

ANNUAL CANCER REGISTRY REPORT-2020: SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL & RESEARCH CENTER, PAKISTAN

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CANCER STATISTICS

This report includes patients registered at the centers affiliated with the Shaukat Khanum Memorial Trust and accessioned into the hospital information system, in Lahore. The centers associated with the Trust include two hospitals: ‘Shaukat Khanum Memorial Cancer Hospital and Research Center’ (SKMCH&RC) in Lahore and Peshawar, the Karachi Diagnostic Center (KDC), and Shaukat Khanum Diagnostic Center Liberty (SKDCL), Lahore. SKMCH&RC Lahore is the oldest center and has been functioning since December 29, 1994; SKMCH&RC Peshawar since December 29, 2015; KDC since 2010; and SKDCL since August 01, 2019. All these centers are referred to as SKMCH&RC/hospital in this combined report.

Distribution of neoplasms

Of a total of 7,267 new neoplasms diagnosed or treated at the aforementioned facilities in Pakistan, from January 1, 2020, to December 31, 2020, 2,960 were seen in males (40.7%) and 4,307 (59.3%) in female patients. Six-thousand, six hundred and sixty-one (6,661 (91.7%)) neoplasms were found in adults, whereas 606 (8.3%) were seen in children. Children were classified as those 18-years or less and adults as more than 18-years of age. Table 1 shows the stratification of cases by behavior and age-group.

Table 1. Distribution of neoplasms by behavior and age-group, Jan. 2020 to Dec. 2020.

Behavior	Age-group	Registered patients (6,975)	Reported neoplasm* (7,267)
Malignant[*]	Adults	6,024	6,118
	Pediatrics	589	590
	Total	6,613	6,708
Benign[€] & uncertain behavior	Adults	485	543
	Pediatrics	16	16
	Total	501	559

* The difference in the number of registered patients and reported neoplasms is attributed to multiple malignancies and benign neoplasms diagnosed in 95 and 58 patients, respectively. Further, 139 patients have both malignant and benign neoplasm simultaneously.

^{*} Cases with behavior code /3 and /2 are considered to be malignant cases.

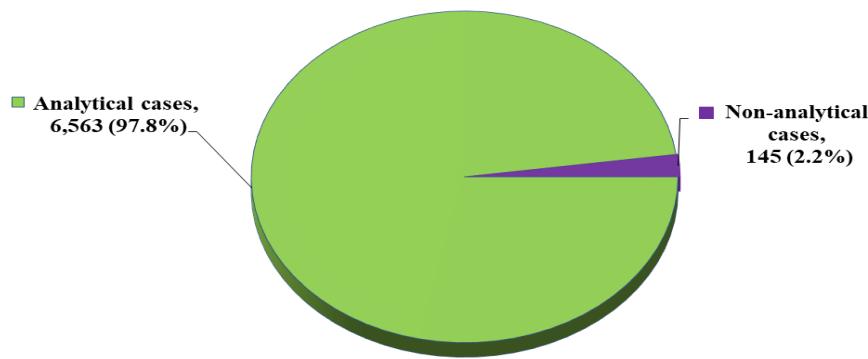
[€] Cases with behavior code /0 and /1 are considered to be benign and uncertain, respectively.

[¥] According to the Facility Oncology Revised Data Standards (FORDS), Revised for 2004, Class of Case 0 to 2 are analytical cases and included in treatment and survival analysis, whereas, Class of Case 3 to 9 are non-analytical cases, usually not included in routine treatment or survival statistics.

Class of Case

Of a total of 6,708 malignant cases recorded in the Registry from January 2020 to December 2020, 6,563 (97.8%) were analytical cases and 145 (2.2%) non-analytical. Figure 1 shows the stratification of analytical and non-analytical cases^Y.

Figure 1. Stratification of analytical and non-analytical cases, Jan. 2020 to Dec. 2020.



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

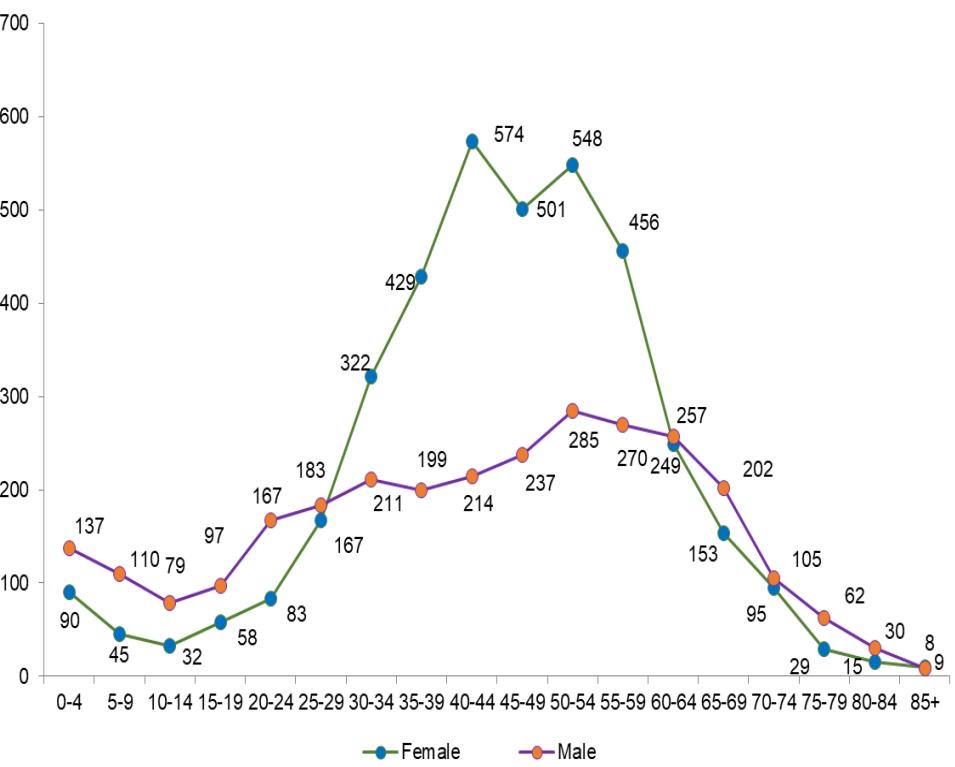
Distribution of malignancies

In the year 2020, a total of 6,708 malignancies were diagnosed at the hospital with 3,855 seen among females and 2,853 among males. Table 2 displays the distributions of female and male patients according to sex and age-group.

Table 2. Distribution of cancer cases by sex and age-group (years), Jan. 2020 to Dec. 2020.

Age-range	Female	Male	Total
0-4	90	137	227
5-9	45	110	155
10-14	32	79	111
15-19	58	97	155
20-24	83	167	250
25-29	167	183	350
30-34	322	211	533
35-39	429	199	628
40-44	574	214	788
45-49	501	237	738
50-54	548	285	833
55-59	456	270	726
60-64	249	257	506
65-69	153	202	355
70-74	95	105	200
75-79	29	62	91
80-84	15	30	45
85+	9	8	17
Total	3855	2853	6708

Figure 2. Cancer cases by sex and age-group (years), Jan.-Dec. 2020.



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

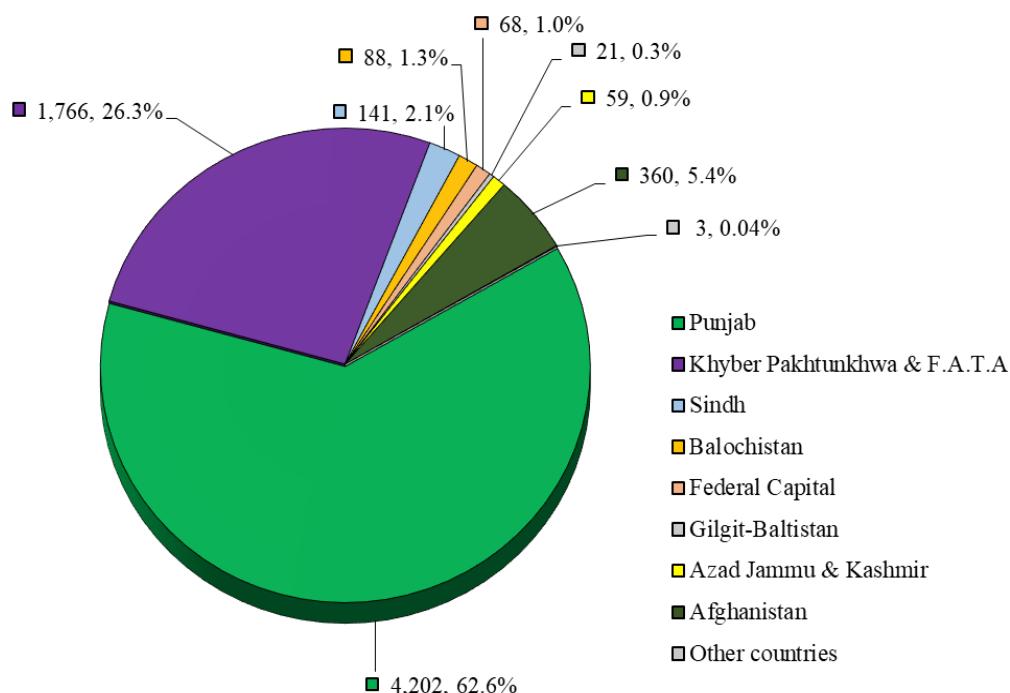
Demographics

Of the 6,708 malignant cancers, nearly 62.6% (4,202) belonged to the province of Punjab and approximately 26.3% (1,766) to Khyber Pakhtunkhwa (Table 3). The fact that the geographic area of residence of a vast majority of patients was Punjab can be explained considering the information that the oldest affiliate is situated in the provincial capital of Punjab and that, this province accounts for almost 50% of the total population of the country.

