

Relation between age and cancer detection in repeat prostate biopsies following a diagnosis of high grade prostatic intraepithelial neoplasia. Thomas Bassler, Binitha Kunnel, Roberto Orozco, and Gerard O'Dowd. UroCor Inc., Oklahoma City, OK

Background: The presence of high grade prostatic intraepithelial neoplasia (PIN) in prostate biopsies (pbxs) is predictive of concurrent cancer and therefore an indication for a repeat biopsy (rbx). Whether the high cancer detection rate of rbxs after PIN diagnosis is similar for all age groups is not known. The purpose of this work was to study the positive rates of rbxs after PIN diagnosis in relation to age.

Design: A retrospective analysis of patients (pts) 50 to 74 yr. of age who had a 1st pbx containing PIN and a follow-up bx, both received between April 95 and May 97, was conducted. Age was calculated from birth to 1st bx date. Positive rates were calculated for all patients regardless of prostate-specific antigen (PSA) and for patients with PSA < 15 ng/ml.

Results: Of a total of 1979 patients 50 to 74 yr. of age who had a 1st pbx with PIN, 617 had a rbx. The time interval between 1st and 2nd bxs ranged from 7 days to 25.8 months (mean = 5.3 months). The overall positive rate for both groups was 21%.

Positive rates for different age groups are given below.

Age groups (yr.)	All (N: 617)	PSA < 15 (N:385)
50-54	8%	8%
55-59	11%	14%
60-64	21%	21%
65-69	24%	23%
70-74	25%	23%

Conclusion: The positive rate of pbxs following a diagnosis of PIN increased with advancing age. These results support the hypothesis that PIN precedes the development and is a precursor of some prostate cancers.