

## PEER-REVIEW REPORT 2

**Name of journal:** Neural Regeneration Research

**Manuscript NO:** NRR-D-18-00413

**Title:** Magnesium sulfate and fetal neuroprotection: overview of clinical evidence

**Reviewer's Name:** Han Zhang

**Reviewer's country:** USA

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### COMMENTS TO AUTHORS

This is a well-written mini-review paper about the currently available conclusions regarding the neuroprotective role and clinical applications of the antenatal MgSO<sub>4</sub> administration. Although the previous review paper has covered the findings and clinical implications from the RCTs, this paper provides a new view of the antenatal MgSO<sub>4</sub> administration trying to addressing or raising the clinically interested but unsolved/unclear questions, such as minor side effects to the mothers and the infants, dosage and protocol optimization strategy, safety issues, cost effective analysis, and recommendations. The data derived from rigorous analysis supports their conclusion. The reviewer only have several minor questions, as listed below.

1. Page 5, lines 23-29: Do the authors mean the side effect, or the benefit, of MgSO<sub>4</sub>?
2. Page 6, lines 8-11: Given the wide range of the dose, is the dose here still higher than that in the current protocols in terms of statistical significance?
3. Page 6, line 54: The term "QT" should be explained in full name when first used.
4. Page 9, line 5: Please give a clear description about what is the previous method in determining the dose of MgSO<sub>4</sub>? Is there any preliminary standard or consensus based on previous clinical studies (e.g., taking BMI, age, weight into consideration)?