Table 3. Distribution of malignancies according to the geographic area of residence of the patients, Jan. 2020 to Dec. 2020.

Province/Region	Malignancies	Percentage
Punjab	4,202	62.6
Khyber Pakhtunkhwa including F.A.T.A [1]	1,766	26.3
Sindh	141	2.1
Balochistan	88	1.3
Federal Capital	68	1.0
Gilgit-Baltistan	21	0.3
Azad Jammu & Kashmir	59	0.9
Afghanistan	360	5.4
Other countries	3	0.04
Total	6,708	100.0

Figure 3. Distribution of malignancies according to the geographic area of residence of the patients, Jan. 2020 to Dec. 2020.



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

^[1] The administrative unit F.A.T.A was merged with the province of Khyber Pakhtunkhwa on May 28, 2018.

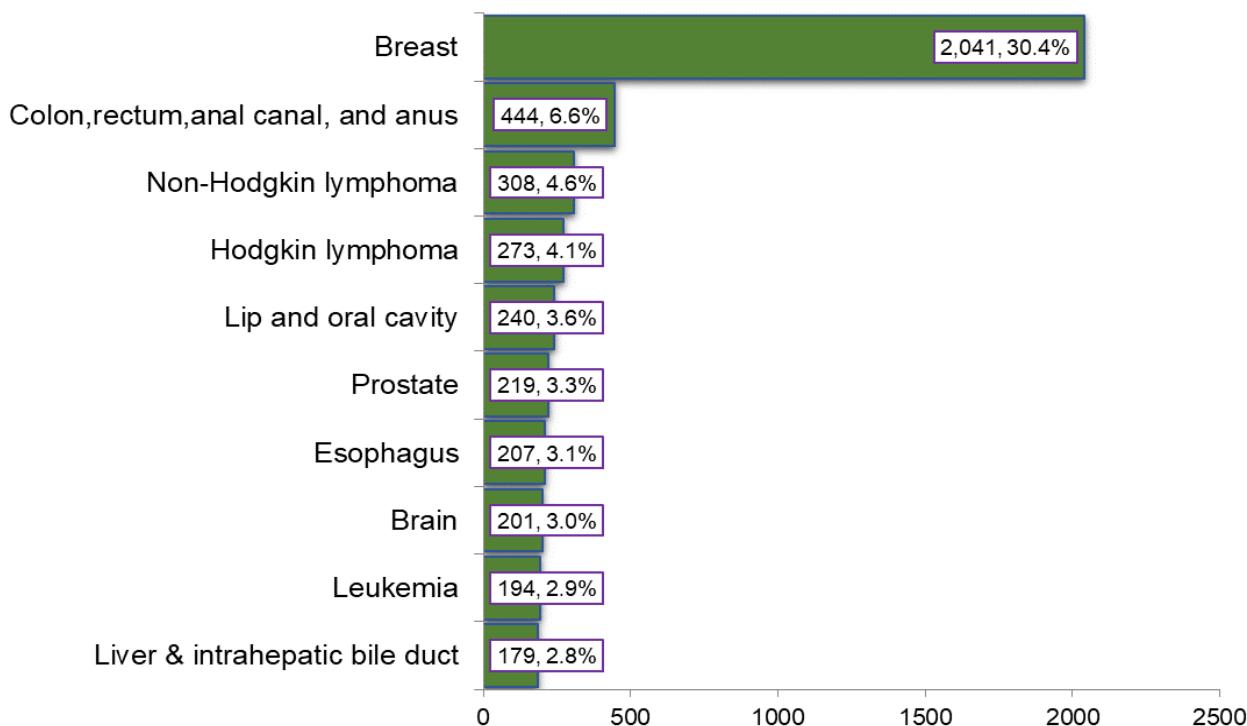
Top ten cancers

Tables 4 to 8 show the list of the ten commonest malignancies seen at SKMCH&RC during the year 2020. Of a total of 6,708 malignancies, breast cancer was the leading one with 2,041 cases accessioned into the Registry. Cancers of the colon, rectum, anal canal, and anus, and non-Hodgkin lymphoma were the second and third most frequently seen cancers, respectively.

Table 4. Top 10 malignancies among all age-groups, both sexes combined, Jan. 2020 to Dec. 2020.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	2,041	30.4	C50.0 - C50.9
2	Colon, rectum, anal canal, & anus	444	6.6	C18.0 - C21.8
3	Non-Hodgkin lymphoma	308	4.6	M9590 - 91, M967 - 972
4	Hodgkin lymphoma	273	4.1	M9650 - M9667
5	Lip & oral cavity	240	3.6	C00.0 - C08.9
6	Prostate	219	3.3	C61.9
7	Esophagus	207	3.1	C15
8	Brain	201	3.0	C71.0 - C71.9
9	Leukemia	194	2.9	M9800 - M9948
10	Liver & intrahepatic bile duct	185	2.8	C22

Figure 4. Top 10 malignancies among all age-groups, both sexes combined, Jan. 2020 to Dec. 2020.



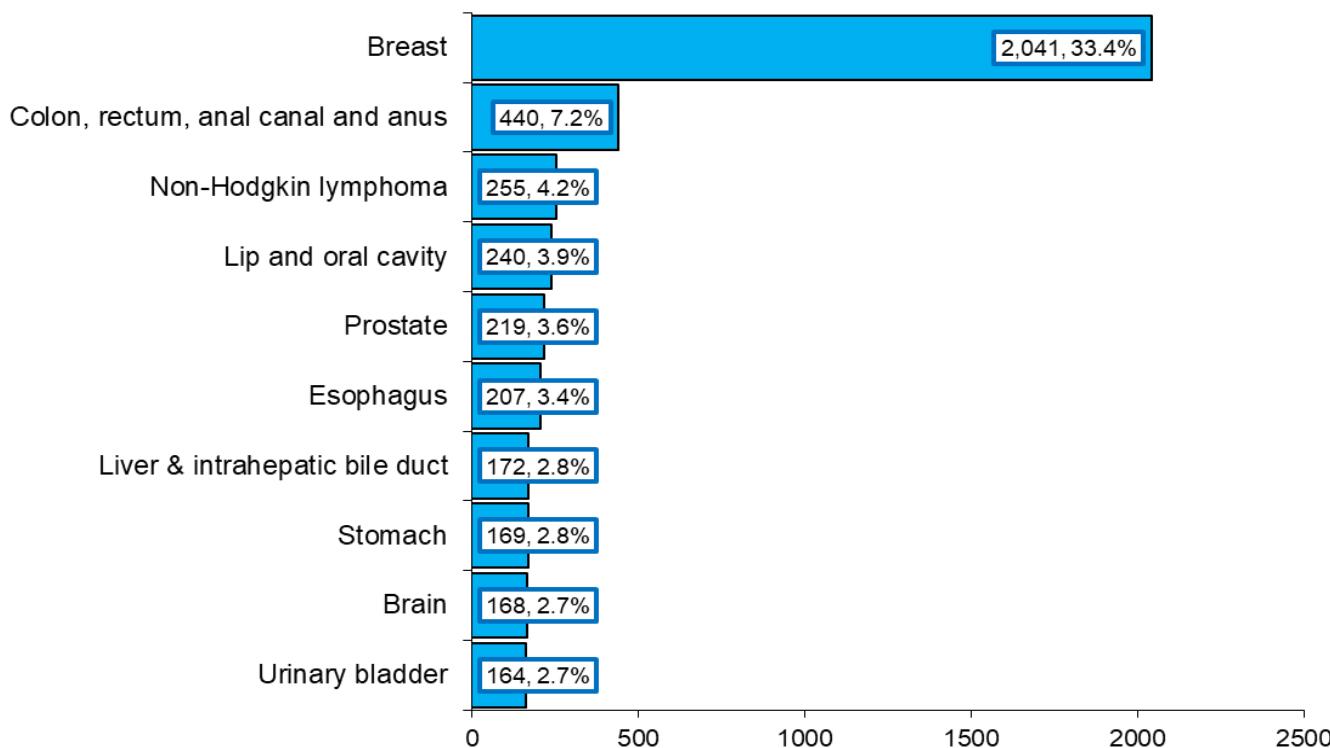
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

Among adults, during the year 2020, a total of 6,118 malignancies were diagnosed or treated at SKMCH&RC. Cancers of the breast, colon/rectum/anal canal/anus, and non-Hodgkin lymphoma were registered as the most frequently seen cancers.

Table 5. Top 10 malignancies among adults (> 18 years), Jan. 2020 to Dec. 2020.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	2041	33.4	C50.0 - C50.9
2	Colon, rectum, anal canal, & anus	440	7.2	C18.0 - C21.8
3	Non-Hodgkin lymphoma	255	4.2	M9590 - 91, M967 - 972
4	Lip & oral cavity	240	3.9	C00.0 - C08.9
5	Prostate	219	3.6	C61.9
6	Esophagus	207	3.4	C15
7	Liver & intrahepatic bile duct	172	2.8	C22
8	Stomach	169	2.8	C44.0 - C44.9
9	Brain	168	2.7	C71.0 - C71.9
10	Urinary bladder	164	2.7	C67

Figure 5. Top 10 malignancies among adults (> 18 years), Jan. 2020 to Dec. 2020.



