

Urinary and Male Genital Tumours/ Forewords and introductions / ICD-O coding of urinary and male genital tumours

Headings

ICD-O topographical coding of urinary and male genital tumours

The ICD-O topography codes for the main anatomical sites covered in this volume are as follows [[Fritz A, Percy C, Jack A, et al., editors. International classification of diseases for oncology (ICD-O). 3rd ed. 1st rev. Geneva (Switzerland): World Health Organization; 2013.]]:

C60 Penis

- C60.0 Prepuce

- C60.1 Glans penis

- C60.2 Body of penis

- C60.8 Overlapping lesion of penis

- C60.9 Penis, NOS

C61 Prostate gland

- C61.9 Prostate gland

C62 Testis

- C62.0 Undescended testis

- C62.1 Descended testis

- C62.9 Testis, NOS

C63 Other and unspecified male genital organs

- C63.0 Epididymis

- C63.1 Spermatic cord

- C63.2 Scrotum, NOS

- C63.7 Other specified parts of male genital organs

- C63.8 Overlapping lesion of male genital organs

- C63.9 Male genital organs, NOS

C64 Kidney

- C64.9 Kidney, NOS

C65 Renal pelvis

- C65.9 Renal pelvis

C66 Ureter**C66.9 Ureter****C67 Bladder****C67.0 Trigone of bladder****C67.1 Dome of bladder****C67.2 Lateral wall of bladder****C67.3 Anterior wall of bladder****C67.4 Posterior wall of bladder****C67.5 Bladder neck****C67.6 Ureteric orifice****C67.7 Urachus****C67.8 Overlapping lesion of bladder****C67.9 Bladder, NOS****C68 Other and unspecified urinary organs****C68.0 Urethra****C68.1 Paraurethral gland****C68.8 Overlapping lesion of urinary organs****C68.9 Urinary system, NOS****ICD-O morphological coding: Introduction**

The ICD-O coding system uses a topography (T) code and a morphology (M) code together, but these are presented in separate lists for ease of use. Behaviour is coded /0 for benign tumours; /1 for unspecified, borderline, or uncertain behaviour; /2 for carcinoma in situ and grade III intraepithelial neoplasia; /3 for malignant tumours, primary site; and /6 for malignant tumours, metastatic site. Behaviour code /6 is not generally used by cancer registries. For various reasons, the ICD-O morphology terms may not always be identical to the entity names used in the WHO classification, but they should be sufficiently similar to avoid confusion. The designation “NOS” (“not otherwise specified”) is provided to make coding possible when subtypes exist but exact classification may not be possible in small biopsies or certain other scenarios. Therefore, it is usual to have “NOS” even when a more specific alternative term is listed in ICD-O.

ICD-O coding of tumours of the kidney

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

Renal cell tumours

Clear cell renal tumours

- 8310/3 Clear cell renal cell carcinoma
- 8316/1 Multilocular cystic renal neoplasm of low malignant potential

Papillary renal tumours

- 8260/0 Papillary adenoma
- 8260/3 Papillary renal cell carcinoma[†]

Oncocytic and chromophobe renal tumours

- 8290/0 Oncocytoma
- 8317/3 Chromophobe cell renal carcinoma
- Other oncocytic tumours of the kidney

Collecting duct tumours

- 8319/3 Collecting duct carcinoma

Other renal tumours

- 8323/1 Clear cell papillary renal cell tumour[†]
- 8480/3 Mucinous tubular and spindle cell carcinoma
- 8316/3 Tubulocystic renal cell carcinoma
- 8316/3 Acquired cystic disease–associated renal cell carcinoma
- 8311/3 Eosinophilic solid and cystic renal cell carcinoma
- 8312/3 Renal cell carcinoma, NOS

