

CHARLES UNIVERSITY
FACULTY OF PHARMACY IN HRADEC KRALOVE

Department: Pharmaceutical Technology Master's degree program in Pharmacy

Opponent's review of Master's thesis

Student's name: Dina Faeq Mohd Said Manna

Mentor of the thesis: Dr. Georgios Paraskevopoulos, Ph.D.

Year of the thesis
defense: 2022

Opponent of the thesis:

PharmDr. Anna Paraskevopoulou, Ph.D.

Title of the thesis:

Active Encapsulation of Imiquimod in Liposomes with Dendrimers

Formal comments: number of pages: 51, number of figures: 17, number of tables: 4, number of references: 130.

Type of work: Experimental work

a) The aim of the thesis is: Fulfilled

b) Language and graphic level: Very good

c) Processing of the theory: Excellent

d) Methods description: Excellent

e) Results description: Excellent

f) Discussion and conclusions: Excellent

I recommend Diploma thesis for the recognition as Rigorous thesis .

Opponent's comments: The thesis of Dina Manna is dealing with the active encapsulation of imiquimod to liposomes with the help of dendrimers. Since imiquimod is known for its poor solubility, this formulation could be beneficial for its skin delivery. The thesis is very well written, thanks to excellent language and style of writing it is easy to follow the text.

I appreciate the high number of relevant citations and very well-done review part.

Unfortunately, there are a lot of formal mistakes which are decreasing the quality of the formal evaluation of the thesis. As an example, I can mention problems with abbreviations (not introduced in the text (Tc), or introduced but later on used the full word (IMQ); citations in the text are sometimes not properly organized (e.g. p. 16: citations in order 36, 32 or 37, 9); chapters' title are at the bottom of a page and text follows later (e.g. p. 17, 25, 31); missing citations at figures (Fig. 4, 6, 11); some figures are not mentioned in the text (Fig. 9, 10, 11), etc. Methods are well described and results presented nicely, even though I would appreciate more repetitions of each sample. I highly appreciate the excellent discussion containing also the part where is justified the design of the experiment and its relation to previous research.

Questions:

1. What was the encapsulation efficiency of the method you used?
2. What is the composition of Sephadex? What is the principle of separating substances with Sephadex?
3. Would you recommend the active loading method you have developed for use in the future?

Evaluation of Master's thesis: Excellent

Recommendations for the thesis defense: Recommended

In Hradec Kralove 23.05.2022

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Opponent's signature