Baishideng Publishing Group

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

PEER-REVIEW REPORT

Name of journal: World Journal of Gastrointestinal Oncology

Manuscript NO: 54640

Title: Identification of an immune-related gene-based signature to predict prognosis of patients with gastric cancer

Reviewer's code: 02537403
Position: Editorial Board
Academic degree: PhD
Professional title: Senior Lecturer
Reviewer's Country/Territory: Romania
Author's Country/Territory: China

Manuscript submission date: 2020-02-10
Reviewer chosen by: AI Technique
Reviewer accepted review: 2020-02-11 20:41
Reviewer performed review: 2020-02-26 00:44
Review time: 14 Days and 4 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [Y] Accept (General priority) [ ] Minor revision [ ] Major revision [ ] Rejection
Re-review	[ ] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

Baishideng Publishing Group

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

SPECIFIC COMMENTS TO AUTHORS

In this study, the authors analyzed the transcriptome RNA-seq data of gastric cancer identifying 4259 DEGs; among them, 181 up-regulated and 354 down-regulated DEGs were IRGs. These IRGs demonstrated to be enriched in immune-related processes such as humoral immune response, phagocytosis, B cell mediated immunity, and cytokine-cytokine receptor interaction. Also, it was explored the potential molecular mechanism of gastric cancer, showing the existence of 67 TFs differentially expressed in gastric cancer, whose implications in the pathogenesis of gastric cancer has to be elucidated. Moreover, 183 survival-related IRGs were identified for gastric cancer; 70 hub IRGs were associated with overall survival of gastric cancer. PPI network indicated that IL6, F2R and AGT were the top three hub genes, mainly involved in gastric cancer-related pathways such as Rap1, PI3K-Akt signaling pathways and cytokine-cytokine receptor interaction. Among 438 samples, in 323 occurred genetic alterations, the most frequent ones being represented by deletions and amplifications of the hub IRGs. Most important, the authors designed an immune-related prognostic signature, consisting of 10 hub IRGs which can independently predict the overall survival of patients with gastric cancer (including S100A12, CGB5 and LGR6), with an excellent performance. Patients with high risk demonstrated a poorer overall survival time than those with low risk according to the median value of risk score. Finally, it is a very interesting research with important clinical relevance due to the identification of differentially expressed IRGs and subsequent design of a prognostic signature which may provide a promising perspective for the treatment of gastric cancer. Moreover, this immune gene prognostic signature was positively correlated with immune cell infiltration, especially macrophages, and inflammatory responses. Therefore, it could effectively predict gastric cancer patients' survival and identify patients who will benefit

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

from immunotherapy. I would suggest avoiding the expression "and so on" for too many times.

Baishideng Publishing Group

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

PEER-REVIEW REPORT

Name of journal: World Journal of Gastrointestinal Oncology

Manuscript NO: 54640

Title: Identification of an immune-related gene-based signature to predict prognosis of patients with gastric cancer

Reviewer's code: 03270518
Position: Editorial Board
Academic degree: MD, PhD
Professional title: Assistant Professor, Professor, Surgeon, Teacher
Reviewer's Country/Territory: Italy
Author's Country/Territory: China

Manuscript submission date: 2020-02-10
Reviewer chosen by: AI Technique
Reviewer accepted review: 2020-02-14 08:06
Reviewer performed review: 2020-02-26 09:44
Review time: 12 Days and 1 Hour

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [Y] Minor revision [ ] Major revision [ ] Rejection
Re-review	[ ] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

Baishideng Publishing Group

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-399-1568
E-mail: bpgoffice@wjgnet.com
https://www.wjgnet.com

SPECIFIC COMMENTS TO AUTHORS

Many compliments.