Molecularly defined renal carcinomas

- 8311/3 *TFE3*-rearranged renal cell carcinomas
- 8311/3 *TFEB*-rearranged renal cell carcinomas
- 8311/3 *ELOC* (formerly *TCEB1*)-mutated renal cell carcinoma
- 8311/3 Fumarate hydratase–deficient renal cell carcinoma
- 8311/3 Hereditary leiomyomatosis and renal cell carcinoma (HLRCC) syndrome–associated renal cell carcinoma
- 8311/3 Succinate dehydrogenase–deficient renal cell carcinoma
- 8311/3 *ALK*-rearranged renal cell carcinomas

8510/3 Medullary carcinoma, NOS

8510/3 SMARCB1-deficient medullary-like renal cell carcinoma

Metanephric tumours

8325/0 Metanephric adenoma

9013/0 Metanephric adenofibroma

8935/1 Metanephric stromal tumour

Mixed epithelial and stromal renal tumours

8959/0 Mixed epithelial and stromal tumour

Adult cystic nephroma

Renal mesenchymal tumours

Adult renal mesenchymal tumours

8860/0 Angiomyolipoma

Oncocytic angiomyolipoma

Angiomyolipoma with epithelial cysts

8860/1 Angiomyolipoma, epithelioid

9161/1 Haemangioblastoma

8361/0 Juxtaglomerular tumour

Functioning juxtaglomerular cell tumour

Non-functioning juxtaglomerular cell tumour

8966/0 Renomedullary interstitial cell tumour

Paediatric renal mesenchymal tumours

8967/0 Ossifying renal tumour of infancy

8960/1 Mesoblastic nephroma

Classic congenital mesoblastic nephroma

Cellular congenital mesoblastic nephroma

Mixed congenital mesoblastic nephroma

8963/3 Malignant rhabdoid tumour of the kidney

8964/3 Clear cell sarcoma of kidney

Embryonal neoplasms of the kidney

Nephroblastic tumours

Nephrogenic rests

Perilobar nephrogenic rests

Intralobar nephrogenic rests

Nephroblastomatosis

8959/0 Paediatric cystic nephroma

8959/1 Cystic partially differentiated nephroblastoma

8960/3 Nephroblastoma

Miscellaneous renal tumours

Germ cell tumours of the kidney

9084/0 Prepubertal-type teratoma

9084/3 Teratoma with carcinoid (neuroendocrine tumour)

9071/3 Yolk sac tumour, NOS

9085/3 Mixed teratoma–yolk sac tumour

ICD-O coding of tumours of the urinary tract

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

Urothelial tumours

Non-invasive urothelial neoplasms

8120/0 Urothelial papilloma

8121/0 Urothelial papilloma, inverted

8130/1 Papillary urothelial neoplasm of low malignant potential

Inverted papillary urothelial neoplasm of low malignant potential

8130/2 Non-invasive papillary urothelial carcinoma, low-grade

Low-grade papillary urothelial carcinoma with an inverted growth pattern

8130/2 Non-invasive papillary urothelial carcinoma, high-grade

Non-invasive high-grade papillary urothelial carcinoma with an inverted growth

pattern

8120/2 Urothelial carcinoma in situ

Invasive urothelial neoplasms

Invasive urothelial carcinoma

8120/3 Infiltrating urothelial carcinoma

Nested urothelial carcinoma

Microcystic urothelial carcinoma

8082/3 Lymphoepithelioma-like urothelial carcinoma

8131/3 Micropapillary urothelial carcinoma

8122/3 Plasmacytoid / signet-ring cell / diffuse sarcomatoid urothelial carcinoma

8031/3 Giant cell urothelial carcinoma

8020/3 Poorly differentiated urothelial carcinoma

Lipid-rich clear cell urothelial carcinoma

Squamous cell neoplasms of the urinary tract

8052/0 Squamous papilloma

Squamous cell carcinomas of the urinary tract

8051/3 Verrucous carcinoma

8070/3 Pure urothelial squamous cell carcinoma[†]

Glandular neoplasms

Adenomas

8261/0 Villous adenoma

8211/0 Tubular adenoma

8263/0 Tubulovillous adenoma

Adenocarcinomas

8140/3 Adenocarcinoma, NOS

8144/3 Enteric adenocarcinoma

8480/3 Mucinous adenocarcinoma

8323/3	Mixed adenocarcinoma
8490/3	Signet-ring cell adenocarcinoma
8140/2	Adenocarcinoma in situ

