Novel biomarkers as parameters for prediction of significant prostate cancer in biopsy and disease relapse after radical treatment

Abstract

Prostate cancer is one of the most diagnosed oncological diseases. Oncomarkers, especially prostate specific antigen (PSA), have significantly improved the diagnosis and monitoring of patients with this disease. However, PSA is not an ideal molecule, and its limitations open the door to further research and efforts to discover an oncomarker with higher specificity and sensitivity to significant prostate cancer. The aim of this paper is to give an overview of currently used and future oncomarkers and to present our data from several years of basic research in this field. Specifically, the results of immunochemical analyses of annexin, SPINK-1, TIMP, chromogranin A, endoglin, mindin and especially the extensive analysis of thymidine kinase 1.

Keywords

Prostate cancer, biomarkers, tumor markers, thymidinkinase 1, mindin, TK210, annexin, SPINK-1, TIMP, chromogranin A, endoglin