

ANNUAL CANCER REGISTRY REPORT-2022: SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL & RESEARCH CENTER, PAKISTAN

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CANCER STATISTICS

Patients enrolled in the hospital information system in Lahore and registered at Shaukat Khanum Memorial Trust-affiliated centers are included in this report. The Shaukat Khanum Memorial Cancer Hospital and Research Centre (SKMCH&RC) in Lahore and Peshawar, the Karachi Diagnostic Centre (KDC), and the Shaukat Khanum Diagnostic Centre Liberty (SKDCL), in Lahore, are some of the centres connected to the Trust. The oldest center, SKMCH&RC Lahore, has been operational since December 29, 1994. SKMCH&RC Peshawar has been operational since December 29, 2015; KDC has been operational since 2010, and SKDCL from August 1, 2019. In this consolidated report, all these facilities are referred to as SKMCH&RC/hospital.

Distribution of neoplasms

Between January 1 and December 31, 2022, there were 8,284 new neoplasms diagnosed or treated at the aforementioned Pakistani facilities, of which 3,528 (42.6%) and 4756 (57.4%) patients were male. Neoplasms totaling 7,379 (89.1%) in number were discovered in adults, while 905 (10.9%) were discovered in youngsters. Children were defined as those who were under 18 years old and adults as those who were over 18. The stratification of cases by behaviour and age group is shown in Table 1.

Table 1. Distribution of neoplasms by behavior and age group, SKMCH&RC, Jan. 2022 to Dec. 2022.

Behavior	Age-group	Registered patients (7,891)	Reported neoplasm* (8,284)
Malignant[♦]	Adults	6,403	6,496
	Pediatrics	882	885
	Total	7,285	7,381
Benign[€] & uncertain behavior	Adults	778	883
	Pediatrics	20	20
	Total	798	903

* The difference in the number of registered patients and reported neoplasms is attributed to multiple malignancies and benign neoplasms diagnosed in 96 and 105 patients, respectively. Further, 192 patients have both malignant and benign neoplasm simultaneously.

♦ Cases with behavior codes /3 and /2 are considered to be malignant cases.

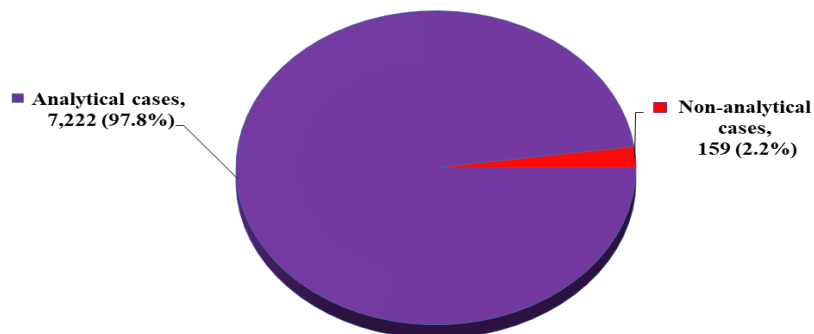
€ Cases with behavior codes /0 and /1 are considered to be benign and uncertain, respectively.

¥ According to the Facility Oncology Revised Data Standards (FORDS), Revised for 2004, Class of Case 00 to 20 are analytical cases and included in treatment and survival analysis, whereas, Class of Case 30 to 33 are non-analytical cases, usually not included in routine treatment or survival statistics.

Class of Case

Between January 2022 and December 2022, there were 7,381 malignant cases reported in the Registry, of which 7,222 (97.8%) were analytical cases and 159 (2.2%) non-analytical cases. The stratification of analytical and non-analytical instances is depicted in Figure 1.

Figure 1. Stratification of analytical and non-analytical cases, SKMCH&RC, Jan. 2022 to Dec. 2022.



Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

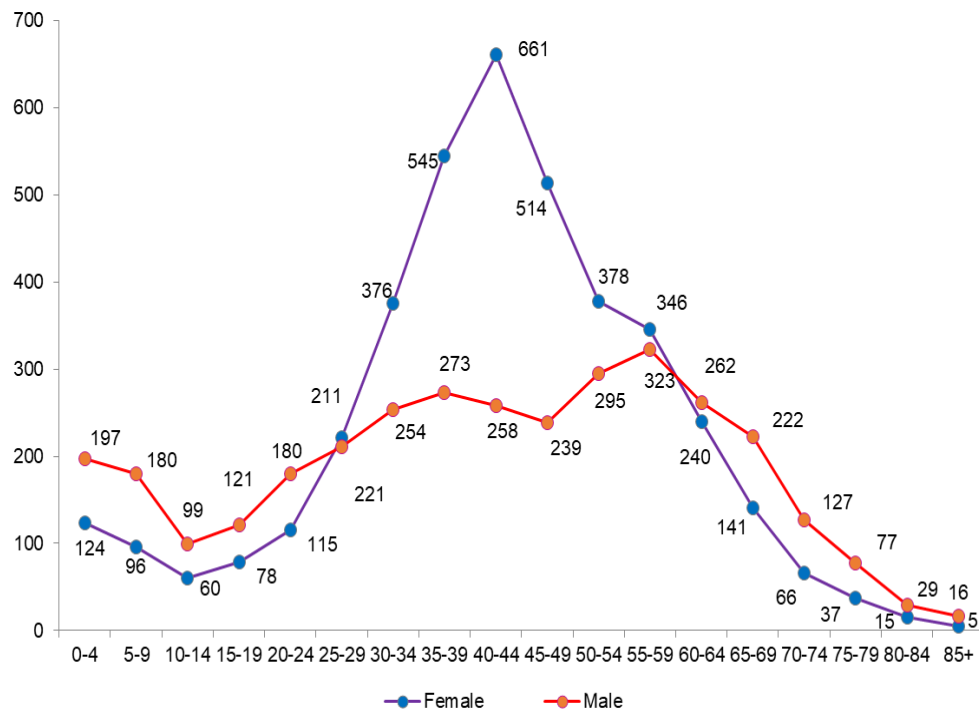
Distribution of malignancies

In the year 2022, a total of 7,381 malignancies were diagnosed at the hospital with 4,018 seen among females and 3363 among males. Table 2 displays the distributions of female and male patients according to sex and age group. A total of 4,941 new malignancies were registered at SKMCH&RC Lahore, 2,346 at Peshawar, and 94 at Karachi Diagnostic Center (KDC).

Table 2. Distribution of cancer cases by sex and age group (years (N=7,381)), SKMCH&RC, Jan. 2022 to Dec. 2022.

Age-range	Female	Male	Total
0-4	124	197	321
5-9	96	180	276
10-14	60	99	159
15-19	78	121	199
20-24	115	180	295
25-29	221	211	432
30-34	376	254	630
35-39	545	273	818
40-44	661	258	919
45-49	514	239	753
50-54	378	295	673
55-59	346	323	669
60-64	240	262	502
65-69	141	222	363
70-74	66	127	193
75-79	37	77	114
80-84	15	29	44
85+	5	16	21
Total	4018	3363	7381

Figure 2. Cancer cases by sex and age group (years (N=7,381)), SKMCH&RC, Jan.-Dec. 2022.



Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

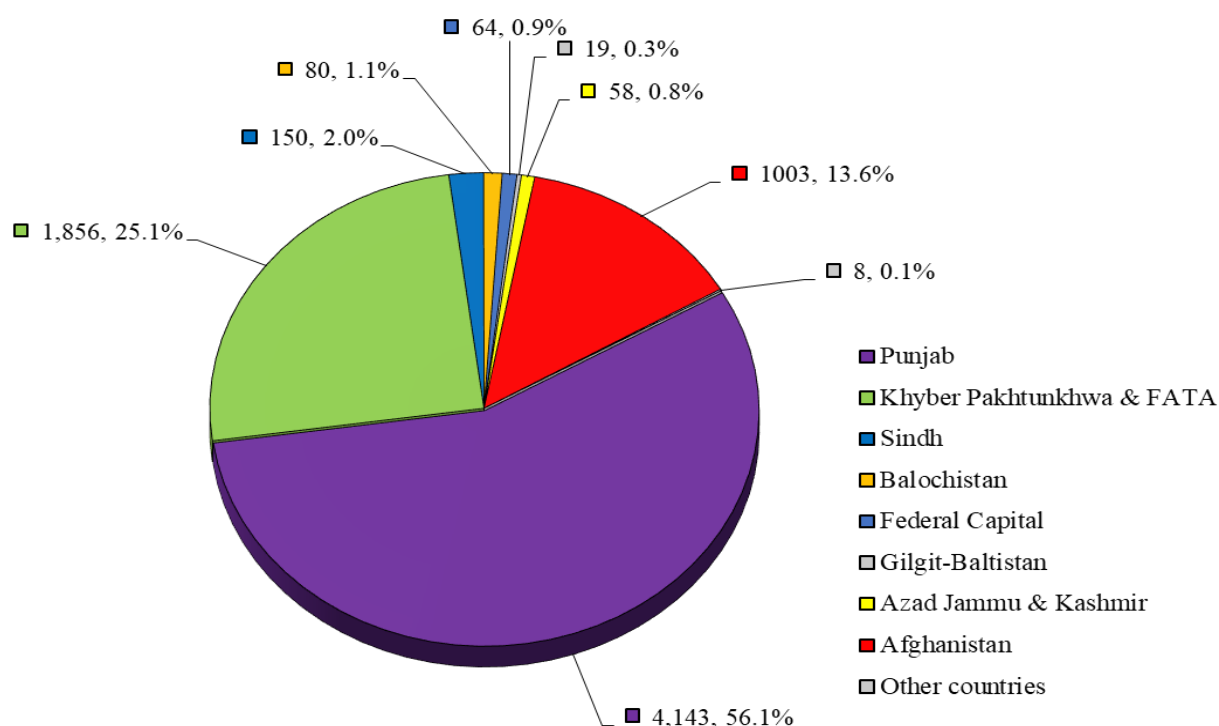
Demographics

Nearly 56.1% (4,143) of the 7,381 malignant cancers were found in the province of Punjab, and about 25.1% (1,856) were found in Khyber Pakhtunkhwa (Table 3). The oldest affiliate is located in Punjab's provincial capital, and this province is responsible for about 53% of the nation's total population, which helps to explain why a large majority of patients came from this region.

