

Abstract

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PCA3 and its importance in diagnostics of prostate cancer

Bachelor thesis

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Prostate cancer is a global problem that bothers many men. Diagnosis is currently focused on measuring levels of prostate-specific antigen, which is used as a screening test. It is focused on the diagnosis of rectal examination and positive biopsy findings. Pitfall of this diagnosis is its not being specific, because prostatic antigen also secretes non-malignant cells. The risk is not finding the proper biopsy tissue, and it often leads to repeat the biopsy.

Modern science is therefore looking for other diagnostic options. The determination of PCA3 gene which expresses specifically in prostate cancer cells looks like prospective option. While existing studies point to the estimated positive predictive value of biopsy, which would allow us to indicate their unnecessary and thus save patients from further invasive procedures.

This work contains information about diagnosis of prostate cancer, briefly describes PCA3 analysis and summarizes the results obtained by the laboratory in which I work.

Keywords: prostate cancer, PCA3, PSA, biopsy