might not help the reader to grasp what had happened to these elderly patients in the current study. The authors should stay focus on why they do not believe the survival outcome was from the underutilization of oncological management. What was the convincing evidence they got?

With that, I recommend giving one more chance for the authors to carefully revise the manuscript accordingly.

REQUESTED REVISIONS:

The punctuation for numbers does not conform to the International standard, namely, 0,657143.

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.

Yes

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

No

**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.

I am able to assess the statistics

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

Acceptable

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