

PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Oncology*

Manuscript NO: 88612

Title: Identification and Validation of a Pyroptosis-Related Prognostic Model Based on Bulk and Single-Cell RNA Sequencing Data

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03633770

Position: Editorial Board

Academic degree: PhD

Professional title: Associate Professor

Reviewer's Country/Territory: India

Author's Country/Territory: China

Manuscript submission date: 2023-10-01

Reviewer chosen by: Yu-Lu Chen

Reviewer accepted review: 2023-11-13 07:18

Reviewer performed review: 2023-11-23 10:44

Review time: 10 Days and 3 Hours

Scientific quality	<input checked="" type="radio"/> Grade A: Excellent <input type="radio"/> Grade B: Very good <input type="radio"/> Grade C: Good <input type="radio"/> Grade D: Fair <input type="radio"/> Grade E: Do not publish
Novelty of this manuscript	<input checked="" type="radio"/> Grade A: Excellent <input type="radio"/> Grade B: Good <input type="radio"/> Grade C: Fair <input type="radio"/> Grade D: No novelty
Creativity or innovation of this manuscript	<input type="radio"/> Grade A: Excellent <input checked="" type="radio"/> Grade B: Good <input type="radio"/> Grade C: Fair <input type="radio"/> Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

In the present manuscript entitled ““Identification and Validation of a Pyroptosis-Related Prognostic Model Based on Bulk and Single-Cell RNA Sequencing Data”” authors have tried to demonstrate the prognostic value of pyroptosis-related genes and their relationship to the immune infiltration of CRC. The authors have done work but more data should be included through some corrections. I may recommend this article for publication after proper revision. Although work is good but need some molecular data prior to acceptance.

1. The introduction first line need to correct “Colorectal cancer (CRC), the second most common cause of cancer deaths, is a globally prevalent malignancy” ie “Colorectal cancer (CRC) is the prevalent malignancy and consider the second most common cause of cancer deaths globally”
2. Moreover the Introduction part should include the information of potential cause of cancers including cancer and CRC after first line. i.e. Change in the microenvironment of cells associated with the growth development substantial numbers of gastrointestinal and extra-gastrointestinal cancers such as CRC, colon cancer, lungs cancer, prostate cancer etc [References 1-5].

1. Intestinal inflammation targets cancer-inducing activity of the microbiota. Science 2012,

338, 120–123. 2. Khan S, Zaidi S, Alouffi AS, Hassan I, Imran A, Khan RA. (2020) Computational Proteome-Wide Study for the Prediction of Escherichia coli Protein Targeting in Host Cell Organelles and Their Implication in Development of Colon Cancer. ACS Omega. 2020 Mar 30;5(13):7254-7261. 3. Potential role of Escherichia coli DNA mismatch repair proteins in colon cancer (2015). Critical Reviews in Oncology/Hematology 96, 3, 475-482 4. Prediction of Mycoplasma hominis proteins targeting in mitochondria and cytoplasm of host cells and their implication in prostate cancer etiology. Oncotarget 2017, 8, 30830–30843. 5. Computational prediction of Mycoplasma hominis proteins targeting in nucleus of host cell and their implication in prostate cancer etiology. Tumour Biol. 2016, 37, 10805–10813. 6. A. Systems Biology Approaches for the Prediction of Possible Role of Chlamydia pneumoniae Proteins in the Etiology of Lung Cancer. PLoS ONE 2016, 11, e0148530. 3. Is there specific rational to select the R (<https://www.r-project.org/>, version 4.1) and the R package Seurat and Blueprint Encode Dateset in SingleR in current study? 4. The quality of all figures need to improve as not visible most of the figures. 5. Conclusion part needs to re-write with important information of results. Minor comments: Check the format of journal for references in text and in bibliography.