



## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Gastrointestinal Oncology*

**Manuscript NO:** 64479

**Title:** Molecular regulation mechanism of ferroptosis and its role in gastrointestinal oncology: Progress and updates

**Provenance and peer review:** Invited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 03478911

**Position:** Editorial Board

**Academic degree:** PhD

**Professional title:** Chief Technician, Executive Vice President, Research Assistant Professor

**Reviewer's Country/Territory:** South Korea

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

**Manuscript submission date:** 2021-04-20

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-04-20 08:33

**Reviewer performed review:** 2021-04-27 05:29

**Review time:** 6 Days and 20 Hours

<b>Scientific quality</b>	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<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 type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection



<b>Re-review</b>	<input checked="" type="checkbox"/> Yes <input 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**

In this review, the authors summarized recent research progress on the mechanism of ferroptosis and its role in gastrointestinal tumors. Ferroptosis is characterized by iron accumulation, excessive ROS production, and overwhelming lipid peroxidation, and is well known for a specific mechanism of sorafenib, but it is a mechanism that has recently attracted attention in the area of gastrointestinal disease, especially cancer. The topic is very appropriate, but there are some issues to raise. 1. The main content was not focused on gastrointestinal cancer. In the "Introduction" section, it is necessary to supplement the non-clinical and clinical background why ferroptosis is attention in gastrointestinal cancer in detail. 2. Most of the content that follows the Introduction section is the general theory of Ferroptosis. Therefore, an association with gastrointestinal cancer must be included in each paragraph. 3. The full contents must be filled out from the table indicated by the author. The origin and mode of action of each inducer and inhibitor, as well as many applications including gastrointestinal cancer, must be described. Please refer to the section "FERROPTOSIS INDUCERS AND INHIBITORS". 4. It is recommended to separate the CRC from the gastric cancer section. Please refer to the section "Ferroptosis and other GI tumors". 5. The clinical cases that utilize the mechanism of ferroptosis must be summarized separately (eg Sorafenib, Cisplatin). Please cite the following reference: Yanwei Su, et. Al., Volume 483, 28 July 2020, Pages 127-136, Cancer Letters.