Table 3. Distribution of malignancies according to the geographic area of residence of the patients (N=7,381), SKMCH&RC, Jan. 2022 to Dec. 2022.

Province/Region	Malignancies	Percentage
Punjab	4143	56.1
Khyber Pakhtunkhwa including FATA [1]	1,856	25.1
Sindh	150	2.0
Balochistan	80	1.1
Federal Capital	64	0.9
Gilgit-Baltistan	19	0.3
Azad Jammu & Kashmir	58	0.8
Afghanistan	1003	13.6
Other countries	8	0.1
Total	7,381	100.0

Figure 3. Distribution of malignancies according to the geographic area of residence of the patients (N=7,381), SKMCH&RC, Jan. 2022 to Dec. 2022.



Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

[1] The administrative unit of the Federally Administered Tribal Areas (FATA) was merged with the province of Khyber Pakhtunkhwa on May 28, 2018.

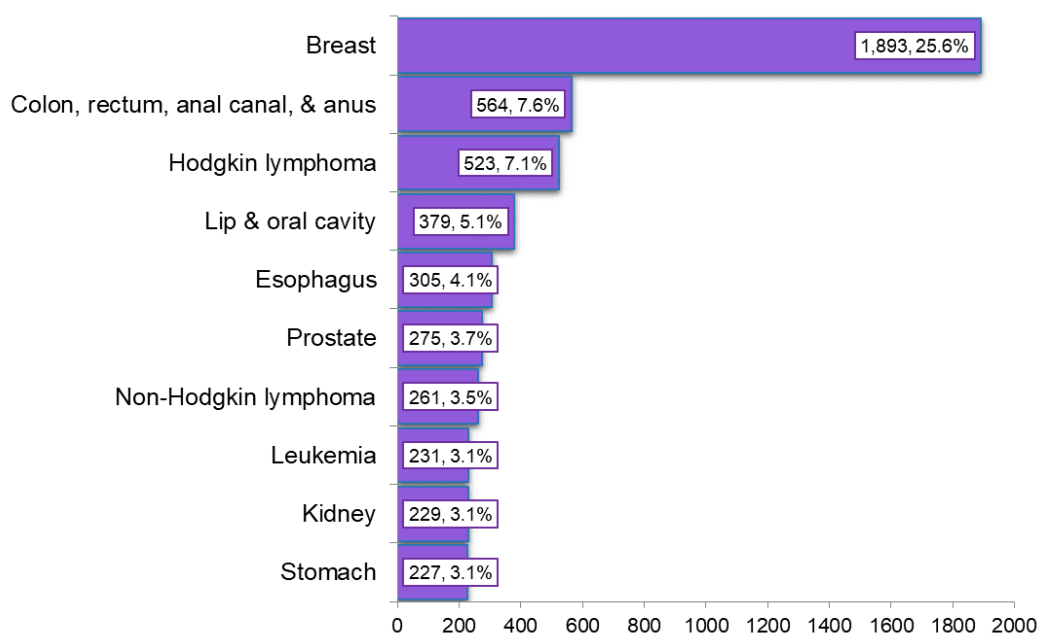
Top ten cancers

The list of the top 10 malignancies diagnosed at SKMCH&RC in 2022 is presented in Tables 4 through 8. Breast cancer led all malignancies with 1,893 cases included in the Registry out of a total of 7,381 malignancies. In all instances, the colon/rectum/anal canal/anus and Hodgkin lymphoma were the second and third most common tumours, respectively. The most common cancers in Lahore were the lip/oral cavity, colon/rectum/anal canal/anus, and breast cancer. The most common malignancies in Peshawar are breast, Hodgkin lymphoma, and colon/rectum/anal canal/anus.

Table 4. Top 10 malignancies among all age groups, both sexes combined (N=7,381), SKMCH&RC, Jan. 2022 to Dec. 2022.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	1,893	25.6	C50.0 - C50.9
2	Colon, rectum, anal canal, & anus	564	7.6	C18.0 - C21.8
3	Hodgkin lymphoma	523	7.1	M9650 - M9667
4	Lip & oral cavity	379	5.1	C00.0 - C08.9
5	Esophagus	305	4.1	C15
6	Prostate	275	3.7	C61.9
7	Non-Hodgkin lymphoma	261	3.5	M9590 - 91, M967 - 972
8	Leukemia	231	3.1	M980 - M994
9	Kidney	229	3.1	C64
10	Stomach	227	3.1	C16

Figure 4. Top 10 malignancies among all age groups, both sexes combined (N=7,381), SKMCH&RC, Jan. 2022 to Dec. 2022.



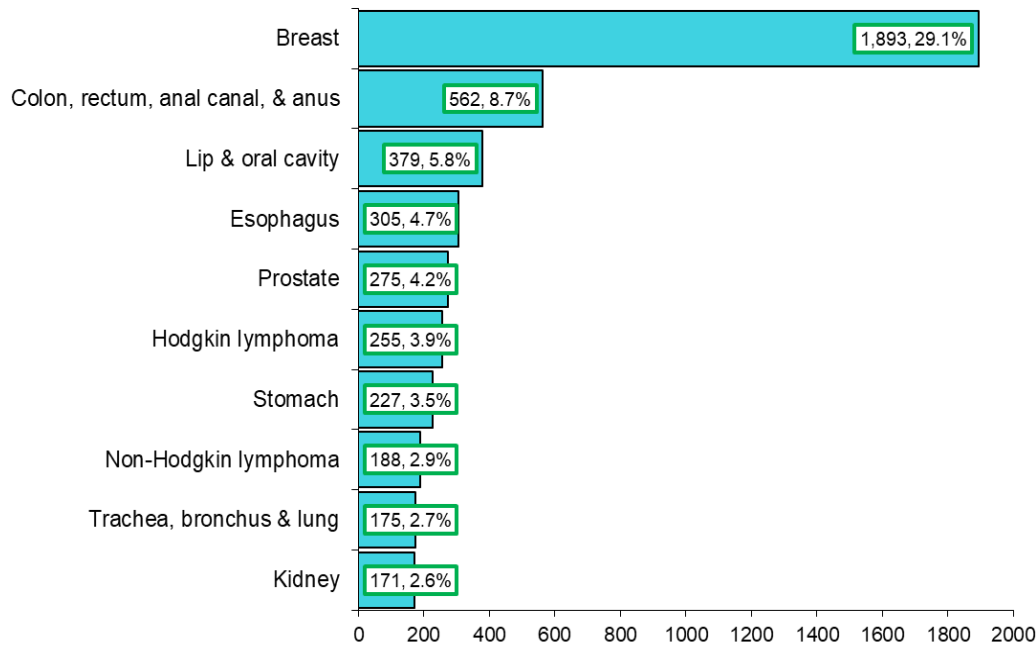
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

A total of 6,496 malignancies in adults were identified or treated at SKMCH&RC in 2022. The most common malignancies seen were those of the breast, colon/rectum/anal canal/anus, as well as those of the lip/oral cavity. The most common cancers in Lahore were lip/oral cavity, colon/rectum/anal canal/anus, and breast cancer. Breast, colon/rectum/anal canal/anus, and esophageal cancer were the most common types in Peshawar.

Table 5. Top 10 malignancies among adults (> 18 years (N=6,496)), SKMCH&RC, Jan. 2022 to Dec. 2022.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	1893	29.1	C50.0 - C50.9
2	Colon, rectum, anal canal, & anus	562	8.7	C18.0 - C21.8
3	Lip & oral cavity	379	5.8	C00.0 - C08.9
4	Esophagus	305	4.7	C15
5	Prostate	275	4.2	C61.9
6	Hodgkin lymphoma	255	3.9	M9650 - M9667
7	Stomach	227	3.5	C16
8	Non-Hodgkin lymphoma	188	2.9	M9590 - 91, M967 - 972
9	Trachea, bronchus, & lung	175	2.7	C34
10	Kidney	171	2.6	C64.0 – C64.9

Figure 5. Top 10 malignancies among adults (> 18 years (N=6,496)), SKMCH&RC, Jan. 2022 to Dec. 2022.



