

## PP06

### DOES THE ADDITION OF STANDARD SYSTEMATIC BIOPSIES TO TARGET PROSTATE BIOPSIES INFLUENCE TREATMENT CHOICES FOR PATIENTS AND CLINICIANS?

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**Objectives:** To determine the detection rate of prostate cancer (PCa) Gleason score (GS)  $\geq 7$  in the opposite side of the prostate from the cancer suspicious region (CSR) detected by multiparametric magnetic resonance imaging (mp-MRI) and to determine if it is necessary to perform a standard systematic prostate biopsy in addition to a target biopsy for the CSR.

**Materials & Methods:** A total of 68 consecutive men with elevated prostate-specific antigen (PSA), at least one CSR detected on mp-MRI on a single side of the prostate (right or left, not both), and no transrectal ultrasound-guided biopsy within the preceding 3 years underwent MRI/US fusion-guided biopsy of CSRs and standard systematic prostate biopsy (12 cores). Histopathology results, including GS, location of cancer and percentage of tumor involving positive cores were recorded. Two experienced genitourinary radiologists retrospectively reviewed all mp-MRI studies blindly. The assessment included but was not limited to location and prostate imaging reporting and data system (PI-RADS) scores of CSRs. The findings from the imaging review were correlated with the histopathology results.

**Results:** On confirmatory MRI/US fusion-guided target biopsy, 56 of 68 patients had biopsy-proven PCa (82%). Nine of 68 patients (13%) had PCa GS  $\geq 7$  on the opposite side of the prostate from the target lesions (GS 7, n=5 and GS 8, n=4) detected by the standard systematic biopsy. Among the 9 patients, the mean percentage of the positive core of PCa for GS 7 was 40% and for GS 8 was 25%. Retrospective review of these 9 patients' mp-MRI studies detected corresponding CSRs with PI-RADS score 3 on the opposite side from the target lesions in 3 of 9 patients. The remaining 6 patients had corresponding complete normal findings at mp-MRI on the side of the prostate.

**Conclusions:** Addition of standard systematic prostate biopsy to target biopsy detected PCa GS  $\geq 7$  on the opposite side of the prostate from the target lesions in 13% of patients. This result may influence treatment choices, particularly for those patients considering focal therapy for PCa.