



## Coding stage – Session 4

Coding Sarcomas

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<b>Preface</b>	XII
<b>Acknowledgments</b>	XIV
<b>Organizations Associated with the TNM System</b>	XV
<b>Members of UICC Committees Associated with the TNM System</b>	XVI
<b>Section Editors</b>	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

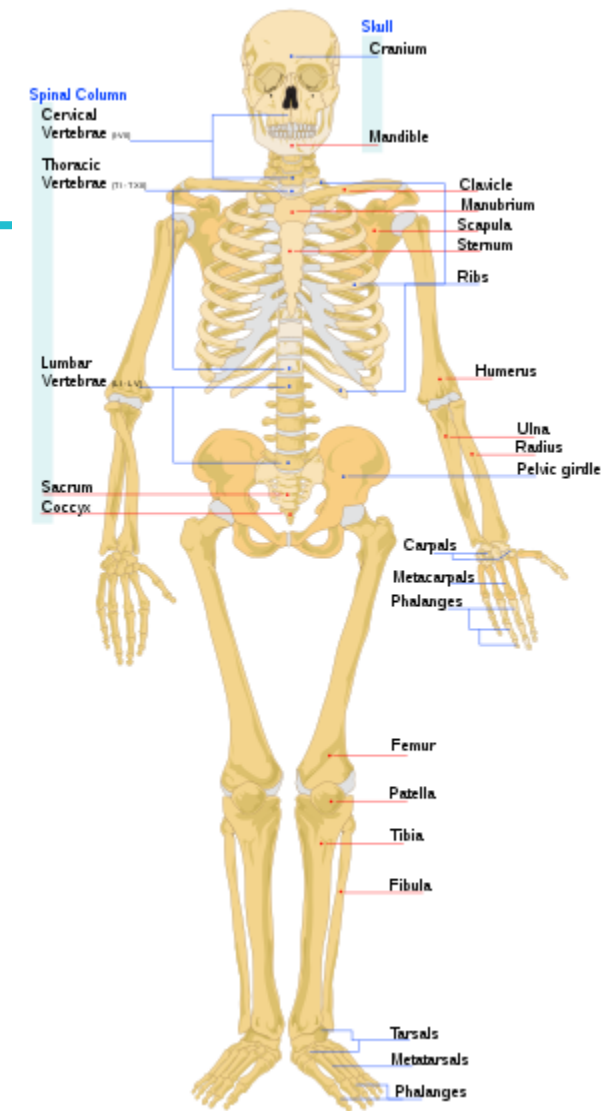
# Sarcoma

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- 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 (C40 – C41)

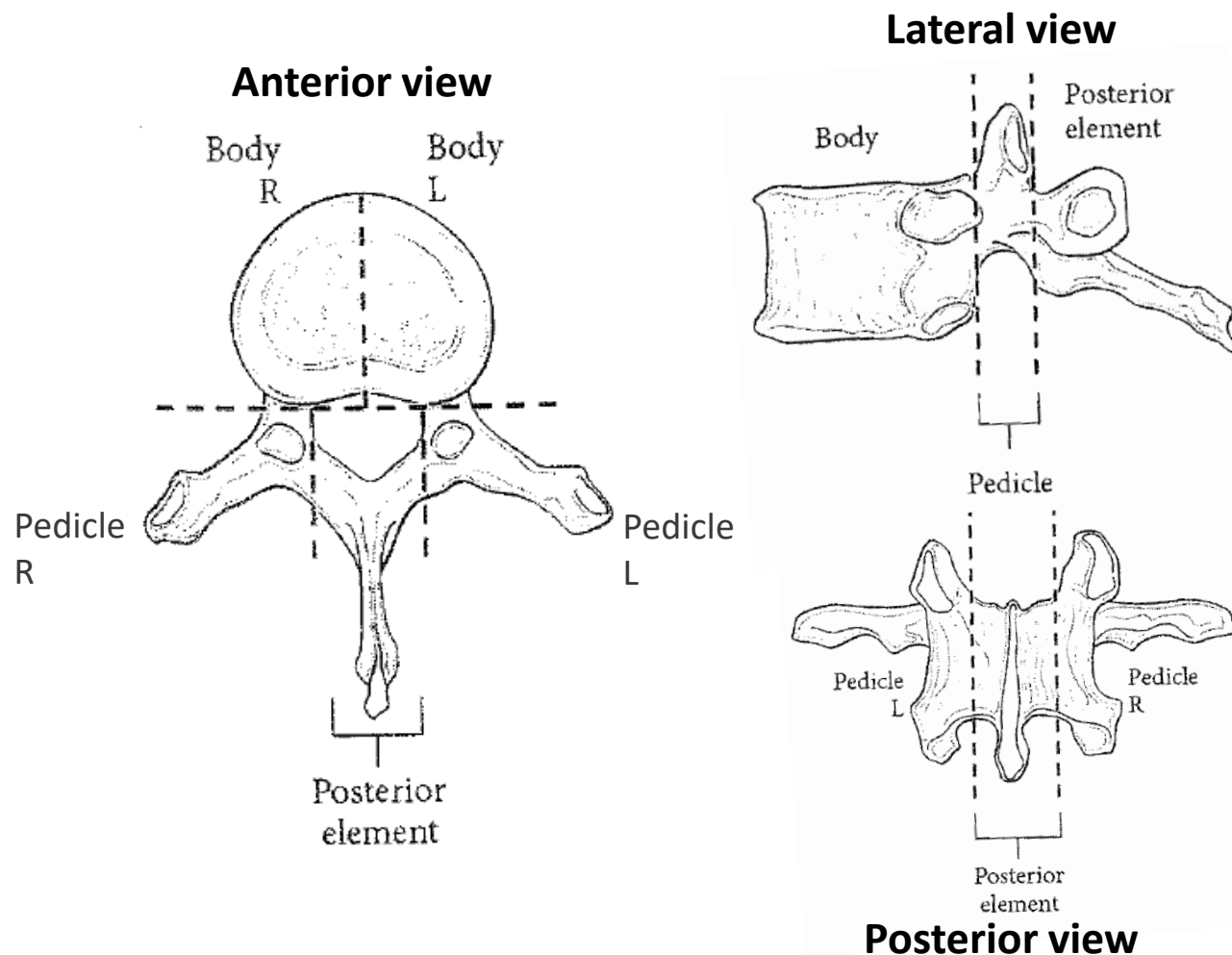
- **Specific T-categories for:**
  - Appendicular Skeleton, Trunk, Skull and Facial Bones
  - Spine (no stage available)
  - Pelvis (no stage available)
- **Histology:** All primary malignant bone tumours
  - *Exceptions:* lymphoma, myeloma, surface/juxtacortical osteosarcoma, juxtacortical chondrosarcoma
- **Histological 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-, N- and M- category principles / Stage