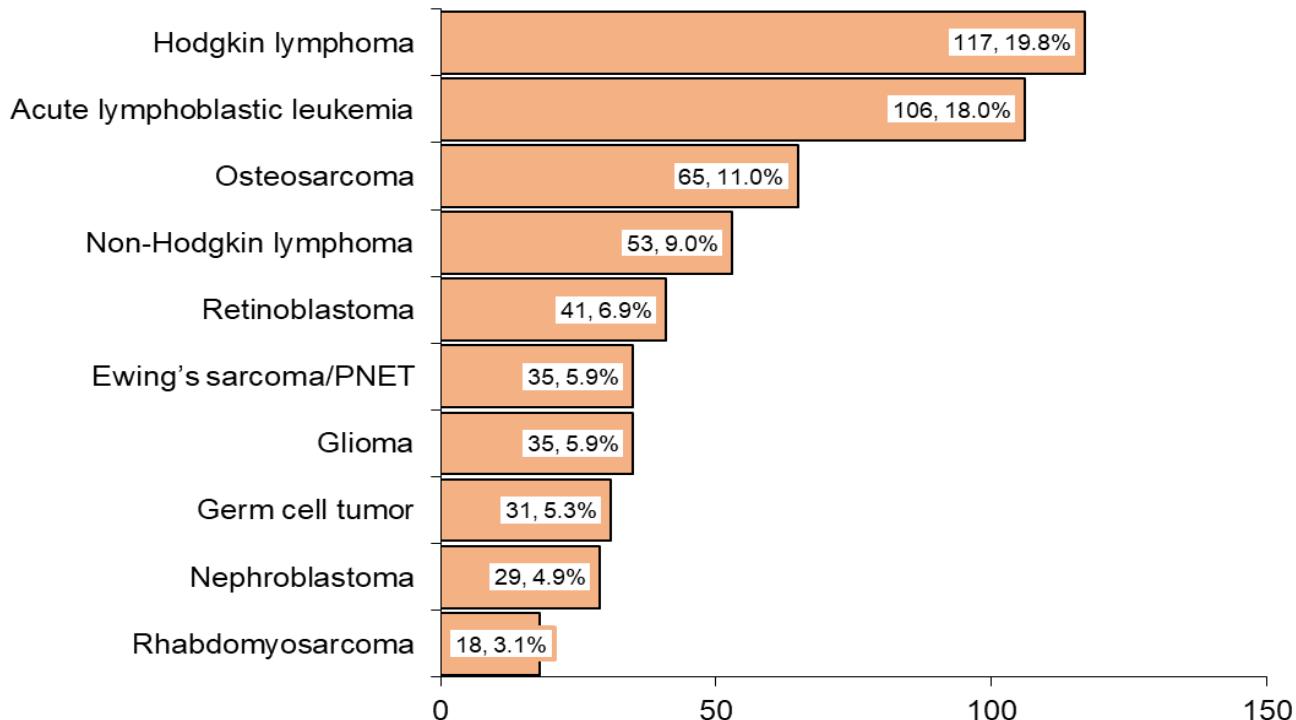
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

In 590 childhood malignancies, using the classification based on tumor morphology, Hodgkin lymphoma, acute lymphoblastic leukemia, and osteosarcoma were identified as the three most common malignancies diagnosed or treated at SKMCH&RC. Table 6 shows the distributions of the top ten malignancies seen in children at SKMCH&RC.

Table 6. Top 10 malignancies in children (<= 18 years), Jan. 2020 to Dec. 2020.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Morphology Code
1	Hodgkin lymphoma	117	19.8	M9650 - M9667
2	Acute lymphoblastic leukemia	106	18.0	M982 - M983
3	Osteosarcoma	65	11.0	M9180 - M9195
4	Non-Hodgkin lymphoma	53	9.0	M9590 - 91, M967 - 972
5	Retinoblastoma	41	6.9	M9510 - M9514
6	Ewing's sarcoma/PNET	35	5.9	M9260
7	Glioma	35	5.9	M938 - M948
8	Germ cell tumor	31	5.3	M906 - M909
9	Nephroblastoma	29	4.9	M8960 - M8960
10	Rhabdomyosarcoma	18	3.1	M8900 - M8921

Figure 6. Top 10 malignancies in children (<= 18 years), Jan. 2020 to Dec. 2020.



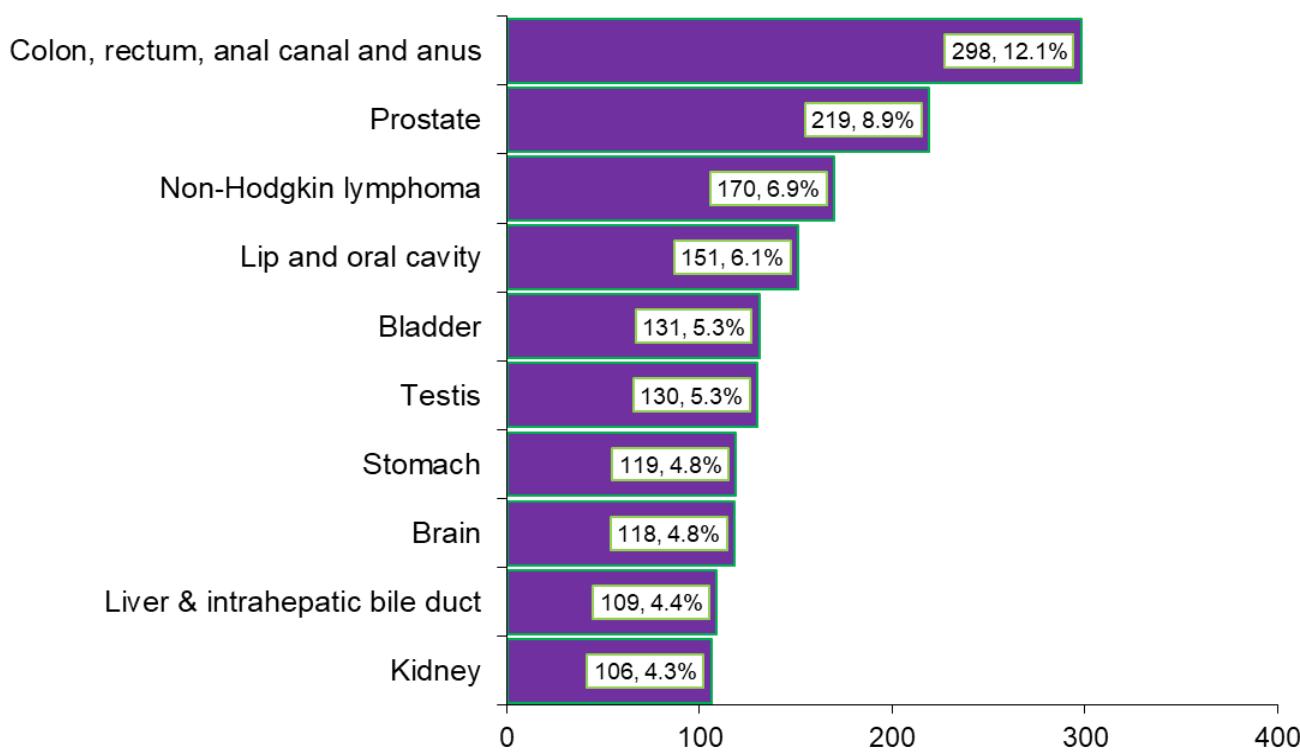
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

In adult males (2,466 malignancies), the commonest cancers were those of the colon, rectum, anal canal, and anus, prostate, and non-Hodgkin lymphoma (Table 7).

Table 7. Top 10 malignancies among adult males (> 18 years), Jan. 2020 to Dec. 2020.

Sr. No.	ICD Category	Count	Percentage	ICD-O-3 Code
1	Colon, rectum, anal canal, & anus	298	12.1	C18 - C21.8
2	Prostate	219	8.9	C61.9
3	Non-Hodgkin lymphoma	170	6.9	M9590 - 91, M967 - 972
4	Lip & oral cavity	151	6.1	C00.0 - C08.9
5	Bladder	131	5.3	C67
6	Testis	130	5.3	C62
7	Stomach	119	4.8	C16
8	Brain	118	4.8	C71.0 - C71.9
9	Liver & intrahepatic bile duct	109	4.4	C22
10	Kidney	106	4.3	C64.0 – C64.9

Figure 7. Top 10 malignancies among adult males (> 18 years), Jan. 2020 to Dec. 2020.