Urachal and diverticular neoplasms

8010/3	Urachal carcinoma
8120/3	Infiltrating urothelial carcinoma (code to site)

Urethral neoplasms

Urethral accessory gland carcinomas

8140/3	Carcinoma of Littre glands
8140/3	Carcinoma of Skene glands
8140/3	Carcinoma of Cowper glands

Tumours of Müllerian type

8310/3	Clear cell carcinoma
8380/3	Endometrioid carcinoma

ICD-O coding of tumours of the prostate

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

Epithelial tumours of the prostate

Glandular neoplasms of the prostate

8440/0	Cystadenoma
8148/2	Prostatic intraepithelial neoplasia, high-grade
8500/2	Intraductal carcinoma
8140/3	Acinar adenocarcinoma
	Atrophic acinar adenocarcinoma
	Pseudohyperplastic acinar adenocarcinoma
	Microcystic acinar adenocarcinoma
	Foamy gland acinar adenocarcinoma

8480/3	Mucinous (colloid) acinar adenocarcinoma
8490/3	Signet-ring cell-like acinar adenocarcinoma
	Pleomorphic giant cell acinar adenocarcinoma
8572/3	Sarcomatoid acinar adenocarcinoma
	Prostatic intraepithelial neoplasia-like carcinoma
8500/3	Ductal adenocarcinoma
8574/3	Adenocarcinoma with neuroendocrine differentiation

Squamous neoplasms of the prostate

8560/3	Adenosquamous carcinoma
8070/3	Squamous cell carcinoma
8147/3	Adenoid cystic (basal cell) carcinoma [†]

Mesenchymal tumours unique to the prostate

Stromal tumours of the prostate

8935/1	Stromal tumour of uncertain malignant potential
8935/3	Stromal sarcoma

ICD-O coding of tumours of the seminal vesicle

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

Epithelial tumours of the seminal vesicle

Glandular neoplasms of the seminal vesicle

8440/0	Cystadenoma
8140/3	Adenocarcinoma

Squamous neoplasms of the seminal vesicle

8070/3	Squamous cell carcinoma
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Other tumours of the seminal vesicle

8959/0	Mixed epithelial and stromal tumour
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ICD-O coding of tumours of the testis

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

Germ cell tumours derived from germ cell neoplasia in situ

Non-invasive germ cell neoplasia

9064/2 Germ cell neoplasia in situ

Specific forms of intratubular germ cell neoplasia

9061/2 Intratubular seminoma

9070/2 Intratubular embryonal carcinoma

9061/2 Intratubular trophoblast

9071/2 Intratubular yolk sac tumour

9080/2 Intratubular teratoma

9073/1 Gonadoblastoma

The germinoma family of tumours

9061/3 Seminoma

Seminoma with syncytiotrophoblastic cells

Non-seminomatous germ cell tumours

9070/3 Embryonal carcinoma

9071/3 Yolk sac tumour, postpubertal-type

9100/3 Choriocarcinoma

9104/3* Placental site trophoblastic tumour of the testis

9105/3 Epithelioid trophoblastic tumour

Cystic trophoblastic tumour

9080/3 Teratoma, postpubertal-type

9084/3 Teratoma with somatic-type malignancy

Mixed germ cell tumours of the testis

9085/3 Mixed germ cell tumours

Polyembryoma

Diffuse embryoma

Germ cell tumours of unknown type

9080/1 Regressed germ cell tumours

Germ cell tumours unrelated to germ cell neoplasia in situ

9063/3 Spermatocytic tumour

Spermatocytic tumour with sarcomatous differentiation

9084/0 Teratoma, prepubertal-type

9084/0 Dermoid cyst

Epidermoid cyst

9071/3 Yolk sac tumour, prepubertal-type

8240/3 Well-differentiated neuroendocrine tumour (monodermal teratoma)