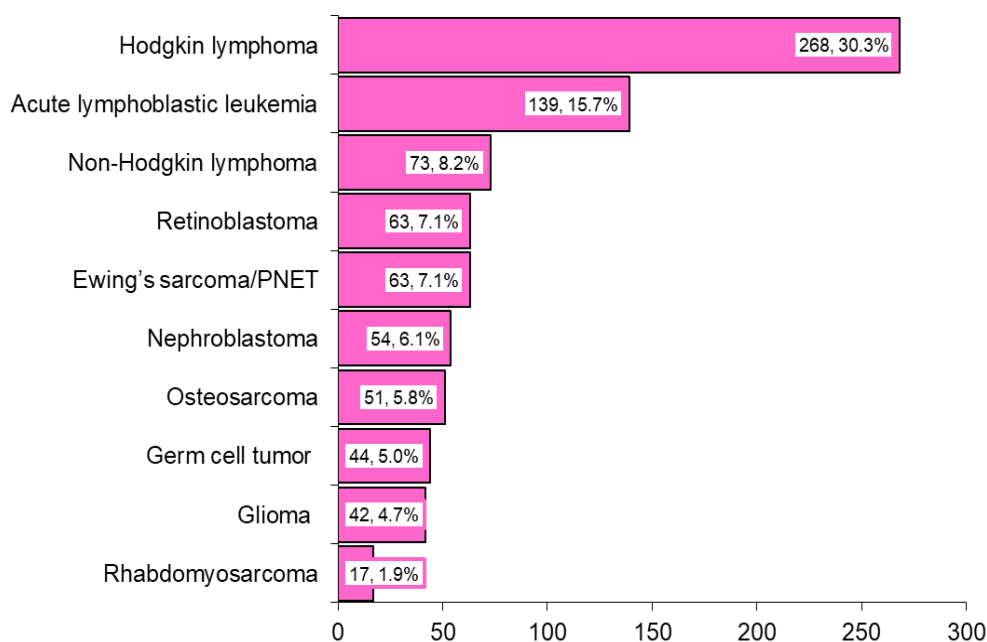
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

Hodgkin lymphoma, acute lymphoblastic leukaemia, and non-Hodgkin lymphoma were found to be the three most prevalent malignancies diagnosed or treated at SKMCH&RC out of 885 children's cancers, according to a categorization based on tumour morphology. In Lahore and Peshawar, the most common malignancies seen in children are similar. The top ten paediatric cancers diagnosed at SKMCH&RC are distributed in Table 6.

Table 6. Top 10 malignancies in children (<= 18 years (N=885)), SKMCH&RC, Jan. 2022 to Dec. 2022.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Morphology Code
1	Hodgkin lymphoma	268	30.3	M9650 - M9667
2	Acute lymphoblastic leukemia	139	15.7	M981 - M983
3	Non-Hodgkin lymphoma	73	8.2	M9590 - 91, M967 - 972
4	Retinoblastoma	63	7.1	M9510 - M9514
5	Ewing's sarcoma/PNET	63	7.1	M9260, M9364
6	Nephroblastoma	54	6.1	M8960 - M8960
7	Osteosarcoma	51	5.8	M9180 - M9195
8	Germ cell tumor	44	5.0	M906 - M909
9	Glioma	42	4.7	M938 - M948
10	Rhabdomyosarcoma	17	1.9	M8900 - M8921

Figure 6. Top 10 malignancies in children (<= 18 years (N=885)), SKMCH&RC, Jan. 2022 to Dec. 2022.



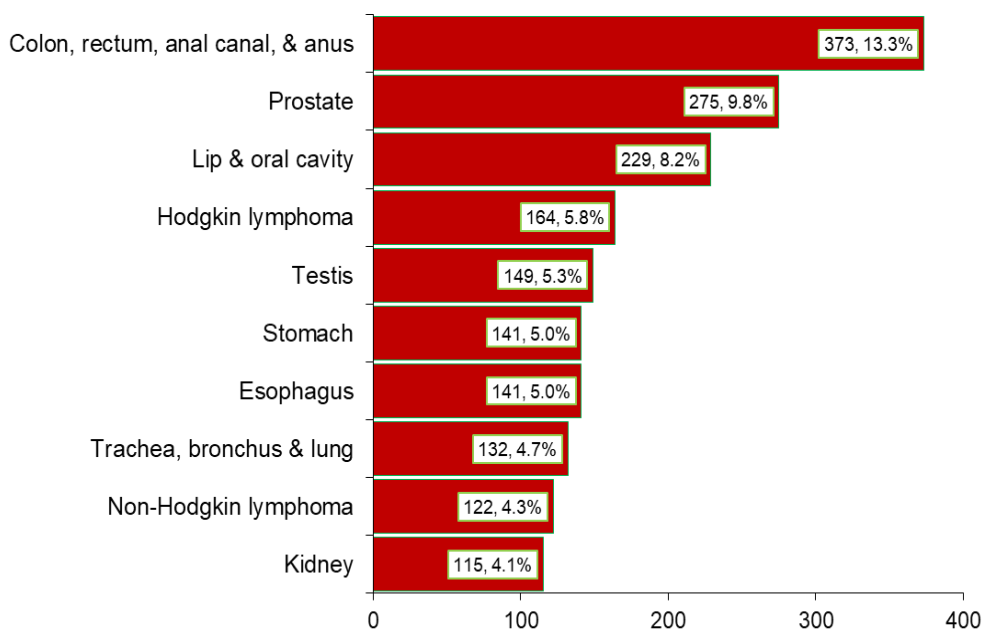
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

The most prevalent cancers in adult men were those of the colon/rectum/anal canal/anus, prostate, lip/oral cavity (Table 7). In Lahore, the top three cancers were colon/rectum/anal canal/anus, prostate, and lip/oral cavity, whereas, in Peshawar, the top three cancers were testicular, colon/rectum/anal canal/anus, and prostate.

Table 7. Top 10 malignancies among adult males (> 18 years (N=2,808)), SKMCH&RC, Jan. 2022 to Dec. 2022.

Sr. No.	ICD Category	Count	Percentage	ICD-O-3 Code
1	Colon, rectum, anal canal, & anus	373	13.3	C18 - C21.8
2	Prostate	275	9.8	C61.9
3	Lip & oral cavity	229	8.2	C00.0 - C08.9
4	Hodgkin lymphoma	164	5.8	M9650 - M9667
5	Testis	149	5.3	C62
6	Stomach	141	5.0	C16
7	Esophagus	141	5.0	C15
8	Trachea, bronchus, & lung	132	4.7	C34
9	Non-Hodgkin lymphoma	122	4.3	M9590 - 91, M967 - 972
10	Kidney	115	4.1	C64.0 – C64.9

Figure 7. Top 10 malignancies among adult males (> 18 years (N=2,808)), SKMCH&RC, Jan. 2022 to Dec. 2022.



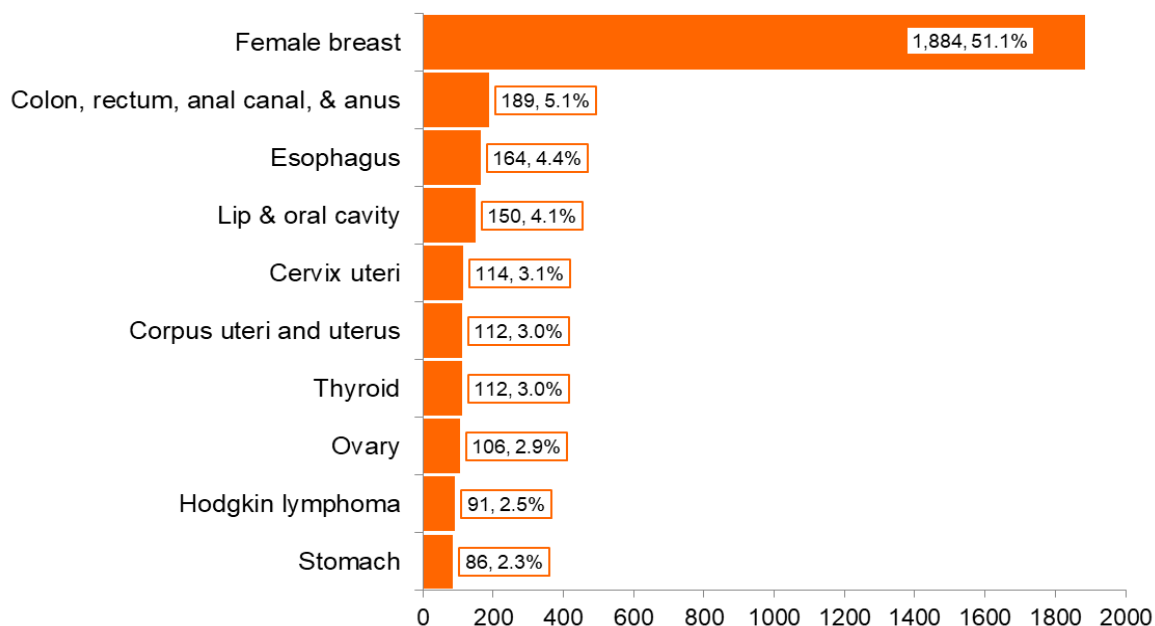
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

Breast cancer, which accounted for 51.1% of all cancer diagnoses in adult women overall (3,688), was the most common kind of diagnosis. Esophageal cancer was the third most prevalent malignancy in females, followed by colorectal cancer (5.1%). Breast, esophageal, colon/rectum/anal canal/anus cancers were the three most common malignancies in Lahore, whereas lip/oral cavity cancers were the most common in Peshawar.

Table 8. Top 10 malignancies among adult females (> 18 years (N=3,688)), SKMCH&RC, Jan. 2022 to Dec. 2022.

Sr. No.	ICD Category	Count	Percentage	ICD-O 3 Code
1	Female breast	1,884	51.1	C50.0 - C50.9
2	Colon, rectum, anal canal, & anus	189	5.1	C18 - C21.8
3	Esophagus	164	4.4	C15 - C15.9
4	Lip & oral cavity	150	4.1	C00.0 - C08.9
5	Cervix uteri	114	3.1	C53.0 - C53.9
6	Corpus uteri and uterus	112	3.0	C54.0 - C55.9
7	Thyroid	112	3.0	C73.9
8	Ovary	106	2.9	C56
9	Hodgkin lymphoma	91	2.5	M9650 - M9667
10	Stomach	86	2.3	C16

Figure 8. Top 10 malignancies among adult females (> 18 years (N=3,688)), SKMCH&RC, Jan. 2022 to Dec. 2022.



Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

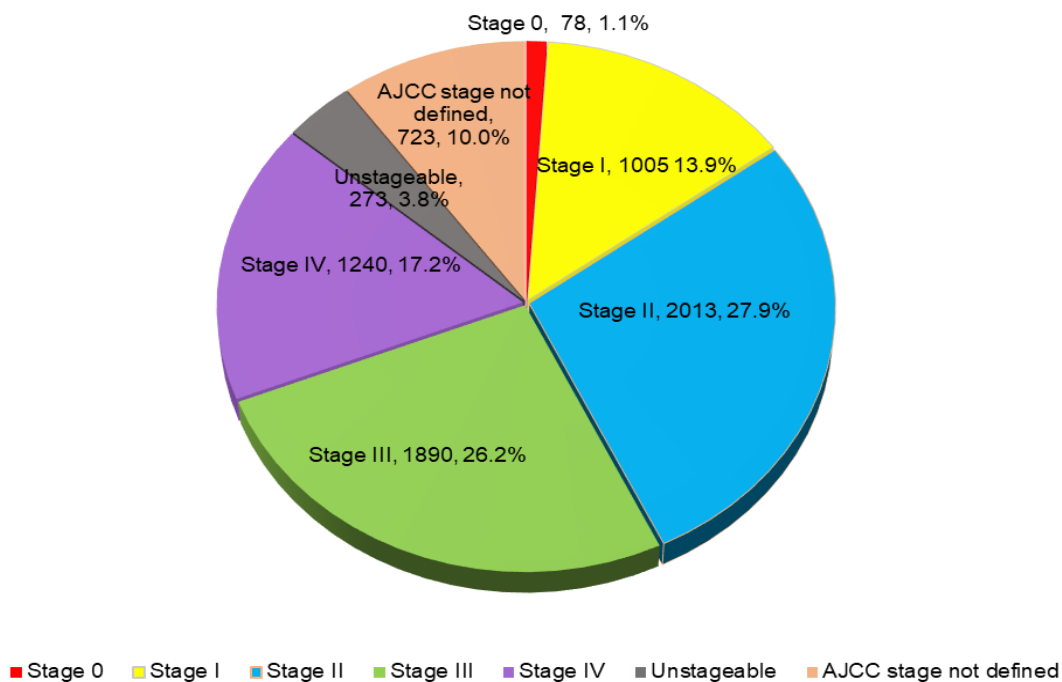
Staging

For all analytical cancer cases, the Registry employs the TNM staging approach of the American Joint Commission on Cancer. TNM classifies malignancies according to four stages: 0, 1, 2, 3, and 4, as well as unstageable and not relevant in all analytical cases (Class of Case 00, 10, 11, and 20). Cancers are categorised as being unstageable since individuals may decide not to receive any therapy or go through further medical testing necessary to determine the proper stage. "Not applicable" denotes that there is no AJCC staging available at that location. Cancer staging for 7,222 analytical cases (classes 00, 10, 11, and 20) during the year 2022 revealed that 78 (1.1%) of cases fell into the stage 0 or in-situ group, 1,005 (13.9%) in stage I, 2013 (27.9%) in stage II, and 1,890 (26.2%) in stage III, 1,240 (17.2%) patients were in Stage IV, 273 (3.8%) couldn't be staged, and 723 (10.0%) didn't have an AJCC stage assigned to them (Table 9).

Table 9. TNM Stage of analytical cancer patients (N=7,222) at SKMCH&RC, Jan. 2022 to Dec. 2022.

AJCC Stage	Count	Percentage
Stage 0	78	1.1
Stage I	1005	13.9
Stage II	2013	27.9
Stage III	1,890	26.2
Stage IV	1,240	17.2
Unstageable	273	3.8
AJCC stage not defined	723	10.0
Total	7222	100.0

Figure 9. TNM stage of cancer patients (N=7,222) at SKMCH&RC, Jan. 2022 to Dec. 2022.



Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

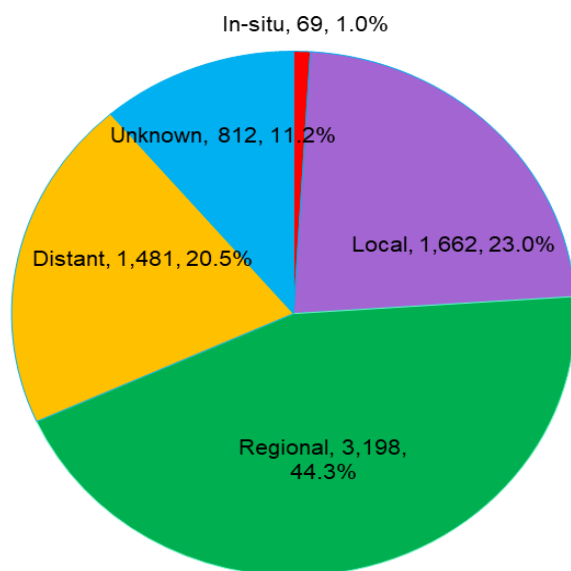
Summary Stage

(2000) SEER Summary Staging Manual How far the tumour had spread from the organ, or its location of origin was indicated using codes and coding instructions. Each site in this guidebook has a unique one-digit hierarchical code. To produce findings, all analytical cases (Class of Case 00, 10, 11, 12, and 20) were included. According to the cancer statistics for 2022, there were 1.0% instances of cancer in-situ, 23.0% localised cancers, 44.3% regional cancers, 20.5% distant cancers, and 11.2% cases with an uncertain summary stage.

Table 10. Classification of analytical cancer patients (N=7,222) according to the SEER Summary Stage, SKMCH&RC, Jan. 2022 to Dec. 2022.

SEER Summary Stage	Count	Percentage
In-situ	69	1.0
Local	1,662	23.0
Regional	3198	44.3
Distant	1,481	20.5
Unknown	812	11.2
Total	7,222	100.0

Figure 10. Classification of analytical cancer patients (N=7,222) according to the SEER Summary Stage, SKMCH&RC, Jan. 2022 to Dec. 2022.



Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

Grade/Differentiation/Immunophenotype

To classify grade, differentiation, and immunophenotype, the International Classification of Diseases for Oncology, Third Edition (ICD-O-3) uses codes and criteria. To produce findings, all analytical cases (Class of Case 00, 10, 11, 12, and 20) were included.

Table 11. Grade/differentiation/immunophenotype of analytical cancers (N=7,222), SKMCH&RC, Jan. 2022 to Dec. 2022.

Grade/differentiation/immunophenotype	Count	Percentage
Grade I	522	7.2
Grade II	2,207	30.6
Grade III	1,855	25.7
Grade IV	138	1.9
T-cell	19	0.3
B-cell	310	4.3
Grade/differentiation/immunophenotype not determined, not stated, or not applicable	2,171	30.1
Total	7,222	100.0

SUPPLEMENTAL INFORMATION

The results are shown in Table 12 by primary site, age range, and sex. According to this, the most frequent systems or sites for malignancies observed at SKMCH&RC are the breast, colon/rectum/anal canal/anus, lymphoma, and lip/oral cavity. The data are stratified by sex, primary site, and morphology in Table 13.

Table 12. Distribution by sex, primary malignant site, and 5-year age group, SKMCH&RC 2022

