

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 47558

Title: Immunotherapy in colorectal cancer: Available clinical evidence, challenges and novel approaches

Reviewer's code: 00188507

Reviewer's country: Japan

Science editor: Jia-Ping Yan

Reviewer accepted review: 2019-03-19 23:01

Reviewer performed review: 2019-03-19 23:11

Review time: 1 Hour

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input checked="" type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input checked="" type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The authors summarized currently available evidences of immunotherapy for CRC showing the results of clinical trials. The theme and the information are really important and can be considered for the publication, however, there are points to be revised. 1.



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Telephone: +1-925-223-8242
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The relation between each paragraph is not clear, therefore, they should be reconstructed with the summary table showing the pros and cons of each options. 2. The author may want to be benefitted from the language editing.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

BPG Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 47558

Title: Immunotherapy in colorectal cancer: Available clinical evidence, challenges and novel approaches

Reviewer's code: 00505752

Reviewer's country: United Kingdom

Science editor: Jia-Ping Yan

Reviewer accepted review: 2019-04-18 06:10

Reviewer performed review: 2019-04-18 11:32

Review time: 5 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input checked="" type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input checked="" type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

This is a comprehensive, well written and informative review. My comments are generally minor as follows. 1. It would be good to use British or American English consistently (eg tumour or tumor, but not both). 2. It is stated that ..."mainly found in the

subset of mismatch repair-deficient (dMMR) or microsatellite-instability-high (MSI-H) tumors." As written, the sentence implies these are different entities. However, microsatellite instability indicates a defective mismatch repair system. It may therefore be better to clarify any distinctions between these two entities or alternatively to write....."mainly found in the subset of mismatch repair-deficient (dMMR) tumors in which high levels of microsatellite-instability (MSI-H) are found." 3. Therefor (sic) should read therefore. 4. MCR should read MCRC (page 5). 5. Constituent drugs in FOLFOX/ FOLFIRI should be spelled out at first mention (page 5). 6. On page 9, the authors imply that targeting of MUC1 using CAR-T is "unspecific". However, this issue may be circumvented through the exploitation of binders that preferentially engage aberrantly glycosylated MUC1, as is widely found in solid tumors but not healthy tissues (Wilkie et al J Immunol Apr 1;180(7):4901-9). Targeting of MUC1 is further supported by its upregulation in tumors and owing to the fact that expression is polarized in healthy tissues (luminal expression - inaccessible to CAR T-cells) but non-polarized in tumor cells. 7. A CAR T cell trial in MCRC targeting CEA should be described (Thistlethwaite et al Cancer Immunol Immunother. 2017 Nov;66(11):1425-1436). Once again, efficacy was limited and toxicity noted as predicted by the authors. 8. The cited ErbB2 CAR T-cell study was tainted by the infusion of an excessive number of CAR T-cells. The authors may wish to note a more recent study in sarcoma in which ErbB2-specific CAR T cells proved both safe and effective (Hegde & Ahmed, Baylor College - see <https://www.ascopost.com/News/59888>). 9. (LAG-3) should read LAG-3.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

[] The same title



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☐ Duplicate publication

☐ Plagiarism

☐ Yes ☐ No

BPG Search:

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☐ Duplicate publication

☐ Plagiarism

☐ Yes ☐ No

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 47558

Title: Immunotherapy in colorectal cancer: Available clinical evidence, challenges and novel approaches

Reviewer's code: 00291404

Reviewer's country: United States

Science editor: Jia-Ping Yan

Reviewer accepted review: 2019-04-18 11:37

Reviewer performed review: 2019-04-18 14:39

Review time: 3 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input checked="" type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input checked="" type="checkbox"/> Major revision	<input checked="" type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The authors have tried hard to cover the whole field of immunotherapy for CRC for the clinical part. Little of frontier and promising preclinical studies have been discussed or even mentioned. Therefore, it is suggested that authors add one word "clinical" to the