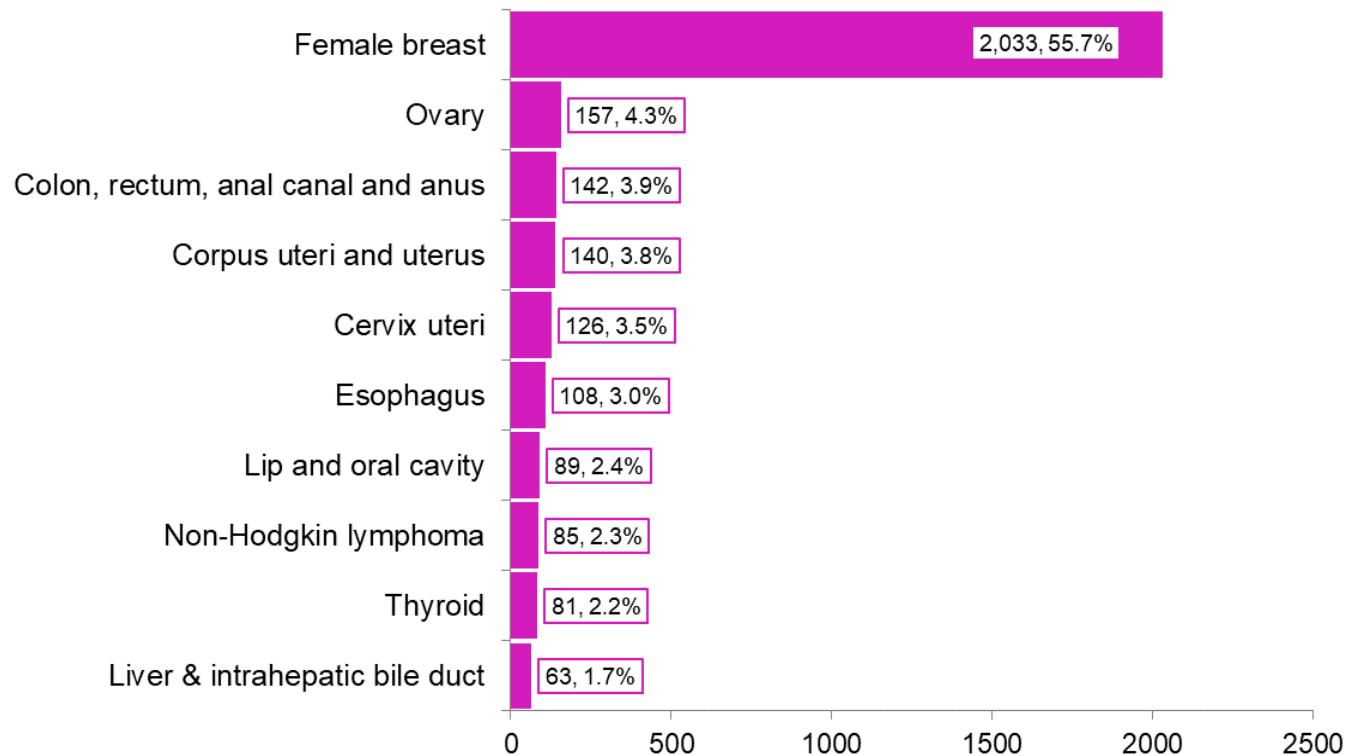
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

The most frequent diagnosis in adult women (3,652) was breast cancer accounting for 55.7% of the cancers. Cancer of the ovary was ranked as the second-highest (4.3%) and those of the colon, rectum, anal canal, and anus as the third common malignancy with 3.9% of the total malignancies, in females.

Table 8. Top 10 malignancies among adult females (> 18 years), Jan. 2020 to Dec. 2020.

Sr. No.	ICD Category	Count	Percentage	ICD-O 3 Code
1	Female breast	2,033	55.7	C50.0 - C50.9
2	Ovary	157	4.3	C56
3	Colon, rectum, anal canal, & anus	142	3.9	C18 - C21.8
4	Corpus uteri and uterus	140	3.8	C54.0 - C55.9
5	Cervix uteri	126	3.5	C53.0 - C53.9
6	Esophagus	108	3.0	C15 - C15.9
7	Lip & oral cavity	89	2.4	C00.0 - C08.9
8	Non-Hodgkin lymphoma	85	2.3	M9590 - 91, M967 - 972
9	Thyroid	81	2.2	C73.9
10	Liver & intrahepatic bile duct	63	1.7	C22

Figure 8. Top 10 malignancies among adult females (> 18 years), Jan. 2020 to Dec. 2020.



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

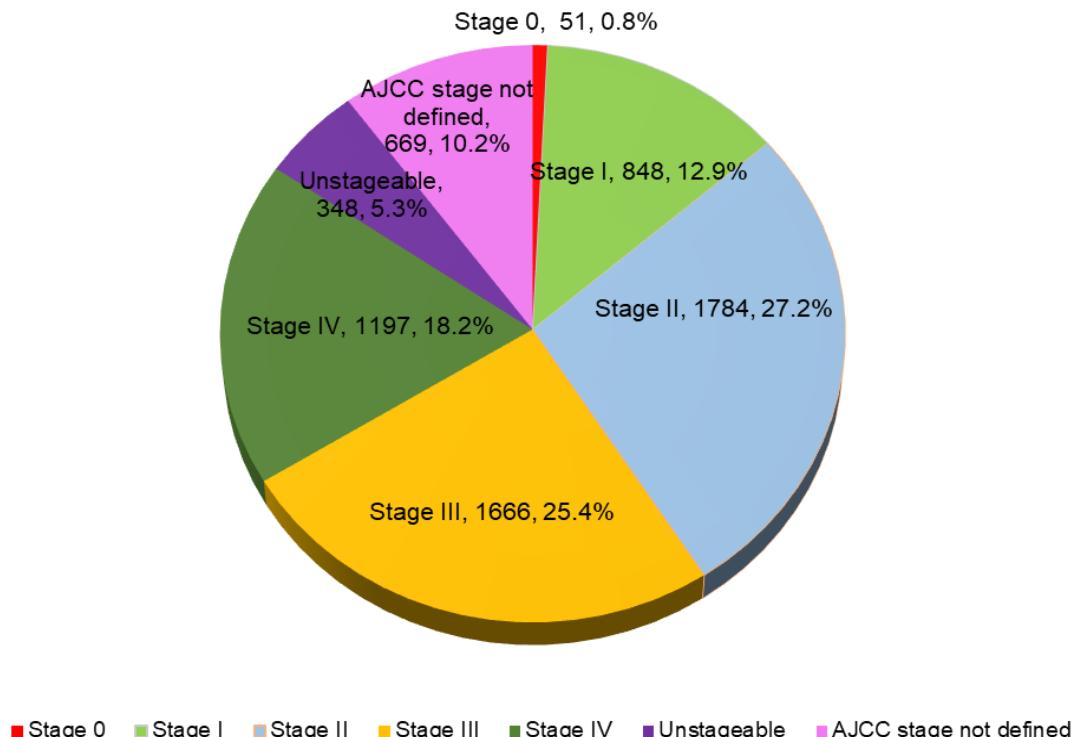
Staging

The Registry uses the American Joint Commission on Cancer TNM staging system for all analytical cancer cases. TNM categorizes cancers in stages 0, 1, 2, 3, 4, unstageable, and not applicable on all analytical cases (Class of Case 0, 1, 2). Cancers are classified as being unstageable as the patients may choose not to receive any treatment or undergo further tests at the hospital needed to establish an appropriate stage. “Not applicable” means non-availability of AJCC staging for that site. During the year 2020, cancer staging for 6,563 analytical cases (Class of Case 0, 1, 2) showed that 51 (0.8%) cases fell into 0 or in-situ category, 848 (12.9%) in Stage I, 1,784 (27.2%) in Stage II, 1,666 (25.4%) cases in Stage III, and 1197 (18.2%) in Stage IV, (table 9); 348 (5.3%) cases were unstageable and 669 (10.2%) had no AJCC stage defined for that site.

Table 9. TNM Stage of cancer patients at SKMCH&RC, Jan. 2020 to Dec. 2020.

AJCC Stage	Count	Percentage
Stage 0	51	0.8
Stage I	848	12.9
Stage II	1,784	27.2
Stage III	1,666	25.4
Stage IV	1,197	18.2
Unstageable	348	5.3
AJCC stage not defined	669	10.2
Total	6,563	100.0

Figure 9. TNM stage of cancer patients at SKMCH&RC, Jan. 2020 to Dec. 2020.



■ Stage 0 ■ Stage I ■ Stage II ■ Stage III ■ Stage IV ■ Unstageable ■ AJCC stage not defined

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

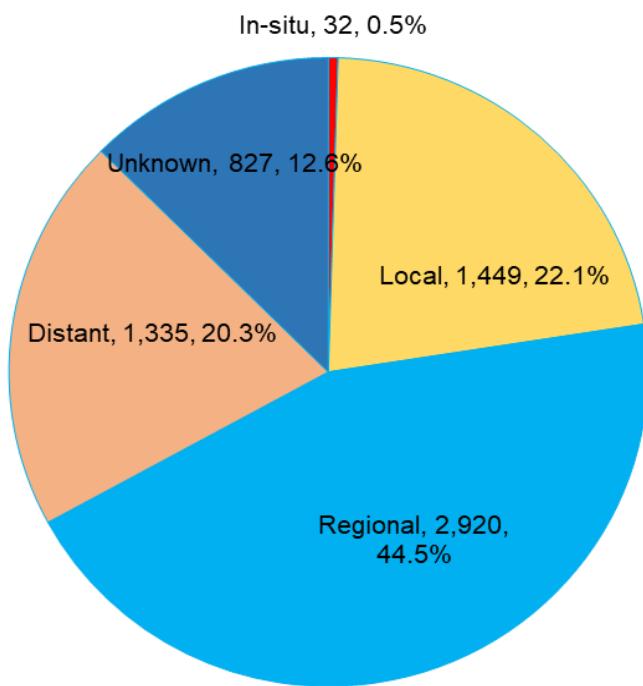
Summary Stage

The SEER Summary Staging Manual-2000 Codes and Coding Instructions were used to describe how far the tumor had spread from the organ or the site of origin. This manual consists of a one-digit hierarchical code for each site. All analytical cases (Class of Case 0, 1, 2), were included to generate results. The cancer data for the year 2020 reflects that there were 0.5% in-situ cases, 22.1% localized cancers, 44.5% regional cases, 20.3% distant, and there were 12.6% cases in which the summary stage was unknown.

Table 10. Classification of patients according to the SEER Summary Stage, Jan. 2020 to Dec. 2020.

SEER Summary Stage	Count	Percentage
In-situ	32	0.5
Local	1,449	22.1
Regional	2,920	44.5
Distant	1,335	20.3
Unknown	827	12.6
Total	6,563	100.0

Figure 10. Classification according to the SEER Summary Stage, Jan. 2020 to Dec. 2020.



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

Grade/Differentiation/Immunophenotype

The International Classification of Diseases for Oncology, Third Edition (ICD-O-3), codes and guidelines have been used to categorize grade/differentiation/immunophenotype. All analytical cases (Class of Case 0, 1, 2), were included to generate results.