FEMALES

ICD-O-3 code	Primary site	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	Total
C00	Lip	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2
C01-C02	Tongue	0	0	0	0	1	1	2	3	7	8	7	9	11	5	3	1	0	0	58
C03	Gum	0	0	0	0	0	3	0	1	2	3	4	1	3	3	0	0	0	0	20
C04-C06	Floor & other parts of the mouth	0	0	0	0	0	1	1	9	4	4	9	1	6	3	0	1	0	0	39
C07-C08	Salivary gland	0	0	0	0	1	2	4	6	2	5	4	4	2	1	0	0	0	0	31
C09-C10	Tonsil & oropharynx	0	0	0	0	0	0	0	2	0	0	0	2	1	1	0	0	0	0	6
C11	Nasopharynx	0	0	0	1	4	4	5	5	2	1	1	2	1	1	0	0	0	0	27
C12-C13	Pyiform sinus & hypopharynx	0	0	0	0	0	3	1	2	2	3	1	3	2	0	0	0	0	0	17
C14	Other & ill-defined lip, oral cavity, pharynx	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
C15	Esophagus	0	0	0	0	1	6	11	19	26	43	23	16	19	0	0	0	0	0	164
C16	Stomach	0	0	0	0	1	1	8	8	9	21	13	14	7	1	2	0	1	0	86
C17	Small intestine	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	3
C18	Colon	0	0	0	0	3	2	8	14	7	10	6	13	6	1	2	0	0	1	73
C19-C21	Rectosigmoid, rectum, anal canal, & anus	0	0	0	1	7	15	18	11	13	15	8	16	5	3	2	2	0	0	116
C22	Liver & intrahepatic bile duct	8	0	0	0	0	0	0	2	3	6	16	10	2	1	1	2	0	1	52
C23-C24	Gall bladder & extrahepatic bile duct	0	0	0	0	0	1	0	3	6	6	4	15	7	12	4	0	0	0	58
C25	Pancreas	0	0	0	0	1	2	2	1	5	0	3	6	5	4	2	2	0	0	33
C30-C31	Nasal cavity, middle ear, & acc. sinuses	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	6
C32	Larynx	0	0	0	0	0	0	0	0	0	2	1	2	1	0	0	0	0	0	6
C33-C34	Traches, bronchus, & lung	0	0	0	0	0	1	4	2	5	3	5	7	5	5	5	0	1	0	43
C37-C38	Thymus, heart, mediastinum, & pleura	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	3
C40-C41	Bone & articular cartilage	4	12	19	10	4	4	4	0	0	1	0	0	0	0	0	0	0	0	58
C44	Skin	0	0	0	0	2	0	1	2	5	6	3	5	5	10	3	7	2	1	52
C47	Peripheral & autoimmune nervous system	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
C49	Connective & soft tissue	2	0	2	5	1	4	4	0	0	1	0	1	0	2	0	0	0	0	22
C50	Breast	0	0	0	0	18	75	188	353	457	280	180	138	82	60	31	15	7	0	1884
C51-C52	Vulva & vagina	0	0	0	0	0	2	0	1	2	2	1	2	2	0	1	1	0	0	14
C53	Cervix uteri	0	0	1	0	0	6	7	16	22	18	17	19	7	1	0	1	0	0	115
C54	Corpus uteri & uterus, NOS	0	0	1	0	1	3	6	7	10	12	19	17	21	12	3	1	0	0	113
C56-C58	Ovary & other female genital organs	2	3	6	11	7	7	10	15	20	14	8	11	8	3	1	2	0	0	128
C64-C66	Kidney & other urinary organ	19	11	0	1	1	4	8	1	3	12	11	7	6	2	1	0	0	0	87
C67	Urinary bladder	0	0	0	0	0	2	3	4	2	6	2	4	3	0	1	1	1	0	29
C69	Eye	30	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	33
C70-C71	Brain	3	6	6	3	9	11	9	7	8	2	2	1	0	2	0	0	0	1	70
C72	Other parts of the nervous system	0	1	3	0	2	1	0	2	0	0	0	1	1	0	0	0	0	0	11
C73	Thyroid gland	0	0	0	3	9	19	21	20	14	11	10	3	2	0	0	0	0	0	112
C74-C75	Adrenal & other endocrine glands	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	3
C76	Other & ill-defined sites	5	2	0	0	0	0	0	0	1	1	0	0	2	1	0	0	0	0	12
C80	Unknown primary	0	0	0	0	0	1	0	3	2	1	2	3	4	2	2	1	0	0	21
M9590-91, 967-972	Non-Hodgkin lymphoma	9	9	2	3	9	12	12	6	5	4	3	2	7	1	1	0	0	0	85
M9650-M9667	Hodgkin lymphoma	12	25	19	22	21	21	25	8	5	4	1	2	1	0	0	0	0	0	166
M9731-M9764	Multiple myeloma & immuno. neoplasms	2	0	0	0	1	0	0	1	1	0	2	0	1	0	0	0	0	0	8
M980	Leukemia, unspecified	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
M981-M983	Lymphoid leukemia	27	21	0	9	1	0	0	3	1	2	1	2	0	0	1	0	0	0	68
M984-M993	Myeloid leukemia	0	2	0	6	2	0	1	0	0	0	0	0	1	0	0	0	0	0	12
M994-M997	Other hematopoietic & myelo. disorders	0	0	1	0	1	1	0	0	1	1	1	0	1	0	0	0	0	0	7
M995-M998	MDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
~	Other reportable CNS neoplasms	0	1	0	3	4	6	10	8	5	5	9	3	1	4	0	0	1	0	60
Total		124	96	60	78	115	221	376	545	661	514	378	346	240	141	66	37	15	5	4018

MALES

ICD-O-3 code	Primary site	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	Total
C00	Lip	0	0	0	1	0	1	2	0	0	0	1	3	2	1	0	0	0	0	11
C01-C02	Tongue	0	0	0	0	1	1	6	8	10	10	11	9	11	8	4	0	0	2	81
C03	Gum	0	0	0	0	0	2	2	4	5	5	3	4	4	2	0	0	0	0	31
C04-C06	Floor & other parts of the mouth	0	0	0	0	0	3	4	10	9	12	17	14	8	6	2	0	0	0	85
C07-C08	Salivary gland	0	0	0	0	1	0	2	2	2	2	6	2	3	1	0	0	0	0	21
C09-C10	Tonsil & oropharynx	0	0	0	0	0	0	1	1	0	2	1	1	1	0	0	0	0	1	8
C11	Nasopharynx	0	0	0	4	7	3	5	5	11	7	8	11	4	2	0	0	0	0	67
C12-C13	Pyriiform sinus & hypopharynx	0	0	0	1	0	2	2	0	1	1	2	0	3	0	0	0	0	0	12
C15	Esophagus	0	0	0	0	1	12	8	16	18	28	21	19	15	1	1	1	0	0	141
C16	Stomach	0	0	0	1	1	4	9	11	18	27	19	29	18	2	1	0	1	0	141
C17	Small intestine	0	0	0	0	1	1	3	2	3	0	3	2	2	1	0	1	0	0	19
C18	Colon	0	0	0	0	4	12	17	21	22	18	19	16	8	10	5	2	0	2	156
C19-C21	Rectosigmoid, rectum, anal canal, & anus	0	0	0	4	21	20	22	28	30	26	25	25	9	5	3	1	0	0	219
C22	Liver & intrahepatic bile duct	7	1	0	0	0	0	1	1	4	6	18	38	15	7	0	6	2	0	106
C23-C24	Gall bladder & extrahepatic bile duct	0	0	0	1	0	0	0	2	7	2	8	8	11	5	4	4	0	1	53
C25	Pancreas	0	0	0	0	0	4	2	2	0	3	9	4	9	8	3	3	1	0	48
C26	Other & ill-defined digestive organs	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
C30-C31	Nasal cavity, middle ear, & acc. sinuses	0	0	0	1	0	0	2	2	0	1	3	1	1	0	0	1	0	0	12
C32	Larynx	0	0	0	0	0	1	1	3	8	7	14	15	17	5	5	4	0	0	80
C33-C34	Traches, bronchus, & lung	0	0	0	0	1	1	3	6	8	5	9	20	21	24	19	11	3	1	132
C37-C38	Thymus, heart, mediastinum, & pleura	0	0	0	1	2	2	0	2	0	0	0	1	0	0	1	0	0	0	9
C40-C41	Bone & articular cartilage	3	13	33	21	9	6	7	0	0	1	0	0	1	0	0	0	0	0	94
C44	Skin	0	0	0	0	0	2	5	3	3	7	4	6	10	22	14	3	2	1	82
C47	Peripheral & autoimmune nervous system	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
C49	Connective & soft tissue	6	0	2	1	5	5	2	2	1	0	1	2	1	1	0	0	0	0	29
C50	Breast	0	0	0	0	0	1	2	0	1	2	0	1	1	0	0	1	1	0	10
C60	Penis	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
C61	Prostate	0	0	0	0	0	0	0	2	1	6	22	36	49	72	44	28	13	2	275
C62	Testis	6	1	1	16	40	41	36	26	1	0	0	0	0	0	0	0	0	0	168
C64-C66	Kidney & other urinary organ	19	8	1	0	1	2	6	11	12	19	25	12	11	10	4	1	1	2	145
C67	Urinary bladder	2	0	1	0	2	1	2	8	17	8	15	14	8	13	13	4	2	2	112
C69	Eye	23	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	32
C70-C71	Brain	2	11	3	3	12	17	21	24	11	6	3	2	3	3	1	0	0	0	122
C72	Other parts of the nervous system	1	1	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	6
C73	Thyroid gland	0	0	0	0	8	3	6	6	9	7	3	6	1	1	0	0	0	0	50
C74-C75	Endocrine gland & related structure	0	0	0	0	0	0	2	0	1	0	1	0	0	0	0	0	0	0	4
C76	Other & ill-defined sites	4	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	7
C80	Unknown primary	0	0	0	0	0	1	0	4	1	2	4	2	4	2	0	1	2	0	23
M9590-91, 967-972	Non-Hodgkin lymphoma	29	16	4	8	12	21	24	27	10	7	5	3	3	1	2	2	0	0	174
M9650-M9667	Hodgkin lymphoma	31	88	49	31	31	34	37	24	20	4	4	1	1	1	0	1	0	0	357
M9731-M9764	Multiple myeloma & immuno. neoplasms	2	0	0	1	0	0	0	0	0	4	2	0	1	1	0	0	0	0	11
M980	Leukemia, unspecified	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
M981-M983	Lymphoid leukemia	54	25	1	13	8	1	1	1	2	0	3	8	1	1	0	0	0	0	119
M984-M993	Myeloid leukemia	2	6	0	7	6	0	2	1	2	1	1	0	0	1	1	1	0	1	32
M994-M997	Other lymphatic & hematopoietic tissue	0	0	0	2	1	0	0	1	1	1	2	2	1	1	0	1	0	0	13
M998-M999	MDS	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
~	Other reportable CNS neoplasms	1	1	4	2	4	7	7	4	9	2	2	4	4	1	0	0	1	0	53
Total		197	180	99	121	180	211	254	273	258	239	295	323	262	222	127	77	29	16	3363

*Diseases are listed according to the International Classification of Diseases for Oncology, Third Edition (ICD-O-3) codes.

~Non-malignant primary intracranial and CNS tumors are also included in the count.

