



Coding stage

Coding Sarcomas

Liesbet Van Eycken

Preface	XII
Acknowledgments	XIV
Organizations Associated with the TNM System	XV
Members of UICC Committees Associated with the TNM System	XVI
Section Editors	XVII

Introduction 1

Head and Neck Tumours 17

Lip and Oral Cavity	18
Pharynx	22
Larynx	31
Nasal Cavity and Paranasal Sinuses	36
Unknown Primary – Cervical Nodes	40
Malignant Melanoma of Upper Aerodigestive Tract	45
Major Salivary Glands	47
Thyroid Gland	51

Digestive System Tumours 55

Oesophagus and Oesophagogastric Junction	57
Stomach	63
Small Intestine	67
Appendix	70
Colon and Rectum	73
Anal Canal and Perianal Skin	77
Liver	80
Intrahepatic Bile Ducts	83
Gallbladder	85
Perihilar Bile Ducts	87
Distal Extrahepatic Bile Duct	89
Ampulla of Vater	91

Pancreas	93
Well-Differentiated Neuroendocrine Tumours of the Gastrointestinal Tract	96

Lung, Pleural, and Thymic Tumours 105

Lung	106
Pleural Mesothelioma	113
Thymic Tumours	115

Tumours of Bone and Soft Tissues 119

Bone	120
Soft Tissues	124
Gastrointestinal Stromal Tumour (GIST)	127

Skin Tumours 131

Carcinoma of Skin	133
Skin Carcinoma of the Head and Neck	136
Carcinoma of Skin of the Eyelid	139
Malignant Melanoma of Skin	142
Merkel Cell Carcinoma of Skin	147

Breast Tumours 151

Gynaecological Tumours 159

Vulva	161
Vagina	164
Cervix Uteri	166
Uterus – Endometrium	171
Uterine Sarcomas	175
Ovarian, Fallopian Tube, and Primary Peritoneal Carcinoma	179
Gestational Trophoblastic Neoplasms	184

Urological Tumours 187

Penis	188
Prostate	191
Testis	195
Kidney	199

Renal Pelvis and Ureter	202
Urinary Bladder	204
Urethra	208

Adrenal Cortex 211

Ophthalmic Tumours	215
Carcinoma of Conjunctiva	216
Malignant Melanoma of Conjunctiva	218
Malignant Melanoma of Uvea	221
Retinoblastoma	226
Sarcoma of Orbit	230
Carcinoma of Lacrimal Gland	232

Hodgkin Lymphoma 235

Non-Hodgkin Lymphomas 239

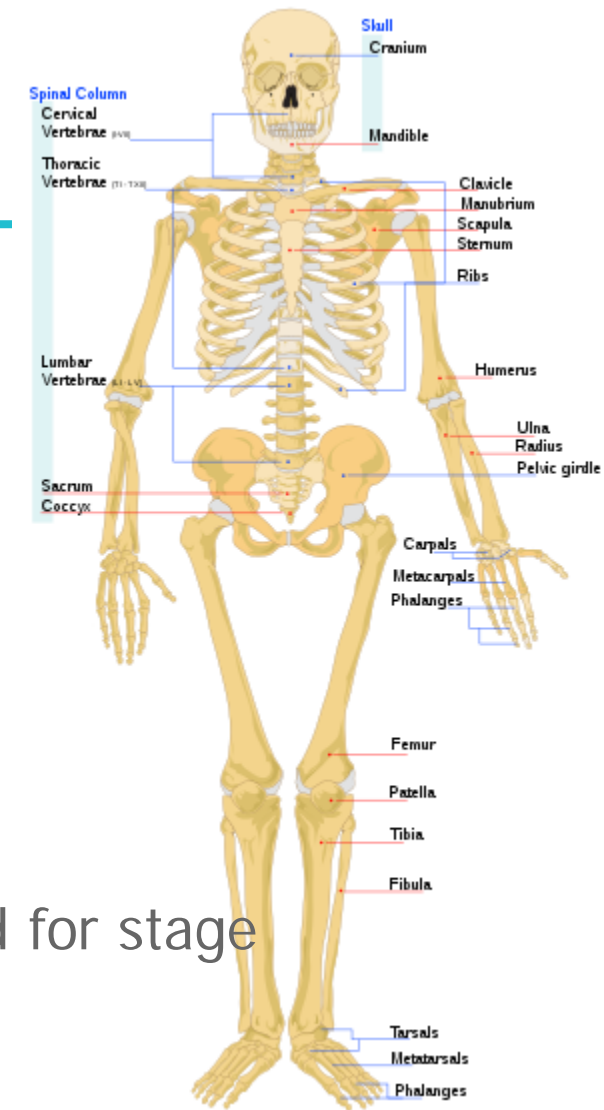
Essential TNM 241

Paediatric Tumours	247
Gastrointestinal Tumours	247
Bone and Soft Tissue Tumours	248
Gynaecological Tumours	249
Urological Tumours	250
Ophthalmic Tumours	251
Malignant Lymphoma	252
Central Nervous System	252

