PROSTATE CANCER

Does a negative second biopsy give patients false hope?

When an initial diagnostic biopsy detects prostate cancer, a second ‘confirmatory’ biopsy is recommended within 1 year and 21–50% of men on active surveillance have no cancer on this second biopsy. Although absence of cancer on prostate rebiopsy is comforting for both the patient and the physician, recent data suggest that a negative second biopsy does not indicate a decreased risk of grade-related disease progression and can give patients false hope regarding their prognosis.

Wong *et al.* retrospectively assessed grade-related (advancement in Gleason score) and volume-related disease progression in men with PSA ≤ 10 ng/ml and $\leq cT2$ cancers with no Gleason grade ≥ 4 , ≤ 3 positive cores, and no core $> 50\%$ involved at diagnostic biopsy. Patients with ≥ 3 biopsies were selected and then dichotomized on cancer status (yes or no) at second biopsy.

Of the 286 patients who remained on active surveillance, 149 (52%) had no cancer and 137 (48%) had cancer at second biopsy. No difference was reported between the groups in terms of the median number of biopsies performed after this second biopsy or the time to subsequent biopsy. Encouragingly, progression-free survival at 5 years was 85.2% and 67.3% for men with a negative and positive second biopsy, respectively.

However, despite a significant difference in volume-related disease progression between men with negative and positive confirmatory biopsies (12.1% and 29.2%, respectively; $P = 0.0003$), rates of

grade-related progression were actually very similar for these two groups (17.5% and 23.4%, respectively; $P = 0.12$). The fact that grade-related progression still occurred in 17.5% of men with a negative second biopsy means that frequency of rebiopsy cannot be reduced during the active surveillance of these men.

“The differences in grade-related and volume-related progression found in our study have implications for the reporting of pathologic progression in active surveillance,” write the authors, who suggest that grade-related progression should be reported independently of total progression as “Gleason score 6 remains the most consistent inclusion criteria used across institutions”.

Melanie Clyne

Original article Wong, L.-M. *et al.* A negative confirmatory biopsy among men on active surveillance for prostate cancer does not protect them from histologic grade progression. *Eur. Urol.* doi:10.1016/j.eururo.2013.04.038