Table 11. Grade/differentiation/immunophenotype of cancers, Jan. 2020 to Dec. 2020.

Grade/differentiation/immunophenotype	Count	Percentage
Grade I	458	6.8
Grade II	2,136	31.8
Grade III	1,737	25.9
Grade IV	124	1.8
T-cell	24	0.4
B-cell	353	5.3
Grade/differentiation/immunophenotype not determined, not stated, or not applicable	1,876	28.0
Total	6,708	100.0

SUPPLEMENTAL INFORMATION

Table 12 depicts the results stratified by primary site, age-group, and sex. According to this, cancers of the breast, colon/rectum/anal canal/anus, lymphoma, and lip/oral cavity are the commonest systems/site(s) for malignancies seen at SKMCH&RC. Table 13 shows the results stratified by sex, primary site, and morphology.

Table 12. Distribution by sex, primary malignant site, and 5-year age-group, 2020

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	0	0	1	1	1	1	1	0	0	0	0	0	5	
C01-C02	Tongue	0	0	0	0	0	4	2	2	5	4	3	9	5	5	3	0	0	0	42	
C03	Gum	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	0	0	0	8	
C04-C06	Floor & other parts of the mouth	0	0	0	0	1	1	0	1	1	3	3	3	1	3	2	0	0	1	20	
C07-C08	Salivary gland	0	0	0	0	2	1	1	1	2	2	1	1	1	2	0	0	0	0	14	
C09-C10	Tonsil & oropharynx	0	0	0	0	0	1	1	0	1	0	1	0	0	1	0	0	0	0	5	
C11	Nasopharynx	0	0	1	0	1	0	1	2	1	2	0	2	0	0	0	0	0	0	10	
C12-C13	Pyriform sinus & hypopharynx	0	0	0	0	0	1	0	3	3	0	2	5	1	0	2	0	0	0	17	
C15	Esophagus	0	0	0	0	2	2	9	9	27	22	21	11	3	0	2	0	0	0	108	
C16	Stomach	0	0	0	0	3	3	5	5	6	2	10	7	4	5	0	0	0	0	50	
C17	Small intestine	0	0	0	0	1	0	0	0	0	0	5	1	2	0	1	1	0	0	11	
C18	Colon	0	0	0	2	3	4	4	12	2	4	4	12	5	3	5	0	0	0	60	
C19-C21	Rectosigmoid, rectum, anal canal & anus	0	0	0	4	5	8	5	13	13	8	11	10	4	7	2	1	0	0	91	
C22	Liver & intrahepatic bile duct	4	0	0	0	0	0	0	2	2	1	10	8	20	6	8	3	2	0	1	67
C23-C24	Gall bladder & extrahepatic bile duct	0	0	0	0	0	0	6	2	7	4	4	7	6	7	8	1	0	0	52	
C25	Pancreas	0	0	0	0	0	0	1	1	1	5	3	4	6	5	4	1	2	1	34	
C26	Other & ill-defined digestive organs	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	
C30-C31	Nasal cavity, middle ear, & acc. sinuses	0	0	1	1	0	0	1	0	1	0	3	0	1	0	0	1	0	0	9	
C32	Larynx	0	0	0	0	0	0	0	1	2	0	0	3	1	1	0	0	0	0	8	
C33-C34	Trachea, bronchus, & lung	0	0	0	0	0	0	0	3	2	4	9	4	6	3	2	2	0	0	35	
C37-C38	Thymus, heart, mediastinum & pleura	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	3	
C40-C41	Bone & articular cartilage	2	6	13	11	4	1	1	1	0	1	3	1	0	0	0	0	0	0	44	
C44	Skin	0	0	0	0	0	0	0	2	3	7	4	3	11	8	5	2	1	0	46	
C47	Peripheral & autoimmune nervous system	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
C49	Connective & soft tissue	4	2	4	3	2	3	6	9	6	3	3	4	1	1	1	1	0	0	53	
C50	Breast	0	0	0	0	14	65	186	280	390	330	329	225	103	56	34	13	7	1	2033	
C51-C52	Vulva & vagina	0	0	0	0	0	1	0	1	0	0	1	1	4	0	1	0	0	0	9	
C53	Cervix uteri	0	0	0	0	0	1	11	7	19	18	28	20	12	6	2	0	0	2	126	
C54	Corpus uteri	0	0	0	0	0	1	6	9	8	9	27	29	22	7	7	2	1	0	128	
C55	Uterus	0	0	0	0	0	1	1	1	0	2	2	0	3	0	2	0	0	0	12	
C56-C57	Ovary & other female genital organs	0	2	4	7	5	14	13	10	20	22	23	22	12	7	3	1	2	0	167	
C64-C66	Kidney & other urinary organ	11	2	0	2	1	0	0	0	8	8	8	4	8	1	1	1	2	0	57	
C67	Urinary bladder	0	0	0	0	0	0	0	0	6	4	3	11	6	2	0	0	0	1	33	
C69	Eye	22	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	26	
C70-C71	Brain	2	7	3	4	2	6	11	4	8	4	3	5	3	2	0	0	0	0	64	
C72	Other parts of the nervous system	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	
C73	Thyroid gland	0	0	0	4	12	13	11	13	8	9	3	3	2	2	2	0	0	0	82	
C76	Other & ill-defined sites	3	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	5	
C80	Unknown primary	0	0	0	0	1	1	1	3	2	0	6	3	4	2	0	0	0	0	23	
M9650-M9667	Hodgkin lymphoma	1	12	5	10	9	15	13	7	0	2	1	2	0	0	0	0	0	0	77	
M9590-91, 967-972	Non-Hodgkin lymphoma	7	4	1	3	6	12	9	12	9	8	10	6	2	5	3	0	1	1	99	
M9731-M732	Multiple myeloma & immuno. neoplasms	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	1	0	0	5	
M982-M983	Lymphoid leukemia	32	7	0	4	3	1	1	0	0	0	1	1	1	0	1	0	0	0	52	
M984-M993	Myeloid leukemia	1	0	0	2	3	1	2	2	1	0	1	0	0	1	0	0	0	1	15	
C42.0, C42.2-4	Other lymphatic & hematopoietic tissue	1	0	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	5	
~	Other reportable CNS neoplasms	0	1	0	1	1	3	7	9	5	4	1	4	2	2	0	0	0	0	40	
	Total	90	45	32	58	83	167	322	429	574	501	548	456	249	153	95	29	15	9	3855	

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	0	0	0	1	1	1	0	3	1	1	0	0	0	0	0	8
C01-C02	Tongue	0	0	0	0	0	1	1	3	4	9	11	11	8	7	1	0	1	1	58
C03	Gum	0	0	0	0	0	0	1	0	2	1	3	3	3	6	2	1	0	0	22
C04-C06	Floor & other parts of the mouth	0	0	0	0	0	1	3	7	5	4	5	6	7	3	2	1	0	0	44
C07-C08	Salivary gland	0	0	0	0	1	0	1	1	5	4	4	1	2	1	0	0	0	0	20
C09-C10	Tonsil & oropharynx	0	1	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	4
C11	Nasopharynx	0	0	3	3	3	0	3	3	5	5	8	3	7	2	1	0	0	0	46
C12-C13	Pyriform sinus & hypopharynx	0	0	0	0	0	0	0	0	2	4	1	1	0	1	1	0	0	0	10
C14	Other & ill-defined lip, oral cavity, pharynx	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
C15	Esophagus	0	0	0	0	4	3	9	10	11	18	18	18	6	0	1	1	0	1	100
C16	Stomach	0	0	0	0	4	1	4	12	13	19	26	19	8	9	2	1	0	0	118
C17	Small intestine	0	0	0	0	0	2	2	1	2	2	1	1	1	0	1	1	0	0	14
C18	Colon	0	1	0	2	1	12	8	15	19	15	11	12	13	4	5	1	1	0	120
C19-C21	Rectosigmoid, rectum, anal canal, & anus	0	0	0	3	14	15	19	27	21	19	22	16	13	12	1	3	0	0	185
C22	Liver & intrahepatic bile duct	5	2	2	0	0	2	1	2	2	12	25	30	16	9	6	4	0	0	118
C23-C24	Gall bladder & extrahepatic bile duct	0	0	0	0	2	0	1	0	6	7	11	4	7	4	1	0	0	0	43
C25	Pancreas	0	0	0	1	1	1	3	1	4	4	6	7	8	6	5	3	2	0	52
C30-C31	Nasal cavity, middle ear, & acc. sinuses	0	0	0	0	1	3	1	0	0	0	1	1	0	0	0	0	0	0	7
C32	Larynx	0	0	0	0	0	1	1	1	8	3	7	10	10	10	7	2	1	0	61
C33-C34	Trachea, bronchus, & lung	0	0	0	1	0	1	5	2	3	6	5	11	21	13	3	8	9	1	89
C37-C38	Thymus, heart, mediastinum, & pleura	0	0	0	0	0	0	0	1	1	1	0	1	0	1	1	0	0	0	6
C40-C41	Bone & articular cartilage	5	4	32	29	16	6	8	2	0	0	1	0	4	0	0	0	0	0	107
C44	Skin	0	0	0	0	4	2	4	1	9	13	16	11	9	8	4	2	3	0	86
C47	Peripheral & autoimmune nervous system	3	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	6
C49	Connective & soft tissue	2	2	3	4	3	8	10	1	4	1	11	4	4	2	3	1	0	0	63
C50	Breast	0	0	0	0	0	0	1	1	3	0	1	1	0	0	0	0	0	0	8
C61	Prostate	0	0	0	0	0	0	0	0	1	7	9	27	52	62	38	14	6	3	219
C62	Testis	6	0	4	9	21	34	28	19	15	6	2	0	1	1	0	1	0	0	147
C64-C66	Kidney & other urinary organ	16	1	1	0	1	4	7	8	9	12	21	12	20	6	3	3	2	0	126
C67	Urinary bladder	0	0	0	0	1	4	5	10	11	14	19	26	13	7	10	9	1	1	131
C69	Eye	18	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	20
C70-C71	Brain	0	5	10	5	10	15	22	13	18	14	9	6	6	2	1	1	0	0	137
C72	Other parts of the nervous system	0	2	0	0	1	1	0	4	0	0	0	0	0	0	0	0	0	0	8
C73	Thyroid gland	0	0	0	0	4	5	3	4	3	4	3	3	0	3	0	0	0	0	32
C74-C75	Endocrine gland & related structure	1	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	5
C76	Other & ill-defined sites	2	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	6
C80	Unknown primary	0	0	0	1	0	1	1	2	2	3	0	3	5	5	2	3	3	1	32
M9650-M9667	Hodgkin lymphoma	15	51	19	17	25	26	25	14	2	0	2	0	0	0	0	0	0	0	196
M9590-91,967-972	Non-Hodgkin lymphoma	12	27	0	7	13	21	21	28	15	17	16	11	9	10	3	1	0	0	211
M9731-M732	Multiple myeloma & immuno. neoplasms	0	0	0	0	0	0	1	1	1	0	1	3	0	3	1	0	1	0	12
M982-M983	Lymphoid leukemia	49	9	1	7	15	5	3	1	1	3	3	3	1	2	0	0	0	0	103
M984-M993	Myeloid leukemia	1	0	0	4	13	0	0	0	1	1	0	1	0	1	0	0	0	0	22
M994	Other leukemia	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
C42.0, C42.2-4	Other lymphatic & hematopoietic tissue	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	5
~	Other reportable CNS neoplasms	1	4	3	2	7	7	3	3	1	7	3	1	0	1	0	0	0	0	43
	Total	137	110	79	97	167	183	211	199	214	237	285	270	257	202	105	62	30	8	2853

