

Vážený pan
Doc. MUDr. Tomáš Kučera, Ph.D.
Předseda oborové rady Biologie a
patologie buňky, 1. LF UK
Praha

| Contact / Email: | Place / Date |
|---|------------------|
| Doc. RNDr. Michal Masařík, Ph.D. masarik@med.muni.cz | Brno 3.9.2021 |

Ph.D. Thesis Review

Author: Rosana MATEU SANZ M.Sc.

Doctoral Study Program: Cell biology and pathology, 1st Faculty of Medicine, Charles University
Prague

Title: Role of fibroblasts in wound healing and cancer

Supervisor: Prof. MUDr. Karel Smetana ml. DrSc.

Reviewer: Assoc. Prof. Michal Masařík, Ph.D.

The work of doctoral student Rosana Mateu Sanz was performed in Professor Smetana's laboratory, the world's leading laboratory in the field of tumor microenvironment. The overall complexity and quality of the thesis corresponds to the fact that it was performed and completed in such a leading laboratory.

The thesis is built on 8 chapters and supplements, is well structured, the text is coherent and consistent and the style and language are accurate, with only rare inaccuracies and/or spelling/typing errors.

The "Literature review" represents an overview of the topic, is well written, and covers all aspects studied or discussed in the thesis. The text is focused on the characterization of tumor microenvironment with special focus to fibroblasts; wound healing and the role of fibroblasts

Masaryk University, Faculty of Medicine

Kamenice 753/5, 625 00 Brno, Czech Republic

T: +420 549 49 2910, E: info@med.muni.cz, www.med.muni.cz

Bank account: KB Brno, Ref. No.: 85636621/0100, ID: 00216224, Tax ID: CZ00216224

Please quote the Reference Number in your reply.

and cancer stroma.

The chapter "Results" contains comments on the five attached publications, the main part of the Thesis. And I have to say that it is always a great pleasure to review the doctoral thesis, which is in fact a commented collection of high quality publication(s) of the author that have already been published or are submitted in journal(s) with an impact factor.

The "Discussion" is a valuable part of the thesis, it puts the results into the context of newborn and tumor biology with special focus on fibroblasts in wound healing and cancer.

The list of references is extensive and shows that the candidate is familiar with the literature related to his research, including the most recent articles.

..

With respect to the presented results I have the following questions for the candidate:

1. What is your opinion on current anticancer treatment with regard to the complexity of the tumor microenvironment?
2. In Annex 3 you show that simultaneous blocking of IL-6 and IL-8 is sufficient to fully inhibit CAF-induced human melanoma cell invasiveness. Does this also apply to other types of tumors?
3. Are there currently any effective inhibitors of these two interleukins?

In summary, Rosana Mateu Sanz work fulfills all the requirements for a dissertation. The thesis is very well presented, achieves the goals and indicates great scientific capacity of the doctoral student. The doctoral thesis also proves excellent guidance of the student by the student supervisor, prof. Karel Smetana. I recommend the thesis for defense and after a successful defense I recommend to confer the candidate Rosana Mateu Sanz M.Sc. title "Doctor" (Ph.D.) in accordance with paragraph 47 of the Higher Education Act. No. 111/1998 Coll.


Doc. RNDr. Michal Masařík, Ph.D.

Associate Professor, Faculty of Medicine, Masaryk University, Brno