



CHAPTER 4

Specific tumor sites (part 1)

Contents

IV(1)-2	Lip cancer
IV(1)-2	Tumors of the upper aerodigestive tract
IV(1)-3	Salivary gland neoplasms
IV(1)-3	Gastrointestinal cancer
IV(1)-3	Esophagus
IV(1)-3	Stomach
IV(1)-4	Small intestine
IV(1)-4	Bowel
IV(1)-7	Liver, bile ducts, and pancreas
IV(1)-7	Lung cancer
IV(1)-7	Mesothelioma
IV(1)-8	Sarcomas
IV(1)-8	Skin cancer
IV(1)-8	Melanoma
IV(1)-9	Other malignant skin tumors
IV(1)-9	Kaposi's sarcoma
IV(1)-9	Breast cancer
IV(1)-9	Registration techniques
IV(1)-10	References
IV(1)-11	Tables

CHAPTER 4

Specific tumor sites (part 1)

The present chapter provides useful insight on peculiar issues with respect to reporting specific neoplasms. Whereas the general system of reporting rules, with the necessary data fields, always holds good and must be followed at all times by registries, we present here indications drawn from the international literature and Italian experience, with respect to useful additional information that can be used in reporting, for a more precise definition of cases in relation to special epidemiological needs.

Every anatomic site is accompanied by a table listing ICD-O-3 morphology codes, taken from the WHO cancer classification publications (*Blue books*), with adaptation to the Italian version of ICD-O-3. Although registrars should refer to the ICD-O-3 handbook¹ for complete rules of use and the full range of morphology types, these tables are provided to aid coding, presenting the codes that are usually most appropriate, especially in the case of morphology types with site specificity (e.g., papillary tumors).

Lip cancer

The skin and mucosa of the lip (vermilion border or free border) are distinct anatomic sites according to all the classification systems used by the registries (ICD, ICD-O), although they are not always considered as such in routine diagnostic procedures.

In practice, the following measures can be taken:

- ◆ tumors associated with the skin adnexa, one of the most frequent of which is basal-cell carcinoma, should not be classified as tumors of the labial mucosa (vermilion border);
- ◆ in case of doubt, confirmation of these carcinomas should be conditional to the presence of skin adnexa, and therefore referred to the skin of the lip.

The following (ICD-O-3) codes should therefore be used: C00 for the mucosa and C44.0 for the skin.

Tumors of the upper aerodigestive tract

It can be difficult to identify the site of primary onset of tumors of the upper aerodigestive tract (UADT): oral cavity, pharynx, and larynx. The numerous anatomic sites recognized in the international classifications (ICD, ICD-O) for this region can lead to overestimation of incident tumors (bearing in mind that the same histological type can be considered a multiple tumor in different sites for the third topography digit); this justifies more restrictive

criteria for application of the rules relating to multiple primaries. In particular, each tumor should be carefully evaluated, considering whether, for example, it may be an extension from an adjacent site or a flare-up of the disease. The pharynx, comprising the base of the tongue, soft palate, and uvula, is divided into three regions (oropharynx, nasopharynx, and hypopharynx); the same applies to the larynx, on the basis of its relationship with the glottis. Upper aerodigestive tract neoplasms thus include:

Oral cavity

- ◆ tongue: body and tip
- ◆ floor of mouth
- ◆ hard palate
- ◆ vestibule of the mouth

Oropharynx

- ◆ Base of tongue (ICD-O-3: C01.9; ICD-9: 141.0)
- ◆ soft palate
- ◆ uvula
- ◆ tonsil:
 - ◆ tonsillar fossa
 - ◆ tonsillar pillar
 - ◆ vallecula
- ◆ anterior surface of epiglottis
- ◆ lateral oropharyngeal wall
- ◆ posterior oropharyngeal wall

Rhinopharynx

Hypopharynx

Larynx

- ◆ supraglottis
- ◆ glottis
- ◆ subglottis

One rule that should be borne in mind when coding UADTs is “Pseudo-topographic Morphology Terms” (Rule H) of ICD-O-3, which applies to adenocarcinomas of the oral cavity.

In the case of lesions involving two or more sites represented by different topographic categories with three digits (none of which is identifiable as primary), the use of topography codes in accordance with the instructions of ICD-O-3 is recommended:

- ◆ C14.8 (Overlapping lesions of lip, oral cavity and pharynx) for lesions involving the lip and oral cavity, oral cavity and pharynx, or tongue and other parts of the oral cavity;

- ◆ C02.8 (Overlapping lesion of tongue) for lesions involving the base and anterior part of the tongue;
- ◆ C05.1 (Soft palate, NOS) for lesions involving the soft palate and nasopharynx not assignable to the nasopharyngeal surface of the soft palate;
- ◆ C13.1 Hypopharyngeal aspect of aryepiglottic fold, NOS (excludes laryngeal aspect of aryepiglottic fold C32.1) ;
- ◆ C32.1 (Epiglottis, NOS) for lesions involving the pharynx and larynx at the level of the epiglottis which are not assignable to the anterior or posterior surface;
- ◆ C14.1 (Laryngopharynx) for lesions involving the pharynx and larynx other than the preceding ones.

Due to the frequency of synchronous and metachronous tumors of the UADT associated with exposure to common risk factors (smoking, alcohol), it is equally important to align registration and inclusion procedures in terms of incidence on the basis of the chart shown in this page. Histology classification of head and neck tumors (WHO)² is reported in [Table 1](#) (page 11).

ORAL CAVITY ADENOCARCINOMAS

For all types of adenocarcinomas in the oral cavity (Adenoid cystic carcinoma, Malignant mixed tumor, Adenocarcinoma NOS or specified) the salivary glands are considered to be the site of origin. If origin is not recorded as being any of the major salivary glands (parotid, sublingual and submandibular, which have their own specific codes), origin must be coded to the Minor salivary glands, whose topography codes refer to localization (e.g., Adenoid cystic carcinoma of the hard palate is actually Adenoid cystic carcinoma of the minor salivary glands of the hard palate, with topography code C05.0 and morphology code M-8200/3).

If a diagnosis does not specify any site of origin, but relevance to the minor salivary glands is defined (e.g., Adenocarcinoma of the minor salivary glands), registrars should use the topography code of the oral cavity, C06.9, which includes Minor salivary glands, NOS.

If neither site of origin nor type of salivary gland involved is specified, topography code C08.9 must be used instead, corresponding to: Salivary gland, NOS.

REGISTRATION AND INCIDENCE OF UPPER AERODIGESTIVE TRACT CANCERS					
Sites		Recorded tumors	Incident tumor		
			if metachronous	if synchronous (as first event)	
C01	base of tongue	all	the first	the most severe, with code C02.9	
C02	other and unspecified parts of tongue				
C00	lip	all	the first	the most severe, with code C06.9	
C03	gum				
C04	floor of mouth				
C05	palate				
C06	other and unspecified parts of tongue				
C09	tonsil				
C10	oropharynx				
C12	pyriform sinus				
C13	hypopharynx				
C14	other and ill-defined sites in lip, oral cavity and pharynx				

Salivary gland cancer

In the case of the salivary glands, the use of topography codes C07 and C08 is only admissible when the parotid, sublingual or submandibular gland (major salivary glands) is specified, or no location is specified (Salivary glands, NOS). Consequently, the appearance of one of the histologies listed in [Table 2](#) (page 12) in an explicitly named site of the oral cavity different from the location of the major salivary glands (e.g., hard palate) calls for assignment of the specific topography code (C05.0), since it is implicit that the tumor is of a minor salivary gland.

Gastrointestinal cancer

Esophagus

The main difficulty relates to locations at the gastroesophageal junction. In practice, a continuous lesion that involves the terminal section of the esophagus and the

cardia should only be coded as C16.0. At the registration stage, this situation occurs:

- ◆ when an esophageal biopsy in the terminal section is positive, and the lesion is found in the subsequent surgical specimen to be a single one;
- ◆ when there are positive biopsies in both the terminal section of the esophagus and the cardiac portion of the stomach;
- ◆ when an X-ray reveals stenosis of the terminal section of the esophagus, and a CAT or endocavitary ECT scan reveals a lesion involving the cardia.

Stomach

Tumors of the gastroesophageal junction (cardia) should be coded with topography C16.0 (ICD-O-3), whereas tumors of the pylorus (on the gastric side) should be given the corresponding topography code C16.4.

Tumors classified as “overlapping” (with no possibility of tracing the primary site) between stomach and duodenum should be given code C26.8 (overlapping tumors of the digestive system).

Lymphomas that arise in the stomach (primary) and all extranodal lymphomas should be given the topography code of the organ of onset in ICD-O-3 (in the case of the stomach: C16.x). However, in the ICD classifications (9th and 10th editions), lymphomas are given a specific code (ICD-9 200-202; ICD-10 C81-85, 96) regardless of the site of origin (nodal or extranodal).

The distinction between early forms of stomach cancer (carcinoma with invasion which does not penetrate the submucosa, even in the presence of lymph node metastasis) and non-early forms (tumors which invade the muscularis propria, including focally) is of particular epidemiological interest. The definition “early” automatically excludes the possibility of a tumor *in situ* and infiltration of the muscularis propria; it is therefore suggested, even in the absence of other indications, that the staging value “pT1” should only be used for the early forms, to differentiate them from the pT2+ or “missing” forms; “condensed” T staging cannot be used in this case. Finally, it may be helpful to mention the Krukenberg tumor, a carcinoma usually located in the ovary (generally bilateral), with histological characteristics of the signet ring cell or gelatinous carcinoma (M- 8490/3). The ovary may be considered its primary site only as an absolute exception, whereas in nearly all cases location in the ovary represents a metastasis originating from the stomach (and occasionally from other parts of the intestine), which coding should therefore refer to.

The correct topography code is consequently C16.x if a gastric lesion is documented, even without direct histological confirmation of that primary lesion (histology of metastasis); the same methodology also applies to other locations in the gastrointestinal system. Code C56 (relating to the ovary) is only allowed if the primary ovarian site is documented in addition to the histology. In the absence of specifications, code C26.9 relating to the gastrointestinal system should still be used.