title in order to separate many papers in preclinical studies from this one: “Immunotherapy for colorectal cancer – Available clinical evidence ...” This is a very useful and timely review. However, there is one major issue I hope that authors can improve it during revision. The authors have tried to cover all approaches, but not discuss some of them in great details enough. For example: Under “Checkpoint inhibition and oncolytic viruses”, they only discussed one clinical trial with Pexa-Vec, which was not even in combination with checkpoint inhibitor (ref #42). They cited an old research paper about the function of GM-CSF (re #41, published in year 2000) which is useless as the readers of this paper should know the function of GM-CSF. In fact, many readers, if this is published, do not know the field of oncolytic virotherapy, now many term as “oncolytic immunotherapy”, as the main mechanisms of action involve the OV-elicited antitumor immunity. In this case, it is ideal to cite one or two review articles for readers to better know the relative new filed. In this case, I would suggest to cite, (1). Lawler SE, Speranza MC, Cho CF, Chiocca EA (2017). Oncolytic Viruses in Cancer Treatment: A Review. *JAMA Oncol* 3: 841-849. (2). Guo ZS, Liu Z, Kowalsky S, Feist M, Kalinski P, Lu B, et al. Oncolytic immunotherapy: Conceptual evolution, current strategies, and future perspectives. *Front Immunol*. 2017; 8:555. The follow-up of that clinical trial is with combination with immune checkpoint inhibitor, some ongoing clinical trials. There is an abstract, if you really want to cite: MP Morelli Mp et al., A phase I/II study of pexa-vec oncolytic virus in combination with immune checkpoint inhibition in refractory colorectal cancer: Safety report. *J Clin Oncol*. 2019. Under “Adoptive cell therapy”, the authors have discussed two clinical trials using TILs. The first was Ref#47, using sentinel lymph node lymphocytes, and the second one was Rosenberg’s TIL again mutant KRAS. In fact, other types of immune cells have been used for adoptive cell transfer for CRC patients. For example, Ishikawa T et al. Phase I clinical trial of adoptive transfer of expanded natural killer cells in combination with

IgG1 antibody in patients with gastric or colorectal cancer. Int J Cancer. 2018; 142:2599-2609. Other minor issues are, 1. It seems that the real data generated from the experiments were presented as supplementary tables and figures? The reviewers do not have access to those data, thus make our duties much more difficult. 2. References: Author have done very poor job in this part, and many references need updated or correct information. Please do a better job in the future. Ref #1: Name of the journal? Ref #15. Journal name? Ref #17, 18. Page number? Ref #22. Journal? Ref #26. The actual article number, (not page numbers, 1-14), is e1433981. Ref #28. The actual article number, (not page numbers, #1-7), is 202. Ref #31. Pages? Ref #33. Journal and other info? Ref #37. Volume and page numbers? Ref #38 Journal name, please?? The author list, the title of the article all contain errors. (It seems the first author is IFN-C?) Ref #39. Journal name, volume and pages?? Ref #44 and 45. Journal again? Ref #46. Journal Name and page numbers? (The name "Theranostics" is misplaced) 3. The authors like to cite many supplementary abstracts in references; Ref #16, 19, 20, 29, 32, 36 and possibly more. These information published in the abstracts were not peer reviewed with real data, and tend to be not accurate. It is a good practice not to cite too many abstracts as references in a review article. 4. There are a number of minor errors in English grammar throughout the manuscript.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No



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BPG Search:

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- ☐ Plagiarism
- ☐ No

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 47558

Title: Immunotherapy in colorectal cancer: Available clinical evidence, challenges and novel approaches

Reviewer's code: 02462207

Reviewer's country: South Korea

Science editor: Jia-Ping Yan

Reviewer accepted review: 2019-04-18 04:47

Reviewer performed review: 2019-04-22 09:47

Review time: 4 Days and 5 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input checked="" type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input checked="" type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input checked="" type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

Authors extensively reviewed clinical trials related to immunotherapy in colorectal cancer. The review touches on nearly every aspect of clinical trials involving various types of immunotherapy. The manuscript is relatively well written. There are several

minor points for a potentially better review article. Ambiguous meaning: 1) Page 3, paragraph 2: the effect of neoadjuvant nivolumab and ipilimumab seems to be as good as that of metastatic setting according to the authors' description (4/7 complete response and 3/4 partial response). Then, what does "challenging the noted response rates with checkpoint inhibition in dMMR/MSI-H tumors" mean? The term "challenging" in this context usually means that the described observation is different from the known one. Consistency in terms: 1) CTLA 4 or CTLA-4 -> please keep a constant term (I recommend CTLA-4) 2) Just before "Future development" section, "phase 1 or II studies..." -> "phase 2 or 3 studies" Several spelling errors: 1) first page of introduction paragraph 2, line 5. therefor -> therefore 2) stage II, III -> stage II, III (throughout the manuscript, numeric in stage description should be in capital Roman) 3) some survival data use commas when describing months: 14,1 months (in page 5). Please correct (14,1 -> 14.1) 4) Please use correct greek symbol. For example, INF-y -> IFN-gamma (please use word processor and use "Insert symbol" menu) 5) In "Adoptive cell therapy" section, ex vivo -> please write in italic font; "tumor draining lymph nodes of 1V MCRC...", what does "1V" mean? Please clarify; More specific, the Rosenberg..." -> "More specifically, the Rosenberg..."