9085/3 Mixed teratoma and yolk sac tumour, prepubertal-type

Sex cord stromal tumours of the testis

Leydig cell tumour

8650/1 Leydig cell tumour

8650/3 Malignant Leydig cell tumour

Sertoli cell tumours

8640/1 Sertoli cell tumour

8640/3 Malignant Sertoli cell tumour

8642/1 Large cell calcifying Sertoli cell tumour

Granulosa cell tumours

8620/1 Adult granulosa cell tumour

8622/0 Juvenile granulosa cell tumour

The fibroma thecoma family of tumours

8600/0 Thecoma

8810/0 Fibroma

Mixed and other sex cord stromal tumours

8592/1 Mixed sex cord-stromal tumour

8590/0 Signet ring stromal tumour

8590/0 Myoid gonadal stromal tumour[†]

8590/1 Sex cord-stromal tumour, NOS

ICD-O coding of tumours of the testicular adnexa

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

Ovarian-type tumours of the collecting ducts and rete testis

8441/0 Serous cystadenoma, NOS

8442/1 Serous borderline tumour, NOS

8441/3 Serous cystadenocarcinoma

8470/0 Mucinous cystadenoma

8472/1 Mucinous borderline tumour

8470/3 Mucinous cystadenocarcinoma

8380/1 Endometrioid tumour, borderline

8380/3 Endometrioid adenocarcinoma

8310/3 Clear cell adenocarcinoma

9000/0 Brenner tumour

Tumours of the collecting ducts and rete testis

8140/0 Adenoma

8140/3 Adenocarcinoma

Paratesticular mesothelial tumours

9054/0 Adenomatoid tumour

9052/0 Well-differentiated papillary mesothelial tumour

9050/3	Mesothelioma
9052/3	Epithelioid mesothelioma
9051/3	Sarcomatoid mesothelioma
9053/3	Biphasic mesothelioma

Tumours of the epididymis

8440/0	Cystadenoma of the epididymis
8450/0	Papillary cystadenoma
8140/3	Adenocarcinoma of the epididymis
8070/3	Squamous cell carcinoma
9363/0	Melanotic neuroectodermal tumour

ICD-O coding of tumours of the penis and scrotum

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

Benign and precursor squamous lesions

Condyloma acuminatum

Squamous cell carcinoma precursors, HPV-associated

8077/0	Low-grade squamous intraepithelial lesion
8077/2	High-grade squamous intraepithelial lesion

Squamous cell tumours and precursors, HPV-independent

8071/2	Differentiated penile intraepithelial neoplasia
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Invasive epithelial tumours of the penis and scrotum

Invasive squamous epithelial tumours

8085/3	Squamous cell carcinoma, HPV-associated
8083/3	Basaloid squamous cell carcinoma
8054/3	Warty carcinoma
8084/3	Clear cell squamous cell carcinoma

8082/3	Lymphoepithelial carcinoma
8086/3	Squamous cell carcinoma, HPV-independent
	Squamous cell carcinoma, usual type
8051/3	Verrucous carcinoma (including carcinoma cuniculatum)
8052/3	Papillary squamous cell carcinoma
	Pseudohyperplastic carcinoma
8074/3	Sarcomatoid squamous cell carcinoma
8070/3	Squamous cell carcinoma, NOS

Other epithelial tumours

8560/3	Adenosquamous carcinoma
8430/3	Mucoepidermoid carcinoma
8542/3	Paget disease, extramammary

Other scrotal tumours

8090/3	Basal cell carcinoma
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ICD-O coding of neuroendocrine neoplasms

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

Neuroendocrine tumours

8240/3	Neuroendocrine tumour, NOS
8240/3	Neuroendocrine tumour, grade 1
8249/3	Neuroendocrine tumour, grade 2

Neuroendocrine carcinomas

8041/3	Small cell neuroendocrine carcinoma
8013/3	Large cell neuroendocrine carcinoma
8154/3	Mixed neuroendocrine–non-neuroendocrine neoplasm
8045/3	Combined small cell neuroendocrine carcinoma
8013/3	Combined large cell neuroendocrine carcinoma

