

Téma rigorózní práce: **Side effects of siRNA-induced gene silencing**

Jméno studenta, studentky: ***Mgr. Marina Fertek***

Jméno oponenta rigorózní práce: ***PharmDr Petr Nachtigal, PhD***

I. Posudek oponenta rigorózní práce

This thesis focuses on non-specific gene silencing induced by a novel genetic technique – RNA interference.

In her work, Marina Fertek investigated the effect of anti-COX siRNA on expression of other genes, which is the most common of siRNA side-effects. She used real time RT-PCR analysis to quantify her findings.

The work is well written with only a negligible amount of typos and errors. The work is written up on ca 75 pages with a detailed list of abbreviations, nice and comprehensive introduction, description of materials and methods used in the study, presentation of results in 18 figures and 10 tables and an appropriate discussion. However, Summary is a mere repetition of what has been done but not what has been achieved; this part could have been elaborated in more detail.

I am also missing better defined conclusions of the whole study; otherwise, I have no major or minor comments.