Small intestine

For Hodgkin’s and non-Hodgkin’s lymphomas, only the following cases are reportable:

- ◆ the disease was originally localized only in the small intestine, possibly affecting the lymph nodes draining the small intestine only; subsequent spread to other sites (lymph nodes and others) is allowed;
- ◆ the disease is nosologically defined in terms of the site (e.g., immunoproliferative disease of the small intestine).

Cases of generalized (or lymph node) lymphoma with a synchronous or metachronous intestinal location are therefore not included in the registration.

Bowel

The bowel is one of the sites with the highest incidence of malignant tumors in both sexes. This site is mainly critical because of:

- ◆ its anatomical extent, which may influence the appearance of several tumors not classified as multiple primaries according to the international rules, but which must be recorded due to the major effects on individual risk assessment (familiarity) and social risk assessment (at-risk groups), and to its impact on the treatment;
- ◆ the introduction of screening programs, leading to the need for greater sensitivity in the incident forms, and possibly as regards premalignant lesions (adenomas), and greater precision in the characterization of lesions (grading, staging, and prognostic factors).

In view of these factors, registries can consider further registration parameters for the incident case, bearing in mind that all extra criteria or data fields to be entered in the registry file must be additional to those established by the international rules. In practice, it must always be possible to distinguish cases that meet international criteria from all possible higher resolution types of analysis. Special registries can adopt different registration rules from those specified in this handbook, on the basis of the experience acquired and the continuity of the activity performed. In short, additions and further analyses can relate to different aspects.

Date of clinical diagnosis

In addition to the date of official diagnosis of the case (on the basis of the general rules), the date when the endoscopic diagnosis was made can be taken into account in order to evaluate the timing of the clinical care process more accurately. Failing this, the date of the examination which first gave rise to the well-founded clinical suspicion of a malignant colorectal tumor will be used. In most cases, therefore, the date of diagnosis coincides with that of endoscopy (or X-ray, in the absence of endoscopy). In a smaller number of cases the date may be that of surgery (tumors discovered incidentally, or during an emergency operation such as surgery for an intestinal occlusion), the histological tests (malignant tumors found in apparently normal mucosa or in lesions which the endoscopist did not consider neoplastic), or the ultrasound scan (liver metastasis from cancer of the colon).

Definition of infiltrating carcinoma

All cases of malignant infiltrating colorectal tumors must be recorded, although the incidence only includes the first one found for site C18, site C19-20, or site C21. Infiltration is defined as penetration of the *muscularis mucosae*. If the cytological abnormalities observed are limited to the mucosa without penetration

of the *muscularis mucosae*, the case is not recorded as infiltrating. Histological diagnoses such as carcinoma *in situ*, intraglandular cancer, foci of neoplastic cells and the like will therefore not be considered infiltrating unless there is a clear indication by the pathologist of infiltration of the *muscularis mucosae*.

Definition of histological types

The following observations can be added to the WHO indications, which are listed below with the relevant codes:

M 8000/3	Malignant tumor (includes unknown histological type and the indication "neoplastic cells")
M 8010/3	Carcinoma, NOS
M 8480/3	Mucinous adenocarcinoma (mucoid component ≥50%)
M 8481/3	Mucin-producing adenocarcinoma (mucoid component <50%)
M 8254/3	Adenocarcinoid tumor
M 8210/3	Adenocarcinoma in adenomatous polyp (tubular/tubulovillous/villous)

Lymphomas (Hodgkin's and non-Hodgkin's)

Only cases in which the disease is located in the bowel should be registered. Cases of generalized (or lymph

node) lymphoma with an intestinal location are therefore not included in the registration.

Staging of colorectal carcinomas

Colorectal carcinomas must be staged using the TNM (Tumor, Node, Metastasis) system; in the case of the bowel, the TNM system is basically identical to the four-category Dukes Classification (revised), as shown in the synoptic chart in the middle of this page. A further staging criterion sometimes encountered by registries is the Astler-Coller classification, which follows the criteria listed below:

Stage A:	lesion limited to the mucosa
Stage B1:	the lesion involves the muscularis propria
Stage B2:	the lesion penetrates the muscularis propria
Stage C1:	stage B1 with metastasis in the locoregional lymph nodes
Stage C2:	stage B2 with metastasis in the locoregional lymph nodes

As is apparent, the Astler-Coller stages are **not** identical to the Dukes classification, and should not be confused with it. TNM staging therefore appears to be the ideal system to guarantee the highest level of staging sensitivity.

TNM AND DUKES STAGING OF COLORECTAL CANCER			
STAGE	TNM	DUKES	DESCRIPTION
I	T ₁ N ₀ M ₀	A	tumor confined to submucosa
	T ₂ N ₀ M ₀	A	tumor penetrates into, but not through the muscularis propria
II	T ₃ N ₀ M ₀	B	tumor invades through the muscularis propria into the perirectal or pericolic tissues. tumors extending to the serosa are to be considered T3, providing the tumor does not invade beyond the serosa
	T ₄ N ₀ M ₀	B	tumor breaches the serosa (visceral peritoneum) or invades adjacent organs or structures (uterus, vagina, bladder, prostate, parietal peritoneum)
III	T ₁₋₄ N ₁ M ₀	C	presence of metastasis in up to 3 mesenteric or aortic lymph nodes, regardless of the degree of invasion of the primary tumor; in the case of micrometastasis (assessed by immunohistochemical or molecular techniques) the pathologist's opinion is requested; lymph nodes presenting mucin production but no cell elements must also be considered metastatic
	T ₁₋₄ N ₂ M ₀	C	presence of metastasis in more than 3 mesenteric or aortic lymph nodes, regardless of the degree of invasion of the primary tumor
IV	T ₁₋₄ N ₀₋₂ M ₁	D	presence of hematogenous metastasis (liver, lung, or other organs not adjacent to the colon and rectum), regardless of the grade of local invasion of the primary tumor and of the involvement of mesenteric and aortic lymph nodes; presence of peritoneal involvement (peritoneal carcinomatosis); involvement of lymph nodes other than mesenteric and aortic lymph nodes; omental metastasis

Special cases

- ◆ the presence of tumor cells in the peritoneal washing fluid at the time of surgery is not considered for staging purposes;
- ◆ tumors of the anorectal region with inguinal lymph node metastasis should be recorded as stage III (N1-2, C);

- ◆ Nx: colorectal carcinomas should be classed as Nx if no mesenteric or aortic lymph nodes are found in the surgical specimen;
- ◆ NS: all tumors in which the obtainable clinical or histopathological documentation is insufficient for accurate staging should be classed as NS (e.g., endoscopic biopsy only);

- ◆ endoscopic and transanal polypectomies, not followed by surgery or local flares within six months, should be classified as stage I-A tumors;
- ◆ rectal tumors treated with preoperative radiotherapy are staged separately, according to the recent yTNM rules; in the absence of such data (mainly a transrectal ultrasound scan), lack of evidence of neoplastic cells in the surgical specimen will be interpreted as NS.

Site of tumor

The site of the tumor is mainly established on the basis of the endoscopic and/or radiological findings. If they are ambiguous, the pathological (macroscopic)

findings and other available test results will be taken into account; moreover, Code C18.8 should not be assigned to **tumors that extend** to more than one subsite of the colon, because it is too general. A single site should be assigned to these tumors, usually the most distal one (e.g., a tumor described as caecum/ascending will be considered as a carcinoma of the ascending colon). Codes C19.9 (rectosigmoid junction) and C21.8 (anorectal junction) remain valid.

In the case of **multiple synchronous locations** at the rectosigmoid junction and rectum, code C20.9 should be used. All locations in the colon can be registered, which must be staged as a single tumor. The sites considered for incidence computation are as follows:

Colon (C18)		Rectum (C19-21)	
Caecum	C18.0	Rectosigmoid junction	C19.9
Appendix	C18.1	Rectum (ampulla)	C20.9
Ascending	C18.2	Anus	C21.0
Hepatic flexure	C18.3	Anal canal	C21.1
Transverse	C18.4	Cloacogenic zone	C21.2
Splenic flexure	C18.5	Anorectal junction	C21.8
Descending colon	C18.6	<i>Multiple synchronous sites of the rectum and of the rectum-sigmoidal junction</i>	C20.9
Sigmoid colon	C18.7		
<i>Overlapping site</i>	<i>the most distal</i>		
<i>Multiple synchronous sites</i>	<i>the lesion at the most advanced stage</i>		
Colon NOS	C18.9		

Multiple colorectal primaries

“Multiple primaries” are defined as two or more colorectal tumors diagnosed at the same time (synchronous) or at different times (metachronous). Considering the complexity of the topic, the length of the colon and rectum, the need for a greater sensitivity in registration than traditional rules provide, we suggest the following:

- ◆ synchronous tumors: two tumors are considered synchronous if they are diagnosed simultaneously, or at a maximum interval of six months one from the other, in two different segments of the bowel; or even in a single segment (e.g., transverse colon) when there is clinical and morphological evidence that they are two different neoplasms; synchronous tumors must be recorded and staged as a single tumor, recording the different subsites involved; for the purpose of inclusion in incidence, the criteria previously described in this handbook should be observed;
- ◆ metachronous tumors: two tumors arising in two different segments of the bowel (much more rarely in the same segment) at least six months one from the other are considered metachronous; every metachronous tumor must be recorded and staged independently of the other, albeit following the general rules for inclusion in incidence and survival estimates;

- ◆ local recurrences: local recurrences, i.e., tumors that arise in the surrounding tissues after the primary tumor has been removed, as well as tumors arising within 5 years on the suture line of previous surgeries for colorectal cancer, are not reportable as they are not considered metachronous; beyond 5 years, the latter can be considered reportable as new tumors, as long as the IARC rules for inclusion in incidence are followed;
- ◆ cases of complex or dubious interpretation: after thorough critical examination, the general rules are applied to them (e.g., NSE cases); two colorectal tumors, one of epithelial origin and the other of non epithelial origin, must always be considered multiple primaries, regardless of location, time, or macroscopic appearance.

