

# Review of: "M-cell targeting acid-resistant oral vaccine delivery for immunization against Hepatitis B infection using cationic solid lipid nanoparticles"

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Potential competing interests: No potential competing interests to declare.

## Review Comments on

M-cell targeting acid-resistant oral vaccine delivery for immunization against Hepatitis B infection using cationic solid lipid nanoparticles

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The manuscript leverages cationic solid lipid nanoparticles (cSLNPs) targeting a prevalent infectious disease- Hepatitis B for vaccine development.

The size range of the nanoparticles is given as:

"The size of cSLNs ranges from 10 to 1000 nm extensively used for oral delivery of antigens to induce immunity "

The strictest definition of nanoparticles is from 1 to 100 nm. Anything > 100 nm, should be stated in micron units.

Nanoparticle therapeutic constructs can provide a range of performance benefits that increase effectiveness: improved pharmacokinetics, improved safety profiles, improved stability, and targeted delivery.

Although a formulation is very effective biologically, if it cannot be reproducibly scaled to commercially relevant quantities, it is of questionable value.

The authors did not make a case for the cSLN preventing HBV infection.

The authors need to tone down their statements to make them realistic and truly reflective of the scope of the study.

## Conclusion

The first sentence is too long, needs to be parsed.

## Grammar and Writing

Use past tense to describe your methods and procedures and other parts of the manuscript. For example

Percentage viability of cell has been evaluated using following formula:

Should be written as: "Percentage viability of cell was evaluated using the following formula:"

Rephrase to read as:

"Blood was collected periodically every two weeks post-immunization through the retro-orbital route of mice."

It is recommended that a copywriter be engaged to improve the grammar and writing style. In several; places it was hard to understand what the authors were trying to say.