Reviewer’s report

Title: Long non-coding RNA LINC00426 contributes to doxorubicin resistance by sponging miR-4319 in osteosarcoma

Version: 0 Date: 30 Mar 2020

Reviewer: Sinan Zhu

Reviewer's report:

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An article of importance in its field

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**Reviewer summary**
Please provide a brief overview of your review, stating plainly your opinion of the manuscript’s overall validity, significance and originality.

Long non-coding RNAs have been widely reported to participate in biological processes, including drug resistance in the cancer treatment. This manuscript studied the LINC00426 in the doxorubicin resistance in osteosarcoma. It is found that LINC00426 knockdown affects cell viability and drug resistance. It is concluded that ectopic introduction of miR-4319 significantly surmounts the Dox resistance in OS cells, while miR-4319 inhibition in LINC00426-deficient cells greatly restore this phenotype. The findings highlights the role of LINC00426 in osteosarcoma.

**Reviewer recommendations to authors**
Please make your report as constructive as possible, if necessary, recommending specific improvements so that the authors have the opportunity to overcome any serious deficiencies that you find. Please divide your comments into major and minor recommendations.

1. How was LINC00426 chosen in study from all other long non-coding RNAs?

2. What about the microRNAs could interact with this LINC00426?

3. Several statistical methods have been employed in the study. Method should be specified in the figure legends.

**Minor issues**
Please detail any minor comments for the authors attention (spelling, typographical errors, grammatical errors, stylistic suggestions etc.) so that, once addressed, the authors may remove them from the review.

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