

Reviewer A

This study addresses a current topic. The manuscript is quite well written and organized. English could be improved. Figures and tables are comprehensive and clear. The introduction explains in a clear and coherent manner the background of this study. We suggest the following modifications:

- Introduction section: although the authors correctly included important papers in this setting, we believe the evolving systemic treatment scenario for breast tumors should be further discussed and some recent papers added within the introduction (PMID: 35378995; PMID: 38595817; PMID: 38100933 ; PMID: 39518127; PMID: 37819422), only for a matter of consistency. We think it might be useful to introduce the topic of this interesting study.

Response: Thank you for your valuable suggestion. In response, we have expanded the Introduction section to include a discussion on the evolving systemic treatment landscape for breast tumors. We have added the recent papers you mentioned (PMID: 35378995; PMID: 38595817; PMID: 38100933; PMID: 39518127; PMID: 37819422) to ensure consistency and provide a more comprehensive background. These references and additions are highlighted in red font in the revised manuscript for your easy reference. We believe this enhancement will provide readers with a more up-to-date context for the study.

- Methods and Statistical Analysis: nothing to add.

Response: Thank you for confirming the adequacy of the methods and statistical analysis section. We will ensure that this section remains unchanged unless further suggestions arise.

- Discussion section: Very interesting and timely discussion. Of note, the authors should expand the Discussion section, including a more personal perspective to reflect on. For example, they could answer the following questions – in order to facilitate the understanding of this complex topic to readers: what potential does this study hold? What are the knowledge gaps and how do researchers tackle them? How do you see this area unfolding in the next 5 years? We think it would be extremely interesting for the readers. However, we think the authors should be acknowledged for their work. In fact, they correctly addressed an important topic, the methods sound good and their discussion is well balanced.

Response: Thank you for your thoughtful feedback. In response to your suggestion, we have added a section in the manuscript discussing these points in greater detail. This includes addressing the potential of the study, the knowledge gaps that still exist, how researchers are tackling these issues, and our perspective on how this area will unfold in the next five years. These additions are marked in red font in the revised manuscript for clarity. We believe these updates will help facilitate a better understanding of the complex topic for the readers. Thank you again for your valuable input.

One additional little flaw: the authors could better explain the limitations of their work, in the last part of the Discussion.

Response: Thank you for your valuable feedback. We will further clarify the limitations of our study in the last part of the Discussion. This will include acknowledging the small sample size and the lack of prospective validation. We will also discuss the need for larger sample sizes and long-term follow-up studies to confirm the clinical significance of AR expression in guiding treatment strategies. These points will be highlighted in red font in the revised manuscript.

We believe this article is suitable for publication in the journal although major revisions are needed. The main strengths of this paper are that it addresses an interesting and very timely question and provides a clear answer, with some limitations. We suggest a linguistic revision and the addition of some references for a matter of consistency. Moreover, the authors should better clarify some points.

Response: Thank you for your valuable feedback. We will revise the manuscript to ensure clarity and coherence, with clear definitions of technical terms and improved language flow. Additionally, we will highlight the changes in red font within the article for better visibility.

Reviewer B

This study examined more than 300 cases to determine the relationship between AR expression in breast cancer and ER, PgR, Ki67, EGFR, KI-67, and histopathological findings.

Overall, this is a well-analyzed study. However, several research results on AR expression and function have been reported in the past, so the findings of this study are not very novel. Examining the relationship between treatment effects and prognosis is necessary to analyze the clinical significance. From the perspective of individualizing treatment, the relationship with HER2 low, etc., may be interesting. If considering the indication of chemotherapy, it may be necessary to examine genomic assays and the effects of chemotherapy and hormone therapy as well. This reviewer believes that further development of this research is necessary.

Response: Thank you for the insightful feedback. The manuscript addresses the relationship between AR expression and breast cancer in the Discussion section, including associations with treatment outcomes and prognostic implications. The connections between AR expression, HER2-low status, and chemotherapy responses are acknowledged, but due to the study's scope, detailed genomic assays and comprehensive treatment effect evaluations were not included. These areas are planned for deeper exploration in future research to enhance our understanding further. Thank you for your understanding.