	Head and Neck				
	Most sites	HPV + Oropharynx	Nasopharynx	Thyroid	
N1	Single node </= 3cm	Unilateral LN </= 6cm	Unilateral LN </= 6cm AND Above cricoid RP LN </= 6cm	N1a - nodes in level VI N1b - nodes in other areas	Oral cavity primary ECS and 1 node <3cm on final pathology changes N3b to N2a
N2	N2a - single node 3-6cm N2b - multiple nodes on unilateral side N2c - Bilateral LNs	Bilateral LN </= 6cm	Bilateral LN </=6cm AND Above Cricoid		
N3	N3a - any LN >6cm N3b - ECS	Any LN >6cm	N3a : any LN >6cm N3b : LN >6cm and LN that extends below cricoid		
	ORAL	OROPHARYNGEAL p16 ve or -ve	NASOPHARYNX	HYPOPHARYNX (3 sub sites: pyriform fossa, post pharyngeal wall and post cricoid region)	VOCAL Cords (larynx C3-C6) and supra and sub glottis
T1	<2cm and <5mm depth	</=2cm	nasopharynx, oropharynx, nasal cavity tumours	<2cm + 1 subsite only	limited to subsite (cords or supraglottis or sub glottis)
T2	>2-4cm and <10mm depth *or <2cm and >5mm depth*	2- </=4cm	extension to pterygoid muscles, pre vertebral muscles, parapharyngeal space (3 Ps)	2-4cm OR more than 1 part of hypopharynx	extension to adjacent subsite (in larynx) with impaired or normal cord mobility
T3	> 4cm and <10mm depth *(or 2-4cm and >10mm depth)*	>4cm or extension to lingual surface of epiglottis	Invades bones - cervical vertebra, skull base, or paranasal sinuses	>4cm OR with fixation of hemilarynx/ vocal cords OR extension to oesophagus	FIXED cords BUT limited to larynx (can include paraglottic space, invasion of inner cortex of thyroid cartilage, post cricoid area etc)
T4	T4a - invades cortical bone, floor of mouth, maxillary sinus or skin or >4cm and >10mm depth T4b - invades skull base,	invades pterygoids, deep/extrinsic muscles of tongue, larynx, skull base, carotid encasement, nasopharynx	invades neuro structures, orbit, cranial nerves, brain OR hypo pharynx, parotid gland, infra temporal fossa	extension to hyoid bone or thyroid/cricoid cartilage or thyroid gland	INVADES THROUGH OUTER THRYOID CARTILAGE +/- tissues beyond larynx (trachea, soft tissue of neck, deep extrinsic muscles of tongue) , oesophagus, thyroid

Head and Neck			
		Thyroid	MAXILLARY SINUS
		T1 - </=2cm (a/b is <1 and <2)	T1 - maxillary sinus mucosa
		T2 - </= 4cm	T2 - bone erosion - into hard palate or middle meatus (nose)
		T3 - minimal extra thyroidal extension	T3 - into ethmoid sinus and medial wall of orbit or post wall of max sinus
		T4 a - oesophagus, trachea, larynx T4b - great vessels/ prevertebral fascia	T4 - into orbit anterior bit, or sphenoid sinus, pytergoid plates or ITF T4b - into nasopharynx, brain, dura, clivus

	Gastrointestinal			
	Colon/rectal	Pancreatic	Oesophageal	Anal
N1	1-3 nodes N1a - 1 node N1b - 2-3 nodes N1c - nodules in serosa or peritonealised soft tissue around rectum and colon but no discrete nodes	1-3 nodes	1-2 nodes	N1a : inguinal, mesolectal, internal iliac, obturator LN N1b - external iliac LN N1c - external iliac and N1a nodes
N2	4-7 nodes	4 or more nodes	3-6 nodes	
N3			7 or more nodes	
T1	utpo submucosa	</= 2cm	T1a = lamina propria/muscularis mucosa T1b = submucosa	</= 2cm
T2	muscularis propria	>2 but </=4 cm	muscularis propria	>2 but </=5cm
T3	Beyond muscularis into serosa and pericolonic tissue T3a </= 1mm T3b <=/5mm T3c </= 15mm T3d >15mm	>4cm	adventitia	>5cm
T4	T4a: visceral peritoneum T4b: other organs	invovles: coeliac axis, SMA, common hepatic artery	T4a - pleural, pericardium, diaphragm, peritoneum T4b - aorta, bone, trachea	other organs (not rectum or sphincters)
STAGING	T1-T2 N0 = Stage 1 T3-T4b N0 = Stage 2 N1/N2 = Stage 3	**Staging for EMRs oesophagus:** pT1a: · M1- limited to the epithelial layer (HGD/IMC) · M2- Invades lamina propria · M3- Invades into but not through the muscularis mucosa		pT1b: · SM1: Infiltrates submucosa <500microns · SM2: Infiltrates submucosa <1000 microns · SM3: Infiltrates submucosa >1000microns

