

## Reviewer Report

**Title:** High-Resolution Computational Modeling of Immune Responses in the Gut

**Version:** Revision 1      **Date:** 1/31/2019

**Reviewer name:** Elsje Pienaar

### Reviewer Comments to Author:

The authors have made significant improvements to the manuscript and thoroughly responded to reviewer comments. One major concern remains surrounding the authors' response to questions around the grid dimensions. The dimensions for the entire grid are given in nm which is smaller than a single cell. Furthermore they state that there are no limits to cell(agent) occupancy per grid compartment. This is rather confusing and calls into question how much spatial information is really contained in this model (e.g. if cytokines are diffusing over the 30nm grid what does that mean for the concentrations that individual cells (measured in micrometers) are seeing?). Based on the author responses it appears that the model is a multi-compartment model with well-mixed discrete agents in each compartment rather than a spatio-temporal model as they claim.

### Methods

Are the methods appropriate to the aims of the study, are they well described, and are necessary controls included? Choose an item.

### Conclusions

Are the conclusions adequately supported by the data shown? Choose an item.

### Reporting Standards

Does the manuscript adhere to the journal's guidelines on [minimum standards of reporting?](#) Choose an item.

Choose an item.

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Are you able to assess all statistics in the manuscript, including the appropriateness of statistical tests used? Choose an item.

### Quality of Written English

Please indicate the quality of language in the manuscript: Choose an item.

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