



## ESTIMATION OF THE STATE OF SCREENING PROGRAM ON EARLY DETECTION OF PROSTATE CANCER WITHIN THE FRAMEWORK OF THE NATIONAL SCREENING PROGRAM IN PAVLODAR REGION

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**Introduction:** Prostate cancer (PCa) is the second most common cancer in men worldwide and it is one of the leading causes of death of elderly men from malignant tumors in Kazakhstan. In the structure of morbidity among all malignant neoplasms, PCa occupies the 6th ranked place (5%). Since 2013, a screening program for the early detection of premalignant and tumor states of the prostate gland is being phased in the Republic of Kazakhstan.

**Methods:** A database of IT named automated control system "Polyclinic" from the Pavlodar branch of the Republican Center for Electronic Health, a database of cancer patients from the Pavlodar Regional Oncology Dispensary have been analyzed. The main indicators for data collection have been determined: plan, performance from the plan, detectability of diseases, the number of detected cancers within the framework of the National Screening Program (NSP), share of cancer in the early and at the late stage etc.

**Results:** In Pavlodar region from 2013 to 2016, 443 new cases of PCa have been identified. Within the framework of (NSP) in 4 years 39675 men were examined for early detection of this pathology, 1034 patients were identified including 91 new cases of PCa. The proportion of newly diagnosed cases of PCa in the NSP from the total number of newly diagnosed cases of PCa in Pavlodar region was 20.4%; under this program the detectability of precancerous and tumor states of the prostate was 2.6%, and the detectability of prostate cancer was 0.3% (according to the European standards, the proportion of the detected cases of PCa among the target group is 0.08%). The share of detected cases of PCa at an early stage was 86.8%, the late stage was 13.2%.

**Conclusion:** Despite the low detectability of this pathology, it is advisable: 1) to continue the screening for early detection of precancerous and tumor states of the prostate, 2) to identify barriers and develop educational programs among the population, 3) to improve the effectiveness of the screening program.