Author's response to reviews

Title: Differences in microRNA expression during tumor development in the transition and peripheral zones of the prostate

Authors:

Jessica Carlsson (jessica.carlsson@his.se)
Gisela Helenius (gisela.helenius@orebroll.se)
Mats G Karlsson (mats.g.karlsson@orebroll.se)
Ove Andrén (ove.andren@orebroll.se)
Karin Klinga-Levan (karin.klinga.levan@his.se)
Björn Olsson (bjorn.olsson@his.se)

Version: 2 Date: 8 October 2012

Author's response to reviews: see over
Cover letter

The manuscript

“Differences in microRNA expression during tumor development in the transition and peripheral zones of the prostate”

is hereby submitted for possible publication in BMC Cancer.

The aim of the study was to identify miRNA expression signatures, i.e. set of miRNAs with expression profiles that consistently differ between normal prostate tissues from the transition zone and the peripheral zone of the prostate as well as normal and malignant prostate tissues from the same prostatic zone.

In this article we have shown that major differences in the transcription programme are those arising during tumor development, rather than during normal tissue development. In addition, tumors arising in the transition zone of the prostate have more unique differentially expressed miRNAs compared to tumors arising in the peripheral zone. The results in this article indicate that separate miRNA expression signatures for diagnosis might be needed for tumors arising in the different zones. From the results it can be concluded that the small RNA molecules (miRNAs) might be important in the biogenesis of prostate cancer and potentially also useful for clinical diagnosis of the disease.

This article constitutes an important part of a project where the role of miRNAs in prostate carcinogenesis will be analyzed. The very large impact of miRNA and carcinogenesis has recently been detected and new insights in this new field are both necessary and important.

We have now updated the manuscript with the editorial requests;

1) The name of the ethics committee have been added to the methods section
2) Information about written consent statements from the participants in the study have been added to the methods section
3) Information about consent of publishing information in Table 1 of the manuscript have been added to the methods section.

We hope that you will find our manuscript suitable for publication.

Skövde 2012-10-04

Sincerely

Jessica Carlsson

PhD student in Biomedicine
School of Life Sciences, Biomedicine/Systems Biology