# Review of: "The Role of Ferroptosis in Inflammatory Bowel Disease: Mechanisms and Therapeutic Implications"

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Potential competing interests: No potential competing interests to declare.

**Comments and Suggestions for Authors**

The manuscript, "The Role of Ferroptosis in Inflammatory Bowel Disease: Mechanisms and Therapeutic Implications," defines the implications of ferroptosis in intestinal epithelial cell death, barrier function, and immune response. The authors demonstrated how ferroptosis has an impact on IBD; administered treatments protected tissues from erastin-mediated ferroptosis and activated Nrf2 antioxidant activity. The authors extensively characterized the effects of therapeutic treatments on iron amount, oxidative stress, and iron-chelating properties. The study addresses an essential question of the mechanism of ferroptosis using an in vitro tissue culture model and animal experiments. Although the manuscript addresses a significant problem, it has some weaknesses and flaws to address. Here are major and minor comments.

Major comments:

1. In cell culture experiments, amounts of erastin or RSL3 should have been determined in cell viability experiments or animal experiments.
2. There is no specific explanation about the type of cells or mice in these studies in the manuscript.
3. Also, there are not any references for several experiments in the manuscript.
4. The limitation for this study is the use of the unknown cell line; the manuscript is not clear about what kind of cell line has been used.
5. In the cell culture model and animal model, different concentrations of erastin were used. Are those amounts an ideal match? What is the human equivalent concentration dose of deferoxamine?
6. What concentration of erastin gives a significant decrease in cell viability?
7. Figure 1E is supposed to be a bar graph to be more understandable and comprehensive.

I have attached the file of my reviews on the manuscript. Please have a look at it.