

BIOMARKERS OF PROSTATE CANCER AGGRESSIVENESS

A research group from IISPV has identified a new non-invasive biomarker panel that could help clinicians in the differential diagnosis of high risk or intermediate risk prostate cancer from low risk prostate cancer patients and thereby improving financial and health outcomes.

The Need

The main problem in the management of prostate cancer (PC) is the inability to distinguish with certainty, prior to proposing a therapeutic attitude, between slow-growing and indolent, aggressive tumors with an impact on patient survival. This fact may lead to an under treatment of aggressive tumors or an overtreatment in the opposite case. Although prostate antigen (PSA) is a routinely used marker for PC, its effectiveness as a specific marker for diagnosis and prognosis is questioned by clinicians. As a consequence, robust biomarkers are needed for the early screening of patients at risk of PC.

The Solution

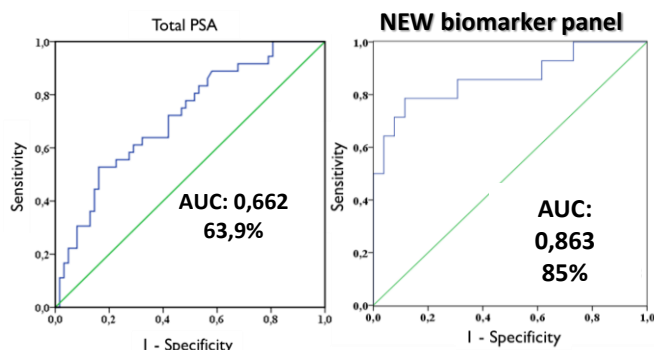
We provide a non-invasive biomarker panel for predicting prostate cancer aggressiveness based on the detection of 3 biomarkers in 2 different biofluids. This approach will considerably reduce the number of patients biopsy intervention and further clinical complications.

Innovative Aspects

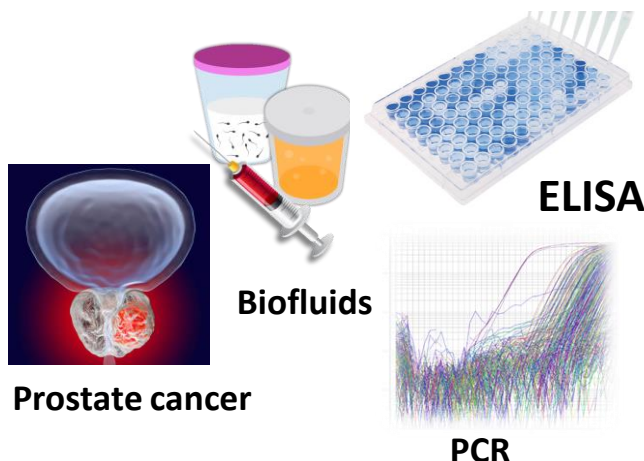
The main innovative aspect of the method is that is **non-invasive** and is **based on 2 biofluids** (blood and semen) and the selected biomarkers can be **easily measured** by one **simple ELISA** and a **PCR test**. This biomarker panel improves current available methods for the decision on prostate cancer aggressiveness.

Stage of Development:

The method has been described in a cohort of 42 subjects and it is pending of independent validation in wider cohort.



The receiver operating characteristic (ROC) curves for the NEW Biomarker panel compared to the classical existing marker PSA.



Intellectual Property:

- Priority European patent application filed 22/11/2018
- PCT application filed 22/11/2019

Ruiz-Plazas X, Rodríguez-Gallego E, Alves M, Altuna-Coy A (..), Chacón MR. Biofluid quantification of TWEAK/Fn14 axis in combination with a selected biomarker panel improves assessment of prostate cancer aggressiveness. J Transl Med. 2019 Sep 9;17(1):307. doi: 10.1186/s12967-019-2053-6

Aims

Looking for a partner interested in a license and/or a collaboration agreement to develop and exploit this asset.

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