*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, 2020

ICD-O-3 Code	Morphology	Female	Male	Total
C00 Lip	Squamous Cell Carcinoma, NOS	4	5	9
	Squamous Cell Carcinoma, Keratinizing, NOS	1	1	2
	Mucoepidermoid Carcinoma	0	1	1
	Squamous Cell Carcinoma In-Situ, NOS	0	1	1
C01-C02 Tongue	Squamous Cell Carcinoma, NOS	37	49	86
	Squamous Cell Carcinoma, Keratinizing, NOS	3	8	11
	Malignant Lymphoma, Large B-Cell Diffuse NOS	0	1	1
	Mucoepidermoid Carcinoma	1	0	1
	Squamous Cell Carcinoma In-Situ, NOS	0	1	1
	Squamous Cell Carcinoma, Spindle Cell	1	0	1
C03-C06 Gum, FOM, palate, other & unspecified parts of the mouth	Squamous Cell Carcinoma, NOS	22	49	71
	Squamous Cell Carcinoma, Keratinizing, NOS	1	12	13
	Adenoid Cystic Carcinoma	3	1	4
	Mucoepidermoid Carcinoma	1	2	3
	Adenocarcinoma, NOS	1	1	2
	Clear Cell Adenocarcinoma, NOS	0	1	1
C07-08 Parotid and other major Salivary glands	Carcinoma, NOS	4	9	13
	Mucoepidermoid Carcinoma	4	8	12
	Adenoid Cystic Carcinoma	2	2	4
	Acinar Cell Carcinoma	1	0	1
	Carcinoma In Pleomorphic Adenoma	1	0	1
	Clear Cell Adenocarcinoma, NOS	1	0	1
	Ewing Sarcoma	1	0	1
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1	0	1
	Marginal Zone B-Cell Lymphoma, NOS	1	0	1
	Neoplasm, Malignant	0	1	1
C09-C10 Tonsil & oropharynx	Malignant Lymphoma, Large B-Cell Diffuse NOS	1	3	4
	Squamous Cell Carcinoma, NOS	2	1	3
	Adenoid Cystic Carcinoma	2	0	2
	Squamous Cell Carcinoma, Keratinizing, NOS	1	1	2
	Carcinoma, NOS	0	1	1
	Embryonal Rhabdomyosarcoma, NOS	0	1	1
C11 Nasopharynx	Carcinoma, Undifferentiated, NOS	6	34	40
	Carcinoma, NOS	3	9	12
	Squamous Cell Carcinoma, NOS	1	3	4
	Malignant Lymphoma, Large B-Cell Diffuse NOS	2	0	2
C12-C13 Pyriform sinus & hypopharynx	Squamous Cell Carcinoma, NOS	15	10	25
	Squamous Cell Carcinoma, Keratinizing, NOS	2	0	2
C14 Other & ill-defined sites in	Squamous Cell Carcinoma, NOS		1	1

the lip, oral cavity, & pharynx				
C15 Esophagus	Adenocarcinoma, NOS	94	66	160
	Adenosquamous Carcinoma	2	13	15
	Basaloid Squamous Cell Carcinoma	6	5	11
	Carcinoma, NOS	1	5	6
	Neoplasm, Malignant	0	4	4
	Neuroendocrine Carcinoma, NOS	2	1	3
	Signet Ring Cell Carcinoma	1	2	3
	Squamous Cell Carcinoma In-Situ, NOS	1	1	2
	Squamous Cell Carcinoma, Keratinizing, NOS	1	1	2
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS	0	1	1
	Squamous Cell Carcinoma, NOS	0	1	1
C16 Stomach	Adenocarcinoma With Neuroendocrine Differentiation	20	63	83
	Adenocarcinoma, NOS	23	38	61
	Carcinoma, NOS	3	7	10
	Gastrointestinal Stromal Sarcoma	3	7	10
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1	2	3
	Mantle Cell Lymphoma	2	1	3
	Marginal Zone B-Cell Lymphoma, NOS	0	2	2
	Mucinous Adenocarcinoma	0	2	2
	Neoplasm, Malignant	0	2	2
	Neuroendocrine Carcinoma, NOS	1	0	1
	Signet Ring Cell Carcinoma	0	1	1
	Squamous Cell Carcinoma, Keratinizing, NOS	0	1	1
	Squamous Cell Carcinoma, NOS	1	0	1
C17 Small intestine	Adenocarcinoma In Tubulovillous Adenoma	5	5	10
	Adenocarcinoma, Intestinal Type	1	7	8
	Adenocarcinoma, NOS	1	0	1
	Burkitt Lymphoma, NOS	0	1	1
	Carcinoid Tumor, NOS	0	1	1
	Hodgkin Lymphoma, Nodular Sclerosis, NOS	1	0	1
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1	0	1
	Malignant Lymphoma, Non-Hodgkin, NOS	0	1	1
	Mucinous Adenocarcinoma	0	1	1
	Neuroendocrine Carcinoma, NOS	1	0	1
	Signet Ring Cell Carcinoma	1	0	1
	Squamous Cell Carcinoma, NOS	1	0	1
	Tubular Adenocarcinoma	0	1	1
C18 Colon	Adenocarcinoma In Adenomatous Polyp	35	78	113
	Adenocarcinoma In Tubulovillous Adenoma	9	15	24
	Adenocarcinoma, NOS	6	13	19
	Burkitt Lymphoma, NOS	5	10	15
	Carcinoma-In-Situ, NOS	3	0	3

	Carcinoma, NOS	0	2	2
	Gastrointestinal Stromal Sarcoma	0	2	2
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1	0	1
	Malignant Lymphoma, Non-Hodgkin, NOS	1	0	1
	Mucinous Adenocarcinoma	0	1	1
	Neuroendocrine Carcinoma, NOS	0	2	2
	Neoplasm, Malignant	0	1	1
	Signet Ring Cell Carcinoma	0	1	1
C19-C21 Rectosigmoid junction, rectum, anal canal, & anus	Adenocarcinoma In Adenomatous Polyp	53	92	145
	Adenocarcinoma In-Situ In Tubulovillous Adenoma	13	46	59
	Adenocarcinoma In Tubulovillous Adenoma	12	20	32
	Adenocarcinoma, NOS	6	8	14
	Adenosquamous Carcinoma	3	10	13
	Burkitt Lymphoma, NOS	1	4	5
	Gastrointestinal Stromal Sarcoma	1	2	3
	Malignant Melanoma, NOS	0	2	2
	Mucinous Adenocarcinoma	1	0	1
	Neoplasm, Malignant	0	1	1
	Neuroendocrine Carcinoma, NOS	0	1	1
	Signet Ring Cell Carcinoma	1	0	1
	Squamous Cell Carcinoma, NOS	0	1	1
C22 Liver & intrahepatic bile ducts	Adenocarcinoma, NOS	47	103	150
	Cholangiocarcinoma	11	6	17
	Hepatoblastoma	4	7	11
	Hepatocellular Carcinoma, NOS	2	2	4
	Hepatosplenic (Gamma-Delta) Cell Lymphoma	0	2	2
	Klatskin Tumor	1	0	1
	Liposarcoma, NOS	1	0	1
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1	0	1
	Neuroendocrine Carcinoma, NOS	1	0	1
C23-C24 Gall bladder & other unspecified parts of biliary tract	Adenocarcinoma In Tubulovillous Adenoma	33	29	62
	Adenocarcinoma, NOS	5	5	10
	Carcinoma, NOS	2	5	7
	Cholangiocarcinoma	3	2	5
	Mucinous Adenocarcinoma	3	1	4
	Neoplasm, Malignant	3	0	3
	Neuroendocrine Carcinoma, NOS	2	0	2
	Pancreatobiliary-Type Carcinoma	0	1	1
	Signet Ring Cell Carcinoma	1	0	1
C25 Pancreas	Adenocarcinoma, NOS	20	32	52
	Carcinoma, NOS	8	10	18
	Gastrointestinal Stromal Sarcoma	5	5	10
	Mucinous Adenocarcinoma	1	1	2
	Neoplasm, Malignant	0	1	1
	Neuroendocrine Carcinoma, NOS	0	1	1

