CHARLES UNIVERSITY
FACULTY OF PHARMACY IN HRADEC KRALOVE
Department of Pharmaceutical Chemistry and Pharmaceutical Analysis

Study program: Pharmacy

Opinion of the Thesis Tutor/Consultant about the Diploma Thesis

Year of assignment: 2022 Year of the defense: 2024

Student:	**Parinaz Tabarestani**
Thesis Tutor:	doc. PharmDr. Jan Zitko, Ph.D.
Consultant:	PharmDr. Priam-Amedeo Houngbedji
Opponent:	doc. PharmDr. Miroslav Miletín, Ph.D.
Thesis title:	**Design, synthesis and biological evaluation of pyrazinamide derivatives containing 1,2,3-triazole linker II**

Scope of work, number of: 79 pages, 21 figures, 8 tables, 79 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:	Very good
e) Diligence and conscientiousness:	Very good

Evaluating the processing of results and writing up the thesis:

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

I recommend the thesis for recognition as a rigorous thesis ☐

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

As a diploma student, Parinaz joined our research group in her 3rd grade of master studies. She became involved in the synthetic work in our laboratory, where, under the supervision of PharmDr. Houngbedji worked on the design and synthesis of new pyrazinamide derivatives with a triazole linker. After initial training, she was able to work independently in the laboratory, mastered working with a flash chromatograph and a basic MS system for monitoring reactions. The student also participated in the evaluation of the results of screening of antimicrobial activity of prepared compounds and analysis of SAR relationships. Generally, we were satisfied with Parinaz's experimental work in the laboratory and the outcomes of the project - 20 newly synthesized derivatives. Unfortunately, the write-up of the thesis was suboptimal, a significant help from the mentor and consultant was needed in most chapters and organization of the thesis. The write-up was also lagging after the intended schedule, and as a result, we did not have enough time for proper checks before the submission. Therefore, some serious errors (e.g. faulty NMR interpretations) persisted to the final version. The significant errors will be corrected in Errata.

Still, I am satisfied with the scientific results of the thesis, the prepared compounds will become part of impacted publication.

The Theses similarity check gives a cumulative similarity of 29 %, with the highest similarity to the diploma thesis of S. Bouz (2019) elaborated in our group on a similar topic. The indicated similarities are located mainly in the description of the common laboratory equipment, where they are understandable. The Turnitin system indicates a cumulative similarity of 21% including the matches in the list of cited literature. After a detailed examination of both protocols, I declare that the matches found are insignificant and are located in parts where they are expected and understandable (e.g. instrumentation, description of biological assays, etc.). Therefore, I deem this thesis as an original work.

Evaluation of the thesis: Very good		**For the defense: Recommend**
In Hradec Králové	9. září 2024	signature of the opponent