Reviewer 2

Open Review	(x) I would not like to sign my review report ( ) I would like to sign my review report
English language and style	( ) Extensive editing of English language and style required (x) Moderate English changes required ( ) English language and style are fine/minor spell check required ( ) I don't feel qualified to judge about the English language and style

	Yes	Can be improved	Must be improved	Not applicable
Does the introduction provide sufficient background and include all relevant references?	( )	( )	(x)	( )
Are all the cited references relevant to the research?	( )	( )	(x)	( )
Is the research design appropriate?	( )	( )	(x)	( )
Are the methods adequately described?	( )	( )	(x)	( )
Are the results clearly presented?	( )	( )	(x)	( )
Are the conclusions supported by the results?	( )	( )	(x)	( )

Comments and Suggestions for Authors — General

Thank you very much for your comments and suggestions.

The paper presented does not show real new facts about prognostic and survival factors in breast cancer patients. This is caused by the fact, that even the best and sophisticated statistical methods cannot help when the main primary data situation is weak:

We believe that the results and conclusions of our work provide interesting data to be published in Journal of Clinical Medicine. As established in the Discussion section, the strength of this study is that the sample was population-based, with high-quality data, as the negligible percentage of missing cases in survival information and the minimum differences observed between cancer-specific and relative survival show. Clinical records of each case have been reviewed deeply by trained professionals. We followed some of the cases for up to 13 years. Moreover, we knew the cause of death, which allowed us to calculate cause-specific survival. The application of the competing-risks model in-stead of the Cox model used in other studies made it possible to obtain more adequate estimates of the risk of dying from breast cancer, considering that there are patients who die from other causes. On the other hand, it has been possible to collect a pathological diagnosis in many cases, which is unusual in other tumours diagnosed frequently by imaging or other clinical tests.

In 69,5 percent of cases Ki67 values are missing, thus leading to the molecular group "luminal without Ki67"!

We have tried to explain better why we created this category luminal without Ki67 and why we decided to keep Ki67 in the molecular classification in the Discussion section. We cannot perform the analysis only in the subgroup of patients with complete medical data because, in case of Ki67, we probably introduce a

selection bias. The reason is that cases with Ki67 probably were the ones where the oncologist performed it when a more aggressive cancer was suspected, so a Ki67 positive cancer.

Furthermore the treatment modalities could not be reflected in all cases.

This aspect is noted as a weakness in the Discussion section. Thus, it is essential to note the difficulty in collecting this type of clinical information from cancer registries due to the complexity of searching it in patient's medical records. We initially tried to collect the treatments received by patients with a sample taken from our database, but due to the complexity involved, we decided to focus on other aspects. Concering this fact, it should be noted that information on the TNM is also challenging to find, and, in Spain, the cancer register of Mallorca is one of the few that collect it.

Both deficiencies lead to the result, that no real new data can be presented, and only known prognostic and survival factors are recapitulated. Therefore the presentation seems not to be useful and informative for an international readership and may be only of regional or national interest.

Specific

Page 4, table 1: correct lines.

We have corrected it.

Line 38: What is the difference between "age" and "age at diagnosis"?

There are no differences. Age is referred to age at diagnosis. This aspect has been clarified in the manuscript.

Line 60: When the study is called "population based" than the number of DCO cases and cases without follow-up should be shown.

We have included the DCO cases at the beginning of the Results section. We have explained better which were the cases without follow-up.

Finally, an English revision has been performed.