Reviewer's report

Title: Development and validation of a prognostic model to predict the prognosis of patients who underwent chemotherapy and resection of pancreatic adenocarcinoma: A large international population-based cohort study

Version: 0 Date: 06 Dec 2018

Reviewer: Michele Molinari

Reviewer's report:

Dear Authors and Editors,

thank you for the opportunity to review the manuscript entitled Prognostic factors and development and international validation of a benchmark population-based survival-predicting model in patients with resected stage I and II pancreatic adenocarcinoma receiving chemotherapy. A large international population based cohort study.

I congratulate the investigators for their efforts to propose the first international nomogram for the prediction of survival of patients with stage I and II resected pancreatic adenocarcinoma and receiving adjuvant systemic chemotherapy. The rationale for this study is that there were no validated international predicting model for survival of patients undergoing pancreatic cancer resections.

I enjoyed reading the manuscript.

My recommendations for the authors and the editors are the following:

Background:

The authors wrote that stage is the major prognostic factor for PC (line 35 page 5). Then they authors are saying that survival of patients with the same TNM stage varies greatly (line 37). Therefore, it is important to have a predictive score that could better predict the survival of resected pancreatic cancer patients based on their characteristics such as age, gender, cell differentiation, T and N status. This is a very important part of the background, however it is not well emphasized. I would recommend the authors to shorten the first part of the background and give more space to the reasons this study is important and what clinical or research impact might have in the future. Since the journal is read mostly by clinicians, I believe that the authors should give the readers a more effective way of putting their work in the clinical contest. In other words, another nomogram will not be important to clinicians unless they understand how they could use it (to improve selection or to inform patients about their prognosis etc.)
Methods:

I would invite the authors of describing in more details how the nomogram was developed and I would ask them to provide an example so that the readers will be able to understand how to use. For example, the authors should describe a typical patient: 72 year old woman with resected pancreatic adenocarcinoma, poorly differentiated, T2, N1. She would have x number of points for her age, x number of points for her sex, ........ In this way, the reader will be able to understand how to calculate the points. There are several supplements that are helpful, but some readers will not have time or the interest in finding them. In addition, I could not open the supplement myself. That means that I could not use the nomogram while reviewing the paper.

Results:

Well written

Discussion:

The discussion is well written and very interesting. The only part that I believe needs some changes is the fact that the authors do not emphasize enough the clinical impact of their work. I realize that their contribution is very important and I appreciate all the intricacies of validation and bootstrapping. However, they need to realize that most clinicians will not fully understand how this study would change practice or what is the true advantage of having a new predictive model.

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.

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