Sarcoma

- Tumours of Bone
- Tumours of Soft Tissues
 - Extremity and superficial trunk
 - Retroperitoneum
 - Head and neck
 - Thoracic and abdominal viscera
- Gastrointestinal Stromal Tumour (GIST)
- Uterine sarcomas
 - Leiomyosarcoma, endometrial stromal sarcoma
 - Adenosarcoma

Bone



- Topography C40-C41, **specific T-categories for:**
 - Appendicular Skeleton, Trunk, Skull and Facial Bones
 - Spine (no stage available)
 - Pelvis (no stage available)
- **Histology:** All primary malignant bone tumours
 - Exceptions: lymphoma, myeloma, surface/juxtacortical osteosarcoma, juxtacortical chondrosarcoma
- **Histopathological grade:** low grade (G1) high grade (G2, G3) needed for stage
 - Example: Stage IA: T1 N0 M0 - G1, GX **Low Grade**
Stage IIA: T1, N0, M0 – G2, G3, **High Grade**

Bone: T and N- category principles

- T-category based on **dimensions** and anatomic **extensions**
 - Principle of '*segments*' for spine and pelvic sarcomas
- N-category: N0-N1
 - **Regional lymph nodes**: appropriate to the site of the primary tumour
 - Node involvement is RARE
 - Even when no clinical/pathological assessment available:
N0 can be considered instead of (p)NX

Bone: Spine segments for staging

T: number of spinal segments involved or involvement of the spinal canal/great vessels.

e.g. 5 Vertebral segments: right/left pedicle, right/left body, posterior element

- **T1** = 1 or 2 adjacent vertebral segments.
- **T2** = three adjacent vertebral segments.
- **T3** = ≥ 4 adjacent vertebral segments, or any tumour involving nonadjacent segments.
- **T4** = invasion of spinal canal or the great vessels.

See Figure 38.1 p. 473 AJCC Manual TNM 8th edition, 1st print

Bone: Pelvic segments for staging

T is defined primarily by the number of pelvic segments involved, the presence of extraosseous extension, or involvement of the pelvic vessels.

- **T1** = 1 pelvic segment without extraosseous extension.
- **T2** = 1 pelvic segment with extraosseous extension or 2 segments without extraosseous extension.
- **T3** = 2 pelvic segments with extraosseous extension.
- **T4** = 3 pelvic segments, extend across the sacroiliac joint, encase the external iliac vessels, or presence of gross tumour within the pelvic vessels.

See Figure 38.2 p. 474 AJCC Manual TNM 8th edition, 1st print

Acetabulum/
periacetabulum

Soft tissue: criteria TNM classification

- **Topography** C38.1-3, C47-C49, C00-C14, C15-C26, C50,, **specific T-categories** for:
 - Extremity and Superficial trunk
 - Retroperitoneum
 - Head and neck (no stage)
 - Thoracic and abdominal viscera (no stage)
- **Histological types** not included:
 - Kaposi sarcoma, dermatofibrosarcoma, sarcoma from dura mater or brain, angiosarcoma
 - Cystosarcoma phyllodes is staged as a STS of the superficial trunk
- **Histopathological grade:** low grade (G1) high grade (G2, G3) needed for stage
 - Extremity
 - Stage IA: T1 N0 M0 - G1, GX **Low Grade**
 - Stage II: T1, N0, M0 – G2, G3, **High Grade**



Soft tissue: T and N- category principles

- **T-category** based on localization, dimensions and anatomic extensions
- N-category: N0-N1
 - **Regional lymph nodes:** appropriate to the site of the primary tumour
 - **Node involvement is rare**
 - Even when no clinical or pathological assessment available: N0 can be considered instead of (p)NX

Soft tissue: T-category

Dimensions only

Extremity and Superficial Trunk

- T1 Tumour 5 cm or less in greatest dimension
- T2 Tumour more than 5 cm but no more than 10 cm in greatest dimension
- T3 Tumour more than 10 cm but no more than 15 cm in greatest dimension
- T4 Tumour more than 15 cm in greatest dimension