Paragangliomas

8693/3 Extra-adrenal paraganglioma

ICD-O coding of mesenchymal tumours

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

Fibroblastic and myofibroblastic tumours

9160/0 Cellular angiofibroma

8825/0 Myofibroblastoma

8857/0 Spindle cell / pleomorphic lipoma

8815/0 Solitary fibrous tumour, benign

8815/1 Solitary fibrous tumour, NOS

Lipomatous solitary fibrous tumour

Dedifferentiated (anaplastic) solitary fibrous tumour

8815/3 Solitary fibrous tumour, malignant

8825/1 Inflammatory myofibroblastic tumour

Vascular tumours

9120/0 Haemangioma, NOS

9121/0 Cavernous haemangioma

9131/0 Capillary haemangioma

Anastomosing haemangioma

9125/0 Epithelioid haemangioma

9120/3 Angiosarcoma

Epithelioid angiosarcoma

Pericytic (perivascular) tumours

8711/0 Glomus tumour, NOS

8712/0 Glomangioma

8713/0 Glomangiomyoma

8711/1	Glomangiomas
8711/1	Glomus tumour of uncertain malignant potential
8711/3	Malignant glomus tumour
9137/0	Myointimoma
8824/0	Myopericytoma
8714/0	PEComa, benign
8860/0	Sclerosing PEComa/angiomyolipoma
8714/3	Malignant PEComa

Smooth muscle tumours

8890/0	Leiomyoma, NOS
8897/1	Smooth muscle tumour of uncertain malignant potential
8890/3	Leiomyosarcoma, NOS
	Superficial leiomyosarcoma
	Deep leiomyosarcoma

Skeletal muscle tumours

8910/3	Embryonal rhabdomyosarcoma, NOS
8920/3	Alveolar rhabdomyosarcoma
8912/3	Spindle cell / sclerosing rhabdomyosarcoma

Tumours of uncertain differentiation

9040/3	Synovial sarcoma, NOS
9041/3	Synovial sarcoma, monophasic
9043/3	Synovial sarcoma, biphasic
	Synovial sarcoma, poorly differentiated
8963/3	Extrarenal rhabdoid tumour
8806/3	Desmoplastic small round cell tumour

ICD-O coding of haematolymphoid tumours

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

Mature B-cell lymphomas

9699/3	Extranodal marginal zone lymphoma of mucosa-associated lymphoid tissue
9680/3	Diffuse large B-cell lymphoma, NOS
9734/3	Plasmacytoma, extramedullary

Histiocytic tumours

9749/1	Juvenile xanthogranuloma
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ICD-O coding of melanocytic lesions

ICD-O-3.2 ICD-O label (subtypes are indicated in grey text, with the label indented);

Please note that the WHO classification of tumour types is more readily reflected in the table of contents

8720/3	Mucosal melanoma
8746/3	Mucosal lentiginous melanoma
8721/3	Nodular melanoma

These morphology codes are from the International Classification of Diseases for Oncology, third edition, second revision (ICD-O-3.2) [[International Association of Cancer Registries (IACR) [Internet]. Lyon (France): International Agency for Research on Cancer; 2021. International Classification of Diseases for Oncology (ICD-O) – ICD-O-3.2; updated 2021 Jan 25. Available from: http://www.iacr.com.fr/index.php?option=com_content&view=category&layout=blog&id=100&Itemid=577]. Behaviour is coded /0 for benign tumours; /1 for unspecified, borderline, or uncertain behaviour; /2 for carcinoma in situ and grade III intraepithelial neoplasia; /3 for malignant tumours, primary site; and /6 for malignant tumours, metastatic site. Behaviour code /6 is not generally used by cancer registries.

This classification is modified from the previous WHO classification, taking into account changes in our understanding of these lesions.

n/a, not available (provisional entity).

* Codes marked with an asterisk were approved by the IARC/WHO Committee for ICD-O at its meeting in Feb 2022.

† Labels marked with a dagger have undergone a change in terminology of a previous code.