Table 13 - Morphology, site, and sex, SKMCH&RC 2022

ICD-O-3 Code	Morphology	Female	Male	Grand Total
C00 Lip	Squamous Cell Carcinoma, NOS	1	7	8
	Squamous Cell Carcinoma, Keratinizing, NOS		3	3
	Carcinoma, NOS	1		1
	Pseudosarcomatous Carcinoma		1	1
C01-C02 Tongue	Squamous Cell Carcinoma, NOS	44	65	109
	Squamous Cell Carcinoma, Keratinizing, NOS	14	14	28
	Carcinoma, NOS		1	1
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS		1	1
C03-C06 Gum, FOM, palate, other & unspecified parts of the mouth	Squamous Cell Carcinoma, NOS	37	90	127
	Squamous Cell Carcinoma, Keratinizing, NOS	8	14	22
	Mucoepidermoid Carcinoma	7	3	10
	Adenoid Cystic Carcinoma	4	2	6
	Carcinoma, NOS	1	3	4
	Adenocarcinoma, NOS		1	1
	Carcinoma Ex Pleomorphic Adenoma	1		1
	Diffuse Large B-Cell Lymphoma, NOS	1		1
	Malignant Myoepithelioma	1		1
	Polymorphous Adenocarcinoma		1	1
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS		1	1
	Squamous Cell Carcinoma, Small Cell, Nonkeratinizing		1	1
C07-C08 Parotid and other major Salivary glands	Carcinoma, NOS	8	8	16
	Mucoepidermoid Carcinoma	7	6	13
	Adenoid Cystic Carcinoma	7	1	8
	Squamous Cell Carcinoma, NOS	4	2	6
	Acinar Cell Carcinoma	1	1	2
	Basal Cell Adenocarcinoma	1	1	2
	Carcinoma Ex Pleomorphic Adenoma		2	2
	Clear Cell Adenocarcinoma, NOS	1		1
	Malignant Myoepithelioma	1		1
	Secretory Carcinoma	1		1
C09-C10 Tonsil & oropharynx	Squamous Cell Carcinoma, NOS	4	7	11
	Basaloid Squamous Cell Carcinoma		1	1
	Carcinoma, NOS	1		1
	Diffuse Large B-Cell Lymphoma, NOS	1		1
	Mucoepidermoid Carcinoma	1		1
C11 Nasopharynx	Carcinoma, Undifferentiated, NOS	21	50	71
	Carcinoma, NOS	4	11	15
	Squamous Cell Carcinoma, NOS	1	3	4
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS	1	1	2
	Carcinoma, Undifferentiated, NOS		1	1
	Diffuse Large B-Cell Lymphoma, NOS		1	1
	Myeloid Sarcoma		1	1
	Neoplasm, Malignant		1	1
Plasmacytoma, NOS	1		1	
C12-C13 Pyriform sinus & hypopharynx	Squamous Cell Carcinoma, NOS	12	10	22
	Squamous Cell Carcinoma, Keratinizing, NOS	5	1	6
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS		1	1

C14 Other and Ill-defined sites in the lip, oral cavity, and pharynx	Diffuse Large B-Cell Lymphoma, NOS		1	1
	Squamous Cell Carcinoma, Keratinizing, NOS	1		1
C15 Esophagus	Squamous Cell Carcinoma, NOS	142	115	257
	Squamous Cell Carcinoma, Keratinizing, NOS	15	11	26
	Adenocarcinoma, NOS	3	8	11
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS	1	3	4
	Squamous Cell Carcinoma, Spindle Cell	2	1	3
	Signet Ring Cell Carcinoma		2	2
	Adenosquamous Carcinoma		1	1
	Carcinoma, NOS	1		1
C16 Stomach	Adenocarcinoma, NOS	34	92	126
	Signet Ring Cell Carcinoma	30	31	61
	Squamous Cell Carcinoma, NOS	9	4	13
	Neuroendocrine Carcinoma, NOS	3	5	8
	Gastrointestinal Stromal Tumor	5	2	7
	Adenocarcinoma In Tubulovillous Adenoma	3	3	6
	Diffuse Large B-Cell Lymphoma, NOS	1	3	4
	Mucinous Adenocarcinoma	1	2	3
	Carcinoma, NOS	1	1	2
	Marginal Zone B-Cell Lymphoma, NOS		2	2
	Small Cell Carcinoma, NOS		1	1
C17 Small intestine	Adenocarcinoma, NOS	2	10	12
	Neuroendocrine Carcinoma, NOS	1	5	6
	Burkitt Lymphoma, NOS	1	3	4
	Adenocarcinoma In Tubulovillous Adenoma		2	2
	Diffuse Large B-Cell Lymphoma, NOS		2	2
	Gastrointestinal Stromal Tumor		1	1
Signet Ring Cell Carcinoma		1	1	
C18 Colon	Adenocarcinoma, NOS	49	105	154
	Mucinous Adenocarcinoma	8	21	29
	Adenocarcinoma In Tubulovillous Adenoma	7	15	22
	Signet Ring Cell Carcinoma	7	9	16
	Burkitt Lymphoma, NOS		3	3
	Neoplasm, Malignant		3	3
	Neuroendocrine Carcinoma, NOS	2	1	3
	Diffuse Large B-Cell Lymphoma, NOS		1	1
	Neuroendocrine Tumor, NOS		1	1
Small Cell Carcinoma, NOS		1	1	
C19-C21 Rectosigmoid junction, rectum, anal canal, & anus	Adenocarcinoma, NOS	60	114	174
	Signet Ring Cell Carcinoma	23	42	65
	Adenocarcinoma In Tubulovillous Adenoma	16	27	43
	Mucinous Adenocarcinoma	6	10	16
	Squamous Cell Carcinoma, NOS	1	9	10
	Malignant Melanoma, NOS	2	6	8
	Neuroendocrine Carcinoma, NOS	2	5	7
	Carcinoma, NOS	2	1	3
	Squamous Cell Carcinoma, Keratinizing, NOS	2	1	3
	Diffuse Large B-Cell Lymphoma, NOS		1	1
	Gastrointestinal Stromal Tumor		1	1
	Neoplasm, Malignant	1		1
	Neuroendocrine Tumor, Grade 2		1	1
	Small Cell Carcinoma, NOS	1		1
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS		1	1

	Squamous Cell Carcinoma, Spindle Cell		1	1
C22 Liver & intrahepatic bile ducts	Adenocarcinoma, NOS	2	5	7
	Carcinoma, NOS		1	1
	Cholangiocarcinoma	8	11	19
	Hepatoblastoma	8	8	16
	Hepatocellular Carcinoma, NOS	32	81	113
	Hodgkin Lymphoma, Mixed Cellularity, NOS		2	2
	Hodgkin Lymphoma, NOS		1	1
	Neuroendocrine Carcinoma, NOS	1		1
	Neuroendocrine Tumor, NOS	1		1
C23-C24 Gall bladder & other unspecified parts of the biliary tract	Adenocarcinoma, NOS	40	46	86
	Adenocarcinoma In Tubulovillous Adenoma	6		6
	Neoplasm, Malignant	4	2	6
	Neuroendocrine Carcinoma, NOS	3	3	6
	Carcinoma, NOS	2		2
	Cholangiocarcinoma	1	1	2
	Papillary Adenocarcinoma, NOS	1		1
	Signet Ring Cell Carcinoma	1		1
	Squamous Cell Carcinoma, NOS		1	1
C25 Pancreas	Adenocarcinoma, NOS	23	32	55
	Neuroendocrine Carcinoma, NOS	2	7	9
	Solid Pseudopapillary Neoplasm of The Pancreas	4	1	5
	Neoplasm, Malignant		3	3
	Adenocarcinoma In Tubulovillous Adenoma	1	1	2
	Adenocarcinoma With Neuroendocrine Differentiation	1	1	2
	Adenosquamous Carcinoma		1	1
	Burkitt Lymphoma, NOS		1	1
	Carcinoma, NOS	1		1
	Ewing Sarcoma	1		1
	Mucinous Adenocarcinoma		1	1
	Neuroendocrine Tumor, NOS		1	1
C26 Other & ill-defined digestive organs	Adenocarcinoma, NOS		1	1
	Burkitt Lymphoma, NOS		1	1
	Diffuse Large B-Cell Lymphoma, NOS		1	1
	Small Cell Carcinoma, NOS		1	1
C30-C31 Nasal cavity, middle ear, & accessory sinuses	Adenocarcinoma, NOS	1	1	2
	Adenoid Cystic Carcinoma	1	4	5
	Burkitt Lymphoma, NOS		1	1
	Carcinoma, NOS		1	1
	Carcinoma, Undifferentiated, NOS		1	1
	Malignant Melanoma, NOS	1		1
	Neoplasm, Malignant		1	1
	Olfactory Neuroblastoma	1	1	2
	Squamous Cell Carcinoma, NOS	2	3	5
C32 Larynx	Squamous Cell Carcinoma, NOS	4	60	64
	Squamous Cell Carcinoma, Keratinizing, NOS	1	11	12
	Squamous Cell Carcinoma in Situ, NOS		4	4
	Carcinoma, NOS	1	1	2
	Neoplasm, Malignant		1	1
	Papillary Squamous Cell Carcinoma		1	1
	Pseudosarcomatous Carcinoma		1	1
	Squamous Cell Carcinoma, Spindle Cell		1	1
C33-C34 Trachea, bronchus, & lung	Small Cell Carcinoma, NOS	9	39	48
	Squamous Cell Carcinoma, NOS	5	30	35

