

CHARLES UNIVERSITY
FACULTY OF PHARMACY IN HRADEC KRALOVE
Department of Organic And Bioorganic Chemistry

Study program: Pharmacy

Opinion of the Thesis Tutor/Consultant about the Diploma Thesis

Year of assignment: 2022

Year of the defense: 2024

Student: **Dominika Pinterova**
Thesis Tutor: PharmDr. Lukas Opalka, Ph.D.
Consultant: PharmDr. Lukas Gorecki, Ph.D.
Opponent: Dr. rer. nat. Mgr. Ing. Tomas Hodik
Thesis title: **Synthesis of chemosensitisers for the treatment of glioblastoma multiforme**

Scope of work, number of: 62 pages, 10 figures, 1 tables, 70 citations

Evaluation of experimental work:

- | | |
|---|-----------|
| a) Evaluation of methodological procedures: | Excellent |
| b) Skill in the laboratory or in obtaining experimental data: | Excellent |
| c) Independence: | Excellent |
| d) Initiative: | Excellent |
| e) Diligence and conscientiousness: | Excellent |

Evaluating the processing of results and writing up the thesis:

- | | |
|---|-----------|
| a) Processing of results (diligence and independence): | Excellent |
| b) Interpretation and discussion of results: | Excellent |
| c) Literary research: | Excellent |
| d) Text processing (stylistic level): | Excellent |
| e) Formal level of the work (text structure, graphic design): | Excellent |

I recommend the thesis for recognition as a rigorous thesis

Verbal evaluation, distinctive features of the author, and the thesis:

Dominika Pinterová completed her diploma thesis at the Department of Toxicology and Military Pharmacy (University of Defence) under the supervision of her consultant, Dr. Lukáš Górecki. Bellow, I attach his opinion on the thesis.

I have had the pleasure of supervising Dominika throughout the duration of her diploma thesis work, which was centered on the preparation of novel compounds for the treatment of glioblastoma multiforme. Her research was conducted as experimental work in a chemistry laboratory, where she displayed exceptional dedication and skill.

Dominika commenced her laboratory work in the middle of her second year of study, an impressive dedication considering the demanding nature of the project and her studies. Her commitment was evident in her frequent laboratory visits, typically twice a week, demonstrating not only her strong work ethic but also her effective time management skills. Dominika exhibited remarkable flexibility, often adapting her schedule to accommodate both the dynamic laboratory environment and the specific needs of the chemical reactions she was performing. Her willingness to come to the lab during unconventional hours, even between mandatory lessons, to initiate reactions and optimize time management, is commendable and indicative of her dedication to the project.

Throughout the course of her research, Dominika was involved in a wide variety of chemical reactions, each requiring distinct methodologies for reaction processing and product purification. She managed these reactions with a high degree of competence, ultimately developing into a proficient chemist capable of intuitively handling complex reactions and their subsequent processing and purification. As her work progressed, she demonstrated increasing independence, eventually reaching a stage where she could work autonomously in the lab without the need for my direct supervision. This level of independence reflects the skills she acquired over time.

In total, Dominika successfully conducted 60 distinct reactions during her research, a testament to both her productivity and her growing expertise. Her ability to engage with the theoretical aspects of her work was equally impressive. Dominika effectively studied and reviewed the relevant scientific literature, demonstrating her proficiency in understanding and summarizing complex information in English. Her capacity to critically evaluate and synthesize key information further highlights her strong academic abilities.

Based on the comprehensive and high-quality work that Dominika has produced, I recommend to evaluate her thesis as Excellent and I recommend her thesis for defense.

As a thesis tutor, I fully agree with the opinion of the consultant. Moreover, I would like to add that Dominika participated three times at the Student Scientific Conference, where she presented the results of her work.

Evaluation of the thesis: Excellent

**For the Recommend
defense:**

In Hradec Kralove

29. srpna 2024

signature of the opponent