Peer Review File

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The paper presents interesting data. However, below proposed revisions may significantly increase visibility and overall quality of the publication.

1. The title should be reconsidered to attract more attention of multi-professional groups such as "Inflammation-related indicators have a potential to increase overall quality of the prostate cancer management".

Reply 1:Thank you for your valuable comments, we have modified our text as advised (see Page 1, line 3-4)

2. Keeping in mind the above point 1, Abstract should be rewritten presenting clinically relevent conclusions and outlook.

Reply 2:Thank you for your valuable comments, we have modified our text as advised (see Page 1-2, line 29-57)

3. Clinically relevant keywords should be added such as "patient stratification" etc.

Reply 3:Thank you for your valuable comments, we have modified our text as advised (see Page 2, line 60)

4. Summary and discussion should be presented in a reader-friendly manner providing sub-titles as messages from corresponding paragraphs such as

- Currently ineffective prostate cancer (PC) screening

- Paradigm change from reactive to predictive and perventive PC management is essential.

- Inflammation is the key aspect in the disease development and progression

Etc.

Reply 4:Thank you for your valuable comments, we have modified our text as advised (see Page 13, line 286, 295-296; Page 14, line 327)

5. To support above proposed innovation, below listed listerature should be used and cited:

- Prostate cancer management: long-term beliefs, epidemic developments in the early twenty-first century and 3PM dimensional solutions. doi: 10.1007/s13167-020-00214-1

- Prostate cancer treatment costs increase more rapidly than for any other cancer-how to reverse the trend? doi: 10.1007/s13167-022-00276-3.

- Anti-prostate cancer protection and therapy in the framework of predictive, preventive and

personalised medicine - comprehensive effects of phytochemicals in primary, secondary and tertiary care. doi: 10.1007/s13167-022-00288-z.

Reply 5:Thank you for your valuable comments, we have modified our text as advised (see Page 16-23, line 370-381)

The paper titled "Current status of research on the diagnostic and prognostic value of inflammation-related indicators in prostate cancer" is interesting. The current evidence shows that, the value of inflammation-related indicators in predicting the diagnosis and prognosis of prostate cancer is now becoming clear. There are several points worth discussing.

1)This review mainly summarizes the inflammation related indicators related to the diagnosis and prognosis of prostate cancer. What new perspective does it provide?

Reply 1:Thank you for your valuable comments, we reviewed the literature and summarize the inflammation-related indicators that related to the diagnosis and prognosis of PCa and describe their value in clinical applications to provide new perspectives for clinical and research work.

2)There have been many studies on the value of inflammation related indicators in guiding the diagnosis and treatment of cancer. Does this review summarize the shortcomings.

Reply 2:Thank you for your valuable comments, we have summarized the shortcomings(see Page 15, line 329-339).

3)What is the relationship between NLR level and prostate cancer?

Reply 3:Thank you for your valuable comments, many studies have shown that NLR has prognostic value in PCa, but some results are controversial.

4)Many studies have shown that NLR has a strong prognostic value, but some of the findings are controversial. Is there any more discussion on this aspect?

Reply 4:Thank you for your valuable comments, we have discussed on this aspect in the part of Summary and discussion(see Page 14, line 297-326).

5)The correlation between inflammation related indicators and prognosis may indicate the mechanism of tumor progression. What indicators are worth paying attention to?

Reply 5:Thank you for your valuable comments, we think that NLR and PLR are worth paying attention to.

The paper titled "Current status of research on the diagnostic and prognostic value of inflammation-related indicators in prostate cancer" is interesting. Through literature review, the author summarizes the inflammatory indicators that may be related to the diagnosis and prognosis of prostate cancer, and describes their clinical significance. value in the application. This review provides new perspectives for clinical and research work. However, there are several issues that would improve the manuscript significantly if addressed.

1. This review selects Chinese and English journal articles published in 2015-2021. The current search date is still at 20211218, and the literature has not been updated in time. It is recommended to add the latest literature for analysis.

Reply 1:Thank you for your valuable comments，we have modified our text as advised (see Page 4, line 103)

2. It is recommended to enrich relevant background knowledge in the foreword or discussion, for example: the current main diagnosis and screening methods for prostate cancer, what are their disadvantages, and the advantages of using inflammatory indicators to diagnose and judge prognosis.