Registration of polyps and adenomas

To complement registration of malignant lesions, in particular in the course of screening programs, assessment of the impact of incidence of polyps and adenomas can be useful. All lesions must then be reported, using appropriate codes to report the presence of moderate or severe dysplasia as found in the histopathological report.³ For lesions not included in ICD-O-3 coding, if registries decide to record them to meet specific local needs, they may refer to the corresponding version of

the Systematized Nomenclature of Medicine (SNOMED) for the relevant morphology codes:⁴

M-7680/0	Polyp, NOS
M-7681/0	Fibroepithelial polyp
M-7563/0	Hamartomatous polyp
M-7204/0	Hyperplastic polyp
M-7682/0	Inflammatory pseudopolyp
M-7564/0	Juvenile polyp
M-7690/0	Polyposis

Table 3 and Table 4 (pages 13-14) list all gastrointestinal and colorectal neoplastic lesions, regardless of their malignancy.

Liver, bile ducts and pancreas

These types of cancer (WHO classification showed in Table 5, page 15) have low survival; they are often found based on image diagnostics alone, with no histological confirmation sought.

Sometimes patients are diagnosed outside a hospital setting and receive palliative care at home or in a hospice facility.

In the case of the liver, it is important to pay attention to possible false positives or false negatives which may occur due to the following:

- ◆ multifocal tumors and metastases are erroneously classified as primaries (it is therefore important to verify the patient's previous clinical history);
- ◆ malignant primaries are erroneously classified as benign tumors or other types of lesion (e.g., macronodular cirrhosis), or vice versa.

Several NSE or DCI cases are therefore likely to be found in this category. Consequently, access to reporting sources for data on diagnostic imaging, laboratory testing (markers), and palliative care centers is advisable; likewise, access to particular therapy procedures (e.g., chemoembolization or stenting) should be carefully considered when selecting HDDs.

For tumors of the endocrine pancreas, please refer to the paragraph on endocrine glands.

Lung cancer

Lung neoplasms are in many cases diagnosed by diagnostic imaging alone, without further histological confirmation, considering the patient's status and the tumor's aggressiveness. Sometimes therapy is mainly limited to palliative care at home or in a hospice facility.

It is important to pay attention to possible false positives or false negatives due to errors in distinguishing primaries and metastases (hence the importance of verifying the patient's previous clinical history). However, a diagnosis

of primary lung cancer should always be considered reliable, even in the presence of previous neoplasms.

Several NSE or DCI cases are likely to be found in this category. Access to sources of data regarding diagnostic imaging is therefore recommended.

It must be emphasized that with the introduction of IDC-10 in mortality registration, in the presence of concurrent neoplasms, ISTAT rules require lung cancer to be considered as follows:⁵

- ◆ primary in any case if it is defined as “bronchial cancer” or “bronchogenic cancer;”
- ◆ a lung cancer should be considered primary if the lung is mentioned differently (even as metastasis) and the following sites are specified:
 - ◆ heart
 - ◆ diaphragm
 - ◆ brain
 - ◆ liver
 - ◆ lymph nodes
 - ◆ mediastinum
 - ◆ meninges
 - ◆ spinal cord
 - ◆ bones
 - ◆ peritoneum
 - ◆ pleura
 - ◆ lung
 - ◆ retroperitoneum
 - ◆ ill-defined sites classifiable as C76;
- ◆ a lung cancer should be considered secondary if the lung is mentioned differently and sites not mentioned in the above list are specified (e.g., breast, prostate, colon, etc.).

Mesothelioma

It is a fairly rare cancer (0.4% of incidence in males and 0.2% in females⁶), with high mortality and associated with asbestos exposure.

Legislative decree no. 277/91 therefore established that an Italian mesothelioma registry (ReNaM) should be founded within the ISPESL. The ReNaM follows relatively different registration rules compared to general cancer registries, both for casefinding from single reporting sources and for registration of the diagnostic level and of the occupational history and asbestos exposure. Cases of malignant mesothelioma identified by population-based registries must therefore be compared with the cases available at regional ReNaM centers, based on working agreements to be established regionally.

In any case, to follow the rules that apply to other sites and according to IARC rules, malignant mesothelioma can only be recorded as such in the presence of positive

histology, which should at least be compatible with mesothelioma; whereas in the presence of non decisive malignant cytology or of diagnosis based only on imaging techniques, use of codes M-8001 or M-8000, with behavior /1 or /3 depending on cases is preferable.

In incidence reports, therefore, only tumors registered as mesotheliomas and assigned to the pleura, peritoneum, pericardium, or tunica vaginalis testis must be included among mesotheliomas; it must be borne in mind that, since mesothelioma is a systemic disease, a second case of mesothelioma in the same subject must never be considered a multiple primary, and therefore should not be included among incident cases. WHO histological classification of tumors of the lung, pleura, thymus, and heart⁷ is reported in [Table 6](#) (page 16).

Sarcomas

This category comprises many neoplasms that originate from the muscle, bone, cartilage, vascular, adipose, and fibrous tissues. These (connective) tissues, on the other hand, are always present within defined organs (intestine, liver, lung, etc.); in these cases (i.e., when the topography site has a specific ICD-O code) the topography code that must be used is always the site-specific code.

When the tumor does not originate in a specific organ or site, the topography codes of soft tissues (C49.X) must be used, which also include morphologies of tumors of the blood and lymphatic vessels; those of the peripheral and autonomic nervous system, instead, are coded to C47.x, whereas those of bone and cartilage are coded to C41.x, which also includes odontogenic tumors (both carcinomas and sarcomas) cited in the table listing tumors of the oral cavity.

Whereas benign soft tissue tumors are frequent and are of interest for registration purposes only with respect to intracranial and intraspinal neoplasms, sarcomas are rare and can be divided into three groups with different behavior: one with local invasiveness, one with low metastatic potential, and one with high metastatic potential. [Table 7](#) (page 17), in which benign forms are omitted, makes it possible to ascertain which group the sarcoma belongs to.⁸

It must be emphasized that Kaposi's sarcoma, included in the category of vascular tumors, should be considered a systemic disease, therefore any localization subsequent to the first is not reportable for incidence. ICD-10 extrapolates Kaposi's sarcoma from its site of origin, which the ICD-O-3 classification, in any case, enables registrars to assign correctly.

Skin cancer

To correctly define the site, it must be borne in mind that the following sites of skin cancer may not be coded to C44.X and coding must refer to the specific sites:

- ◆ C51.0: labia majora
- ◆ C51.0: vulva
- ◆ C60.9: penis
- ◆ C63.2: scrotum

For registration of multiple skin primaries, please refer to the general ICD-O rules; in any case it is important to keep in mind that, for incidence purposes, systemic tumors that involve different organs (lymphoma, leukemia, Kaposi's sarcoma: groups 7, 8, 9) must be considered only once, with topography referring to the site of first onset. The topography subsites available in ICD-O are fairly broad, and therefore of limited use for more detailed studies. In this case, [Table 8](#) (page 18) suggests the use of a more detailed coding pattern (source ENCR⁹). WHO histological classification¹⁰ is reported in [Table 9](#) (page 21).

Melanoma

According to ICD-O rules, the topography code of the site of origin must be assigned, including skin; in ICD classifications (9th and 10th editions), instead, skin melanomas have their own topography code (ICD-9: 172; ICD-10: C43). Clark's level and Breslow's thickness are considered useful information to determine expected outcome; when available, these data should be considered, even for more detailed studies.

According to IARC recommendations, a specific morphology code can be accepted for melanoma even in the absence of pathology (with clinical diagnosis only). The pT staging of skin melanoma is performed by measuring its thickness according to the revised 2002 AJCC criteria,¹¹ which are different from the previously used criteria (1997).

There are site-specific codes for lesions arising from different sites other than the skin (soft tissues, meninges), which obviously require topographic detail. In the case in which histological diagnosis is performed on metastasis, and there is no way to determine the site of the primary lesion, the following procedure should be adopted:

- ◆ follow the patient over time to find evidence of the site of origin;
- ◆ if further diagnostic procedures (diagnostic imaging, endoscopy) should be suspect for visceral locations, a specific topography code must be assigned;
- ◆ otherwise, topography code C44.9, associated to ICD9: 172.9 and to ICD10: C43.9, referred to Skin, NOS; there are in the clinical literature cases of melanomas that started from nevi in regression or particularly aggressive forms that are not easily diagnosed; on the other hand, it is possible that, given a metastasis, the subsequent site ascertainment may take place in an outpatient setting and not lead to surgery or treatment involving hospitalization.

The lesion defined as Juvenile melanoma (ICDO 3: M-8770/0) is actually a benign lesion, known as Spitz

nevus, which is preferably classified today as Spindle and epithelial cell nevus (C44.x).

SKIN MELANOMA STAGING CRITERIA (AJCC 2002)		
pT stage	thickness	presence of ulceration
pT1	up to 1.0 mm	a: without ulceration and Clark level II/III b: with ulceration or level IV/V
pT2	1.01-2.0 mm	a: without ulceration b: with ulceration
pT3	2.01- 4.0 mm	a: without ulceration b: with ulceration
pT4	> 4 mm	a: without ulceration b: with ulceration

Other malignant skin tumors

This is usually a crowded category, with variations that may be significant from one area to another, depending both on actual variations in incidence and on the capacity of registries to intercept information flow on these diseases (almost all are removed outside a hospital setting, so data flow depends on the contribution of information directly available from outpatient laboratories).

