

Discussion of Input-Output Data in the Computer Implementation of the PSA-level Test during the Analysis of Prostate Cancer

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Abstract

The article analyzes the initial and result dataset of the stochastic process based on the PSA-level measuring used for the detection of prostate cancer. It identifies the required inputs as well as the processing method. It specifies the minimum data set and outlines the opportunities which can be implemented by adding further data.

In case of dates listed in the input data the necessary and sufficient accuracy and the normalization of the time factor are presented.

The article describes the structure and internal consistency of the internal data in the algorithm to implement. The output data of the PRO-FILTER screening package – which will be implemented as a computer service – and one possible way of its computation is presented.

It describes the preparation of the PRO-FILTER database, the steps of progressive data collection, and it gives the points where the continuously expanding database can influence the algorithms.

Keywords: prostate cancer, PSA-level, data analysis