# Appendix A TNM classification of penile and distal urethral tumours (UICC TNM 8)

This update to Appendix A provides updated information on staging using UICC TNM 8, which should be used for all tumours diagnosed after 1 January 2018.

In the case of multiple tumours, the tumour with the highest T category should be classified and the multiplicity or number of tumours should be indicated in parentheses, e.g. pT2 (m) or pT2 (5).

The new WHO classification uses only grades 1–3 in Squamous Cell Carcinoma. The grade given is that of the highest grade area of tumour seen irrespective of the percentage of tumour. Sarcomatoid differentiation should also be reported separately.

Use of the category TX is to be avoided and the designation T… at least is preferable if full staging is not possible because of the nature of the specimen (e.g. small incision biopsies) or the presence of positive margins.

TNM 8 removes the need to substage penile tumours into T2a and T2b as tumours involving the Corpus Cavernosum are now T3. Urethral involvement is no longer regarded as a defining feature of staging.

### Tumours of the penis and foreskin

#### Primary tumour (T)

TX Primary tumour cannot be assessed

T0 No evidence of primary tumour

Tis Carcinoma in situ(PeIN)

Ta\* Noninvasive localise squamous cell carcinoma\*

T1a Tumour invades subepithelial connective tissue\*\* without lymphovascular invasion or perineural invasion and is not poorly differentiated (i.e. grade 3 or sarcomatoid)

T1b Tumour invades subepithelial connective tissue\*\* with lymphovascular invasion or perineural invasion or is poorly differentiated

T2 Tumour invades corpus spongiosum with or without invasion of the urethra

T3 Tumour invades corpus cavernosum

T4 Tumour invades other adjacent structures

\*Including verrucous carcinoma. The authors view is that the category Ta is to be used with care as these tumours are exceptionally rare and are not evidence based

\*\*Glans: Tumour invades lamina propria.

Foreskin: Tumour invades dermis, lamina propria or dartos fascia.

Shaft: Tumour invades connective tissue between epidermis and corpora and regardless of   
 location.

#### Regional lymph nodes (N)

##### Clinical stage definition

cNX Regional lymph nodes cannot be assessed

cN0 No palpable or visibly enlarged inguinal lymph nodes

cN1 Palpable mobile unilateral inguinal lymph node

cN2 Palpable mobile multiple or bilateral inguinal lymph nodes

cN3 Palpable fixed inguinal nodal mass or pelvic lymphadenopathy, unilateral or bilateral

*Pathologic stage definition*

pNX Regional lymph nodes cannot be assessed

pN0 No regional lymph node metastasis

pN1 Metastasis in up to two regional lymph nodes

pN2 Metastases in three or more unilateral lymph nodes or or bilateral inguinal lymph nodes

pN3 Extranodal extension of lymph node metastasis or pelvic lymph node(s), unilateral or bilateral

#### Distant metastasis (M)

M0 No distant metastasis (clinical category only)

M1 Distant metastasis – includes lymph node metastasis outside of the true pelvis in addition to visceral or bone sites

#### Anatomic stage/prognostic groups

|  |  |  |  |
| --- | --- | --- | --- |
| **Stage** | **T** | **N** | **M** |
| **0** | Tis | N0 | M0 |
| Ta | N0 | M0 |
| **I** | T1a | N0 | M0 |
| **IIA** | T1b | N0 | M0 |
| T2 | N0 | M0 |
| **IIB** | T3 | N0 | M0 |
| **IIIA** | T1–3 | N1 | M0 |
| **IIIB** | T1–3 | N2 | M0 |
| **IV** | T4 | Any N | M0 |
| Any T | N3 | M0 |
| Any T | Any N | M1 |

### Tumours of the distal urethra

It should be noted that the N categories differ considerably between urethral and penile tumours and extranodal spread is not a feature of the urethral N staging (i.e. there is no N3 category).

#### Primary tumour (T)

#### Urethra (male and female)

TX Primary tumour cannot be assessed

T0 No evidence of primary tumour

Ta\* Non-invasive papillary, polypoid or verrucous carcinoma\*

Tis Carcinoma in situ (PeIN)\*\* or urothelial carcinoma in situ

T1 Tumour invades subepithelial connective tissue

T2 Tumour invades any of the following: corpus spongiosum, prostate or periurethral muscle

T3 Tumour invades any of the following: corpus cavernosum, beyond prostatic capsule, anterior vagina or bladder neck (extraprostatic extension)

T4 Tumour invades other adjacent organs (invasion of the bladder)

\*The dataset authors’ view is that the use of this category for verrucous carcinoma is to be avoided as it is not evidence based. This category includes non-invasive urothelial carcinomas but these are very rare in the distal urethra.

\*\*The dataset authors recommend the use of the same terminology (PeIN) for squamous precancerous lesions of the distal urethra as in the penis.

#### Regional lymph nodes (N)

NX Regional lymph nodes cannot be assessed

N0 No regional lymph node metastasis

N1 Single regional lymph node metastasis in the inguinal region or true pelvis [perivesical, obturator, internal (hypogastric) and external iliac], or presacral lymph node

N2 Multiple regional lymph node metastasis in the inguinal region or true pelvis [perivesical, obturator, internal (hypogastric) and external iliac], or presacral lymph node

#### Distant metastasis (M)

M0 No distant metastasis\*

M1 Distant metastasis

\*This is a clinical category, not to be used in pathological reporting.

#### Anatomic stage/prognostic groups

|  |  |  |  |
| --- | --- | --- | --- |
| **Stage** | **T** | **N** | **M** |
| **0** | Tis | N0 | M0 |
| Ta | N0 | M0 |
| **I** | T1 | N0 | M0 |
| **II** | T2 | N0 | M0 |
| **III** | T1, T2 | N1 | M0 |
| T3 | N0, N1 | M0 |
| **IV** | T4 | N0, N1 | M0 |
| Any T | N2 | M0 |
| Any T | Any N | M1 |

**Reference**

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2. Corbishley C, Chaux A, Colecchia M, Cubilla AL, Shanks J, Velazquez EF *et al.*  *Carcinoma of the Penis and Distal Urethra Histopathology Reporting Guide (1st edition*.) Sydney, Australia: International Collaboration on Cancer Reporting. Available at: [www.iccr-cancer.org/datasets/published-datasets/urinary-male-genital](http://www.iccr-cancer.org/datasets/published-datasets/urinary-male-genital).
3. Humphrey PA, Moch H, Reuter VE, Ulbright TM (eds.) *WHO Classification of Tumours of the Urinary System and Male Genital Organs (4th edition).* Lyon, France: IARC Press, 2016.