A registry can therefore decide to record these tumors (as per the international ENCR recommendations - November 2000), on the basis also of internal resources and interests, according to the following options:

- ◆ register all malignant skin tumors;
- ◆ register all malignant skin tumors, with the exception of basal cell carcinomas (ICD-O-3: M-809-811) of the skin C.44X (therefore registering genital sites);
- ◆ register all malignant skin tumors, with the exception of basal cell and squamous cell carcinomas C44.X (ICD-O-3: M-805-811), registering genital lesions.

Kaposi's sarcoma

This neoplasm falls into the category of diseases that can be accepted with reasonable certainty even in the absence of histopathological diagnosis. Presence of its morphology code (ICD-O-3: M-9140) is consequently accepted by IARC even with clinical diagnosis only. The ICD-10 classification, unlike ICD-9, has a specific code for this disease (C46). It can present in other organs other than the skin, but for incidence purposes it must be considered only once, in compliance with ICD-O rules.

Breast cancer

Breast cancer is a particularly important sector which involves most registries, both as to incidence volume (it is the first malignant cancer in females, accounting for about 30% of all malignant tumors incident in women),

and mammogram screening programs, already functioning or planned, which call for additional registry work, way beyond the usual set of data used for all tumors.

Earlier diagnosis and evolution of characterization and treatment strategies for this type of cancer are still very important issues today, and registries must therefore strive to achieve the following

- ◆ decreasing time of latency between incidence and registration, to provide health policy decision-makers with elements of assessment of the program's effectiveness;
- ◆ increase the sensitivity of information, with more detailed characterization of lesions (histotype, grade), their staging (with information that can further disaggregate the traditional TNM staging and with the possibility of assessing the impact of sentinel lymph node procedures);
- ◆ work more closely with clinics, in particular following patients' diagnosis-care path, to ensure dispersion of fewer of the data that can help to characterize the lesion and treatment and monitor patient follow-up;
- ◆ give greater value to the collection of biological variables (receptors, proliferation, oncogenes/tumor suppressor genes) which are now currently used in prognostic evaluation of every new case; collection of these data must be considered a structural goal especially for special registries, so as to allow these parameters to be introduced in more large-scale studies that require greater territorial coverage;
- ◆ build a working relationship with screening centers, in areas where a screening program is active, to document in the greatest possible detail the screening status of each patient.

Registration techniques

While all rules and criteria generally established for neoplasms also apply in this case, all lesions (both *in situ* and invasive) need to be recorded for this type of cancer, regardless of laterality and time order (obviously omitting from the traditional incidence analyses cases that are not considered for incidence purposes under international rules), any time a lesion cannot be qualified as recurrence of a previous case; information on focality and - for cases coming from screening - of the date of invitation and of examination should also be recorded, to make assessment of diagnostic timelines possible. Additional variables can be identified by registries according to their needs and based on national or regional studies under way; Table 10 (page 22)¹²⁻¹⁵ provides a list of suggested variables, which can naturally be changed according to specific registry or study protocol requirements.

In consideration of the great relevance of this disease, Tables 11-14 (pages 23-26) list topographic annotations, staging (AJCC and 2002 pTNM) and WHO classification for breast cancer.^{16,17}

References

1. Fritz A, Percy C, Jack A et al. *International Classification of Diseases for Oncology*. Third edition. Geneva, World Health Organization, 2000.
2. Barnes L, Eveson J, Reichart P, Sidransky D. *Pathology and Genetics of Tumours of the Head and Neck*. WHO Classification of Tumours. Lyon, IARC Press, 2005.
3. Hamilton SR, Aaltonen LA. *Pathology and Genetics of Tumours of the Digestive System*. WHO Classification of Tumours. Lyon: IARC Press, 2000.
4. Spackman KA, Campbell KE, Cote RA. *SNOMED RT: A Reference Terminology for Health Care*. Northfield IL, College of American Pathologists, 2000.
5. Organizzazione mondiale della sanità (WHO). *Classificazione statistica internazionale delle malattie e dei problemi sanitari correlati*, 10th rev., vol. 2. Rome, Ministero della sanità, 2000.
6. AIRT Working group. "I tumori in Italia. Rapporto 2006." *Epidemiol Prev* 2006; 1 (Suppl. 2): 56-57.
7. Travis WD, Brambilla E, Mueller-Hermelink HK, Harris CC. *Pathology and Genetics of Tumours of the Lung, Pleura, Thymus and Heart*. WHO Classification of Tumours. Lyon, IARC Press, 2003.
8. Fletcher CDM, Unni KK, Mertens F. *Pathology and Genetics of Tumours of Soft Tissue and Bone*. WHO Classification of Tumours. Lyon, IARC Press, 2002.
9. Tyczynski JE, Démaret E, Parkin DM. Standards and Guidelines for Cancer Registration in Europe: The ENCR Recommendations. *IARC Technical publication* no. 40, Lyon 2003: 10-13.
10. Le Boit PE, Burg G, Weedon D, Sarasin A. *Pathology and Genetics of Skin Tumours*. WHO Classification of Tumours. Lyon: IARC Press, 2006.
11. Balch CM, Buzaid AC, Soong SJ et al. "Final Version of American Joint Committee on Cancer Staging System for Cutaneous Melanoma." *J Clin Oncol* 2001; 19: 3635-48.
12. Associazione Italiana Registri Tumori, Lega Italiana per la Lotta contro i Tumori. Study protocol on the impact of breast cancer screening in Italy (IMPACT study). Contact person: Eugenio Paci, Registro tumori toscano.
13. Rete dei Registri tumori Regione Emilia-Romagna. Regional breast cancer database for breast cancer screening impact evaluation.
14. SQT project on breast cancer diagnosis and therapy monitoring in breast clinics and screening programs (<http://win.osservatorionazionalecreening.it/publicazioni.php>).
15. Tavassoli FA. *Pathology of the Breast*. East Norwalk, CT, Appleton & Lange, 1992.
16. Sobin LH, Wittekind C. *TNM Classification of Malignant Tumours*, 6th edition. UICC 2002.
17. Tavassoli FA, Devilee P. *Tumours of the Breast and Female Genital Organs*. WHO Classification of Tumours. IARC Press, Lyon 2003.

Tables

Table 1. WHO: histological classification of tumors of the head and neck²
[BACK](#)

Histological classification of tumors of the oral cavity and oropharynx	
Epithelial tumors	
8051/3	Verrucous carcinoma, NOS
8052/3	Papillary squamous cell carcinoma
8070/3	Squamous cell carcinoma, NOS
8074/3	Squamous cell carcinoma, spindle cell
8075/3	Squamous cell carcinoma, adenoid
8082/3	Lymphoepithelial carcinoma
8083/3	Basaloid squamous cell carcinoma
8560/3	Adenosquamous carcinoma
Minor salivary gland tumors	
8147/3	Basal cell adenocarcinoma
8200/3	Adenoid cystic carcinoma
8290/3	Oxyphilic adenocarcinoma
8310/3	Clear cell adenocarcinoma, NOS
8430/3	Mucoepidermoid carcinoma
8450/3	Papillary cystadenocarcinoma, NOS
8480/3	Mucinous adenocarcinoma
8500/3	Infiltrating duct carcinoma, NOS
8525/3	Polymorphous low grade adenocarcinoma
8550/3	Acinar cell carcinoma
8562/3	Epithelial-myoepithelial carcinoma
8982/3	Malignant myoepithelioma
8941/3	Carcinoma in pleomorphic adenoma
Soft tissue tumors	
9140/3	Kaposi's sarcoma
Tumors of the lymphatic system	
9680/3	Malignant lymphoma, large B-cell, diffuse, NOS
9673/3	Mantle cell lymphoma
9687/3	Burkitt's lymphoma, NOS (see also M-9826/3)
9690/3	Follicular lymphoma, NOS (see also M-9675/3)
9699/3	Marginal zone B-cell lymphoma, NOS
9714/3	Anaplastic large cell lymphoma, T-cell and Null cell type
9734/3	Plasmacytoma, extramedullary
9751/1	Langerhans cell histiocytosis, NOS
9758/3	Follicular dendritic cell sarcoma
9930/3	Myeloid sarcoma (see also M-9861/3)
Mucosal malignant melanoma	
8720/3	Malignant melanoma, NOS

Histological classification of odontogenic tumors	
Malignant tumors	
<i>Odontogenic carcinomas</i>	
9270/3	Odontogenic tumor, malignant
9302/3	Ghost cell odontogenic carcinoma
9310/3	Ameloblastoma, malignant
9341/3	Clear cell odontogenic carcinoma
<i>Odontogenic sarcomas</i>	
9290/3	Ameloblastic odontosarcoma
9330/3	Ameloblastic fibrosarcoma
Histological classification of tumors of the rhinopharynx	
Malignant epithelial tumors	
8071/3	Squamous cell carcinoma, keratinising, NOS
8072/3	Squamous cell carcinoma, large cell, non-keratinising, NOS
8083/3	Basaloid squamous cell carcinoma
8260/3	Papillary adenocarcinoma, NOS
Other epithelial tumors	
9350/1	Craniopharyngioma
Tumors of the lymphatic system	
9680/3	Malignant lymphoma, large B-cell, diffuse, NOS
9719/3	NK/T-cell lymphoma, nasal and nasal-type
9734/3	Plasmacytoma, extramedullary
9758/3	Follicular dendritic cell sarcoma
Bone and cartilage tumors	
9370/3	Chordoma, NOS

Table 2. WHO: histological classification of tumors of the head and neck,² larynx and trachea
BACK

