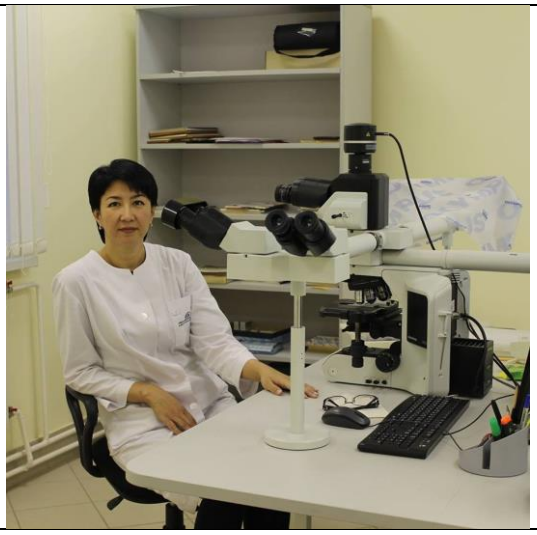
EuroSciCon
19th Edition on
World Pathology Week
Pathology Week 2019
June 19-20, 2019 | Tokyo, Japan



АЛМАТЫ ОНКОЛОГИЯ ОРТАЛЫҒЫ
ALMATY ONCOLOGY CENTRE

The specificity of the Basal Cell Cocktail, P504S and ERG immunohistochemical markers in the diagnosis of prostate adenocarcinoma, experience of Almaty Oncology Center

A. Altayeva[1], M. Saktaganov[1], S. Barsov[1],N. Tusupova[2],Sh. Mulkibayeva[2],

1. Almaty Oncology Center, Head of Pathology Department. Almaty, Kazakhstan
2. Asfendiyarov Kazakh National Medical University.Department of histology, cytology and embryology.Almaty, Kazakhstan.

Objective: Screening program for early detection of prostate cancer was carried out in Kazakhstan from 2014-2017. Total of 62,874 men were examined in Almaty with 794 patients (1.3%, 794/62,874) underwent prostate biopsy with 8-12 samples due to high PSAlevel.We evaluated expression of Basal Cell Cocktail, P504S (AMACR) and ERG (EPR3864) immunohistochemical markers to determine their specificity in the diagnosis of prostate adenocarcinoma.

Method: Prostate core needle biopsies from 794 patients (50-66 years) were evaluated using routine H&E sections and Ventana Basal Cell Cocktail (34βE12 + p63), P504S (AMACR) and ERG (EPR3864) immunohistochemical markers.

Results: Prostate core needle biopsies of 794 patients were evaluated. Cases interpreted as HPIN or ASAP on routine H&E sections were evaluated with 2 step immunohistochemical study: a Ventana Basal Cell Cocktail marker (34βE12 + p63) was used for the 1st step and P504S (AMACR) and ERG (EPR3864) – for the 2nd step. Prostate adenocarcinoma was detected in 309 cases (39%, 309/794): Glisson score 6 (3+3) was detected in 44 (14.2%) cases, Glisson score 7 (3+4) - in 200 (64.7%), Glisson score 7 (4+3) - in 64 (20.7%) cases and Glisson score 8 (4+4) - in 1 case (0.4%). The use of the Basal Cell Cocktail and P504S markers showed the highest specificity ($p \geq 0.95$) for the diagnosis of prostate adenocarcinoma in comparison to the ERG marker ($p \leq 0.45$).

Conclusion: For differential diagnosis of prostate adenocarcinoma, we recommend use phased approach of Basal Cell Cocktail and P504S (AMACR) markers, since

they are specific and highly sensitive. The ERG marker (EPR3864) is not recommended for routine use in the diagnosis of prostate adenocarcinoma, due to low reliability criteria.

Presenting author details
Full name: Ainash Altayeva
Contact number: +77077887619
Email id: doctor-ainash@mail.ru
Category: (e-Poster)
Session name: Prostate pathology
Research interest: IHC studies of prostate cancer