



A guide to Prostate Cancer (Radical Prostatectomy) Histopathology Reporting

Clinical details		
G1.02	Pathology accession number	Text
S1.02	Principal clinician	Text
S1.03	Surgical procedure	Text
Nature of specimen		
G1.03	Clinical history (including Gleason grade and score of previous specimens)	Text
G1.04	Previous therapy	Text
G1.05	PSA (prebiopsy) value	Text
G1.06	Relevant clinical information for clinicopathological staging	Text
G1.07	Comments	Text

Macroscopic findings		
S2.02	Weight of prostate gland without seminal vesicles	___ g
S2.03	Size of prostate gland	
	Apex–base	___ mm
	Right–left	___ mm
	Anterior–posterior	___ mm
S2.04	Seminal vesicles	Absent Present
	If present, what is size (in greatest dimension)	___ mm
S2.05	Lymph nodes	Absent Present
	If present:	
	Site	Text
	Number	___
G2.02	Macroscopic comments	Text

Microscopic findings		
S3.01	Tumour type	Text
	Adenocarcinoma	Subclassifn.
	Other	Type
G3.01	Tumour location (largest nodule)	R. anterior R. posterior L. anterior L. posterior Other (text)
	Tumour location (other nodules >10 mm)	Text
G3.02	Tumour volume estimate	___ cm ³
	Qualitative description	Text
S3.02	Gleason score (see p2)	
	Primary	___
	Secondary	___
	Tertiary	___

Microscopic findings (cont.)		
S3.03	Extraprostatic extension (EPE)	Negative Focal Extensive
	If focal or extensive, what is location	Text
S3.04	Margin involvement	Negative Positive Equivocal
	If positive or equivocal is it...	Extraprostatic Intraprostatic
	Location	Text
	Length of margin involvement	___ mm
S3.05	Seminal vesicles	Positive Negative
	If positive:	Left side Right side Both
S3.06	Lymph nodes	Positive Negative
	If positive:	Left side Right side Both
	Site	Text
G3.03	Lymphovascular invasion	Absent Present
G3.04	Microscopic comments	Text

Synthesis and overview		
S5.01	Tumour stage (AJCC/UICC)	See p2
G5.01	Diagnostic summary	Text
	Include:	
	a. specimen type (S1.03)	
	b. tumour type (S3.01)	
	c. Gleason score (S3.02)	
	d. tumour stage (S5.01)	
	e. whether or not the specimen margins are involved (S3.04)	
S5.02	Comments	Text

NOTES

S3.02 Gleason Score

Gleason grade

- Closely packed small regular glands forming a circumscribed rounded nodule
Very rarely use in radical prostatectomy specimen reports. Do not use for needle biopsy specimens
- Glands more loosely arranged; not quite as uniform; fairly circumscribed but may have minimal infiltration at margins
May be used in radical prostatectomy and TURP specimen reports. Do not use for needle biopsies
- Discrete glandular units/acini with marked variation in size and shape; infiltrates in and amongst benign prostatic tissue
Very rarely cribriform (see below)
- Fused micro acinar glands; ill-defined glands with poorly formed lumina; large cribriform irregular glands; hypernephroid
- Minimal if any glandular differentiation – solid sheets, cords or single cells. Comedocarcinoma

Gleason score

Number of different grades present	Proportion of grades present	Comments
1	One of 2, 3, 4 or 5 only	Double grade to get score (eg 4+4=8) Record for dominant nodule +/- nondominant (smaller) nodule if of higher grade (if present)
2 – Primary and secondary	Grades mixed	Report both grades, dominant pattern* first (2+3, 3+4, 4+3 ..) Record for dominant nodule +/- nondominant (smaller) nodule if of higher grade (if present)
	Secondary grade is lower and of limited amount (<5%)	Ignore lower grade – 4+3 becomes 4+4 Record for dominant nodule +/- non dominant (smaller) nodule if of higher grade (if present)
	Secondary grade is higher and of limited amount (<5%)	Include higher grade – 3+3 becomes 3+4 Record for dominant nodule +/- non dominant (smaller) nodule if of higher grade (if present)
3 – Primary, secondary and tertiary	Grades 2, 3, 4 or 5	Report dominant grade (largest area) first, then secondary grade (second largest area), then tertiary grade (only if 4 or 5) eg 3+4=7 with tertiary grade 5 eg 2+3=5 with tertiary grade 4 Record for dominant nodule +/- non dominant (smaller) nodule if of higher grade (if present)

Notes:

Dominant (primary) grade is that which occupies the greatest area.
For radical prostatectomy specimens secondary grade is defined as that which occupies the second greatest area.
For radical prostatectomy specimens tertiary grade is defined as that which occupies the third greatest area (provided that it is higher than the primary and secondary grades).

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 as if were absent
Mucinous fibroplasia	Collagenous micronodules	Grade as if were absent
Glomeruloid structures		Grade as 4
Foamy gland change		Grade as if were absent
Small cell neuroendocrine		Do not assign a grade

Gleason scoring of cribriform patterns

- Grade 3 Small, well circumscribed, round with smooth regular edges Rare. Should be used only rarely in scoring
- Grade 4 Irregular cribriform and fused gland masses
Should include nearly all cribriform patterns
- Grade 5 Any cribriform area with necrosis
Comedonecrosis
- PIN Do not include in score
- Intraductal carcinoma Branched architecture of high grade intraductal proliferation filling lumen
Include as Grade 4 (or 5 if comedonecrosis)

PIN = prostatic intraepithelial neoplasia

S5.01 Tumour stage (AJCC/UICC)**

Pathologic primary tumor (T)

pTX Primary tumor cannot be assessed

pT0 No evidence of primary tumor

*

pT2 Organ Confined

pT2a Unilateral, one-half of one side or less

pT2b Unilateral, involving more than one-half side but not both sides

pT2c Bilateral disease

pT3 Extraprostatic extension

pT3a Extracapsular extension or microscopic invasion of bladder neck**

pT3b Seminal vesicle invasion

pT4 Invasion of rectum, levator muscles and/or pelvic wall.

Notes:

- Invasion into the prostate apex or into (but not beyond) the prostate capsule is not classified as T3, but as T2.

* Note: There is no pathologic T1 classification

** Note: Positive surgical margin should be indicated by an R1 descriptor (residual microscopic disease)

Pathologic regional lymph nodes (N)

pNX Regional lymph nodes not sampled.

pN0 No positive regional nodes.

pN1 Metastasis in regional node(s).

Clinical and pathologic distant metastasis (M)

M0 No distant metastasis.

M1 Distant metastasis

M1a Non-regional lymph node(s)*

M1b Bone(s)

M1c Other site(s) with or without bone disease

*Notes:

When more than one site of metastasis is present, the most advanced category is used. pM1c is most advanced.

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