

**CHARLES UNIVERSITY
FACULTY OF PHARMACY IN HRADEC KRALOVE**

Department Biophysics and Physical Chemistry

Study program: Pharmacy

Opinion of the Opponent of the Diploma Thesis

Year of the defense: 2024

Student: **Nikta Mehdizadeh**

Thesis Tutor: Mgr. Pavel Bárta, Ph.D.

Consultant:

Opponent: RNDr. Jana Maixnerová, Ph.D.

Thesis title: **IN VITRO STUDY OF ¹⁶¹Tb-LABELLED HUMAN
MONOCLONAL ANTIBODY RAMUCIRUMAB**

Scope of work, number of 56 pages, 13 figures, 4 tables, 81 citations

Evaluation of the work:

- | | |
|---|-----------|
| a) Processing of the theoretical part: | Excellent |
| b) The complexity of the methods used: | Excellent |
| c) Preparation of the methodological part (clarity, comprehensibility): | Excellent |
| d) The quality of the experimental data obtained: | Excellent |
| e) Processing of results (clarity): | Excellent |
| f) Evaluation of results, including statistical analysis: | Excellent |
| g) Discussion of results: | Very good |
| h) Clarity, conciseness, and adequacy of conclusions: | Excellent |
| i) Meeting the objectives of the work: | Excellent |
| j) Quantity and up to date of references: | Excellent |
| k) Language level (stylistic and grammatical level): | Excellent |
| l) Formal level of the work (text structure, graphic design): | Excellent |

I recommend the thesis for recognition as a rigorous thesis

Comments on the evaluation:

Cancer is the most common and most severe disease in humans today, which is why it is a major research topic. This thesis deals with this topic related to radiodiagnosis and radiotherapy of cancer. Its topic is: In vitro study of ¹⁶¹Tb-labelled human monoclonal antibody Ramucirumab. The theoretical part is very well developed using many literature sources, then the experimental part and results are briefly but sufficiently well described. The discussion is, in my opinion, very concise. Overall, it can be said that the thesis required a lot of effort and the goal of the thesis is fulfilled very successfully.

Questions and comments to student:

1. What is the prevalence of Glioblastoma in men and women in Europe in last years?
2. Why did you choose the terbium-161 in your study?
3. Is it possible to use other chelating agents for terbium-161?

4. What is the application of ramucirumab, meaning is it the main treatment or adjunctive?

Evaluation of the thesis: Excellent

**For the
defense:**

Recommend

In Hradec Králové

11. září 2024

signature of the opponent