Histological classification of tumors of the salivary glands	
<i>Epithelial tumors</i>	
8012/3	Large cell carcinoma, NOS
8041/3	Small cell carcinoma, NOS
8070/3	Squamous cell carcinoma, NOS
8082/3	Lymphoepithelial carcinoma
8140/3	Adenocarcinoma, NOS
8147/3	Basal cell adenocarcinoma
8200/3	Adenoid cystic carcinoma
8310/3	Clear cell adenocarcinoma, NOS
8410/3	Sebaceous adenocarcinoma
8430/3	Mucoepidermoid carcinoma
8440/3	Cystadenocarcinoma, NOS
8480/3	Mucinous adenocarcinoma
8550/3	Acinar cell carcinoma
8525/3	Polymorphous low grade adenocarcinoma
8562/3	Epithelial-myoepithelial carcinoma
8290/3	Oxyphilic adenocarcinoma
8500/3	Infiltrating duct carcinoma, NOS
8941/3	Carcinoma in pleomorphic adenoma
8974/1	Sialoblastoma
8980/3	Carcinosarcoma, NOS
8982/3	Malignant myoepithelioma
<i>Tumors of the lymphatic system</i>	
9680/3	Malignant lymphoma, large B-cell, diffuse, NOS
9699/3	Marginal zone B-cell lymphoma, NOS
Histological classification of tumors of the hypopharynx, larynx, and trachea	
<i>Epithelial tumors</i>	
8031/3	Giant cell carcinoma
8051/3	Verrucous carcinoma, NOS
8052/3	Papillary squamous cell carcinoma
8070/3	Squamous cell carcinoma, NOS
8074/3	Squamous cell carcinoma, spindle cell
8075/3	Squamous cell carcinoma, adenoid
8082/3	Lymphoepithelial carcinoma
8083/3	Basaloid squamous cell carcinoma
8200/3	Adenoid cystic carcinoma
8430/3	Mucoepidermoid carcinoma
8560/3	Adenosquamous carcinoma
<i>Neuroendocrine tumors</i>	
8041/3	Small cell carcinoma, NOS
8045/3	Combined small cell carcinoma
8240/3	Carcinoid tumor, NOS
8249/3	Atypical carcinoid tumor
<i>Soft tissue tumors</i>	
8810/3	Fibrosarcoma, NOS
8825/1	Myofibroblastic tumor, NOS
8830/3	Malignant fibrous histiocytoma
8850/3	Liposarcoma, NOS
8890/3	Leiomyosarcoma, NOS
8900/3	Rhabdomyosarcoma, NOS
9040/3	Synovial sarcoma, NOS
9120/3	Hemangiosarcoma
9140/3	Kaposi's sarcoma
<i>Bone and cartilage tumors</i>	
9180/3	Osteosarcoma, NOS
9220/3	Chondrosarcoma, NOS
9250/1	Giant cell tumor of bone, NOS
<i>Mucosal malignant melanoma</i>	
8720/3	Malignant melanoma, NOS

Table 3. WHO: histological classification of tumors of the digestive system³
BACK

Histological classification of esophageal cancer		Histological classification of stomach cancer	
<i>Epithelial tumors</i>		<i>Epithelial tumors</i>	
8020/3	Carcinoma, undifferentiated, NOS	8020/3	Carcinoma, undifferentiated, NOS
8041/3	Small cell carcinoma, NOS	8041/3	Small cell carcinoma, NOS
8051/3	Verrucous carcinoma, NOS	8070/3	Squamous cell carcinoma, NOS
8070/3	Squamous cell carcinoma, NOS	8140/3	Adenocarcinoma, NOS
8074/3	Squamous cell carcinoma, spindle cell	8144/3	Adenocarcinoma, intestinal type
8083/3	Basaloid squamous cell carcinoma	8145/3	Carcinoma, diffuse type
8140/3	Adenocarcinoma, NOS	8240/3	Carcinoid tumor, NOS
8200/3	Adenoid cystic carcinoma	8211/3	Tubular adenocarcinoma
8240/3	Carcinoid tumor, NOS	8260/3	Papillary adenocarcinoma, NOS
8430/3	Mucoepidermoid carcinoma	8480/3	Mucinous adenocarcinoma
8560/3	Adenosquamous carcinoma	8490/3	Signet ring cell carcinoma
		8560/3	Adenosquamous carcinoma
<i>Non epithelial tumors</i>		<i>Non epithelial tumors</i>	
8720/3	Malignant melanoma, NOS	8890/3	Leiomyosarcoma, NOS
8936/1	Gastrointestinal stromal tumor, NOS	8936/1	Gastrointestinal stromal tumor, NOS
8936/3	Gastrointestinal stromal sarcoma	8936/3	Gastrointestinal stromal sarcoma
8890/3	Leiomyosarcoma, NOS	9140/3	Kaposi's sarcoma
8900/3	Rhabdomyosarcoma, NOS	9673/3	Mantle cell lymphoma
9140/3	Kaposi's sarcoma	9680/3	Malignant lymphoma, large B-cell, diffuse, NOS
		9699/3	Marginal zone B-cell lymphoma, NOS; MALT lymphoma
		<i>Histological classification of tumors of the small intestine</i>	
		<i>Epithelial tumors</i>	
		8020/3	Carcinoma, undifferentiated, NOS
		8041/3	Small cell carcinoma, NOS
		8070/3	Squamous cell carcinoma, NOS
		8140/3	Adenocarcinoma, NOS
		8153/1	Gastrinoma, NOS
		8156/1	Somatostatinoma, NOS
		8240/3	Carcinoid tumor, NOS
		8241/3	Enterochromaffin cell carcinoid
		8244/3	Composite carcinoid
		8480/3	Mucinous adenocarcinoma
		8490/3	Signet ring cell carcinoma
		8510/3	Medullary carcinoma, NOS
		8560/3	Adenosquamous carcinoma
		<i>Non epithelial tumors</i>	
		8890/3	Leiomyosarcoma, NOS
		8936/1	Gastrointestinal stromal tumor, NOS
		9120/3	Hemangiosarcoma
		9140/3	Kaposi's sarcoma
		<i>Malignant lymphomas</i>	
		9680/3	Malignant lymphoma, large B-cell, diffuse, NOS
		9673/3	Mantle cell lymphoma
		9687/3	Burkitt's lymphoma, NOS (see also M-9826/3)
		9699/3	Marginal zone B-cell lymphoma, NOS; MALT lymphoma
		9702/3	Mature T-cell lymphoma, NOS
		9717/3	Intestinal T-cell lymphoma
		9764/3	Immunoproliferative small intestinal disease

Table 4. WHO: histological classification of tumors of the digestive system³

BACK

Histological classification of tumors of the appendix	
<i>Epithelial tumors</i>	
8140/0	Adenoma, NOS
8211/0	Tubular adenoma, NOS
8261/0	Villous adenoma, NOS
8263/0	Tubulovillous adenoma, NOS
8213/0	Serrated adenoma
8140/3	Adenocarcinoma, NOS
8480/3	Mucinous adenocarcinoma
8490/3	Signet ring cell carcinoma
8041/3	Small cell carcinoma, NOS
8020/3	Carcinoma, undifferentiated, NOS
8240/1	Carcinoid tumor of uncertain malignant potential
8241/3	Enterochromaffin cell carcinoid
8245/1	Tubular carcinoid
8243/3	Goblet cell carcinoid
8244/3	Composite carcinoid
<i>Non epithelial tumors</i>	
9570/0	Neuroma, NOS
8850/0	Lipoma, NOS
8890/0	Leiomyoma, NOS
8936/1	Gastrointestinal stromal tumor, NOS
8890/3	Leiomyosarcoma, NOS
9140/3	Kaposi's sarcoma

Histological classification of colorectal cancer	
<i>Epithelial tumors</i>	
8140/0	Adenoma, NOS
8211/0	Tubular adenoma, NOS
8261/0	Villous adenoma, NOS
8263/0	Tubulovillous adenoma, NOS
8213/0	Serrated adenoma
8140/3	Adenocarcinoma, NOS
8480/3	Mucinous adenocarcinoma
8490/3	Signet ring cell carcinoma
8041/3	Small cell carcinoma, NOS
8070/3	Squamous cell carcinoma, NOS
8560/3	Adenosquamous carcinoma
8510/3	Medullary carcinoma, NOS
8020/3	Carcinoma, undifferentiated, NOS
8240/3	Carcinoid tumor, NOS (except of appendix M-8240/1)
8241/3	Enterochromaffin cell carcinoid
8244/3	Composite carcinoid
<i>Non epithelial tumors</i>	
8850/0	Lipoma, NOS
8890/0	Leiomyoma, NOS
8936/1	Gastrointestinal stromal tumor, NOS
8890/3	Leiomyosarcoma, NOS
9120/3	Hemangiosarcoma
9140/3	Kaposi's sarcoma
8720/3	Malignant melanoma, NOS
9699/3	Marginal zone B-cell lymphoma, NOS
9673/3	Mantle cell lymphoma
9680/3	Malignant lymphoma, large B-cell, diffuse, NOS
9687/3	Burkitt's lymphoma, NOS (see also M-9826/3)

Histological classification of anal canal cancer	
<i>Epithelial tumors</i>	
8542/3	Paget's disease, extramammary
8070/3	Squamous cell carcinoma, NOS
8140/3	Adenocarcinoma, NOS
8480/3	Mucinous adenocarcinoma
8041/3	Small cell carcinoma, NOS
8020/3	Carcinoma, undifferentiated, NOS
8240/3	Carcinoid tumor, NOS
<i>Malignant melanoma</i>	
8720/3	Malignant melanoma, NOS

Table 5. WHO: histological classification of tumors of the digestive system³

BACK

Histological classification of cancer of the liver and intrahepatic bile ducts

<i>Epithelial tumors</i>	
8020/3	Carcinoma, undifferentiated, NOS
8160/3	Cholangiocarcinoma (C22.1, C24.0)
8161/3	Bile duct cystadenocarcinoma (C22.1, C24.0)
8170/3	Hepatocellular carcinoma, NOS (C22.0)
8180/3	Combined hepatocellular carcinoma and cholangiocarcinoma
8970/3	Hepatoblastoma (C22.0)
<i>Non epithelial tumors</i>	
8900/3	Rhabdomyosarcoma, NOS
8991/3	Embryonal sarcoma
9133/1	Epithelioid hemangioendothelioma, NOS
9120/3	Hemangiosarcoma
<i>Miscellaneous tumors</i>	
8963/3	Malignant rhabdoid tumor
8980/3	Carcinosarcoma, NOS
9071/3	Yolk sac tumor
9080/1	Teratoma, NOS
9140/3	Kaposi's sarcoma

Histological classification of tumors of the gallbladder and of the extrahepatic bile ducts

<i>Epithelial tumors</i>	
8013/3	Large cell neuroendocrine carcinoma
8020/3	Carcinoma, undifferentiated, NOS
8041/3	Small cell carcinoma, NOS
8070/3	Squamous cell carcinoma, NOS
8140/3	Adenocarcinoma, NOS
8144/3	Adenocarcinoma, intestinal type
8161/3	Bile duct cystadenocarcinoma
8240/3	Carcinoid tumor, NOS
8243/3	Goblet cell carcinoid
8245/1	Tubular carcinoid
8244/3	Composite carcinoid
8260/3	Papillary adenocarcinoma, NOS
8310/3	Clear cell adenocarcinoma, NOS
8480/3	Mucinous adenocarcinoma
8490/3	Signet ring cell carcinoma
8560/3	Adenosquamous carcinoma
<i>Non epithelial tumors</i>	
8890/3	Leiomyosarcoma, NOS
8900/3	Rhabdomyosarcoma, NOS
9140/3	Kaposi's sarcoma

Histological classification of tumors of the exocrine pancreas

<i>Epithelial tumors</i>	
8020/3	Carcinoma, undifferentiated, NOS
8035/3	Carcinoma with osteoclast-like giant cells
8154/3	Mixed islet cell and exocrine adenocarcinoma
8441/3	Serous cystadenocarcinoma, NOS
8452/1	Solid pseudopapillary tumor
8452/3	Solid pseudopapillary carcinoma
8453/1	Intraductal papillary-mucinous tumor with moderate dysplasia
8453/2	Intraductal papillary-mucinous carcinoma, non-invasive
8453/3	Intraductal papillary-mucinous carcinoma, invasive
8470/2	Mucinous cystadenocarcinoma, non-invasive
8470/3	Mucinous cystadenocarcinoma, NOS
8480/3	Mucinous adenocarcinoma
8490/3	Signet ring cell carcinoma
8500/3	Infiltrating duct carcinoma, NOS
8550/3	Acinar cell carcinoma
8551/3	Acinar cell cystadenocarcinoma
8560/3	Adenosquamous carcinoma
8971/3	Pancreatoblastoma

Table 6. WHO: histological classification of tumors of the lung, pleura, thymus, and heart⁷
BACK

Histological classification of tumors of the lung	
<i>Epithelial tumors</i>	
8012/3	Large cell carcinoma, NOS
8013/3	Large cell neuroendocrine carcinoma
8014/3	Large cell carcinoma with rhabdoid phenotype
8022/3	Pleomorphic carcinoma
8031/3	Giant cell carcinoma
8032/3	Spindle cell carcinoma, NOS
8033/3	Pseudosarcomatous carcinoma
8041/3	Small cell carcinoma, NOS
8045/3	Combined small cell carcinoma
8052/3	Papillary squamous cell carcinoma
8070/2	Squamous cell carcinoma in situ, NOS
8070/3	Squamous cell carcinoma, NOS
8073/3	Squamous cell carcinoma, small cell, non-keratinising
8082/3	Lymphoepithelial carcinoma
8083/3	Basaloid squamous cell carcinoma
8084/3	Squamous cell carcinoma, clear cell type
8123/3	Basaloid carcinoma
8140/3	Adenocarcinoma, NOS
8200/3	Adenoid cystic carcinoma
8230/3	Solid carcinoma, NOS
8240/3	Carcinoid tumor, NOS
8249/3	Atypical carcinoid tumor
8250/3	Bronchiolo-alveolar adenocarcinoma, NOS
8252/3	Bronchio-alveolar carcinoma, non-mucinous
8253/3	Bronchio-alveolar carcinoma, mucinous
8254/3	Bronchio-alveolar carcinoma, mixed mucinous and non-mucinous
8255/3	Adenocarcinoma with mixed subtypes
8260/3	Papillary adenocarcinoma, NOS
8310/3	Clear cell adenocarcinoma, NOS
8333/3	Foetal adenocarcinoma
8430/3	Mucoepidermoid carcinoma
8470/3	Mucinous cystadenocarcinoma, NOS
8480/3	Mucinous adenocarcinoma
8490/3	Signet ring cell carcinoma
8550/3	Acinar cell carcinoma
8560/3	Adenosquamous carcinoma
8562/3	Epithelial-myoeithelial carcinoma
8972/3	Pulmonary blastoma
8980/3	Carcinosarcoma, NOS

<i>Mesenchymal tumors</i>	
8800/3	Sarcoma, NOS
8825/1	Myofibroblastic tumor, NOS
8827/1	Myofibroblastic tumor, peribronchial
8973/3	Pleuropulmonary blastoma
9040/3	Synovial sarcoma, NOS
9041/3	Synovial sarcoma, spindle cell
9043/3	Synovial sarcoma, biphasic
9120/3	Hemangiosarcoma
9133/1	Epithelioid hemangioendothelioma, NOS
9174/1	Lymphangiomyomatosis
<i>Lymphoproliferative tumors</i>	
9680/3	Malignant lymphoma, large B-cell, diffuse, NOS
9699/3	Marginal zone B-cell lymphoma, NOS–MALT lymphoma
9751/1	Langerhans cell histiocytosis, NOS
9766/1	Angiocentric immunoproliferative lesion
<i>Miscellaneous tumors</i>	
8580/1	Thymoma, benign
8720/3	Malignant melanoma, NOS

Histological classification of tumors of the pleura	
<i>Mesothelial tumors</i>	
9050/3	Mesothelioma, malignant
9051/3	Fibrous mesothelioma, malignant
9052/1	Well differentiated papillary mesothelioma, NOS (<i>not listed in ICD-O-3</i>)
9052/3	Epithelioid mesothelioma, malignant
9053/3	Mesothelioma, biphasic, malignant
<i>Lymphoproliferative tumors</i>	
9678/3	Primary effusion lymphoma
<i>Mesenchymal tumors</i>	
8806/3	Desmoplastic small round cell tumor
9040/3	Synovial sarcoma, NOS
9041/3	Synovial sarcoma, spindle cell
9043/3	Synovial sarcoma, biphasic
9120/3	Hemangiosarcoma
9133/1	Epithelioid hemangioendothelioma, NOS

Table 7. WHO: histological classification of tumors of the soft tissues, bone and cartilage⁸
BACK

<i>Adipocytic tumors</i>		<i>Vascular tumors</i>	
<i>Locally aggressive</i>		<i>Locally aggressive</i>	
8851/3	Liposarcoma, well differentiated	9130/1	Hemangioendothelioma, NOS
<i>Malignant</i>		<i>Rarely metastasizing</i>	
8850/3	Liposarcoma, NOS	9135/1	Endovascular papillary angioendothelioma
8852/3	Myxoid liposarcoma	9130/1	Hemangioendothelioma, NOS
8853/3	Round cell liposarcoma	9140/3	Kaposi's sarcoma
8854/3	Pleomorphic liposarcoma	<i>Malignant</i>	
8855/3	Mixed type liposarcoma	9133/3	Epithelioid hemangioendothelioma, malignant
8858/3	Dedifferentiated liposarcoma	9120/3	Hemangiosarcoma
<i>Fibroblastic and myofibroblastic tumors</i>		<i>Tumors of uncertain differentiation</i>	
<i>Locally aggressive</i>		<i>Rarely metastasizing</i>	
8821/1	Aggressive fibromatosis	8836/1	Angiomatoid fibrous histiocytoma
<i>Rarely metastasizing</i>		8940/1	Mixed tumor
8811/3	Fibromyxosarcoma	8982/1	Myoepithelioma
8814/3	Infantile fibrosarcoma	9373/1	Parachordoma
8815/1	Solitary fibrous tumor	<i>Malignant</i>	
8825/1	Myofibroblastic tumor, NOS	8800/3	Sarcoma, NOS
8825/3	Low grade myofibroblastic sarcoma	8804/3	Epithelioid sarcoma
9150/1	Hemangiopericytoma, NOS	8806/3	Desmoplastic small round cell tumor
<i>Malignant</i>		8963/3	Malignant rhabdoid tumor
8810/3	Fibrosarcoma, NOS	8990/3	Mesenchymoma, malignant
8811/3	Fibromyxosarcoma	9040/3	Synovial sarcoma, NOS
<i>"Fibrohistiocytic" tumors</i>		9044/3	Clear cell sarcoma
<i>Rarely metastasizing</i>		9231/3	Myxoid chondrosarcoma
8835/1	Plexiform fibrohistiocytic tumor	9260/3	Ewing's sarcoma
9251/1	Giant cell tumor of soft parts, NOS	9364/3	Peripheral neuroectodermal tumor
<i>Malignant</i>		9581/3	Alveolar soft part sarcoma
8830/3	Malignant fibrous histiocytoma	<i>Osteocartilaginous tumors</i>	
<i>Leiomyosarcomas</i>		9220/0	Chondroma, NOS
8890/3	Leiomyosarcoma, NOS	9240/3	Mesenchymal chondrosarcoma
<i>Pericytic tumors</i>		9180/3	Osteosarcoma
8711/3	Glomus tumor, malignant		
8713/1	Glomangiomyoma		
<i>Skeletal muscle tumors</i>			
8900/3	Rhabdomyosarcoma, NOS		
8901/3	Pleomorphic rhabdomyosarcoma, adult type		
8910/3	Embryonal rhabdomyosarcoma, NOS		
8912/3	Spindle cell rhabdomyosarcoma		
8920/3	Alveolar rhabdomyosarcoma		

Table 8. ICD-O and ENCR topography coding for skin cancer

BACK

ICD-O	Description	ENCR	Recommendation
C44.0	Skin of lip, NOS Skin of upper lip Skin of lower lip	C44.09	Skin of lip, NOS Skin of upper lip Skin of lower lip
C44.1	Eyelid Eyelid, NOS Canthus, NOS Inner canthus Lower lid Meibomian gland Outer canthus Upper lid	C44.19	Eyelid
C44.2	External ear Auricle, NOS Pinna Ceruminous gland Concha Ear, NOS Ear lobule Earlobe External auditory canal Auditory canal, NOS Auricular canal, NOS External auricular canal Ear canal External auditory meatus Helix Skin of auricle Skin of ear, NOS Tragus	C44.29	External ear
C44.3	Skin of other and unspecified parts of face Skin of: ❖ face ❖ forehead ❖ cheek ❖ jaw ❖ chin ❖ nose ❖ temple Ala nasi Chin, NOS Columnella Eyebrow External cheek External nose Forehead, NOS Temple, NOS	C44.30 C44.31 C44.3 C44.33 C44.39	Cheek Forehead Temple Eyebrow Nose Columnella Chin Jaw Face, NOS
C44.4	Skin of scalp and neck Skin of head, NOS Skin of neck Skin of scalp Scalp, NOS Skin of cervical region Skin of supraclavicular region	C44.40 C44.41 C44.49	Skin of neck Skin of cervical region Skin of supraclavicular region Skin of scalp Scalp, NOS Skin of head, NOS
C44.5	Skin of trunk Skin of: ❖ abdomen ❖ anus ❖ axilla ❖ back ❖ flank	C44.50 C44.51	Trunk, anterior, upper Axilla Breast Thorax Infraclavicular region Trunk, anterior, lower Abdomen

	<ul style="list-style-type: none"> ❖ buttock ❖ groin ❖ breast ❖ umbilicus ❖ abdominal wall ❖ thoracic wall ❖ perineum ❖ gluteal region ❖ inguinal region ❖ sacrococcygeal region ❖ scapular region ❖ infraclavicular region ❖ thorax ❖ trunk Perianal skin Umbilicus, NOS		Abdominal wall Flank Groin Inguinal region Pubis Umbilicus Trunk anterior, NOS Thorax Trunk, posterior, upper Back Scapular region Trunk, posterior, lower Buttock Gluteal region Sacrococcygeal region Trunk, posterior, NOS Perineum Anus Perianal skin Trunk, NOS
C44.6	Skin of upper limb and shoulder Skin of: <ul style="list-style-type: none"> ❖ upper limb ❖ forearm ❖ arm ❖ finger ❖ elbow ❖ hand ❖ palm ❖ thumb ❖ wrist ❖ antecubital space ❖ shoulder Finger nail Palmar skin		Skin of upper arm Elbow Shoulder Antecubital space Skin of lower arm Forearm Wrist Skin of hand, dorsal Skin of hand, palmar Skin of hand, NOS Skin of finger, dorsal Skin of finger, palmar Skin of finger, subungual Nail Skin of finger, NOS Skin of arm, NOS
C44.7	Skin of lower limb and hip Skin of: <ul style="list-style-type: none"> ❖ hip ❖ lower limb ❖ heel ❖ ankle ❖ thigh ❖ toe ❖ leg ❖ knee ❖ foot ❖ calf ❖ popliteal space Plantar skin Sole of foot Toe nail		Skin of leg Hip Knee Popliteal space Thigh Skin of lower leg Ankle Calf Heel Shin Skin of foot, dorsal Skin of foot, plantar Sole of foot Skin of foot, NOS Skin of toe, dorsal Plantar skin Sole of foot Toe nail Skin of toe, plantar Skin of toe, subungual Nail Skin of toe, NOS Skin of leg, NOS
C44.8	Overlapping lesion of skin (see ICD-O)		Overlapping lesion of skin of face or face and head/neck Overlapping lesion of skin of head or head and neck Overlapping lesion of skin of trunk or trunk and neck Overlapping lesion of skin of upper limb or upper limb and shoulder/trunk Overlapping lesion of skin of lower limb or lower limb and hip/trunk Overlapping lesion of skin, NOS



C44.9	Skin, NOS (<i>except skin of labia majora C51.0, skin of vulva C51.9, skin of penis C60.9 and skin of scrotum C63.2</i>)	C44.9	Skin, NOS
C51.0	Labium majus Labia majora, NOS Bartholin's [greater vestibular] gland Skin of labia majora	C51.0	Skin of labia majora
C51.9	Vulva, NOS External femal genitals Fourchette Labia, NOS Labium, NOS Pubis Mons Veneris Pudendum Skin of vulva	C51.9	Skin of vulva
C60.9	Penis, NOS Skin of penis	C60.9	Skin of penis
C63.2	Scrotum, NOS Skin of scrotum	C63.2	Skin of scrotum

Table 9. WHO: histological classification of tumors of the skin¹⁰
[BACK](#)

<i>Keratinocytic tumors</i>		<i>Adnexal tumors of the skin with follicular differentiation</i>	
8051/3	Verrucous carcinoma, NOS	8103/1	Pilar tumor, NOS
8070/3	Squamous cell carcinoma, NOS	8110/3	Pilomatrix carcinoma
8074/3	Squamous cell carcinoma, spindle cell		
8075/3	Squamous cell carcinoma, adenoid	<i>Adnexal tumors of the skin with sebaceous differentiation</i>	
8081/2	Bowen's disease	8410/3	Sebaceous adenocarcinoma
8090/3	Basal cell carcinoma		
8091/3	Multifocal superficial basal cell carcinoma	<i>Skin lymphomas</i>	
8092/3	Infiltrating basal cell carcinoma, NOS	<i>Mature T and NK cell</i>	
8093/3	Basal cell carcinoma, fibroepithelial	9700/3	Mycosis fungoides
8094/3	Basosquamous carcinoma	9701/3	Sézary's syndrome
8097/3	Basal cell carcinoma, nodular	9705/3	Angioimmunoblastic T-cell lymphoma
8098/3	Adenoid basal carcinoma	9708/3	Subcutaneous panniculitis-like T-cell lymphoma
8560/3	Adenosquamous carcinoma	9709/3	Cutaneous T-cell lymphoma, NOS
		9718/3	Primary cutaneous CD30+ T-cell lymphoproliferative disorder
<i>Melanocytic tumors</i>		9719/3	NK/T-cell lymphoma, nasal and nasal-type
8720/3	Malignant melanoma, NOS	<i>Mature B-cell</i>	
8721/3	Nodular melanoma	9680/3	Malignant lymphoma, large B-cell, diffuse, NOS
8742/2	Lentigo maligna	9690/3	Follicular lymphoma, NOS
8743/3	Superficial spreading melanoma	9699/3	Marginal zone B-cell lymphoma, NOS – SALT lymphoma
8744/3	Acral lentiginous melanoma, malignant	<i>Immature cell lymphomas (lymphoblastic lymphomas)</i>	
8745/3	Desmoplastic melanoma, malignant	9727/3	Precursor cell lymphoblastic lymphoma, NOS
8761/3	Malignant melanoma in giant pigmented nevus		
8762/1	Proliferative dermal lesion in congenital nevus	<i>Vascular tumors</i>	
8780/3	Blue nevus, malignant	9120/3	Hemangiosarcoma
<i>Adnexal tumors of the skin with apocrine and eccrine differentiation</i>		<i>Smooth muscle and skeletal tissue tumors</i>	
8200/3	Adenoid cystic carcinoma	8890/3	Leiomyosarcoma, NOS
8211/3	Tubular adenocarcinoma		
8400/3	Sweat gland adenocarcinoma	<i>Fibrous, histiocytic, and fibrohistiocytic tumors</i>	
8401/3	Apocrine adenocarcinoma	8824/1	Myofibromatosis
8403/3	Malignant eccrine spiradenoma	8834/1	Giant cell fibroblastoma
8407/3	Sclerosing sweat duct carcinoma	8832/3	Dermatofibrosarcoma, NOS
8409/3	Eccrine poroma, malignant		
8408/3	Eccrine papillary adenocarcinoma	<i>Neural tumors</i>	
8480/3	Mucinous adenocarcinoma	8247/3	Merkel cell carcinoma
8940/3	Mixed tumor, malignant, NOS	9260/3	Ewing's sarcoma
8540/3	Paget's disease, mammary	9364/3	Peripheral neuroectodermal tumor
8542/3	Paget's disease, extramammary	9580/0	Granular cell tumor, NOS

Table 10. Additional variables to consider in breast cancer registration

BACK

Data field	Description
multiple tumor	woman with single tumor, woman with multiple primaries
progressive number of the cancer	in case of multiple primaries; includes "pure" <i>in situ</i> carcinomas (when not associated with an already registered malignant tumor)
laterality	right, left
pT	UICC 2002 TNM 6th edition coding
invasive tumor diameter	maximum size (in millimeters); in the presence of multifocality/multicentricity, diameter of the largest nodule
<i>in situ</i> tumor diameter	maximum size (in millimeters); as above
foci	focus of lesion: <ul style="list-style-type: none"> ❖ unifocal ❖ multifocal (nodules within an area up to 5 cm in diameter) ❖ multicentric (nodules more than 5 cm from each other or nodules in different quadrants)¹⁵
pN	UICC 2002 TNM 6th edition coding
total lymph nodes	number of total lymph nodes examined
positive lymph nodes	number of metastatic lymph nodes
isolated tumor cells	presence of isolated tumor cells
immunohistochemical stage N	immunohistochemical exam performed for pN staging
axillary dissection	axillary dissection performed
sentinel lymph node	indicates sentinel lymph node procedures were performed
M	presence of distant metastasis at diagnosis (TNM VI, 2002)
grading	grade of differentiation (for invasive and <i>in situ</i> tumors)
grading method	WHO, Elston Ellis, Holland, other coding...
surgery date	main surgery date
surgery	type of surgery performed: <ul style="list-style-type: none"> ❖ tumorectomy ❖ wide excision ❖ quadrantectomy ❖ mastectomy ❖ not performed ❖ unknown
date of pre-operative chemotherapy	date pre-operative chemotherapy started
pre-operative chemotherapy	performed, not performed, unknown...
date of first invitation	date of first screening invitation
date of first screening test	date first screening test was performed
date of subsequent examinations	use <i>n</i> data fields for <i>n</i> screening tests taken by patient
screening status	proposed classification: see Chapter 2, "Screening programs"
estrogen receptors	presence of estrogen receptors (use highest scale of measurement possible)
progesterone receptors	presence of progesterone receptors (use highest scale of measurement possible)
proliferation	immunohistochemical assessment (greatest possible detail)
oncogenes/tumor suppressor genes	use <i>n</i> data fields (greatest possible detail)