Reply 2:Thank you for your valuable comments, we have modified our text as advised (see Page 3, line 72-76)

3. Regarding the connection between NLR and PCa diagnosis, it is suggested to express it more specifically.

Reply 3:Thank you for your valuable comments, we have modified our text as advised (see Page 4, table 4)

4. In the Discussion section, is the use of non-steroidal anti-inflammatory drugs such as aspirin and the index of dietary inflammation related to NLR? Clarity is recommended. In addition, the discussion section only discusses NLR, while other inflammatory indicators are briefly mentioned, and it is recommended to enrich the discussion content.

Reply 4:Thank you for your valuable comments, we have modified our text as advised (see Page 14, line 297-302)

5. It is suggested to revise and polish the grammar and wording of the article.

Reply 5:Thank you for your valuable comments, we have modified our text as advised.

This article reviews the diagnostic and prognostic value of inflammatory indices (e.g., NLR, PLR) in prostate cancer. Although this is an interesting topic with high clinical relevance, the readability of the manuscript is poor. The manuscript needs an extensive revision and editing. Here are some examples:

λ Line 69, what does the word "two" mean?

λ Lines 70 to 72, tumor microenvironment is not a biomarker.

λ Line 73, predict the diagnosis?

λ Lines 78 to 79, what does "a lack of uniform understanding" mean?

λ Line 107, highly operational?

λ Lines 111 to 115, this sentence is difficult to understand.

λ Line 117, subsequent evaluation?

λ Line 122, small?

λ Lines 126 to 127, the rationality of the sentence is difficult to understand.

λ Lines 135 to 136, this sentence is difficult to understand.

λ Line 168, what does "clinically significant PCa" mean?

Generally, the organization of this review is really poor, and the readability needs to be improved. The rationality of some sentences is unclear. I suggest the authors: (1) use a table to summarize the findings of previous studies; (2) invite a native speaker or medical editor to edit this manuscript carefully; (3) discuss the possible explanation for the inconsistency among previous studies.

Reply 1:Thank you for your valuable comments, we have modified our text as advised (see Page 7-13, table 2-4)

Reply 2:Thank you for your valuable comments, we have modified our text as advised.

Reply 3:Thank you for your valuable comments, we have modified our text as advised (see Page 14, line 325-327)

The paper titled "Current status of research on the diagnostic and prognostic value of inflammation-related indicators in prostate cancer" is interesting. Numerous studies have been conducted on the value of inflammation-related indicators in guiding the diagnosis and treatment of prostate cancer. The value of inflammation-related indicators in predicting the diagnosis and prognosis of prostate cancer patients is now becoming clear. However, there are several minor issues that if addressed would significantly improve the manuscript.

1) How to regulate inflammation to improve the efficacy of prostate cancer treatment? What are the intervention strategies for targeted regulation of inflammation in the treatment of

prostate cancer? It is suggested to add relevant contents.

Reply 1:Thank you for your valuable comments，we have modified our text as advised (see Page 10, line 289-295)

2) Please try to explain the relationship between inflammation and the occurrence, development and treatment of prostate cancer, starting with the process of inflammation initiation and elimination.

Reply 2:Thank you for your valuable comments. The focus of this manuscript is on the potential value of inflammatory indicators in clinical work for the diagnosis and determination of prognosis of prostate cancer, and does not focus on the basic medicine level targeting the relevance of inflammation to the development of prostate cancer. We have retrieved relevant studies(PMID: 30229548) that focus on the mechanistic level for your reference. Thank you again for your valuable comments.

3) There are many databases. Why did the author only select PubMed database in this study for searching? Please explain the reason.

Reply 3:PubMed was the source of publication on PCa and inflammation-related indicators. We can get enough information through PubMed. So we used PubMed database in this study for searching.

4) What is the relationship between the polymorphism of inflammation-related genes and the risk of prostate cancer? It is suggested to add relevant contents.

Reply 4:Thank you for your valuable comments，we have modified our text as advised (see Page 8-9, line 220-234)

5) The introduction part of this paper is not comprehensive enough, and the similar papers have not been cited, such as "Identifying prognostic signatures in the microenvironment of prostate cancer, PMID:34984186".　It is recommended to quote this article.

Reply 5:Thank you for your valuable comments，we have modified our text as advised (see Page 3, line 72-74)

6) What is the relationship between the lymphocytic inflammatory index and the clinicopathologic characteristics and prognosis of prostate cancer? It is suggested to add relevant contents.

Reply 6:Thank you for your valuable comments，we have modified our text as advised (see Page 5, line 103-104)

7) It is suggested to further carry out large sample prospective clinical research to explore its

potential mechanism.

Reply 7:Thank you very much for your constructive comments. Currently, we are collecting relevant clinical data, and we will strengthen it in future research.