

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Gastroenterology*

**Manuscript NO:** 86378

**Title:** Leukocyte immunoglobulin-like receptor B2 overexpression as a promising therapeutic target and noninvasive screening biomarker for colorectal cancer

**Provenance and peer review:** Unsolicited manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 05387405

**Position:** Peer Reviewer

**Academic degree:** MSc, PhD

**Professional title:** Research Scientist

**Reviewer's Country/Territory:** Hungary

**Author's Country/Territory:** China

**Manuscript submission date:** 2023-06-15

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2023-06-30 16:31

**Reviewer performed review:** 2023-07-08 19:16

**Review time:** 8 Days and 2 Hours

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 Grade E: Do not publish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

<b>Scientific significance of the conclusion in this manuscript</b>	<input checked="" type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
<b>Language quality</b>	<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
<b>Conclusion</b>	<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
<b>Re-review</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Peer-reviewer statements</b>	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

The study of Wang QQ et al. investigated LILRB2 and its ligand, ANGPTL2 in CRC patients, healthy controls and adenoma patients. The study is well designed, the language of the article is very good, the presentation of data and figure quality is excellent. The following minor issues were found: 1. Correlation is used very often in Results to present relationships/associations. The reviewer suggests that the authors use other terms and use the word correlation only for the Spearman and Pearson tests. 2. "confirming that serum LILRB2 level is associated with tumour burden in CRC." This statement should be refined. To prove this claim, the authors should have performed several measurements after the surgical removal of the tumor, including when progression, recurrence, etc. occurs. 3. "Another source is hypothesized to be CRC-associated immune cells because tumorigenesis is closely related to the chronic inflammatory state in the body and during tumour development, chemotaxis and infiltration of myeloid cells, including neutrophils, dendritic cells, and tumour-associated macrophages, which are common cell types with LILRB2 expression." Similar to the above, please refine. Authors collected postoperative blood within 24

hours of the surgery. This time is not enough for the immune cells to be properly "cleared" from the circulation. 4. In Table 1, percentages should be calculated for the subgroups (columns), and not for the rows. E.g., in the case of age, instead of this: 4(44.4%) 5(55.6%) 15(30.6%) 34(69.4%) calculate this: 4(4/19 in %) 5(5/39 in %) 15(15/19 in %) 34(34/39 in %) The prevalence rates of the parameters in each group are more useful information for a clinician than the data presented by the authors in the current version.

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**Reviewer's code:** 05117456

**Position:** Editorial Board

**Academic degree:** AGAF, FACG, FACP, MD

**Professional title:** Director, Professor

**Reviewer's Country/Territory:** United States

**Author's Country/Territory:** China

**Manuscript submission date:** 2023-06-15

**Reviewer chosen by:** Geng-Long Liu

**Reviewer accepted review:** 2023-07-26 17:06

**Reviewer performed review:** 2023-08-09 08:00

**Review time:** 13 Days and 14 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<b>Peer-reviewer statements</b>	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

Wang and colleagues report on LILRB2 as a promising therapeutic target and noninvasive screening biomarker for colorectal cancer. The manuscript assesses the presence of the LILRB2 protein and its ligand ANGPTL2 in CRC tissue along with the impact of overexpression on differentiation metastasis and prognosis in CRC. The manuscript also highlights the potential of LILRB2 for screening purposes. The manuscript subject is novel, and the paper is well written, with clear objectives, methods, discussion and conclusions supported by the data presented. My main concern involves the figures, specifically figures 1, 3 and 4. Consistent use of asterisks between figures should be encouraged and they should represent the same across figures. For example, 3 asterisks appear to represent a significance of  $p < 0.001$  in figures 1 and 4. However, the 2 asterisks represent 2 different values in figures 4C and 4D. An explanation of what the asterisks stand for in Figures 4A-D would add clarity for the reader. Another item in the discussion needs to be mentioned. At the end of the 3rd paragraph of the discussion the final sentence mentions that LILRB2 is overexpressed hepatocellular and breast cancer. This finding needs to be addressed as a limitation as then LILRB2 levels could be confounded by the presence of 2 tumors concurrently. The point about further study of LILRB2 in both hepatocellular and breast cancer is well taken.