Appendix A TNM pathological staging (UICC TNM 9)[1]

This update to Appendix A provides information on staging using UICC TNM 9, which should be used for all tumours diagnosed from 1 January 2026.

The classification applies only to germ cell tumours of the testis. There should be histological confirmation of the disease and division of cases by histological type. Histopathological grading is not applicable.

The presence of elevated serum tumour markers, including alpha-fetoprotein (AFP), human chorionic gonadotropin (hCG) and lactate dehydrogenase (LDH), is frequent in this disease. Staging is based on the determination of the anatomical extent of disease and assessment of serum tumour markers.

Stages are subdivided based on the presence and degree of elevation of serum tumour markers. Serum tumour markers are obtained immediately after orchiectomy and, if elevated, should be performed serially after orchiectomy according to the normal decay for AFP (half-life 7 days) and hCG (half-life 3 days) to assess for serum tumour marker elevation. The S classification is based on the nadir value of hCG and AFP after orchiectomy. The serum level of LDH (but not its half-life levels) has prognostic value in patients with metastatic disease and is included in staging.

pT Primary tumour

pTX	Primary tumour cannot be assessed (used if no radical orchiectomy has been performed)*
pT0	No evidence of primary tumour (e.g., histological scar in testis)
pTis	Intratubular germ cell neoplasia
pT1	Tumour limited to testis, including the rete testis, but without vascular/lymphatic invasion or invasion of the epididymis; tumour may invade tunica albuginea but not tunica vaginalis
pT2	Tumour limited to testis with vascular/lymphatic invasion, or invading hilar soft tissue or epididymis or tumour extending through tunica albuginea with involvement of tunica vaginalis
pT3	Tumour invades spermatic cord with or without vascular/lymphatic invasion

pT4 Tumour invades scrotum with or without vascular/lymphatic invasion

Notes

* except for pTis and pT4, where radical orchiectomy is not always necessary for classification purposes, the extent of the primary tumour is classified after radical orchiectomy)

pN Regional lymph nodes

The regional lymph nodes are the abdominal para-aortic (periaortic), preaortic, interaortocaval, precaval, paracaval, retrocaval and retroaortic nodes. Nodes along the spermatic vein should be considered regional.

Laterality does not affect the N classification.

The intrapelvic nodes and the inguinal nodes are considered regional after scrotal or inguinal surgery performed before the diagnosis of the testis tumour.

pNX Regional lymph nodes cannot be assessed

pN0 No regional lymph node metastasis

pN1 Metastasis with a lymph node mass 2 cm or less in greatest dimension and five or fewer positive nodes, none more than 2 cm in greatest dimension

pN2 Metastasis with a lymph node mass more than 2 cm but not more than 5 cm in greatest dimension; or more than five nodes positive, none more than 5 cm; or evidence of extranodal extension of tumour

pN3 Metastasis with a lymph node mass more than 5 cm in greatest dimension

pM Distant metastasis

pM1 Distant metastasis

- pM1a Non-regional lymph node(s) or lung metastasis
- pM1b Distant metastasis other than non-regional lymph nodes and lung

Serum Tumour Markers

SX Serum marker studies not available or not performed

S0 Serum marker study levels within normal limits

	LDH	hCG (mIU / ml)	AFP (ng / ml)
S1	<1.5 x N	and <5000	and <1000
S2	1.5-10 x N	or 5000 – 50,000	or 1000 – 10,000
S3	>10 x N	or >50,000	or >10,000

N indicates the upper limit of normal for the LDH assay

Stage grouping

Stage	T	N	M	S
Stage 0	pTis	N0	M0	S0
Stage I	pT1, pT2, pT3, pT4	N0	M0	SX
Stage IA	pT1	N0	M0	S0
Stage IB	pT2, pT3, pT4	N0	M0	S0
Stage IS	Any pT/TX	N0	M0	S1, S2, S3
Stage II	Any pT/TX	N1, N2, N3	M0	SX
Stage IIA	Any pT/TX	N1	M0	S0
	Any pT/TX	N1	M0	S1
Stage IIB	Any pT/TX	N2	M0	S0
	Any pT/TX	N2	M0	S1
Stage IIC	Any pT/TX	N3	M0	S0
	Any pT/TX	N3	M0	S1
Stage III	Any pT/TX	Any N	M1a	SX
Stage IIIA	Any pT/TX	Any N	M1a	S0
	Any pT/TX	Any N	M1a	S1
Stage IIIB	Any pT/TX	N1, N2, N3	M0	S2
	Any pT/TX	Any N	M1a	S2
Stage IIIC	Any pT/TX	N1, N2, N3	M0	S3
	Any pT/TX	Any N	M1a	S3
	Any pT/TX	Any N	M1b	Any S

References

1. Brierley JD, Giuliani M, O'Sullivan B, Rous B, Van Eycken L (eds.). *TNM Classification of Malignant Tumours* (9th edition). Oxford, UK: Wiley-Blackwell; 2025.