

## ESPS Peer-review Report

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

**ESPS Manuscript NO:** 3329

**Title:** Autophagy Inhibition by Chloroquine Sensitizes HT-29 Colorectal Cancer Cells to Concurrent Chemoradiation

**Reviewer code:** 02454120

**Science editor:** Wen, Ling-Ling

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| CLASSIFICATION                                     | LANGUAGE EVALUATION  | RECOMMENDATION                      | CONCLUSION   |
|--|--|-------------------------------------|--|
| <input type="checkbox"/> Grade A (Excellent)       | <input checked="" type="checkbox"/> Grade A: Priority Publishing     | Google Search:                      | <input type="checkbox"/> Accept                        |
| <input type="checkbox"/> Grade B (Very good)       | <input type="checkbox"/> Grade B: minor language polishing           | <input type="checkbox"/> Existed    | <input type="checkbox"/> High priority for publication |
| <input checked="" type="checkbox"/> Grade C (Good) | <input type="checkbox"/> Grade C: a great deal of language polishing | <input type="checkbox"/> No records | <input type="checkbox"/> Rejection                     |
| <input type="checkbox"/> Grade D (Fair)            |  | BPG Search:                         | <input type="checkbox"/> Minor revision                |
| <input type="checkbox"/> Grade E (Poor)            | <input type="checkbox"/> Grade D: rejected                           | <input type="checkbox"/> Existed    | <input checked="" type="checkbox"/> Major revision     |
|  |  | <input type="checkbox"/> No records |  |

## COMMENTS TO AUTHORS

This manuscript addresses an important research question -- Whether autophagy inhibitor can enhance the radio-sensitivity in treating locally advanced rectal cancer. The experimental design regarding outcome measures chosen seems well considered. Regarding statistical aspects of the design, analysis, data presentation and interpretation, some clarifications and more details will be very helpful for readers to further understand the data presented in the manuscript: 1. The experimental design involves 3 factors: Cell lines (2 levels), treatment groups (8 levels), measurement time points (6 time points). Within cell lines, 3 concentrations were used. For RT, 3 active dose levels were used. This brings a total of more than 570 reads for one outcome measurement at different combinations of these factors (levels). The experiment included 7 outcome measurements. For each of the outcome measurement, authors didn't present the whole picture of the data. It seems like authors only reported selected combination(s) data for each measurement. This is suspicious to me that authors were selecting the results and only report the ones that show "positive results" in the manuscript. Without seeing the whole picture of the data, or number of multiple comparisons, it is hard to distinguish whether the results presented in the manuscript is just by chance, or it is real. Please clarify. 2. Authors didn't indicate how many replicates were conducted. This brings question of whether the statistical analysis is appropriately conducted. 3. Not all outcome measures are continuous (not to mention the normality assumption), for example, apoptotic -- binary, colony forming assays -- binary. Student's test won't be appropriate for these measures. Further, based on the design described in the text, this is really a ANOVA type of analysis for the normally distributed measures, and multivariate logistic regression type of analysis for binary measures.