ROUND 1

24th January, 2022

Editor-in-Chief World Journal of Diabetes

Dear Editor-in-Chief,

RE: Submission of a revised research article entitled 'Improved systemic half-life of glucagon-like peptide-1 (GLP1)-loaded carbonate apatite nanoparticles in rats'

Thank you for the comments. Below are our responses to the comments by the reviewers and the editor-inchief:

Reviewer 1:

The Introduction has been revised to improve the coherence between the Introduction and Discussion sections (Please refer to Lines 86-89, 95-99 and 111-114). A paragraph was included in the Discussion section to clarify that the present work and discussion focused on the animal context, specifically the systemic bioavailability of GLP1 in animals (Refer to lines 301-307). Since there are obviously differences in the PK/PD profiles between animal and human, it may be irrelevant or perhaps cause confusion to include human findings in the Introduction section.

The Results follow Gaussian distribution.

The References list has been updated. Limiting our references to the last 5 years only will limit further the Discussion of the data. Currently only 5 out of 23 references (22%) are from the year 2014 or earlier. Two of these papers were from our original publications on carbonate apatite nanoparticles. The other two papers were about GLP1 nanoparticles, which formed the primary comparison between GLP1 CA NPs and previously reported GLP1 nanocarriers.

The study limitation has been included in Lines 317-327.

The manuscript was reviewed to improve the clarity of the content and presentation.

Reviewer 2:

The comments annotated on the manuscript were addressed. We responded to each of the comments on the revised manuscript itself.

Editor-in-chief:

Editable figures organised into a single PowerPoint file is included.

We hope that we have satisfactorily addressed all the comments. Please let us know if any further clarification is needed on any of the responses.

Thanking you in advance for considering the manuscript.

Yours sincerely, Chooi Yeng Lee, PhD School of Pharmacy, Monash University Malaysia Email: chooi.yeng.lee@monash.edu

ROUND 2

15th March, 2022

Editor-in-Chief World Journal of Diabetes

Dear Editor-in-Chief,

RE: Submission of a revised research article entitled 'Improved systemic half-life of glucagon-like peptide-1 (GLP1)-loaded carbonate apatite nanoparticles in rats'

Thank you for the comments. Below are the point-by-point responses to the comments by the third reviewer:

Revision 1. Abbreviations should be explained what they stand for the first time they are used. – Please clarify which specific terms that need explanation.

It is generally not accepted to use abbreviations in abstracts unless they are spelled in full at least once. – There was no abbreviation in the abstract that was not spelled out in full the first time the terms appeared unless you are referring to 'nm', 'h', and 'P', which are standard and universally used abbreviations. Please clarify. Nonetheless, a list of other abbreviations used in the manuscript has been added after the abstract.

2. Appropriate statistical analysis should be performed. Statistical tables and figures should be checked and followed statistical norms.

The statistical test adapted for this study was Student's t test. The analysis method was discussed with reference. Please refer to Lines 196-201.

3. The sentences in the statistics section should be revised.

The sentences in the statistics section have been revised. Please refer to Lines 196-201.

The figures of the manuscript were checked again for quality and accuracy. A set of images of higher resolution can be provided, if required, after the manuscript has been accepted for publication.

Thank you.

Yours sincerely, Chooi Yeng Lee, PhD School of Pharmacy, Monash University Malaysia Email: chooi.yeng.lee@monash.edu