Retroperitoneum

- T1 Tumour 5 cm or less in greatest dimension
- T2 Tumour more than 5 cm but no more than 10 cm in greatest dimension
- T3 Tumour more than 10 cm but no more than 15 cm in greatest dimension
- T4 Tumour more than 15 cm in greatest dimension

Head and Neck

- T1 Tumour 2 cm or less in greatest dimension
- T2 Tumour more than 2 cm but no more than 4 cm in greatest
- T3 Tumour more than 4 cm in greatest dimension
- T4a Tumour invades the orbit, skull base or dura, central compartment viscera, facial skeleton, and or pterygoid muscles
- T4b Tumour invades the brain parenchyma, encases the carotid artery, invades prevertebral muscle or involves the central nervous system by perineural spread

Thoracic and Abdominal Viscera

- T1 Tumour confined to a single organ
- T2a Tumour invades serosa or visceral peritoneum
- T2b Tumour with microscopic extension beyond the serosa
- T3 Tumour invades another organ or macroscopic extension beyond the
- T4a Multifocal tumour involving no more than two sites in one organ
- T4b Multifocal tumour involving more than two sites but not more than 5 sites
- T4c Multifocal tumour involving more than five sites

Gastrointestinal Stromal Tumour (GIST)

- **Topography** C15-C20, C48.0-2;8
- **T-category:** dimension only
 - T1 Tumour 2 cm or less
 - T2 Tumour more than 2 cm but not more than 5 cm
 - T3 Tumour more than 5 cm but not more than 10 cm
 - T4 Tumour more than 10 cm in greatest dimension
- **Histopathological grade:** needed for stage
 - Low mitotic rate: 5 or fewer per 50 hpf
 - High mitotic rate: over 5 per 50 hpf
 - e.g. gastric tumour T2N0M0: Stage IA: if low mitotic rate – Stage II if high mitotic rate
- **N-category N0-N1**
 - Regional lymph nodes: appropriate to the site of the primary tumour
 - Node involvement is rare: Even when no clinical or pathological assessment available: N0 can be considered instead of (p)NX
- **Stage:** Gastric GIST and intestinal GIST

Uterine sarcoma–FIGO/TNM

Adenosarcoma

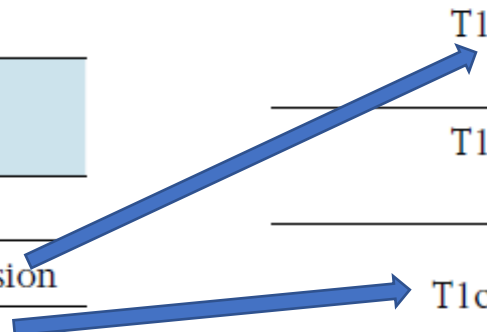
T – Primary tumour

TNM categories	FIGO Stage	Definition
T1	I	Tumour limited to the uterus
T1a	IA	Tumour limited to the endometrium/ endocervix
T1b	IB	Tumour invades to less than half of the myometrium
T1c	IC	Tumour invades more than half of the myometrium
T2	II	Tumour extends beyond the uterus, within the pelvis
T2a	IIA	Tumour involves adnexa
T2b	IIB	Tumour involves other pelvic tissues
T3	III	Tumour infiltrates abdominal tissues
T3a	IIIA	One site
T3b	IIIB	More than one site
N1	IIIC	Metastasis to regional lymph nodes
T4	IVA	Tumour invades bladder or rectum
M1	IVB	Distant metastasis

Leiomyosarcoma, Endometrial stromal sarcoma

T – Primary tumour

TNM categories	FIGO Stage	Definition
T1	I	Tumour limited to the uterus
T1a	IA	Tumour 5 cm or less in greatest dimension
T1b	IB	Tumour more than 5 cm
T2	II	Tumour extends beyond the uterus, within the pelvis
T2a	IIA	Tumour involves adnexa
T2b	IIB	Tumour involves other pelvic tissues
T3	III	Tumour infiltrates abdominal tissues
T3a	IIIA	One site
T3b	IIIB	More than one site
N1	IIIC	Metastasis to regional lymph nodes
T4	IVA	Tumour invades bladder or rectum
M1	IVB	Distant metastasis



- Exercises sarcoma

- <https://create.kahoot.it/share/sarcoma-exercises/03eeb2dc-e3c2-44da-8cd9-0f5d968b1bdd>

