

FOR A GIVEN PROSTATE-SPECIFIC ANTIGEN VALUE, POSITIVE PROSTATE BIOPSY RATE INCREASES WITH AGE. Gerard O'Dowd, Binitha Kunnel and Roberto Orozco. UroCor Inc., Oklahoma City, OK

Background: It is well documented that serum prostate-specific antigen (PSA) levels increase with increasing age on volunteers. Whether the higher PSA levels seen in healthy older men are explained by age-related benign processes alone is less clear. The aim of this study was to determine the positive rates of pbxs from men of different age groups but with similar PSA..

Design: The positive rates of pbxs submitted to our institution by office-based urologists between April 95 and March 97 were retrospectively calculated. Pbxes from men 50 to 79 yr., normal digital rectal examination, pre-biopsy PSA of 4.01 to 10 ng/ml, and no history of previous pbx were included.

Results: A total of 4404 patients with a mean age of 65.8 years were studied. Positive rates (given in parenthesis) for 1st time pbxs are presented below.

Age groups (yr.)	PSA (ng/ml) values			
	4.01-6	6.01-8	8.01-10	Total
50-59	479 (22.5)	255 (25.9)	157(28.0)	891 (24.5)
60-69	868 (28.8)	776 (29.1)	454 (29.1)	2088 (29.0)
70-79	515 (33.6)	544 (35.1)	366(41.2)	1425 (36.1)
Total	1852(28.5)	1575(30.7)	977(33.5)	4404 (30.4)

The overall positive rate was 30.4%. Although the positive rate increased with increasing PSA for the 50-59 and 70-79 age groups, it plateaus after 6 ng/ml for the 60-69 group. The positive rate increased with increasing age for each PSA range.

Conclusions: The positive rate of pbxs from men with the above criteria increases with increasing PSA, but increases even more with increasing age for a given PSA range.