

Review of: "[Review Article] Nanocarriers for Protein and Peptide Drug Delivery"

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Potential competing interests: No potential competing interests to declare.

The review topic is of potential interest as the effective delivery of proteins and peptides poses significant challenges. The use of nanocarriers may help to overcome limitations due to protein instability, protect the protein material from external stresses and improve the delivery.

However, the Authors marginally touch several types of nanocarriers, without highlighting advantages and disadvantages of each cargo system.

The Authors have also included microspheres, even if the focus of the review seems to be on nanocarriers (as stated in the title). I suggest removing this section or revising the focus of the review.

In Table 1, it is not clear if the listed drugs are delivered by means of microspheres. If this is the case, I suggest adding relevant details on the type of cargo system.

When discussing on emulsions, I suggest referring to droplet size instead of particle size, since the dispersed phase is liquid, not solid.

The section on polymeric nanoparticles can be significantly enlarged including more synthetic polymers (e.g., PEG based nanoparticles) and discussing advantages and limitations of the different materials.

I personally think that the message conveyed in figure 3 can be oversimplistic. I would discuss more in detail the synthesis method, the use of stabilizers, and the impact of synthesis conditions on nanocarrier size.

Why did the Authors introduce a new section for mucoadhesive polymer nanocarriers? I would place it as a sub-section of the "Nanoparticles" section.

Nanoemulsion is repeated twice before ref. [8]