ACTIVE SURVEILLANCE FOR PROSTATE CANCER: A NOMOGRAM PREDICTING THE RISK OF UPGRADING/UPSIZING AT 1 YR RE-BIOPSY

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Introduction: Since 2005, we have been proposing AS in low-risk PCa. Variables influencing upgrading/upsizing at the first re-biopsy (1yr after AS beginning) are analyzed and a preliminary nomogram is presented.

Methods: AS institutional protocol (SAINT) started in March 2005 and was accepted by 86 pts. Entry criteria were: iPSA<10ng/ml, Tstage<T2a, GPS<3+3, positive biopsy-cores<20%, max core length containing cancer<50%. Pts drop out was: PSADT<2yrs, PSA>10ng/ml, upgrading/upsizing at re-biopsy or personal choice.

In Nov 2007 PRIAS protocol was embraced: 126 pts were enrolled (Oct 2010). PRIAS vs SAINT differs on: iPSA<10ng/ml, max 2 positive cores, PSA density<0.2ng/ml/cc.

Multivariable logistic regression (MVLR) analyzed correlations between variables and upgrading/upsizing at first re-biopsy and a nomogram was developed.

Result: Statistical analysis was performed on 109 pts with complete records (1yr min f-up).

20/109 pts had upgrading/upsizing after re-biopsy, switching to radical treatment. Age, iPSA, PSA density, number of positive cores, percent of positive cores, absolute biopsy tumor length (ABSmm) and Tstage were considered as factors potentially influencing upgrading/upsizing. GPS was not considered (all pts had GPS=3+3).

Backward and forward MVLR resulted in a three-continuous variable best fit model (overall p=0.05): ABSmm (p=0.07, OR=1.20), age (p=0.37, OR=0.97), PSA density (p=0.24, OR=6.9). A nomogram was built on this result.

Conclusions: A nomogram including biopsy details coupled to age and PSA density can help identifying pts who have a higher probability of upgrading/upsizing after a short time in AS. More data are required to strengthen the statistical power of this preliminary analysis.

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