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

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- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

BPG Search:



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- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 47558

Title: Immunotherapy in colorectal cancer: Available clinical evidence, challenges and novel approaches

Reviewer's code: 03656606

Reviewer's country: China

Science editor: Jia-Ping Yan

Reviewer accepted review: 2019-04-22 11:33

Reviewer performed review: 2019-04-22 13:09

Review time: 1 Hour

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input checked="" type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input type="checkbox"/> Grade C: Good	polishing	<input checked="" type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The impact of immunotherapy on the survival of patients with colorectal cancer is not obvious compared with other malignancies, such as melanoma and lung cancer. Only a minority of patients with metastatic colorectal cancer, mainly CMS1, respond to



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7041 Koll Center Parkway, Suite
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immunotherapy. This article presents the status of immunotherapy in colorectal cancer and analyzes the difficulties in improving the efficacy of this modality. And novel approaches in the future are also reviewed in this article. This is a comprehensive review which summarizes important clinical data about immunotherapy of colorectal cancer and points out promising strategies in this field. This article provides useful information about immunotherapy of colorectal and indicates that a combined strategy may resolve the dilemma in immunotherapy of colorectal.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

BPG Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 47558

Title: Immunotherapy in colorectal cancer: Available clinical evidence, challenges and novel approaches

Reviewer's code: 02686084

Reviewer's country: Mexico

Science editor: Jia-Ping Yan

Reviewer accepted review: 2019-04-20 06:03

Reviewer performed review: 2019-04-30 05:55

Review time: 9 Days and 23 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input checked="" type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input checked="" type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

I. The author the will be take in consideration included the paper information with have been published, is necessary included more information and references about Immninotherapy in colorectal cancer. II. References are relevant and update, however,

the author should add more about of Immunotherapy in colorectal cancer.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

BPG Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☐ No

PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 47558

Title: Immunotherapy in colorectal cancer: Available clinical evidence, challenges and novel approaches

Reviewer's code: 03535487

Reviewer's country: Italy

Science editor: Jia-Ping Yan

Reviewer accepted review: 2019-04-18 06:05

Reviewer performed review: 2019-04-30 10:57

Review time: 12 Days and 4 Hours

SCIENTIFIC QUALITY	LANGUAGE QUALITY	CONCLUSION	PEER-REVIEWER STATEMENTS
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	<input type="checkbox"/> Accept	Peer-Review:
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language	(High priority)	<input checked="" type="checkbox"/> Anonymous
<input checked="" type="checkbox"/> Grade C: Good	polishing	<input checked="" type="checkbox"/> Accept	<input type="checkbox"/> Onymous
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of	(General priority)	Peer-reviewer's expertise on the
<input type="checkbox"/> Grade E: Do not	language polishing	<input type="checkbox"/> Minor revision	topic of the manuscript:
publish	<input type="checkbox"/> Grade D: Rejection	<input type="checkbox"/> Major revision	<input checked="" type="checkbox"/> Advanced
		<input type="checkbox"/> Rejection	<input type="checkbox"/> General
			<input type="checkbox"/> No expertise
			Conflicts-of-Interest:
			<input type="checkbox"/> Yes
			<input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

the study shows that colorectal cancer seems not to be the correct tumor type for immunotherapy. The hypermutatad colorectal cancer type is only mederately affected by immunotherapy, despite some encouraging single report, there are no randomized



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trials available on the efficacy of immunotherpay for colorectal cancer. the conclusion of the authors is scientifically correct and guarrantee to the paper a good scientific evaluation.

INITIAL REVIEW OF THE MANUSCRIPT

Google Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☒ No

BPG Search:

- ☐ The same title
- ☐ Duplicate publication
- ☐ Plagiarism
- ☒ No