

HABILITATION THESIS REVIEWER'S REPORT

Masaryk University

Applicant

Mgr. Karel Souček, Ph.D.

Habilitation thesis

Plasticity of cell identity and its role in cancer progression

Reviewer

Prof. MUDr. Jan Trka, Ph.D.

Reviewer's home unit, institution

CLIP, Dept. Paediatric Haematology and Oncology, Second Faculty of Medicine, Charles University, Prague, Czech Republic

Dr. Souček's habilitation thesis is a massive work containing a number of publications on cellular plasticity in cancer. Dr. Souček divided the thesis into four chapters and provided each chapter with a thorough commentary. At the end he included a very valuable chapter on the future development of the field.

In the comments and especially in the papers themselves, he demonstrates a high knowledge of the field and especially the quality of his work from previous years. The works cited in the habilitation dossier are numerous and many of them have been published in high quality journals in the field. The reviewer therefore does not feel in a position to judge the quality of these papers after they have been peer-reviewed in these journals.

Overall, this is a very good thesis in terms of both factual and formal aspects.

Reviewer's questions for the habilitation thesis defence (number of questions up to the reviewer)

The reviewer would like to ask the habilitant two questions and add one comment on his publication history.

1. What is the known role of exosome in cancer cell plasticity?
2. In this paper, TGF- β , c-Myb and Trop2 molecules are identified as potential targets for cancer targeted therapy. What is the specific progress in this area for these three molecules?

Given the large number of high quality publications, this reviewer would consider excluding articles published in MDPI and Oncotarget journals.

Conclusion

The habilitation thesis entitled “Plasticity of cell identity and its role in cancer progression” by Karel Souček **fulfils** requirements expected of a habilitation thesis in the field of Experimental Animal Biology.

Date: May 16, 2024

Signature: