Chapter 3: Classification and coding

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The Cancer Incidence in Five Continents (CI5) series has followed the evolution of the International Classification of Diseases (ICD) through four revisions, from the seventh revision (ICD-7) to the tenth (ICD-10), and the creation of a coding scheme for oncology: the International Classification of Diseases for Oncology (ICD-O) (WHO, 1976), now in its third edition (ICD-O-3) (Fritz et al., 2000), which is available from http://codes. iarc.fr/. CI5 Volumes I (Doll et al., 1966) and II (Doll et al., 1970) presented data on cancer incidence coded to ICD-7 (WHO, 1957). Volume III (Waterhouse et al., 1976) published data using both ICD-7 and ICD-8 (WHO, 1967). ICD-8, which came into effect in 1968, was also used in Volume IV (Waterhouse et al., 1982). ICD-9 (WHO, 1977) was used for Volumes V (Muir et al., 1987), VI (Parkin et al., 1992), and VII (Parkin et al., 1997). ICD-10 (WHO, 1992) was used for Volumes VIII (Parkin et al., 2002) and IX (Curado et al., 2007), and is also used for the present volume. The updates to ICD-10 since 2010 (available from http://www.who.int/ classifications/icd/icd10updates/en/) and the 2011 revision of ICD-O-3 (WHO, 2013; available from http://codes.iarc.fr/) were not considered in this volume, which presents data for the 5-year period of 2003-2007.

The data are published at the level of the three-character ICD-10 codes in the individual registry tables. The groupings of ICD codes adopted in the previous two volumes have been used again in this volume to maintain comparability over time. Table 3.1 presents the individual ICD-10 site codes, the full ICD-10 titles, the Volume X groupings, and the short titles used in the tables of incidence.

CLASSIFICATIONS USED IN THE CANCER REGISTRY

Data submitted for the first four volumes of CI5 were sent in tabular format - organized by sex, site, and 5-year age group - on tape, diskette, or (most commonly) forms specifically designed for the purpose. The only verification possible was to tally the columns and rows. For Volume V, registries were given the option of sending data in the form of a case listing coded to ICD-9 topography only, or to ICD-9 or ICD-O topography plus ICD-O morphology. Only a very small minority of registries sent data coded to ICD-O. Contributors to Volume VI were encouraged to send data as a listing of individual cases, but 24% still sent tabulated data. Starting from Volume VII, data had to be sent as a listing of individual cases. Since the publication in 1976 of the first edition of ICD-O – which clearly defined axes of anatomical location, histology,

and behaviour - international conformity to standard classification systems and coding rules has increased steadily. For data published in Volume IV (1973–1977), 90% of registries recorded histological diagnosis. For coding, just over a third of the registries used the American Cancer Society's Manual of Tumor Nomenclature and Coding (MOTNAC) (ACS, 1951; 1968), a third had started to use ICD-O, and 12% used the Systematized Nomenclature of Pathology (SNOP) (CAP, 1965). About 75% of contributors to Volume V used ICD-O to code histology, and that proportion rose to more than 90% for Volumes VI and VII. Only 4 of the 186 contributors to Volume VIII, 1 of the 225 contributors to Volume IX, and 2 of the 290 contributors to the present volume did not code their histological data to ICD-O. Although most of the data submitted for this volume had been coded or converted to ICD-O-3 (see Chapter 6), registries were also asked what classification systems were used for coding data in the registry during the period. Of the 290 contributors, 265 registries (91.4%) coded to ICD-O topography and morphology (of which 255 used ICD-O-3), 23 registries (7.9%) coded to ICD-9 or ICD-10 topography and ICD-O morphology, and two registries (0.7%) coded to ICD-9 or ICD-10 topography and MOTNAC or the Systematized Nomenclature of Medicine (SNOMED) (CAP, 1974) for morphology.

COMPARABILITY

All data supplied for this volume either were already coded to ICD-O-3 when submitted, or were converted by IARC to ICD-O-3 for checking, and were then converted to ICD-10 for presentation (see Chapter 6). This process ensures that the same validity checks and multiple primary rules are applied to all data, and that the final ICD-10 codes used in this publication follow a standard ICD-O-3 to ICD-10 conversion. When a dataset included an ICD-10 code, this was ignored in the tabulations. The ICD-O-3 to ICD-10 conversion program was written at IARC using the rules of the ICD-O-2 to ICD-10 conversion program developed by Percy (1998). The conversion tables strictly follow the ICD-10 coding rules, as expressed in the instruction manual of ICD-10 Volume 2 (Percy et al., 1990) or in the alphabetical index of ICD-10 Volume 3. For example, the combination of unknown primary site (ICD-O-3 topography C80.9) and fibrosarcoma, not otherwise specified (NOS; ICD-O-3 morphology 8810/3) is converted to C49.9: "Connective and other soft tissues, NOS" in ICD-10 (see ICD-10 Volume 2, page 74).

Theoretically, the use of a standard, well-designed coding system such as ICD should make the analysis and tabulation of comparable results a simple matter. But in practice, it has been a continual exercise in detection for the editors of CI5 to establish exactly how registries code various cancers. For the present volume, registries were asked whether any malignant diagnoses were excluded from their data, and how they coded intraductal carcinoma of breast, NOS; ductal and lobular carcinoma in situ of breast; ovarian cystadenoma of borderline malignancy; borderline tumour of ovary; benign tumours of brain and nervous system; and in situ and unspecified carcinoma of bladder (see Table 3.2).

Non-melanoma skin cancer

The incidence of non-melanoma skin cancer (NMSC) is difficult to assess. These cancers are very common and rarely fatal, and the completeness of their registration varies widely depending on access to outpatient and general practitioners' records. Most NMSCs are basal cell carcinomas (BCCs) or squamous cell carcinomas (SCCs); other skin cancers are rare. Although some registries record the first occurrence of all NMSCs, others register BCC only, and many do not collect data on either SCC or BCC.

Bladder cancer

The issue of coding non-invasive tumours (taking into account the recorded level of invasion and grade) and which to include in the tables as "cancer of the bladder" - has long been a subject of debate. In CI5 Volume VI, it was decided, for the sake of geographical comparability, to exclude tumours of benign, in situ, and unspecified behaviour. In principle, the availability of data as individual case listings with histological type and behaviour should make it possible to publish only data on malignant cancer, by excluding diagnoses with any behaviour code other than /3. But when registries were asked about the behaviour codes they used for non-invasive and unspecified diagnoses of malignant bladder cancer for Volume VII, many of them reported that they assigned the behaviour code /3 to both in situ and unspecified diagnoses, making it impossible to distinguish such cases. As a result, the editors decided to accept that non-invasive diagnoses of bladder cancer are generally considered malignant by pathologists; since Volume VII, the bladder cancer rubric (ICD-10 C67) has therefore included the in situ (ICD-10 D09.0) and unspecified (ICD-10 D41.4) categories. In this volume, whenever possible, the inclusion of neoplasms of uncertain or unknown behaviour together with invasive cancers is indicated by a dagger symbol beside C67 in the tables, and a note on the data in the accompanying narrative. A few registries preferred not to include such cases in their dataset, even when available in the registry, for the sake of continuity over time.

Breast cancer

Intraductal carcinoma, ductal carcinoma in situ (DCIS), and lobular carcinoma in situ of breast are classified in ICD-O-3 as in situ cancers (behaviour code /2). All the registries in CI5 Volume X collect these diagnoses, and very few code any of these diagnoses as malignant (behaviour code /3) (see Table 3.2).

Ovarian cancer

The registries contributing to this volume were asked how they coded ovarian cystadenoma of borderline malignancy and borderline tumour of ovary. The behaviour codes they reported using are tabulated in Table 3.2. Borderline ovarian diagnoses are classified as non-malignant tumours in ICD-O-3 (behaviour code /1) and are excluded from the tabulations, but a few registries still code them as malignant neoplasms.

Brain and central nervous system

Many registries choose to include benign and unspecified tumours of the brain and central nervous system in their data, because of the potentially serious clinical consequences of these tumours. Prior to Volume VII, such tumours may therefore have been included in the tables along with cancers of the brain and nervous system. However, the proportion of such cases varies widely between registries, so since Volume VII they are no longer included.

Myeloproliferative disorders and myelodysplastic syndromes

These include records with the ICD-O-3 morphological codes 9950/3, 996_/3, 9975/3, and 998_/3. Only registries that originally coded their data to ICD-O-3 can report such diagnoses, as they were not considered malignant tumours in ICD-O-2 (behaviour code /1). These codes are converted to the ICD-10 codes D45, D46_, and D47_ by the IARC ICD-O-3 to ICD-10 conversion program, and are presented in two separate categories in the tables (see Table 3.1).

ICD-10 site code	Full ICD-10 title	Grouping used in tables	Short title used in tables
200	Malignant neoplasm of lip	-	Lip
01	Malignant neoplasm of base of tongue	C01-C02 are grouped	Tongue
002	Malignant neoplasm of other and unspecified parts of tongue		
C03	Malignant neoplasm of gum	C03-C06 are grouped	Mouth
C04	Malignant neoplasm of floor of mouth		
C05	Malignant neoplasm of palate		
C06	Malignant neoplasm of other and unspecified parts of mouth		
C07	Malignant neoplasm of parotid gland	C07-C08 are grouped	Salivary gland
C08	Malignant neoplasm of other and unspecified major salivary glands		
C09	Malignant neoplasm of tonsil	-	Tonsil
C10	Malignant neoplasm of oropharynx	-	Other oropharynx
C11	Malignant neoplasm of nasopharynx	-	Nasopharynx
C12	Malignant neoplasm of pyriform sinus	C12-C13 are grouped	Hypopharynx
C13	Malignant neoplasm of hypopharynx		
C14	Malignant neoplasm of other and ill-defined sites in the lip, oral cavity and pharynx	-	Pharynx unspecified
C15	Malignant neoplasm of oesophagus	-	Oesophagus
C16	Malignant neoplasm of stomach	-	Stomach
C17	Malignant neoplasm of small intestine	-	Small intestine
C18	Malignant neoplasm of colon	-	Colon
C19	Malignant neoplasm of rectosigmoid junction	C19-C20 are grouped	Rectum
C20	Malignant neoplasm of rectum		
C21	Malignant neoplasm of anus and anal canal	-	Anus
C22	Malignant neoplasm of liver and intrahepatic bile ducts	-	Liver
C23	Malignant neoplasm of gallbladder	C23-C24 are grouped	Gallbladder etc.
C24	Malignant neoplasm of other and unspecified parts of biliary tract		
C25	Malignant neoplasm of pancreas	-	Pancreas
C26	Malignant neoplasm of other and ill-defined digestive organs	C26 is included in other and unspecified	
C30	Malignant neoplasm of nasal cavity and middle ear	C30-C31 are grouped	Nose, sinuses, etc.
C31	Malignant neoplasm of accessory sinuses		
C32	Malignant neoplasm of larynx	-	Larynx
C33	Malignant neoplasm of trachea	C33-C34 are grouped	Trachea, bronchus and lun
C34	Malignant neoplasm of bronchus and lung		
C37	Malignant neoplasm of thymus	C37-C38 are grouped	Other thoracic organs
C38	Malignant neoplasm of heart, mediastinum and pleura		
C39	Malignant neoplasm of other and ill-defined sites in the respiratory system and intrathoracic organs	C39 is included in other and unspecified	
C40	Malignant neoplasm of bone and articular cartilage of limbs	C40-C41 are grouped	Bone
C41	Malignant neoplasm of bone and articular cartilage of other and unspecified sites		
C43	Malignant melanoma of skin	-	Melanoma of skin
C44	Other malignant neoplasms of skin	-	Other skin
C45	Mesothelioma	-	Mesothelioma
C46	Kaposi sarcoma	-	Kaposi sarcoma
C47	Malignant neoplasm of peripheral nerves and autonomic nervous system	C47 is grouped with C49	Connective and soft tissue
C48	Malignant neoplasm of retroperitoneum and peritoneum	C48 is included in other and unspecified	
C49	Malignant neoplasm of other connective and soft tissue	C49 is grouped with C47	
C50	Malignant neoplasm of breast	-	Breast
C51	Malignant neoplasm of vulva	-	Vulva
C52	Malignant neoplasm of vagina	-	Vagina
C53	Malignant neoplasm of cervix uteri	-	Cervix uteri
C54	Malignant neoplasm of corpus uteri	-	Corpus uteri
C55	Malignant neoplasm of uterus, part unspecified	-	Uterus unspecified
C56	Malignant neoplasm of ovary	-	Ovary
C57	Malignant neoplasm of other and unspecified female genital organs	-	Other female genital organ

260 261 262 263 264 265 266 267 268	Malignant neoplasm of placenta Malignant neoplasm of penis Malignant neoplasm of prostate Malignant neoplasm of testis Malignant neoplasm of other and unspecified male genital organs Malignant neoplasm of kidney, except renal pelvis Malignant neoplasm of renal pelvis Malignant neoplasm of ureter	- - - - -	Placenta Penis Prostate Testis Other male genital organs Kidney
261 262 263 264 265 266 267 268	Malignant neoplasm of prostate Malignant neoplasm of testis Malignant neoplasm of other and unspecified male genital organs Malignant neoplasm of kidney, except renal pelvis Malignant neoplasm of renal pelvis Malignant neoplasm of ureter	- - - - -	Prostate Testis Other male genital organs
262 263 264 265 266 267 268	Malignant neoplasm of testis Malignant neoplasm of other and unspecified male genital organs Malignant neoplasm of kidney, except renal pelvis Malignant neoplasm of renal pelvis Malignant neoplasm of ureter	- - - -	Testis Other male genital organs
263 264 265 266 267	Malignant neoplasm of other and unspecified male genital organs Malignant neoplasm of kidney, except renal pelvis Malignant neoplasm of renal pelvis Malignant neoplasm of ureter	- - -	Other male genital organs
064 065 066 067	Malignant neoplasm of kidney, except renal pelvis Malignant neoplasm of renal pelvis Malignant neoplasm of ureter	- - -	· · ·
065 066 067 068	Malignant neoplasm of renal pelvis Malignant neoplasm of ureter	-	Kidney
266 267 268	Malignant neoplasm of ureter	-	
067 068			Renal pelvis
68	Malignant papellage of bladder	-	Ureter
	Malignant neoplasm of bladder	-	Bladder
	Malignant neoplasm of other and unspecified urinary organs	-	Other urinary organs
69	Malignant neoplasm of eye and adnexa	-	Eye
	Malignant neoplasm of meninges	C70-C72 are grouped	Brain, nervous system
	Malignant neoplasm of brain		
	Malignant neoplasm of spinal cord, cranial nerves and other parts of central nervous system		
73	Malignant neoplasm of thyroid gland	-	Thyroid
74	Malignant neoplasm of adrenal gland	-	Adrenal gland
75	Malignant neoplasm of other endocrine glands and related structures	-	Other endocrine
276	Malignant neoplasm of other and ill-defined sites	C76 is included in other and unspecified	
280	Malignant neoplasm without specification of site	C80 is included in other and unspecified	
281	Hodgkin disease	-	Hodgkin lymphoma
	Follicular (nodular) non-Hodgkin lymphoma	C82-C85 and C96 are grouped	Non-Hodgkin lymphoma
	Diffuse non-Hodgkin lymphoma		
	Peripheral and cutaneous T-cell lymphomas		
	Other and unspecified types of non-Hodgkin lymphoma		
	Malignant immunoproliferative diseases	-	Immunoproliferative disease
	Multiple myeloma and malignant plasma cell neoplasms	-	Multiple myeloma
091	Lymphoid leukaemia	-	Lymphoid leukaemia
	Myeloid leukaemia	C92-C94 are grouped (following ICD-O-3)	Myeloid leukaemia
	Monocytic leukaemia		
094	Other leukaemias of specified cell type		
95	Leukaemia of unspecified cell type	-	Leukaemia unspecified
96	Other and unspecified malignant neoplasms of lymphoid, haematopoietic and related tissue	C96 is grouped with C82–C85	
	Other and unspecified	Includes C26, C39, C48, C76, and C80 Includes ICD-O-3 M9950/3,	Other and unspecified
/IPD	Myeloproliferative disorders	M996_/3, and M9975/3	Myeloproliferative disorders
MDS 000-96	Myelodysplastic syndromes	Includes ICD-O-3 M998_/3	Myelodysplastic syndromes All sites

	Behaviour codes									
Registry	Benign tumours of brain and nervous system	Carcinoma of bladder, in situ	Carcinoma of bladder, not otherwise specified	Ovarian cystadenoma of borderline malignancy	Borderline tumour of ovary	Ductal carcinoma of breast, in situ	Intraductal carcinoma of breast, not otherwise specified	Lobular carcinomo of breast in situ		
Africa										
Algeria, Sétif	3	2	3	3	3	3	3	3		
Egypt, Gharbiah	0	2	3	1	1	2	2	2		
Libya, Benghazi	0	2	3	1	1	2	2	2		
Malawi, Blantyre	3	3	3	3	3	3	3	3		
South Africa, PROMEC	1	2	2	2	2	2	2	2		
Tunisia, North	1	2	2	1	2	2	3	2		
Uganda, Kyadondo County	0	2	3	1	1	2	2	2		
Zimbabwe, Harare: African	0	2	3	1	1	2	2	2		
Central and South America										
Argentina, Bahía Blanca	0	2	3	1	1	2	3	2		
Argentina, Córdoba	0	2	3	1	1	2	3	2		
Argentina, Mendoza	0	2	1	1	1	2	2	2		
Argentina, Tierra del Fuego	0	2	3	2	2	2	2	2		
Brazil, Aracaju	0	2	3	1	1	2	2	2		
Brazil, Belo Horizonte	0	2	3	1	1	2	2	2		
Brazil, Cuiabá	0	2	3	1	1	2	2	2		
Brazil, Fortaleza	0	2	3	1	1	2	2	2		
	3			1	1	2	2			
Brazil, Goiânia		2	3	·				2		
Brazil, São Paulo	0	2	3	1	1	2	2	2		
Chile, Region of Antofagasta	0	2	3	1	1	2	2	2		
Chile, Bío Bío Province	0	2	3	1	1	2	2	2		
Chile, Valdivia	0	2	3	1	1	2	2	2		
Colombia, Bucaramanga	0	2	3	1	1	2	2	2		
Colombia, Cali	0	2	3	1	1	2	2	2		
Colombia, Manizales	0	2	3	1	1	2	2	2		
Colombia, Pasto	1	2	3	1	1	2	3	2		
Costa Rica	0	2	3	1	1	2	2	2		
Cuba, Villa Clara	0	2	3	1	1	2	3	2		
Ecuador, Cuenca	0	2	3	0	1	2	2	2		
Ecuador, Quito	0	2	3	1	1	2	2	2		
France, Martinique	0	2	3	1	1	2	3	2		
Jamaica, Kingston and St Andrew	0	2	3	1	1	2	2	2		
USA, Puerto Rico	0	2	2	1	1	2	2	2		
Uruguay	1	2	3	1	1	2	2	2		
North America										
Canada	0	2	3	1	1	2	2	2		
Canada, Alberta	0	2	3	1	1	2	2	2		
Canada, British Columbia	0	2	3	1	1	2	3	2		
Canada, Manitoba	0	2	3	1	1	2	3	2		
Canada, New Brunswick	0	3	3	3	3	2	2	2		
	-									
Canada, Newfoundland and Labrador	0	2	3	1	1	2	2	2		
Canada, Nova Scotia	0	2	3	1	1	2	3	2		
Canada, Northwest Territories	0	2	1	1	1	2	3	2		
Canada, Ontario	0	2	3	1	1	2	3	2		
Canada, Prince Edward Island	0	2	2	1	1	2	2	2		
Canada, Quebec	0	2	3	1	1	2	2	2		
Canada, Saskatchewan	0	2	3	1	1	2	2	2		
Canada, Yukon	0	2	3	1	1	2	3	2		

	Behaviour codes									
Registry	Benign tumours of brain and nervous system	Carcinoma of bladder, in situ	Carcinoma of bladder, not otherwise specified	Ovarian cystadenoma of borderline malignancy	Borderline tumour of ovary	Ductal carcinoma of breast, in situ	Intraductal carcinoma of breast, not otherwise specified	Lobular carcinoma of breast in situ		
USA, NPCR	0	3	3	1	1	2	2	2		
USA, SEER	0	2	3	1	1	2	2	2		
USA, Alabama	0	2	3	1	1	2	2	2		
USA, Alaska	0	2	3	1	1	2	3	2		
USA, Arizona	0	2	3	1	1	2	2	2		
USA, Arkansas	0	2	3	1	1	2	2	2		
USA, California	0	2	3	1	1	2	2	2		
USA, California, Los Angeles County	0	2	3	1	1	2	2	2		
USA, California, San Francisco Bay Area	0	2	3	1	1	2	2	2		
USA, Colorado	0	2	3	1	1	2	2	2		
USA, Connecticut	0	2	3	1	1	2	2	2		
USA, Delaware	0	2	3	1	1	2	2	2		
USA, Florida	0	2	3	1	1	2	2	2		
USA, Georgia	0	2	3	1	1	2	2	2		
_		2	3	1		2	2	2		
USA, Georgia, Atlanta	0			·	1					
USA, Idaho	0	2	3	1	1	2	3	2		
USA, Illinois	0	2	3	1	1	2	2	2		
USA, Indiana	0	2	3	1	1	2	2	2		
USA, Iowa	0	2	3	1	1	2	2	2		
USA, Kentucky	0	2	3	1	1	2	2	2		
USA, Louisiana	0	2	3	1	1	2	2	2		
USA, Louisiana, New Orleans	0	2	3	1	1	2	2	2		
USA, Maine	0	2	3	1	1	2	2	2		
USA, Massachusetts	0	2	3	1	1	2	3	2		
USA, Michigan	0	2	3	1	1	2	2	2		
USA, Michigan, Detroit	0	2	3	1	1	2	2	2		
USA, Mississippi	0	2	3	1	1	2	2	2		
USA, Missouri	0	2	3	1	1	2	2	2		
USA, Montana	0	2	3	3	1	2	2	2		
USA, Nebraska	0	2	2	1	1	2	2	2		
USA, New Hampshire	0	2	3	0	1	2	2	2		
USA, New Jersey	0	2	3	1	1	2	2	2		
•		2	3	1	1	2	2	2		
USA, New Mexico	0			•						
USA, New York State	0	2	3	1	1	2	2	2		
USA, North Carolina	0	2	3	1	1	2	2	2		
USA, North Dakota	0	2	3	1	1	2	2	2		
USA, Ohio	0	2	3	1	1	2	2	2		
USA, Oklahoma	0	2	3	1	1	2	2	2		
USA, Oregon	0	2	3	1	1	2	2	2		
USA, Pennsylvania	0	2	3	1	1	2	2	2		
JSA, Rhode Island	0	2	3	1	1	2	2	2		
USA, South Carolina	0	2	3	1	1	2	2	2		
JSA, South Dakota	0	2	3	1	1	2	3	2		
USA, Tennessee	0	2	3	1	1	2	2	2		
USA, Texas	0	2	3	1	1	2	2	2		
USA, Utah	0	2	3	1	1	2	2	2		
USA, Vermont	0	2	3	1	1	2	2	2		
USA, Virginia	1	2	3	3	2	3	3	2		
	0	2	3	ა 1	1	3 2	3 2	2		
USA, Washington State				•						
USA, Washington, Seattle	0	2	3	1	1	2	2	2		
USA, West Virginia	0	2	3	1	1	2	2	2		

	Behaviour codes									
Registry	Benign tumours of brain and nervous system	Carcinoma of bladder, in situ	Carcinoma of bladder, not otherwise specified	Ovarian cystadenoma of borderline malignancy	Borderline tumour of ovary	Ductal carcinoma of breast, in situ	Intraductal carcinoma of breast, not otherwise specified	Lobular carcinoma of breast, in situ		
USA, Wisconsin	0	3	3	1	1	2	3	2		
USA, Wyoming	1	2	3	2	2	2	3	2		
Asia										
Bahrain: Bahraini	0	3	3	3	1	2	3	2		
China, Beijing City	0	2	3	3	3	2	2	2		
China, Cixian County	0	2	3	1	1	2	3	2		
China, Haining County	0	3	3	3	3	3	3	3		
China, Harbin City, Nangang District	3	3	1	0	1	2	2	2		
China, Hong Kong	1	2	3	3	3	2	2	2		
China, Jiashan County	0	2	3	1	1	2	3	2		
China, Jiaxing City	0	2	3	1	1	2	3	2		
China, Macao	0	2	3	1	1	2	2	2		
				•						
China, Qidong County	3	2	2	2	2	2	2	2		
China, Shanghai City	0	2	3	1	1	2	3	2		
China, Wuhan City	3	2	3	1	1	2	3	2		
China, Yangcheng County	0	2	3	0	1	2	3	2		
China, Yanting County	3	2	3	1	1	2	2	2		
China, Zhongshan City	0	2	3	1	1	2	2	2		
ndia, Bangalore	0	2	3	1	1	2	2	2		
ndia; Barshi, Paranda, and Bhum	0	2	3	1	1	2	2	2		
ndia, Bhopal	0	2	3	1	1	2	2	2		
ndia, Chennai	0	2	1	1	1	2	2	2		
ndia, Dindigul, Ambilikkai	0	2	1	1	1	2	2	2		
ndia, Karunagappally	0	2	3	1	1	2	3	2		
ndia, Mizoram	0	2	3	1	1	2	3	2		
ndia, Mumbai	0	2	3	0	1	2	3	2		
ndia, New Delhi	0	2	3	0	3	2	3	2		
India, Poona	0	2	3	0	1	2	3	2		
India, Sikkim State	0	2	3	1	1	2	3	2		
					•					
ndia, Trivandrum	0	2	3	1	1	2	2	2		
ran (Islamic Republic of), Golestan Province	0	2	3	1	1	2	3	2		
srael	0	2	3	1	1	2	2	2		
Japan, Aichi Prefecture	0	2	3	1	1	2	2	2		
Japan, Fukui Prefecture	1	2	3	1	1	2	2	2		
Japan, Hiroshima	0	2	3	1	1	2	2	2		
Japan, Miyagi Prefecture	0	2	3	1	1	2	2	2		
Japan, Nagasaki Prefecture	0	2	3	1	1	2	2	2		
Japan, Niigata Prefecture	0	2	3	1	1	2	2	2		
Japan, Osaka Prefecture	0	2	3	1	1	2	3	2		
Japan, Saga Prefecture	0	2	3	1	1	2	2	2		
Republic of Korea	0	2	3	1	1	2	2	2		
Republic of Korea, Busan	0	2	3	1	1	2	2	2		
Republic of Korea, Daegu	0	2	3	1	1	2	2	2		
Republic of Korea, Daejeon	0	2	3	1	1	2	2	2		
Republic of Korea, Gwangju	0	2	3	1	1	2	3	2		
Republic of Korea, Incheon	0	2	3	1	1	2	3	3		
Republic of Korea, Jejudo	0	2	3	1	1	2	2	2		
Republic of Korea, Seoul	0	2	3 3	1	1	2	2	2		
Republic of Korea, Seoul Republic of Korea, Ulsan				·	•					
REDUDUC OT KOREA LUSAN	0	2	3	1	1	2	2	2		

	Behaviour codes									
Registry	Benign tumours of brain and nervous system	Carcinoma of bladder, in situ	Carcinoma of bladder, not otherwise specified	Ovarian cystadenoma of borderline malignancy	Borderline tumour of ovary	Ductal carcinoma of breast, in situ	Intraductal carcinoma of breast, not otherwise specified	Lobular carcinoma of breast in situ		
Malaysia, Penang	0	3	1	3	3	3	3	3		
Philippines, Manila	1	2	3	1	1	2	2	2		
Philippines, Rizal	1	2	3	1	1	2	2	2		
Qatar: Qatari	0	2	3	1	1	2	2	2		
Saudi Arabia, Riyadh: Saudi	0	2	3	1	1	2	2	2		
Singapore	0	2	1	1	1	2	2	2		
Thailand, Bangkok	0	2	3	1	1	2	2	2		
Thailand, Chiang Mai	0	2	3	1	3	2	3	2		
Thailand, Chonburi	0	2	3	1	1	2	2	2		
Thailand, Khon Kaen	0	2	3	1	1	2	2	2		
Thailand, Lampang	0	2	3	1	1	2	3	2		
Thailand, Songkhla	0	2	3	1	1	2	2	2		
Turkey, Antalya	0	2	3	1	1	2	2	2		
Turkey, Edirne	0	2	3	1	1	2	2	2		
Turkey, İzmir	0	2	3	1	1	2	3	2		
Turkey, Izmir Turkey, Trabzon	0	2	3	1	1	2	3 2	2		
Turkey, ITabzoff	U	2	J	l	'	2	2	2		
Europe										
Austria	0	2	1	1	1	2	3	2		
Austria, Tyrol	0	2	3	1	1	2	2	2		
Austria, Vorarlberg	0	2	3	1	1	2	3	2		
Belarus	0	2	3	3	1	2	3	2		
Belgium	1	2	3	1	1	2	2	2		
Bulgaria	0	2	3	3	1	2	3	2		
Croatia	0	2	3	1	1	2	2	2		
Cyprus	0	2	3	1	1	2	2	2		
Czech Republic	0	2	3	3	3	2	3	2		
Denmark	0	2	3	3	1	2	2	2		
Estonia	0	2	3	3	1	2	3	2		
Finland	0	2	3	1	1	2	2	2		
France, Bas-Rhin	0	2	3	1	1	2	2	2		
France, Calvados	1	2	3	1	1	2	2	2		
France, Doubs	0	2	3	1	1	2	2	2		
France, Haut-Rhin	0	2	3	1	1	2	2	2		
France, Hérault	0	2	1	1	1	2	2	2		
France, Isère	0	2	3	1	1	2	2	2		
France, Loire-Atlantique	1	2	3	1	1	2	2	2		
France, Manche	0	2	3	1	2	2	2	2		
France, Somme	0	2	1	1	1	2	2	2		
France, Tarn	0	2	1	1	1	2	2	2		
France, Vendée	1	2	3	1	1	2	2	2		
Germany, Brandenburg	0	2	3	1	1	2	2	2		
	0	2	3	1	1	2	2	2		
Germany, Bremen Germany, Free State of Saxony	0	2	3	1	1	2	2	2		
				·						
Germany, Hamburg	0	2	3	1	1	2	3	2		
Germany, Mecklenburg-Western Pomerania		2	3	1	1	2	2	2		
Germany, Munich	0	2	3	1	1	2	2	2		
Germany, North Rhine-Westphalia	0	2	3	1	1	2	3	2		
Germany, Saarland	0	2	3	3	3	2	3	2		
Germany, Schleswig-Holstein	0	2	3	1	1	2	2	2		
Iceland	1	2	3	1	1	2	2	2		

Registry	Benign			Behaviour codes									
	tumours of brain and nervous system	Carcinoma of bladder, in situ	Carcinoma of bladder, not otherwise specified	Ovarian cystadenoma of borderline malignancy	Borderline tumour of ovary	Ductal carcinoma of breast, in situ	Intraductal carcinoma of breast, not otherwise specified	Lobular carcinoma of breast in situ					
Ireland	0	2	3	1	1	2	2	2					
Italy, Biella	0	2	1	0	1	2	2	2					
Italy, Brescia	0	2	3	1	1	2	2	2					
Italy, Catania and Messina	0	2	3	1	1	2	2	2					
Italy, Catanzaro	0	2	1	1	1	2	2	2					
Italy, Como	0	2	1	1	1	2	2	2					
Italy, Ferrara	0	2	3	1	1	2	2	2					
Italy, Florence and Prato	0	2	1	1	1	2	2	2					
Italy, Friuli-Venezia Giulia	0	2	3	0	1	2	3	2					
Italy, Genoa	0	2	3	1	1	2	2	2					
Italy, Latina	0	2	1	1	1	2	2	2					
Italy, Lecco	0	2	3	3	3	2	2	2					
Italy, Lombardy, South	0	2	3	3	3	2	2	2					
Italy, Mantua	0	2	3	3	1	2	2	2					
Italy, Milan	0	2	3	1	1	2	2	2					
Italy, Modena	0	2	3	1	1	2	2	2					
Italy, Naples	0	2	1	1	1	2	2	2					
Italy, Nuoro	0	2	1	1	1	2	2	2					
Italy, Palermo	0	2	1	1	1	2	2	2					
	0	2		0	1	2	2	2					
Italy, Parma			3										
Italy, Ragusa	0	2	1	1	1	2	2	2					
Italy, Reggio Emilia	0	2	3	1	1	2	2	2					
Italy, Romagna	0	2	1	1	1	2	2	2					
Italy, Salerno	0	2	1	0	1	2	2	2					
Italy, Sassari	0	2	1	1	1	2	2	2					
Italy, Sondrio	0	2	1	1	1	2	2	2					
Italy, South Tyrol	0	2	3	1	1	2	2	2					
Italy, Syracuse	0	2	3	1	1	2	2	2					
Italy, Trapani	0	2	1	1	1	2	3	2					
Italy, Trento	3	2	3	2	2	2	2	2					
Italy, Turin	0	2	3	1	1	2	2	2					
Italy, Umbria	3	3	3	3	3	3	3	3					
Italy, Varese	0	2	3	3	3	2	2	2					
Italy, Veneto	0	2	3	1	1	2	2	2					
Latvia	0	2	3	0	1	2	3	2					
Lithuania	0	2	3	1	1	2	2	2					
Malta	0	2	3	0	1	2	3	2					
Norway	0	2	3	1	3	2	2	2					
The Netherlands	1	2	3	1	1	2	2	2					
The Netherlands, Eindhoven	0	2	3	1	1	2	2	2					
Poland, Cracow	0	2	3	3	1	2	2	2					
Poland, Kielce	1	2	1	1	1	2	2	2					
Poland, Lower Silesia	3	2	3	1	1	2	2	2					
Poland, Podkarpackie	1	2	3	1	1	2	3	2					
Portugal, Azores	0	2	3	1	1	2	2	2					
Russian Federation, Saint Petersburg	0	2	3	3	3	2	3	2					
Serbia, Central	0	2	3	ა 1	ა 1	2	3	2					
Serbia, Centrai Slovakia				•	1								
	0	2	3	1		2	2	2					
Slovenia	0	2	3	1	1	2	3	2					
Spain, Albacete Spain, Asturias	0	2 2	3 3	1	1	2 2	2 2	2 2					

	Behaviour codes									
Registry	Benign tumours of brain and nervous system	Carcinoma of bladder, in situ	Carcinoma of bladder, not otherwise specified	Ovarian cystadenoma of borderline malignancy	Borderline tumour of ovary	Ductal carcinoma of breast, in situ	Intraductal carcinoma of breast, not otherwise specified	Lobular carcinoma of breast, in situ		
Spain, Basque Country	0	2	3	1	1	2	3	2		
Spain, Canary Islands	0	2	1	1	1	2	2	2		
Spain, Ciudad Real	0	2	3	1	1	2	2	2		
Spain, Cuenca	0	2	3	1	1	2	2	2		
Spain, Girona	0	2	3	1	1	2	2	2		
Spain, Granada	0	2	3	1	1	2	2	2		
Spain, La Rioja	0	2	3	1	1	2	2	2		
Spain, Mallorca	0	2	1	1	1	2	2	2		
Spain, Murcia	0	2	3	1	1	2	2	2		
Spain, Navarra	0	2	1	1	1	2	2	2		
Spain, Tarragona	0	2	3	1	1	2	2	2		
Sweden	1	2	1	1	3	2	2	2		
Switzerland, Basel	0	2	3	1	1	2	2	2		
Switzerland, Geneva	0	2	3	1	1	2	2	2		
Switzerland, Graubünden and Glarus	0	2	3	1	1	2	2	2		
Switzerland, Neuchâtel	0	2	1	1	2	2	2	2		
Switzerland, St Gall-Appenzell	0	2	3	1	1	2	2	2		
Switzerland, Ticino	0	2	3	1	1	2	2	2		
Switzerland, Valais	0	2	1	1	1	2	2	2		
Switzerland, Vaud	0	2	1	1	1	2	2	2		
Switzerland, Vadd	0	2	3	1	1	2	2	2		
Ukraine	0	2	3	1	1	2	3	2		
UK, England	0	2	3	1	1	2	2	2		
	0	2	3 1	1	1	2	3	2		
UK, England, East of England Region			•		1	2				
UK, England, North West	0	2	3	3	•		2	2		
UK, England, Northern and Yorkshire	0	2	3	3	1	2	2	2		
UK, England, Oxford Region	0	2	3	1	3	2	3	2		
UK, England, South West	0	2	1	1	1	2	3	2		
UK, England, Thames	0	2	3	1	1	2	2	2		
UK, England, Trent	0	2	3	3	3	2	2	2		
UK, England, West Midlands	0	2	1	3	1	2	2	2		
UK, Northern Ireland	0	2	3	1	1	2	2	2		
UK, Scotland UK, Wales	0	2 2	1 3	1 3	1	2 2	2 2	2 2		
	U	2	3	J		۷	۷	۷		
Oceania										
Australia, Australian Capital Territory	0	2	1	1	1	2	2	2		
Australia, New South Wales	0	2	3	1	1	2	3	2		
Australia, Northern Territory	0	2	3	1	1	2	2	2		
Australia, Queensland	0	2	3	1	1	2	2	2		
Australia, South Australia	1	2	3	1	1	2	2	2		
Australia, Tasmania	0	2	3	1	1	2	2	2		
Australia, Victoria	0	2	3	1	1	2	2	2		
Australia, Western Australia	0	2	3	1	1	2	2	2		
New Zealand	0	2	3	1	1	2	2	2		
USA, Hawaii	0	2	2	1	1	2	2	2		

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