

Dear Editor(s) and reviewers,

We sincerely appreciate your valuable comments and feedbacks on our manuscript. Please find the point-to-point responses to your questions below:

Reviewer #1:

For me, as a pharmacologist, this was a very interesting review to read. A kind of "putting into one place" all relevant general information and principles on the important topic of formulation of biologicals. I have no comments to authors. The review is informative and well written.

Reviewer #2:

In the manuscript entitled 'Formulation Strategies in Immunotherapeutic Pharmaceutical Products', Zhang and colleagues reviewed the formulation strategies and excipients that have been used in commercialized Ab products, but the following points need to be improved.

1. Less than half of the references cited in this manuscript were published within 5 years. It needs to be revised.

Answer: Thanks very much for your point. More new references were added in the manuscript.

2. Formulations and excipients were simply listed in antibody-based biopharmaceutical products. Precise strategies should be stated in the manuscript.

Answer: Thank you very much for your suggestion. As you may notice, the composition of mAbs can be very different. The choice of excipients is highly mAb independent, meaning each mAbs has their own favorite environment, therefore, it is very difficult to provide a general guideline for formulating mAbs.

We believe that the statement in the manuscript, 'The excipients selected for Ab formulations can be categorized into 5 classes: Sugars and polyols, amino acids, surfactants, buffer and tonicifying agents, and others (preservatives, antioxidants, and chelators)', is the best precise strategies at this point. And under each categories, commonly used excipients were provided for the readers' reference. We basically suggested a pool of excipients to our readers.

3. The conclusion section should add some of the author's own insights.

Answer: Thanks for the suggestion. More authors' opinions were added to the conclusion section.