Table 11. Breast cancer sites and regional lymph nodes

BACK

Site	Description
	nipple (C50.0)
Q5	central portion of breast (C50.1)
Q2	upper inner quadrant of breast (C50.2)
Q4	lower inner quadrant of breast (C50.3)
Q1	upper outer quadrant of breast (C50.4)
Q3	lower outer quadrant of breast (C50.5)
	axillary tail of breast (C50.6)
<i>The regional lymph nodes are as follows:</i>	
1. axillary (ipsilateral)	interpectoral (Rotter's) nodes and lymph nodes along the axillary vein and its tributaries that may be divided into the following levels: <ul style="list-style-type: none"> ❖ Level I (low axilla): lymph nodes lateral to the lateral border of pectoralis minor muscle ❖ Level II (mid axilla): lymph nodes between the medial and lateral borders of the pectoralis minor muscle and interpectoral (Rotter's) lymph nodes ❖ Level III (apical axilla): lymph nodes medial to the medial margin of the pectoralis minor muscle, including those designated as subclavicular, infraclavicular, or apical.
2. ipsilateral infraclavicular (subclavicular)	
3. internal mammary (ipsilateral)	lymph nodes in the intercostal spaces along the edge of the sternum in the endothoracic fascia
4. supraclavicular (ipsilateral)	
<i>Note 1: intramammary lymph nodes are considered axillary lymph nodes</i>	
<i>Note 2: any other lymph node metastasis (including contralateral supraclavicular, cervical, or internal mammary lymph nodes) must be coded as distant metastasis (M1)</i>	

Table 12. Breast cancer staging (AJCC 2002) according to TNM 2002
BACK

Stage 0	Tis N0 M0
Stage I	T1* N0 M0
Stage IIA	T0 N1 M0 T1* N1 M0 T2 N0 M0
Stage IIB	T2 N1 M0 T3 N0 M0
Stage IIIA	T0 N2 M0 T1* N2 M0 T2 N2 M0 T3 N1, N2 M0
Stage IIIB	T4 N1, N2, N3 M0
Stage III C	Tx N3 M0
Stage IV	Tx Nx M1
<i>*T1 includes T1mic</i>	

Table 13. TNM 2002 classification (T/pT and pN) of breast cancer
BACK

T	Definition
TX	primary tumor cannot be assessed
Tis	carcinoma <i>in situ</i>
Tis (DCIS)	ductal carcinoma in situ
Tis (LCIS)	lobular carcinoma in situ
Tis (Paget)	Paget's disease of the nipple with no tumor (Note: Paget's disease associated with a tumor is classified according to the size of the tumor)
T1	tumor not larger than 2.0 cm in greatest dimension
T1mic	microinvasion not larger than 0.1 cm in greatest dimension (in case of multiple foci evaluate the largest)
T1a	tumor larger than 0.1 cm but not larger than 0.5 cm
T1b	tumor larger than 0.5 cm but not larger than 1.0 cm
T1c	tumor larger than 1.0 cm but not larger than 2.0 cm
T2	tumor larger than 2.0 cm but not larger than 5.0 cm in greatest dimension
T3	tumor larger than 5.0 cm in greatest dimension
T4	tumor of any size with direct extension to chest wall (ribs, intercostal muscles, and serratus anterior muscle, but not including pectoralis muscle) or skin, only as described in T4a-T4d
T4a	extension to chest wall
T4b	edema (including peau d'orange) or ulceration of the skin of the breast, or satellite skin nodules confined to the same breast; dimpling of the skin, nipple retraction, or any other skin change, except those described under T4b and T4d, are not included, and are classified according to the standard tumor classification
T4c	both T4a and T4b
T4d	inflammatory carcinoma (if the skin biopsy is negative and there is no localized, measurable primary cancer, the category is pTx)
N	Definition
pNX	regional lymph nodes cannot be assessed (not removed for pathologic study or previously removed)
pN0(sn)	negative sentinel lymph node
pN0	no regional lymph node metastasis. Note: cases of single tumor cells (ITC, single tumor cells, or small cell clusters not larger than 0.2 mm) are classified pN0; ITCs do not usually show evidence of malignant activity (e.g., proliferation or stromal reaction) in lymph nodes
pN1mi	micrometastasis (larger than 0.2 mm but not larger than 2.0 mm)
pN1	metastasis in one to three axillary lymph nodes, and/or in internal ipsilateral mammary nodes with microscopic disease detected by sentinel lymph node dissection but not clinically apparent
pN1a	metastasis in one to three axillary lymph nodes, including at least one tumor deposit larger than 2.0 mm in greatest dimension
pN1b	metastasis in internal mammary nodes with microscopic disease detected by sentinel lymph node dissection but not clinically apparent
pN1c	metastasis in one to three axillary lymph nodes and in internal mammary lymph nodes with microscopic disease detected by sentinel lymph node dissection but not clinically apparent
pN2	metastasis in four to nine ipsilateral axillary lymph nodes, or in clinically apparent internal ipsilateral mammary lymph nodes in the absence of axillary lymph node metastasis
pN2a	metastasis in four to nine axillary lymph nodes (at least one tumor deposit larger than 2.0 mm)
pN2b	metastasis in clinically apparent internal mammary lymph nodes in the absence of axillary lymph node metastasis
pN3	metastasis in ten or more ipsilateral axillary lymph nodes, or in ipsilateral infraclavicular lymph nodes, or clinically apparent metastasis in internal ipsilateral mammary lymph nodes in the presence of one or more positive axillary lymph node(s) or in more than three axillary lymph nodes with microscopically detected, not clinically apparent metastasis in internal mammary lymph nodes; or, in ipsilateral supraclavicular lymph nodes
pN3a	metastasis in ten or more ipsilateral axillary lymph nodes (at least one tumor deposit larger than 2.0 mm); or, metastasis to the ipsilateral infraclavicular lymph nodes
pN3b	metastasis in clinically apparent internal mammary lymph nodes in the presence of one or more positive axillary lymph node(s); or, in more than three axillary lymph nodes and in internal mammary lymph nodes with microscopic disease detected by sentinel lymph node dissection but not clinically apparent
pN3c	metastasis in supraclavicular lymph nodes

Table 14. WHO: classification of tumors of the breast and female genital organs¹⁷
BACK

Histological classification of breast cancer (modified)	
<i>Epithelial tumors</i>	
8013/3	Large cell neuroendocrine carcinoma
8022/3	Pleomorphic carcinoma
8035/3	Carcinoma with osteoclast-like giant cells
8041/3	Small cell carcinoma, NOS
8070/3	Squamous cell carcinoma, NOS
8200/3	Adenoid cystic carcinoma
8201/3	Cribriform carcinoma, NOS
8211/3	Tubular adenocarcinoma
8249/3	Atypical carcinoid tumor
8314/3	Lipid-rich carcinoma
8315/3	Glycogen-rich carcinoma
8401/3	Apocrine adenocarcinoma
8410/3	Sebaceous adenocarcinoma
8430/3	Mucoepidermoid carcinoma
8480/3	Mucinous adenocarcinoma
8490/3	Signet ring cell carcinoma
8500/2	Intraductal carcinoma, noninfiltrating, NOS
8500/3	Infiltrating duct carcinoma, NOS
8502/3	Secretory carcinoma of breast
8503/2	Noninfiltrating intraductal papillary adenocarcinoma
8503/3	Intraductal papillary adenocarcinoma with invasion
8504/2	Noninfiltrating intracystic carcinoma
8507/3	Invasive micropapillary carcinoma
8510/3	Medullary carcinoma, NOS
8520/2	Lobular carcinoma in situ, NOS
8520/3	Lobular carcinoma, NOS
8522/2	Intraductal carcinoma and lobular carcinoma in situ
8522/3	Infiltrating duct and lobular carcinoma
	Infiltrating duct carcinoma in situ
	Infiltrating lobular carcinoma in situ
8523/3	Infiltrating duct mixed with other types of carcinoma
8524/3	Infiltrating lobular mixed with other types of carcinoma
8525/3	Polymorphous low grade adenocarcinoma
8530/3	Inflammatory carcinoma
8540/3	Paget's disease, mammary
8541/3	Paget's disease and infiltrating duct carcinoma of breast
8543/3	Paget's disease and intraductal carcinoma of breast
8550/3	Acinar cell carcinoma
8560/3	Adenosquamous carcinoma
8575/3	Metaplastic carcinoma, NOS
<i>Mesenchymal tumors</i>	
8821/1	Aggressive fibromatosis
8825/1	Myofibroblastic tumor, NOS
8850/3	Liposarcoma, NOS
8890/3	Leiomyosarcoma, NOS
8900/3	Rhabdomyosarcoma, NOS
9120/3	Hemangiosarcoma
9150/1	Hemangiopericytoma, NOS
9180/3	Osteosarcoma, NOS
<i>Myoepithelial and fibroepithelial lesions</i>	
8982/3	Malignant myoepithelioma
9020/1	Phyllodes tumor, borderline
9020/3	Phyllodes tumor, malignant
<i>Malignant lymphomas</i>	
9680/3	Malignant lymphoma, large B-cell, diffuse, NOS
9687/3	Burkitt's lymphoma, NOS (see also M-9826/3)
9690/3	Follicular lymphoma, NOS (see also M-9675/3)
9699/3	Marginal zone B-cell lymphoma, NOS