



# Can we omit base cores in transperineal (TP) systemic prostate biopsy?

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## Objective:

To determine whether base cores in TP systemic biopsy provide clinically significant value that affect subsequent management.

## Patients & Methods:

A total of 105 consecutive patients with elevated PSA who underwent TP systemic biopsy from April 2023 to June 2024 in the New Territories West Cluster were reviewed retrospectively. Patients with known history of CA prostate for active surveillance, clinically metastatic CA prostate, and clinical T staging of 3 or above were excluded.

The mean age was 68.9 years old (range: 53-82 years old), mean PSA level was 14.5, and mean TRUS prostate size was 51.2mL.

## Results:

Table 1. Pathology results

Pathology	Number of patients (n=105)
Ca Prostate	54
No evidence of malignancy	42
Atypical small acinar proliferation (ASAP)	6
Suspicious cell	2
High-grade prostatic intraepithelial neoplasia (HGPIN)	1

Among the patients with CA prostate, 25 (46.2%) patients had carcinoma detected in base cores.

Table 2. Patients with positive base cores (n=25)

Including base cores	Excluding base cores
○ 13 patients had $\leq 50\%$ positive cores	12 patients had $\leq 50\%$ positive cores
○ 6 patients had pathology on unilateral lobe ○ 19 patients had pathology on bilateral lobes	Same
○ ISUP grading: ➤ Grade 1: 4 patients ➤ Grade 2: 9 patients ➤ Grade 3: 2 patients ➤ Grade 4: 4 patients ➤ Grade 5: 6 patients	Same, except one: Grade 5 $\rightarrow$ Grade 4
○ D'Amico risk classification: ➤ Low risk: none ➤ Intermediate risk: 10 patients ➤ High risk: 15 patients	Same

There were 6 patients with grade 1-2 complications after TP biopsy:

- AROU: 4
- Haematuria: 1
- Haemospermia: 1

None with grade 3 complications or above.

## Conclusion:

Base cores in TP systemic biopsy did not affect risk classification in CA prostate and did not alter subsequent management