- 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 used instead of (p)NX
- M-category
  - M0 – M1a lung – M1b other distant metastasis
- Stage: if available: GRADE to be included to summarize T,N,M, into a STAGE

# Bone: Spine segments for staging

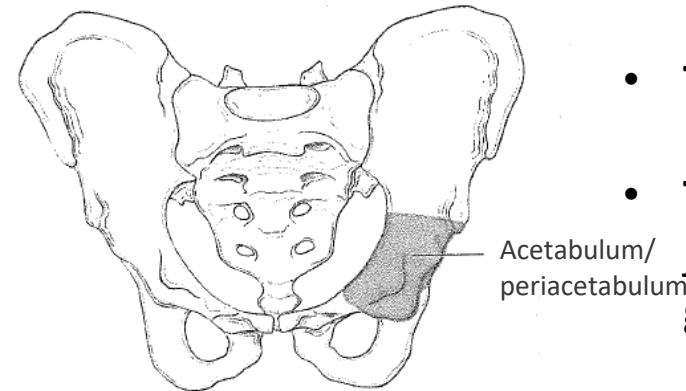
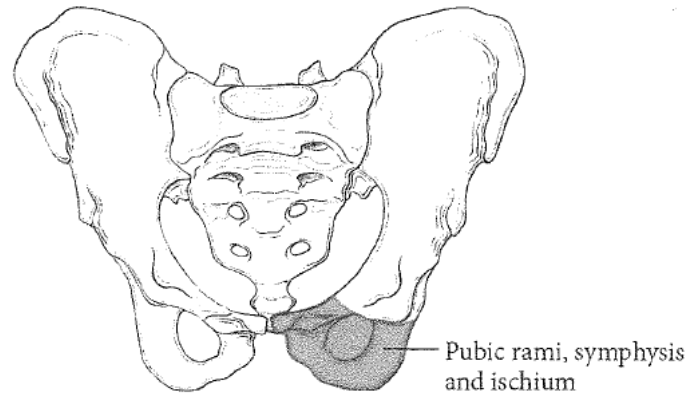
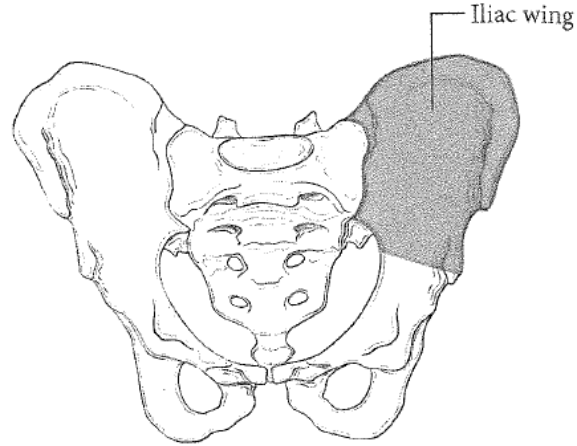
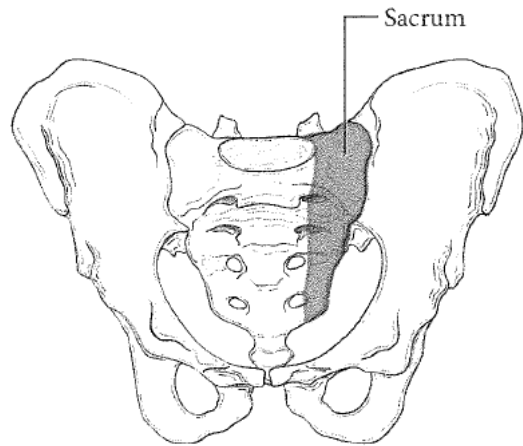


**T:** number of spinal segments involved or involvement of the spinal canal/great vessels.

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** =  $\geq 4$  adjacent vertebral segments, or any tumour involving nonadjacent segments.
- **T4** = invasion of spinal canal or the great vessels.

# 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.

# 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
- **Histological 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

## Dimensions and Invasion into...

## Invasion serosa and multifocality

- 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 mitoses 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
  - => Mitotic counting is for an area of 5 mm<sup>2</sup>
- **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 involves 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