	Other above diaphragm				
	LUNG		Mesothelioma	Thymoma (masaoka-koga (surgical) staging)	Breast
T1	</= 3cm tumour NOT involving main bronchus T1a </= 1 cm T1b 1-2 cm T1c 2-3 cm		Ipsilateral pleura	STAGE 1 - no capsular invasion	< / = 2cm
T2	>3 and </=5cm. CAN involve main bronchus/ atelectasis extending upto hilum (but NOT involve carina) T2a - 3-4 cm T2b 4-5 cm		invasion of lung parenchyma or diaphragm	STAGE II - IIA - microscopic invasion of capsule IIB - macroscopic invasion of mediastinal fat or pleural	>2 and </= 5cm
T3	>5 and </= 7cm Can involve CARINA, pleura, pericardium, chest wall, phrenic nerve Can involve second tumour in same lobe of lung		Invasion of : endo-thoracic fascia or solitary site of chest wall pericardium (partial thickness) or mediastinal fat	STGAE III Invasion of pericardium, vessels, lung	> 5cm
T4	>7cm Can involve diaphragm or mediastinal structures Or a second tumour in different lobe of ipsilateral lung		Invasion of: -full thickness pericardium/ pericardial effusion - contralateral pleura - chest wall / ribs - vertebra/spinal cord - mediastinal organs - peritoneum	STAGE IV IVa - pleural and pericardial mets IVb - distant mets	T4a - chest wall invasion T4b - skin oedema/ulceration T4c - a + b T4d - inflammatory cancer
N1	ipsilateral, hilar nodes		Ipsilateral intrathoracic nodes		mobile axillary nodes
N2	mediastinal or subcarinal nodes		contralateral intrathoracic nodes + SCF nodes		fixed axillary nodes OR internal mammary nodes
N3	contralateral hilar/mediastinal nodes or any SCF nodes				SCF or infraclavicular nodes Axillary AND internal mammary nodes
M1a	pleural or pericardial effusion OR tumour in opposite lung	LUNG: Stage 1a : T1N0 Stage 1b : T2aN0 (adj osimertinib) Stage 2 : T2bN0, T3N0, T1-T2 N1 (adjuvant chemo or adjuvant atezolizumab after Sx + chemo) Stage 3a: T1T2 N2 and T3/T4 N1 (upper limit adj osimertinib or adjuvant atezolizumab)			pN1 - 1-3 axillary nodes (+/- pathological IMC nodes only) pN2 - 4-9 axillary nodes or clinical IMC nodes only pN3 - 10 or more axillary nodes OR SCF/INFC nodes +/- IMC nodes
M1b	single extra thoracic met				
M1c	multiple extra thoracic mets				

UROLOGY

	Bladder	Penile	Prostate	Renal
Ta	papillary and non invasive LOW RISK : Ta and < 3cm and Gd1/2 INT RISK : Ta and multifocal or >3cm AND Gd1/2 HIGH RISK : Ta + Gd 3, CIS or pT1	non invasive, verrocous Ca		
T1	lamina propria	sub epithelial connective tissue T1a - NO LVSI and well/mod differentiated T1b - LVSI or poorly differentiated	not clinically palpable / not seen on imaging T1 a: <5% of TURP chips T1 b : >5% of TURP chips T1 c: +ve TRUS biopsy	</= 7cm
T2	muscle invasive	corpus spongiosum +/- urethra	T2 - limited to prostate T2a - <50% of one lobe T2b - >50% of 1 lobes T2c - bilateral lobes	> 7cm
T3	peri-vesical fat T3a - microscopic invasion T3b - macroscopic invasion	corpus cavernosum +/- urethra	Beyond capsule T3a - extracapsular extension T3b - seminal vesicle	Invasion into renal vein or peri-renal fat T3a - IVC below diaphragm T3b - IVC above diaphragm
T4	Other organs T4a - pelvic organs T4b - pelvic wall	invades other structure	T4 - other organs	Invasion of gerona's fascia or adrenal gland

GYNAECOLOGY (FIGO)