	Signet Ring Cell Carcinoma	0	1	1
	Spindle Cell Sarcoma	0	1	1
C26 Other & ill-defined digestive organs	Adenocarcinoma, NOS	2		2
C30-C31 Nasal cavity, middle ear, & accessory sinuses	Adenoid Cystic Carcinoma	1	2	3
	Squamous Cell Carcinoma, NOS	2	0	2
	Adenocarcinoma With Mixed Subtypes	1	0	1
	Adenosquamous Carcinoma	0	1	1
	Carcinoma, NOS	0	1	1
	Chondrosarcoma, NOS	0	1	1
	Embryonal Rhabdomyosarcoma, NOS	1	0	1
	Mucoepidermoid Carcinoma	0	1	1
	Neuroendocrine Carcinoma, NOS	1	0	1
	Olfactory Neuroblastoma	0	1	1
	Plasmacytoma, NOS	0	1	1
	Pseudosarcomatous Carcinoma	1	0	1
	Squamous Cell Carcinoma, Keratinizing, NOS	1	0	1
	Teratoma, Malignant, NOS	1	0	1
C32 Larynx	Squamous Cell Carcinoma, NOS	5	49	54
	Squamous Cell Carcinoma, Keratinizing, NOS	1	7	8
	Adenoid Cystic Carcinoma	1	1	2
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS	1	1	2
	Basaloid Squamous Cell Carcinoma	0	1	1
	Carcinoma, NOS	0	1	1
	Squamous Cell Carcinoma, Spindle Cell	0	1	1
C33-C34 Trachea, bronchus, & lung	Adenocarcinoma, NOS	14	25	39
	Squamous Cell Carcinoma, NOS	4	22	26
	Small Cell Carcinoma, NOS	3	13	16
	Acinar Cell Carcinoma	6	8	14
	Neoplasm, Malignant	1	8	9
	Neuroendocrine Carcinoma, NOS	1	5	6
	Carcinoma, NOS	1	1	2
	Mucoepidermoid Carcinoma	0	2	2
	Non-Small Cell Carcinoma	0	2	2
	Adenoid Cystic Carcinoma	0	1	1
	Atypical Carcinoid Tumor	0	1	1
	Carcinoid Tumor, NOS	1	0	1
	Epithelioid Hemangioendothelioma, Malignant	0	1	1
	Malignant Melanoma, NOS	1	0	1
	Marginal Zone B-Cell Lymphoma, NOS	1	0	1
	Mucinous Adenocarcinoma	1	0	1
	Papillary Adenocarcinoma, NOS	1	0	1
	Pseudosarcomatous Carcinoma	1	0	1
C37-C38 Thymus,	Thymoma, Malignant, NOS	0	2	2

heart, mediastinum, & pleura	Carcinoma, NOS	1	0	1
	Epithelioid Mesothelioma, Malignant	1	0	1
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1	0	1
	Malignant Lymphoma, Non-Hodgkin, NOS	0	1	1
	Mediastinal Large B-Cell, Lymphoma	0	1	1
	Mesothelioma, Malignant	0	1	1
	Precursor T-Cell Lymphoblastic Lymphoma	0	1	1
	Small Cell Carcinoma, NOS	0	1	1
	Thymoma, Type B1, Malignant	1	0	1
	Thymoma, Type B2, Malignant	0	1	1
	Thymoma, Type B3, Malignant	0	1	1
C40-41 Bones, joints, & articular cartilage	Osteosarcoma, NOS	17	67	84
	Ewing Sarcoma	19	24	43
	Chondroblastic Osteosarcoma	3	8	11
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1	10	11
	Chondrosarcoma, NOS	2	2	4
	Dedifferentiated Chondrosarcoma	1	2	3
	Telangiectatic Osteosarcoma	1	1	2
	Embryonal Rhabdomyosarcoma, NOS	0	1	1
	Hodgkin Lymphoma, Mixed Cellularity, NOS	0	1	1
	Neuroblastoma, NOS	0	1	1
	Parosteal Osteosarcoma	1	0	1
	Plasmacytoma, NOS	1	0	1
	Precursor B-Cell Lymphoblastic Lymphoma	0	1	1
	Small Cell Osteosarcoma	0	1	1
C42 Hematopoietic & reticuloendothelial system	Precursor B-Cell Lymphoblastic Leukemia	46	84	130
	Acute Myeloid Leukemia, NOS	8	15	23
	B-Cell Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma	5	13	18
	Multiple Myeloma	4	11	15
	Precursor T-Cell Lymphoblastic Leukemia	2	6	8
	Chronic Myeloid Leukemia, NOS	2	2	4
	Acute Promyelocytic Leukemia	3	0	3
	Myelodysplastic Syndrome, NOS	2	1	3
	Chronic Myelogenous Leukemia, BCR/ABL Positive	0	2	2
	Essential Thrombocythemia	1	1	2
	Hairy Cell Leukemia	0	2	2
	Langerhans Cell Histiocytosis, Multifocal	0	2	2
	Polycythemia Vera	1	1	2
	Acute Megakaryoblastic Leukemia	0	1	1
	Acute Myeloid Leukemia, M6 Type	0	1	1
	Chronic Myelomonocytic Leukemia, NOS	1	0	1
	Langerhans Cell Histiocytosis, NOS	1	0	1
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1	0	1
	Mixed Phenotype Acute Leukemia, B/Myeloid, NOS	0	1	1

C44 Skin	Squamous Cell Carcinoma, NOS	9	37	46
	Basal Cell Carcinoma, Nodular	19	12	31
	Basal Cell Carcinoma, NOS	4	15	19
	Dermatofibrosarcoma, NOS	3	10	13
	Squamous Cell Carcinoma, Keratinizing, NOS	1	6	7
	Malignant Melanoma, NOS	3	2	5
	Basaloid Squamous Cell Carcinoma	1	1	2
	Basosquamous Carcinoma	1	1	2
	Malignant Lymphoma, Large B-Cell Diffuse NOS	0	2	2
	Mycosis Fungoides	1	1	2
	Sebaceous Adenocarcinoma	1	1	2
	Acral Lentiginous Melanoma, Malignant	1	0	1
	Adenoid Cystic Carcinoma	1	0	1
	Bowen Disease	0	1	1
	Cutaneous T-Cell Lymphoma, NOS	0	1	1
	Fibrosarcoma, NOS	1	0	1
	Squamous Cell Carcinoma-In-Situ, NOS	1	0	1
C47 Peripheral nerves & auto-immune N.S	Neuroblastoma, NOS	0	4	4
	Malignant Peripheral Nerve Sheath Tumor	1	2	3
C48 Retroperitoneum & peritoneum	Burkitt Lymphoma, NOS		1	1
	Malignant Lymphoma, Large B-Cell Diffuse NOS		1	1
C49 Connective, subcutaneous & other soft tissues	Alveolar Rhabdomyosarcoma	5	11	16
	Dedifferentiated Liposarcoma	5	10	15
	Embryonal Rhabdomyosarcoma, NOS	9	4	13
	Ewing Sarcoma	8	2	10
	Fibromyxosarcoma	5	5	10
	Fibrosarcoma, NOS	3	6	9
	Follicular Dendritic Cell Sarcoma	4	3	7
	Giant Cell Sarcoma	2	3	5
	Histiocytic Sarcoma	2	3	5
	Leiomyosarcoma NOS	2	2	4
	Liposarcoma, NOS	1	3	4
	Malignant Peripheral Nerve Sheath Tumor	2	0	2
	Malignant Rhabdoid Tumor	0	2	2
	Mesenchymal Chondrosarcoma	0	2	2
	Myxoid Chondrosarcoma	2	0	2
	Myxoid Leiomyosarcoma	0	1	1
	Myxoid Liposarcoma	0	1	1
	Pleomorphic Liposarcoma	0	1	1
	Pleomorphic Rhabdomyosarcoma, Adult Type	0	1	1
	Rhabdomyosarcoma, NOS	0	1	1
	Sarcoma, NOS	1	0	1
	Spindle Cell Sarcoma	1	0	1
	Synovial Sarcoma, NOS	1	0	1

