



SDI Review Form 1.6

Journal Name:	<u>Journal of Advances in Medical and Pharmaceutical Sciences</u>
Manuscript Number:	Ms_JAMPS_32493
Title of the Manuscript:	5-Fluorouracil Encapsulated mPEG-Chitosan Nanogels for Controlling Drug Release
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	In cancer research there is a need for some basic experiments and analyzes to ensure that the "object under study" is rated as ideal for such. Although the study has its significant interest still find itself in a very simple stage of disclosure of it. I suggest that in material characterization of the nanogel make further analyzes such as DLS and Zeta Potential to clarify more data on size and stability of the nanogel. I felt the need for an analysis of the nanogels' cytotoxicity. I believe that the introduction of more analysis will make the work more suitable for publication.	We would like to thanks for your insightful comments and completely agree that this paper will be more nuanced if further analyses such as DLS, Zetal Potential, and the nanogel's cytotoxicity are provided. Besides, we would highly appreciate if you could look at the manuscript from a different perspective. In this study, mPEG-CS conjugate was synthesized with different molar ratios for the purpose of examining the influence of the molar ratios of mPEG and CS on drug loading and release behavior of 5-FU and developing potential nanocarriers for controlled drug delivery in cancer therapy. According to the results of ¹HNMR, FTIR, and TEM, the obtained mPEG-CS was successfully prepared with spherical in shape and diameter range of 20-50 nm. The result of drug loading showed that the 5-FU loading was independent of different molar ratios of mPEG-CS, whereas the drug release profile of 5-FU indicated that the highest percentage of mPEG over the modified CS nanogels resulted in the fastest drug release profile. Moreover, mPEG-CS (1:1) and mPEG (5-1) showed a good potential to be used as controlled delivery systems. Therefore, mPEG-CS nanogels present a potential for developing suitable nanomedicine carriers in cancer treatment. We truly appreciate your comments, and will consider these suggestions for our next paper. Thank you so much.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		