STAGES	Endometrium 2009	Endometrium FIGO 2023 (histology presumed to be non aggressive / low grade endometroid unless otherwise specified)	Cervical FIGO 2018	Ovary FIGO 2014	Vulva FIGO 2021
I	IA : <50% of myometrium invasion IB : >50% of myometrial invasion	IA1 - endometrial polyp IA2 - <50% myometrial invasion and no/focal LVSI IA3 - low grade endometroid cancer of uterus with synchronous low grade ovarian endometroid deposit IB - >50% myometrial invasion IC - aggressive histology *(serous, clear cell, high grade endometroid)* but no myometrial invasion	IA MICROSCOPIC DISEASE IA1 - <3mm invasion IA2 - >3 - 5mm invasion IB LIMITED TO CERVIX IB1 </= 2cm IB2 2-4 cm IB3 >4cm	IA - single ovary IB - both ovaries IC - capsular rupture IC1 - during surgery IC2 - before Sx IC3 - cytology + peritoneal fluid	I - Confined to vulva IA < 2cm with <1mm DOI IB >2cm OR >1mm DOI
II	cervix	IIA - cervical stroma involvement IIB - substantial LVSI IIC - aggressive histology with any myometrial invasion	IIA - vaginal upper 1/3rd (IIA1 or IIA2 : <4cm or >4cm) IIB - parametrium	II - Intrapelvic disease IIA - fallopian tube or ovary IIB - bowel or bladder	II - Extension to lower 1/3 of vagina, urethra, anus
III	IIIA - ovary IIIB - parametrium/vagina IIIC - pelvic nodes	IIIA1 - involvement of ovary/fallopian tube (except when meeting IA3 criteria) IIIA2 - extension to uterine serosa IIIB1- parametrium/vaginal IIIB2 - pelvic peritoneum IIIC1 - pelvic LN IIIC2 - par aortic LN	IIIA - lower 1/3 vagina IIIB - pelvic side wall IIIC - nodes IIIC1 - pelvic LN, IIIC2 - paraortic LN	III - extra pelvic disease IIIA - microscopic peritoneal disease outside pelvis or retroperitoneal LN involvement IIIB - <2cm peritoneal deposit IIIC - >2cm deposit	III - Upper 2/3 of perineum or regional LNs IIIA - inguino-femoral LN <5mm or Upper 2/3 vagina/ anus/urethra or upto bladder or rectal mucosa IIIB - inguino-femoral LN >5mm IIIC - LN with ECS
IV	IV A - bowel or bladder IB B - distant mets	IVA - bowel or bladder IVB - peritoneum outside pelvis IVC - distant mets	IV A - bowel or bladder IB B - distant mets	IV A - pleural effusion IB B - distant mets	

	OTHERS			
	SOFT TISSUE SARCOMA	BONE SARCOMA	SKIN CANCER	MELANOMA
T1	</= 5cm	</= 8cm	</= 2cm	</=1mm DOI a - no ulceration, b - with ulceration
T2	>5 and </= 10cm	> 8cm	2 - 4cm	>1mm but </=2mm a - no ulceration, b - with ulceration
T3	>10 cm and </= 15cm	discontinuous regions in primary bone	> 4cm or DOI 6mm or more perineurial invasion invasion beyond s/c fat minor bone erosion	>2mm but </= 4mm a - no ulceration, b - with ulceration
T4	>15cm		Involvement of bone or cartilage	>4mm a - no ulceration, b - with ulceration
			Nodes similar to head and neck cancers	N1 - 1 node a- occult b - clinically detected c- in transit or satellite
				N2 - 2-3 nodes
				N3 - 4 nodes
				STAGING: Stage 1 - T1 and T2a N0 STAGE 2 - no nodes Stage 2a - T2b, T3a N0 Stage 2b - T3b or T4a N0 (adj pembro) Stage 3a-c - nodes Upto T4a and N2c (adjuvant pembrolizumab, adj dab/tram) Stage 4 - mets - adjuvant nivolumab if resected

Node retrieval for adequate surgery

Breast cancer - 10
Oesophageal cancer - 15
Colon cancer - 12
Head and Neck cancer - 18

CK7 CK20

CK7 + CK20 +	CK7 + CK 20 -ve	CK 7 -ve and CK20 +	CK7 -ve and CK20 -ve
	Lung adenocarcinoma		HCC (hepatocellular Ca)
	Breast carcinoma		RCC (renal cell Ca)
	Thyroid carcinoma		SCC lung and SCLC lung
	Salivary gland carcinoma	Merkel cell carcinoma	Head and Neck SCC
Urothelial tumours	Endometrial carcinoma	Colorectal carcinoma	
Ovarian mucinous adenocarcinoma	Cervical carcinoma		
	Ovarian serous (mesothelin+)		
Cholangiocarcinoma	Cholangiocarcinoma		
Pancreatic adenocarcinoma	Pancreatic carcinoma		

WT-1 positive in **ovarian**, **mesothelioma**, wilms, desmoplatic small round cell

HCC - hepar 1 +, glypican-3 +. MOC31 is negative (and distinguishes HCC from intrahepatic cholangioCa)