

Pharmacy

Review of diploma thesis

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Mentor of the thesis: Doc. RNDr. Zdeňka Šklubalová, PhD.

Year of the defence:
2015

Reviewer of the thesis: Mgr. Pavel Ondrejček

Title of diploma thesis:

Determination of the compressibility of excipients used for formulation of tablets with theophylline

Formal comments: number of pages: 64, number of graphs: 0, number of figures: 17,
number of tables: 15, number of references: 26

Type of work: Experimental

- a) Aim of the thesis is: Fulfilled
- b) Language and graphic level: Excellent
- c) Processing of theory: Very good
- d) Methods description: Very good
- e) Results description: Excellent
- f) Discussion and conclusions: Excellent

Reviewer comments:

- 1) Few misinterpretations and mistakes (e.g. Page 27 - plasticity is not constant but parameter).
- 2) Energetic parameters of compaction equation and force-displacement method have the same symbols (E1, E2 and E3).
- 3) The shape of microscopically observed particles could be described according to division mentioned in theoretical part of thesis.

Questions:

- 1) Is the term "tablet" in accordance with the properties of products prepared by high-force compression (e.g. 40kN)?
- 2) What was the main reason for many times higher tensile strength of tablets prepared from microcrystalline cellulose and theophylline when compared to the other materials?
- 3) What was the reason for the measurement of tensile strength instead of method of measuring of the tablet hardness according to Pharmacopoeia?

Evaluation of diploma thesis: Excellent, to defense: Recommended

In Hradec Kralove 22. 5. 2015

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