	Adenocarcinoma, NOS	6	24	30
	Acinar Cell Carcinoma	9	12	21
	Neuroendocrine Carcinoma, NOS	3	8	11
	Carcinoma, NOS	1	4	5
	Mucinous Adenocarcinoma	4		4
	Non-Small Cell Carcinoma	1	2	3
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS		3	3
	Adenoid Cystic Carcinoma	1	1	2
	Adenosquamous Carcinoma	1	1	2
	Neoplasm, Malignant		2	2
	Diffuse Large B-Cell Lymphoma, NOS	1		1
	Lepidic Adenocarcinoma	1		1
	Mucoepidermoid Carcinoma		1	1
	Neuroendocrine Tumor, Grade 2	1		1
	Neuroendocrine Tumor, NOS		1	1
	Papillary Adenocarcinoma, NOS		1	1
	Pseudosarcomatous Carcinoma	1		1
	Spindle Cell Sarcoma		1	1
	Squamous Cell Carcinoma in Situ, NOS		1	1
	Undifferentiated Sarcoma		1	1
C37-C38 Thymus, heart, mediastinum, & pleura	Precursor T-Cell Lymphoblastic Lymphoma	1	2	3
	Mixed Germ Cell Tumor		2	2
	Seminoma, NOS		2	2
	Squamous Cell Carcinoma, NOS		2	2
	Thymoma, Type B2		2	2
	Diffuse Large B-Cell Lymphoma, NOS		1	1
	Hodgkin Lymphoma, Nodular Sclerosis, NOS	1		1
	Hodgkin Lymphoma, NOS	1		1
	Myeloid Sarcoma		1	1
	Neuroendocrine Carcinoma, NOS		1	1
	Thymic Carcinoma, NOS	1		1
	Thymoma, Type A	1		1
Thymoma, Type Ab	1		1	
C40-C41 Bones, joints, & articular cartilage	Ewing Sarcoma	22	45	67
	Osteosarcoma, NOS	26	39	65
	Chondroblastic Osteosarcoma	4	6	10
	Chondrosarcoma, NOS	1	2	3
	Diffuse Large B-Cell Lymphoma, NOS	2	1	3
	Parosteal Osteosarcoma	3		3
	Burkitt Lymphoma, NOS		1	1
	Chordoma, NOS	1		1
	Langerhans Cell Histiocytosis, Disseminated		1	1
	Myeloid Sarcoma		1	1
	Odontogenic Tumor, Malignant		1	1
	Plasmacytoma, NOS	1		1
	Telangiectatic Osteosarcoma		1	1
Teratoma, Malignant, NOS	1		1	
C42.1 Hematopoietic & reticuloendothelial system	Precursor B-Cell Lymphoblastic Leukemia	57	100	157
	Acute Myeloid Leukemia, NOS	11	18	29
	B-Cell Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma	9	18	27
	Plasma Cell Myeloma	4	7	11
	Essential Thrombocythemia	3	6	9
	Chronic Myeloid Leukemia, NOS		7	7
	Myeloproliferative Neoplasm, NOS	2	5	7
	Precursor T-Cell Lymphoblastic Leukemia	2	2	4
Polycythemia Vera	2	1	3	

	Acute Leukemia, NOS	1	1	2
	Chronic Myelogenous Leukemia, BCR/ABL Positive	1	1	2
	Myelodysplastic Syndrome, NOS		2	2
	Acute Promyelocytic Leukemia		1	1
	Hairy Cell Leukemia		1	1
	Leukemia, NOS		1	1
	Neoplasm, Uncertain Whether Benign or Malignant	1		1
C44 Skin	Basal Cell Carcinoma, Nodular	24	33	57
	Squamous Cell Carcinoma, NOS	11	26	37
	Basal Cell Carcinoma, NOS	5	9	14
	Dermatofibrosarcoma Protuberans, Fibrosarcomatous	6	4	10
	Sebaceous Carcinoma	3	2	5
	Squamous Cell Carcinoma, Keratinizing, NOS	2	3	5
	Adenoid Cystic Carcinoma		1	1
	Basosquamous Carcinoma	1		1
	Langerhans Cell Histiocytosis, Disseminated	1		1
	Malignant Melanoma, NOS		1	1
	Mycosis Fungoides		1	1
	Porocarcinoma, NOS		1	1
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS		1	1
C47, C49 Peripheral nerves & auto-immune N.S and Connective, subcutaneous & other soft tissues	Synovial Sarcoma, NOS	2	6	8
	Embryonal Rhabdomyosarcoma, NOS	3	4	7
	Ewing Sarcoma	4	2	6
	Neuroblastoma, NOS	1	5	6
	Leiomyosarcoma NOS	1	2	3
	Spindle Cell Sarcoma	1	2	3
	Synovial Sarcoma, Biphasic	1	2	3
	Undifferentiated Sarcoma	3		3
	Epithelioid Sarcoma	2		2
	Ganglioneuroblastoma	1	1	2
	Giant Cell Sarcoma	1	1	2
	Sarcoma, NOS	1	1	2
	Chondrosarcoma, NOS	1		1
	Clear Cell Sarcoma, NOS		1	1
	Diffuse Large B-Cell Lymphoma, NOS	1		1
	Fibromyxosarcoma	1		1
	Hemangioendothelioma, Malignant		1	1
	Liposarcoma, Well Differentiated		1	1
	Myxoid Leiomyosarcoma		1	1
	Myxoid Liposarcoma		1	1
	Osteosarcoma, NOS	1		1
	Rhabdomyosarcoma, NOS		1	1
	Small Cell Sarcoma		1	1
	Spindle Cell Rhabdomyosarcoma		1	1
	Teratocarcinoma		1	1
C50 Breast	Infiltrating Duct Carcinoma, NOS	1597	7	1604
	Lobular Carcinoma, NOS	100		100
	Infiltrating Duct Mixed with Other Types of Carcinomas	38		38
	Inflammatory Carcinoma	29		29
	Carcinoma, NOS	22	1	23
	Metaplastic Carcinoma, NOS	15		15
	Comedocarcinoma, Noninfiltrating	10		10
	Ductal Carcinoma in Situ, Solid Type	9		9
	Neoplasm, Malignant	8		8
	Paget Disease and Infiltrating Duct Carcinoma of the Breast	8		8

	Mucinous Adenocarcinoma	6		6
	Papillary Carcinoma, NOS	6		6
	Infiltrating Duct and Lobular Carcinoma	5		5
	Intraductal Carcinoma, Noninfiltrating, NOS	5		5
	Intraductal Micropapillary Carcinoma	4		4
	Paget Disease and Intraductal Carcinoma of the Breast	4		4
	Noninfiltrating Intraductal Papillary Adenocarcinoma	2	1	3
	Phyllodes Tumor, Malignant	3		3
	Cribriform Carcinoma in Situ	2		2
	Cribriform Carcinoma, NOS	2		2
	Lobular Carcinoma in Situ, NOS	2		2
	Apocrine Adenocarcinoma	1		1
	Diffuse Large B-Cell Lymphoma, NOS		1	1
	Encapsulated Papillary Carcinoma	1		1
	Invasive Micropapillary Carcinoma of the Breast	1		1
	Marginal Zone B-Cell Lymphoma, NOS	1		1
	Metaplastic carcinoma	1		1
	Neuroendocrine Carcinoma, NOS	1		1
	Small Cell Carcinoma, NOS	1		1
	Solid Carcinoma, NOS	1		1
C51-C52 Vulva & vagina	Squamous Cell Carcinoma, NOS	9		9
	Adenocarcinoma, NOS	1		1
	Clear Cell Adenocarcinoma, NOS	1		1
	Leiomyosarcoma NOS	1		1
	Malignant Melanoma, NOS	1		1
	Squamous Cell Carcinoma, Keratinizing, NOS	1		1
C53 Cervix uteri	Squamous Cell Carcinoma, NOS	37		37
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS	22		22
	Squamous Cell Carcinoma, Keratinizing, NOS	21		21
	Adenocarcinoma, NOS	12		12
	Adenocarcinoma, Endocervical Type	3		3
	Adenosquamous Carcinoma	3		3
	Endometrioid Adenocarcinoma, NOS	3		3
	Squamous Cell Carcinoma, HPV-Positive Carcinoma, NOS	3		3
	Neuroendocrine Carcinoma, NOS	2		2
	Carcinoma, Undifferentiated, NOS	2		2
	Embryonal Rhabdomyosarcoma, NOS	1		1
	Leiomyosarcoma NOS	1		1
	Mesonephroma, Malignant	1		1
	Mucinous Adenocarcinoma	1		1
	Small Cell Carcinoma, NOS	1		1
	Squamous Cell Carcinoma, Spindle Cell	1		1
C54 Corpus uteri	Endometrioid Adenocarcinoma, NOS	76		76
	Serous Carcinoma, NOS	14		14
	Leiomyosarcoma NOS	6		6
	Carcinosarcoma, NOS	5		5
	Carcinoma, NOS	2		2
	Endometrial Stromal Sarcoma, Low-Grade	2		2
	Endometrial Stromal Sarcoma, NOS	2		2
	Adenosarcoma	1		1
	Carcinoma, Undifferentiated, NOS	1		1
	Clear Cell Adenocarcinoma, NOS	1		1
	Embryonal Rhabdomyosarcoma, NOS	1		1
	Low-Grade Serous Carcinoma	1		1

