

A guide to Prostate Cancer (CORE/NEEDLE BIOPSY) Histopathology Reporting



Includes the  International Collaboration on Cancer reporting dataset denoted by *

Pre-analytical details

| | | |
|-----------------------------|---|-----------|
| S1.02 | Clinical information provided on request form (complete as narrative or use the structured format below) | Text |
| CLINICAL INFORMATION | | |
| | *Previous history of prostate cancer (including the Gleason grade and score of previous specimens if known) | Text |
| | *Previous biopsy (specify date and where performed) | Text |
| | *Previous therapy | Text |
| | *Other | Text |
| | *Pre-biopsy serum PSA | ___ ng/mL |
| Specimens provided | | |
| | *Clinical stage | Text |
| S1.03 | Pathology accession number | Text |
| S1.04 | Principal clinician | Text |
| G1.01 | Comments | Text |

Macroscopic findings

| | | |
|--------------|--|--|
| S2.01 | *SPECIMEN(S) SUBMITTED | |
| | *Location of specimens (Record sequential specimen indicator & location for each specimen) | ___ (spec. id) AND Text (Location) |
| | *Total number of cores (Record number of cores per specimen) | ___ (cores/spec) |
| | *Length of core(s) (Record for each core received) | ___mm AND/OR Fragments |
| S2.02 | *Block identification key | Text |
| G2.01 | Other macroscopic comment | Text |

Microscopic findings

| | | |
|--------------|--|---|
| S3.02 | *Histological tumour type | See p2 |
| S3.03 | *HISTOLOGICAL GRADE | |
| | *GLEASON SCORE (if indeterminate specify reason) | Indeterminate OR complete the following: |
| | *Primary pattern/grade | ___ (1-5) |
| | *Secondary pattern/grade | ___ (1-5) |
| | *International Society of Urological Pathology (ISUP) Grade (Grade Group/Prognostic Group) | See p2 |
| G3.01 | *Percentage Gleason pattern 4/5 (applicable for Gleason scores ≥ 7) | ___% OR Not identified |

Microscopic findings

| | | |
|--------------|---|---|
| S3.04 | *TUMOUR EXTENT[^] | |
| | *No. of positive cores (≥ 5 mm) and the total number of cores | ___/___ |
| | AND | |
| | *Length of tissue involved by carcinoma | ___mm |
| | OR | |
| | *Linear extent of prostatic tissue involved by carcinoma | ___% |
| S3.05 | *Perineural invasion[^] | Not identified Present |
| G3.02 | *Seminal vesicle invasion[^] | Not identified Present |
| S3.06 | *Lymphovascular invasion[^] | Not identified Present |
| S3.07 | *Extraprostatic extension (EPE)[^] | Not identified Present |
| | If present, consider reporting G3.03. | |
| G3.03 | *Location(s) of EPE | Right base Right mid Right apex Left base Left mid Left apex Other, specify |
| S3.08 | *Intraductal carcinoma of prostate (IDC-P)[^] | Not identified Present |
| G3.04 | *Coexistent pathology | None identified Present, specify |
| G3.05 | Additional microscopic comment | Text |

[^] This element should be recorded for each positive specimen. Negative findings can be recorded per specimen or they can be recorded in the Summary.

Synthesis and overview

| | | |
|--------------|---|------|
| G5.01 | Diagnostic summary | Text |
| | Include: | |
| | <ul style="list-style-type: none"> Tumour type Location Gleason Score <ul style="list-style-type: none"> Highest Composite (optional) Perineural invasion LVI EPE IDC-P Additional comment | |
| S5.01 | Overarching comment | Text |
| G5.02 | Edition/version number of the RCPA protocol on which the report is based | Text |

S3.01 Histological tumour type

Select all that apply:

- Adenocarcinoma (Acinar)
- Other (*specify*)

S3.02 HISTOLOGICAL GRADE

ISUP grade/grade group

- ISUP Grade (Grade Group) 1 (Gleason score ≤6)
- ISUP Grade (Grade Group) 2 (Gleason score 3+4=7)
- ISUP Grade (Grade Group) 3 (Gleason score 4+3=7)
- ISUP Grade (Grade Group) 4 (Gleason score 8)
- ISUP Grade (Group Group) 5 (Gleason score 9-10)
- Indeterminate (specify reason)

ISUP grading system, core/needle biopsies and TURP specimens

| ISUP grade (Grade group) | Gleason score | Definition |
|--------------------------|---------------|--|
| Grade 1 | 2-6 | Only individual discrete well-formed glands |
| Grade 2 | 3+4=7 | Predominantly well-formed glands with lesser component (*) of poorly-formed/fused/cribriform glands |
| Grade 3 | 4+3=7 | Predominantly poorly-formed/fused/cribriform glands with lesser component (**) of well-formed glands |
| Grade 4 | 4+4=8 | Only poorly-formed/fused/cribriform glands |
| | 3+5=8 | Predominantly well-formed glands and lesser component (*) lacking glands (or with necrosis) |
| | 5+3=8 | Predominantly lacking glands and lesser component (**) of well-formed glands (or with necrosis) |
| Grade 5 | 9-10 | Lack gland formation (or with necrosis) with or without poorly formed/fused/cribriform glands |

* Any component of the high-grade pattern (i.e. even if less than 5%) is included in the grade.

** The low-grade pattern is included in the grade only if it is at least 5%.

Gleason scoring of unusual patterns

| Pattern | Morphology | Comment |
|---------------------------|---------------------------------------|--|
| Vacuoles | Cytoplasmic change seen in all grades | Grade as if vacuoles were absent, on the underlying architecture |
| Mucin extravasation | | Grade based on glandular architecture |
| Mucinous fibroplasia | Collagenous micronodules | Grade based on glandular architecture |
| Glomeruloid structures | | Grade as 4 |
| Foamy gland change | | Grade based on glandular architecture |
| Small cell neuroendocrine | | Do not assign a grade |