

Reviewer#1**Specific comments to authors**

Firstly, I would like to commend your comprehensive and detailed report of a case of male mucinous breast carcinoma. The original findings of this manuscript are the case report of male mucinous breast carcinoma, which is extremely rare. You proposed an interesting hypothesis that male mucinous breast carcinoma may be overlooked as lesions might not be located within the areolar region. In this case, you verified this hypothesis through surgical and pathological analysis. Secondly, the quality and importance of this manuscript lie in providing valuable clinical data and insights on male mucinous breast carcinoma, proposing new diagnostic and therapeutic perspectives. Your discussion on the therapeutic strategies in the manuscript provides valuable insights, especially for patients primarily treated with hormonal therapy after 2010. However, I would suggest a clearer summarization of these data and viewpoints in the conclusion section. However, the limitations of this study lie in the small number of cases, making it difficult to draw widely applicable conclusions. Also, **while you have mentioned many potential risk factors that might affect the development of male mucinous breast carcinoma, there is a lack of detailed information on how these risk factors interact.**

Reply: We plan to use the net database for further analysis to find the risk factors that interact in the following work.

For future directions of the topic described in this manuscript, **I suggest further research into the interplay of these risk factors, and why the incidence of male mucinous breast carcinoma is so low.**

Reply: It has been statistically studied that the percentage of male breast cancer in men is 1%, while mucinous cancer is reduced from 4% to 2%, so the probability of male

mucinous breast cancer occurring is even lower.

Furthermore, I would like you to discuss further why mucinous tumors are likely to be overlooked and how this can be improved.

Reply: We discuss as the follow: (line 261-263) In our case, the patient's gynecomastia symptoms are not visible because of the patient's low BMI and the absence of fat encapsulation in the gland beneath the skin.

For the next steps for the authors, I would suggest studying more cases of male mucinous breast carcinoma to better understand the pathogenesis and optimal treatment of this rare disease. In summary, I perceive this as a high-quality and important manuscript that provides new insights and information on the clinical diagnosis and treatment of male breast cancer. Despite some limitations, I believe that this manuscript will have a positive impact on basic science and clinical practice.

PEER-REVIEW REPORT

Reviewer#2

Specific comments to authors

The authors present male mucinous breast cancer without gynecomastia. The authors should have confirmed that this article is not the first report about male mucinous breast cancer, non-retro areolar position and without gynecomastia. However, the report about non-retro areolar lesion is scanty. Several reports are published about this malignancy.

In the discussion, the authors should concise the contents.

Reply: Because the number of male mucinous breast cancer cases with complete clinical information was only 8, all of which are representative, we wanted to maximize the retention of information and demonstrate this approach.

The authors couldn't describe all of the papers in the references. What are the different points depending on the site and gynecomastia?

Reply: The number of articles collected is too small to make a statistically significant regional classification. We will continue to conduct research and collect relevant articles to further answer this question.