	Mixed Cell Adenocarcinoma	1		1
C56-C58 Ovary & other female genital organs	Serous Carcinoma, NOS	48		48
	Endometrioid Adenocarcinoma, NOS	12		12
	Dysgerminoma	11		11
	Adult Granulosa Cell Tumor of Ovary	10		10
	Mucinous Adenocarcinoma	10		10
	Clear Cell Adenocarcinoma, NOS	6		6
	Mixed Germ Cell Tumor	6		6
	Adenocarcinoma, NOS	4		4
	Neoplasm, Malignant	4		4
	Teratoma, Malignant, NOS	3		3
	Yolk Sac Tumor, NOS	3		3
	Carcinoma, NOS	2		2
	Diffuse Large B-Cell Lymphoma, NOS	2		2
	Germinoma	2		2
	Carcinoma, Undifferentiated, NOS	1		1
	Embryonal Carcinoma, NOS	1		1
	Leiomyosarcoma NOS	1		1
	Mucinous Cystadenocarcinoma, NOS	1		1
	Nephroblastoma, NOS	1		1
	Sertoli-Leydig Cell Tumor, Poorly Differentiated	1		1
Small Cell Carcinoma, NOS	1		1	
C60 Penis	Squamous Cell Carcinoma, NOS		1	1
C61 Prostate	Adenocarcinoma, NOS		225	225
	Acinar Cell Carcinoma		38	38
	Neoplasm, Malignant		6	6
	Carcinoma, NOS		3	3
	Adenocarcinoma With Mixed Subtypes		1	1
	Mucinous Adenocarcinoma		1	1
	Small Cell Carcinoma, NOS		1	1
C62 Testis & other male genital organs	Mixed Germ Cell Tumor		80	80
	Seminoma, NOS		44	44
	Embryonal Carcinoma, NOS		14	14
	Yolk Sac Tumor, NOS		11	11
	Germinoma		5	5
	Teratoma, Malignant, NOS		4	4
	Choriocarcinoma, NOS		2	2
	Embryonal Rhabdomyosarcoma, NOS		2	2
	Neoplasm, Malignant		2	2
	Ewing Sarcoma		1	1
	Intratubular Malignant Germ Cells		1	1
	Rhabdomyosarcoma, NOS		1	1
	Spermatocytic Seminoma		1	1
C64-C66 Kidney, renal pelvis, & ureter	Clear Cell Adenocarcinoma, NOS	37	76	113
	Nephroblastoma, NOS	29	25	54
	Renal Cell Carcinoma, NOS	7	17	24
	Renal Cell Carcinoma, Chromophobe Type	3	7	10
	Papillary Adenocarcinoma, NOS	4	3	7
	Papillary Transitional Cell Carcinoma	1	4	5
	Ewing Sarcoma	2	2	4
	Renal Cell Carcinoma, Sarcomatoid		3	3
	Transitional Cell Carcinoma, NOS	1	2	3
	Papillary Carcinoma, NOS		2	2
	Neoplasm, Malignant		1	1
	Carcinoma, Undifferentiated, NOS	1		1

	Clear Cell Sarcoma of Kidney		1	1
	Malignant Lymphoma, Non-Hodgkin, NOS	1		1
	Neuroblastoma, NOS		1	1
	Oxyphilic Adenocarcinoma		1	1
	Pheochromocytoma, NOS	1		1
	Synovial Sarcoma, NOS	1		1
C67 Bladder	Papillary Transitional Cell Carcinoma	16	60	76
	Transitional Cell Carcinoma, NOS	10	45	55
	Embryonal Rhabdomyosarcoma, NOS		3	3
	Papillary Urothelial Carcinoma, Non-Invasive		2	2
	Urothelial Carcinoma, Micropapillary	1	1	2
	Carcinoma, NOS	1		1
	Small Cell Carcinoma, NOS		1	1
	Squamous Cell Carcinoma, NOS	1		1
C69 Eye and adnexa	Retinoblastoma, NOS (C69.2)	32	30	62
	Adenoid Cystic Carcinoma	1	1	2
	Retinoblastoma, NOS		1	1
C70-C71 Meninges & brain	Glioma, Malignant	23	39	62
	Astrocytoma, NOS	11	28	39
	Meningioma, NOS	22	9	31
	Glioblastoma, NOS	5	19	24
	Pilocytic Astrocytoma	11	8	19
	Oligodendroglioma, NOS	8	9	17
	Medulloblastoma, NOS	6	6	12
	Neoplasm, Uncertain Whether Benign or Malignant	1	9	10
	Atypical Meningioma	2	4	6
	Myxopapillary Ependymoma	2	4	6
	Ependymoma, NOS	2	3	5
	Meningothelial Meningioma	3	2	5
	Diffuse Large B-Cell Lymphoma, NOS	1	1	2
	Gemistocytic Astrocytoma		2	2
	Langerhans Cell Histiocytosis, Disseminated	1	1	2
	Pleomorphic Xanthoastrocytoma	1	1	2
	Schwannoma, NOS	2		2
	Astrocytoma, Anaplastic		1	1
	Central Neurocytoma		1	1
	Chondrosarcoma, NOS	1		1
	CNS Embryonal Tumor, NOS		1	1
	Ganglioglioma, NOS		1	1
	Gliomatosis Cerebri		1	1
	Hemangiopericytoma, NOS		1	1
	Lipoma, NOS		1	1
	Malignant Melanoma, NOS	1		1
	Neoplasm, Malignant		1	1
Oligodendroglioma, Anaplastic		1	1	
Pilomyxoid Astrocytoma		1	1	
Sarcoma, NOS		1	1	
Solitary Fibrous Tumor/Hemangiopericytoma, Grade 1		1	1	
C72 Spinal cord, cranial nerves, & other parts of the CNS	Glioma, Malignant	6	2	8
	Ependymoma, NOS	1	2	3
	Astrocytoma, NOS	1		1
	Chordoma, NOS	1		1
	Diffuse Large B-Cell Lymphoma, NOS	1		1
	Ganglioglioma, NOS		1	1
	Glioblastoma, NOS	1		1

	Oligodendroglioma, NOS		1	1
	Pilocytic Astrocytoma	1		1
	Plasmacytoma, NOS		1	1
C73 Thyroid	Papillary Carcinoma, NOS	83	32	115
	Follicular Adenocarcinoma, NOS	9	4	13
	Papillary Carcinoma, Follicular Variant	9	1	10
	Medullary Carcinoma, NOS	2	7	9
	Neoplasm, Malignant	1	2	3
	Follicular Carcinoma, Minimally Invasive	2		2
	Oxyphilic Adenocarcinoma	1	1	2
	Papillary Carcinoma, Encapsulated by Thyroid	1	1	2
	Papillary Microcarcinoma	1	1	2
	Carcinoma, NOS		1	1
	Follicular Carcinoma, Encapsulated, Angioinvasive	1		1
	Papillary Carcinoma, Columnar Cell	1		1
	Papillary Carcinoma, Oncocytic Variant	1		1
C74 Adrenal gland	Pheochromocytoma, NOS		4	4
	Adrenal Cortical Carcinoma	3		3
	Precursor T-Cell Lymphoblastic Lymphoma	1		1
C75 Other endocrine glands & related structures	Pituitary Adenoma, NOS	26	18	44
	Neoplasm, Uncertain Whether Benign or Malignant	1	1	2
	Craniopharyngioma		1	1
	Neuroendocrine Carcinoma, NOS	1		1
C76 Other & ill-defined sites	Burkitt Lymphoma, NOS	2	8	10
	Yolk Sac Tumor, NOS	5	2	7
	Mixed Germ Cell Tumor	2		2
	Ewing Sarcoma		1	1
	Gastrointestinal Stromal Tumor	1		1
	Germinoma		1	1
	Malignant Lymphoma, Non-Hodgkin, NOS		1	1
	Neoplasm, Malignant	1		1
	Neuroblastoma, NOS		1	1
	Neuroendocrine Carcinoma, NOS		1	1
	Neuroendocrine Tumor, NOS	1		1
	Seminoma, NOS		1	1
	Small Cell Carcinoma, NOS	1		1
	Teratoma, Malignant, NOS	1		1
C77 Lymph nodes (NHL, HL)	Hodgkin Lymphoma, Mixed Cellularity, NOS	74	216	290
	Hodgkin Lymphoma, Nodular Sclerosis, NOS	61	77	138
	Diffuse Large B-Cell Lymphoma, NOS	34	79	113
	Hodgkin Lymphoma, NOS	21	33	54
	Burkitt Lymphoma, NOS	9	28	37
	Hodgkin Lymphoma, Nodular Lymphocyte Predominant	5	16	21
	Hodgkin Lymphoma, Lymphocyte-Rich	3	11	14
	Anaplastic Large Cell Lymphoma, T Cell, and Null Cell Type	5	4	9
	Follicular Lymphoma, Grade 1	2	6	8
	Angioimmunoblastic T-Cell Lymphoma	1	4	5
	Follicular Lymphoma, Grade 2	2	3	5
	Follicular Lymphoma, Grade 3	2	3	5
	Mantle Cell Lymphoma	1	3	4
	Mediastinal Large B-Cell, Lymphoma	2	1	3
	T-Cell/Histiocyte Rich Large B-Cell Lymphoma	2	1	3
	Malignant Lymphoma, Non-Hodgkin, NOS	1	1	2
	Marginal Zone B-Cell Lymphoma, NOS	1	1	2
	Precursor B-Cell Lymphoblastic Lymphoma	2		2

	Precursor T-Cell Lymphoblastic Lymphoma	1	1	2
	ALK Positive Large B-Cell Lymphoma		1	1
	Anaplastic Large Cell Lymphoma, ALK Negative	1		1
	Follicular Lymphoma, NOS		1	1
	Hodgkin Lymphoma, Lymphocyte Depletion, NOS		1	1
	Langerhans Cell Histiocytosis, Disseminated		1	1
	Malignant Lymphoma, Small B Lymphocytic, NOS	1		1
	Mature T-Cell Lymphoma, NOS		1	1
	Plasmablastic Lymphoma	1		1
C80 Unknown primary site	Neoplasm, Malignant	10	7	17
	Adenocarcinoma, NOS	5	7	12
	Carcinoma, NOS	1	5	6
	Neuroendocrine Carcinoma, NOS	2	2	4
	Mucinous Adenocarcinoma	1	1	2
	Small Cell Carcinoma, NOS		2	2
	Squamous Cell Carcinoma, NOS	2		2
Grand Total		4018	3363	7381

"NOS" is an abbreviation for Not Otherwise Specified.

Note: Lymphomas arise in solid organ sites categorized in their respective sites.