	Synovial Sarcoma, Spindle Cell	0	1	1
	Undifferentiated Sarcoma	0	1	1
C50 Breast	Infiltrating Duct Carcinoma, NOS	1756	6	1762
	Lobular Carcinoma, NOS	115	0	115
	Carcinoma, NOS	43	2	45
	Infiltrating Duct Mixed With Other Types Of Carcinoma	19	0	19
	Metaplastic Carcinoma, NOS	15	0	15
	Inflammatory Carcinoma	14	0	14
	Mucinous Adenocarcinoma	11	0	11
	Neoplasm, Malignant	11	0	11
	Ductal Carcinoma In-Situ, Solid Type	8	0	8
	Phyllodes Tumor, Malignant	8	0	8
	Papillary Carcinoma, NOS	6	0	6
	Infiltrating Duct And Lobular Carcinoma	5	0	5
	Comedocarcinoma, Noninfiltrating	3	0	3
	Neuroendocrine Carcinoma, NOS	3	0	3
	Paget Disease, Mammary	3	0	3
	Intraductal Micropapillary Carcinoma	2	0	2
	Malignant Lymphoma, Large B-Cell Diffuse NOS	2	0	2
	Noninfiltrating Intraductal Papillary Adenocarcinoma	2	0	2
	Paget Disease And Infiltrating Duct Carcinoma Of Breast	2	0	2
	Paget Disease And Intraductal Carcinoma Of Breast	2	0	2
	Cribiform Carcinoma, NOS	1	0	1
	Infiltrating Ductular Carcinoma	1	0	1
	Intraductal Carcinoma, Noninfiltrating, NOS	1	0	1
	Medullary Carcinoma, NOS	1	0	1
	Small Cell Carcinoma, NOS	1	0	1
C51-C52 Vulva & vagina	Squamous Cell Carcinoma, Keratinizing, NOS	4		4
	Squamous Cell Carcinoma, NOS	3		3
	Adenocarcinoma, NOS	1		1
	Neuroendocrine Carcinoma, NOS	1		1
C53 Cervix uteri	Squamous Cell Carcinoma, NOS	57		57
	Squamous Cell Carcinoma, Keratinizing, NOS	26		26
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS	14		14
	Adenocarcinoma, NOS	11		11
	Adenosquamous Carcinoma	4		4
	Endometrioid Adenocarcinoma, NOS	4		4
	Squamous Cell Carcinoma, Small Cell, Nonkeratinizing	4		4
	Adenocarcinoma, Endocervical Type	1		1
	Carcinoma In-Situ, NOS	1		1
	Carcinoma, Undifferentiated, NOS	1		1
	Clear Cell Adenocarcinoma, NOS	1		1
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1		1
	Serous Cystadenocarcinoma, NOS	1		1

	Small Cell Carcinoma, NOS	1		1
C54 Corpus uteri	Endometrioid Adenocarcinoma, NOS	86		86
	Serous Cystadenocarcinoma, NOS	15		15
	Endometrial Stromal Sarcoma, NOS	7		7
	Carcinoma, NOS	5		5
	Carcinosarcoma, NOS	4		4
	Adenocarcinoma, NOS	3		3
	Papillary Serous Cystadenocarcinoma	3		3
	Adenosarcoma	1		1
	Clear Cell Adenocarcinoma, NOS	1		1
	Endometrial Stromal Sarcoma, Low Grade	1		1
	Neoplasm, Malignant	1		1
	Serous Surface Papillary Carcinoma	1		1
C55 Uterus	Leiomyosarcoma NOS	3		3
	Adenocarcinoma, NOS	2		2
	Serous Cystadenocarcinoma, NOS	2		2
	Carcinoma, NOS	1		1
	Carcinosarcoma, NOS	1		1
	Choriocarcinoma, NOS	1		1
	Clear Cell Adenocarcinoma, NOS	1		1
	Epithelioid Sarcoma	1		1
C56 Ovary	Serous Cystadenocarcinoma, NOS	83		83
	Neoplasm, Malignant	14		14
	Endometrioid Adenocarcinoma, NOS	10		10
	Mucinous Adenocarcinoma	8		8
	Dysgerminoma	7		7
	Mixed Germ Cell Tumor	5		5
	Adenocarcinoma, NOS	4		4
	Carcinoma, NOS	4		4
	Clear Cell Adenocarcinoma, NOS	4		4
	Granulosa Cell Tumor, Malignant	4		4
	Mucinous Cystadenocarcinoma, NOS	4		4
	Teratoma, Malignant, NOS	4		4
	Yolk Sac Tumor	4		4
	Germinoma	2		2
	Serous Surface Papillary Carcinoma	2		2
	Choriocarcinoma, NOS	1		1
	Embryonal Carcinoma, NOS	1		1
	Granular Cell Tumor, Malignant	1		1
	Mixed Cell Adenocarcinoma	1		1
	Serous Cystadenoma, NOS	1		1
	Sertoli-Leydig Cell Tumor, Poorly Differentiated	1		1
C57 Other and unspecified female genital	Adenocarcinoma, NOS	1		1
	Serous Cystadenocarcinoma, NOS	1		1

organs				
C61 Prostate	Adenocarcinoma, NOS		196	196
	Acinar Cell Carcinoma		10	10
	Carcinoma, NOS		6	6
	Neoplasm, Malignant		6	6
	Transitional Cell Carcinoma, NOS		1	1
C62-63 Testis & other male genital organs	Mixed Germ Cell Tumor		60	60
	Seminoma, NOS		46	46
	Embryonal Carcinoma, NOS		16	16
	Yolk Sac Tumor		7	7
	Neoplasm, Malignant		6	6
	Germinoma		5	5
	Embryonal Rhabdomyosarcoma, NOS		2	2
	Teratoma, Malignant, NOS		2	2
	Malignant Lymphoma, Large B-Cell Diffuse NOS		1	1
	Rhabdomyosarcoma, NOS		1	1
	Squamous Cell Carcinoma, NOS		1	1
	Teratocarcinoma		1	1
C64-C66 Kidney, renal pelvis, & ureter	Clear Cell Adenocarcinoma, NOS	15	44	59
	Renal Cell Carcinoma, NOS	14	43	57
	Nephroblastoma, NOS	13	16	29
	Transitional Cell Carcinoma, NOS	2	8	10
	Papillary Adenocarcinoma, NOS	2	5	7
	Neoplasm, Malignant	1	3	4
	Renal Cell Carcinoma, Sarcomatoid	1	3	4
	Renal Cell Carcinoma, Chromophobe Type	3	0	3
	Ewing Sarcoma	2	0	2
	Papillary Transitional Cell Carcinoma	1	1	2
	Burkitt Lymphoma, NOS	0	1	1
	Carcinoma, NOS	0	1	1
	Clear Cell Sarcoma, NOS	0	1	1
	Collecting Duct Carcinoma	1	0	1
	Papillary Carcinoma, NOS	0	1	1
	Spindle Cell Carcinoma, NOS	1	0	1
	Tubular Adenocarcinoma	1	0	1
C67 Bladder	Transitional Cell Carcinoma, NOS	15	66	81
	Papillary Transitional Cell Carcinoma	16	59	75
	Carcinoma, NOS	0	2	2
	Papillary Transitional Cell Carcinoma, Non-Invasive	0	2	2
	Adenocarcinoma, NOS	0	1	1
	Leiomyosarcoma NOS	1	0	1
	Neuroendocrine Carcinoma, NOS	0	1	1
	Squamous Cell Carcinoma, NOS	1	0	1
C69 Eye and adnexa	Retinoblastoma, NOS (C69.2)	24	17	41
	Adenoid Cystic Carcinoma	2	0	2

	Marginal Zone B-Cell Lymphoma, NOS	1	0	1
	Rhabdomyosarcoma, NOS	0	1	1
	Sebaceous Adenocarcinoma	0	1	1
	Squamous Cell Carcinoma, NOS	0	1	1
C70-C71 Meninges & brain	Glioma, Malignant	21	49	70
	Glioblastoma, NOS	13	31	44
	Astrocytoma, NOS	7	23	30
	Oligodendrogioma, NOS	8	11	19
	Meningioma, NOS	6	5	11
	Ependymoma, NOS	2	6	8
	Neoplasm, Uncertain Whether Benign Or Malignant	3	5	8
	Medulloblastoma, NOS	2	5	7
	Pilocytic Astrocytoma	4	2	6
	Malignant Lymphoma, Large B-Cell Diffuse NOS	3	2	5
	Oligodendrogioma, Anaplastic	2	3	5
	Astrocytoma, Anaplastic	2	2	4
	Hemangioblastoma	1	2	3
	Meningioma, Malignant	2	0	2
	Meningothelial Meningioma	1	1	2
	Angiomatous Meningioma	0	1	1
	Atypical Meningioma	0	1	1
	Atypical Teratoid/Rhabdoid Tumor	0	1	1
	Cavernous Hemangioma	1	0	1
	Central Neurocytoma	1	0	1
	Germinoma	0	1	1
	Gliosarcoma	1	0	1
	Hemangiopericytoma, Malignant	0	1	1
C72 Spinal cord, cranial nerves, & other parts of the CNS	Neoplasm, Malignant, Uncertain Whether Primary Or Metastatic	0	1	1
	Neurilemoma, NOS	1	0	1
	Pilomyxoid Astrocytoma	0	1	1
	Subependymal Giant Cell Astrocytoma	0	1	1
	Ependymoma, NOS	2	3	5
	Malignant Lymphoma, Large B-Cell Diffuse NOS	3	1	4
	Neurilemoma, NOS	1	3	4
C73 Thyroid	Myxopapillary Ependymoma (C72.0)	0	3	3
	Astrocytoma, NOS	0	2	2
	Glioma, Malignant	0	2	2
	Malignant Melanoma, NOS	0	1	1
	Papillary Carcinoma, NOS	53	21	74
	Medullary Carcinoma, NOS	7	4	11
	Follicular Adenocarcinoma, NOS	4	2	6
	Papillary Adenocarcinoma, NOS	5	1	6
	Follicular Carcinoma, Minimally Invasive	5	0	5
	Papillary Carcinoma, Follicular Variant	4	1	5

	Carcinoma, NOS	2	1	3
	Malignant Lymphoma, Large B-Cell Diffuse NOS	2	0	2
	Adenocarcinoma, NOS	0	1	1
	Neoplasm, Malignant	1	0	1
	Oxyphilic Adenocarcinoma	0	1	1
	Papillary Carcinoma, Columnar Cell	1	0	1
C74 Adrenal gland	Neoplasm, Malignant		1	1
	Neuroblastoma, NOS		1	1
C75 Other endocrine glands & related structures	Pituitary Adenoma, NOS	19	15	34
	Craniopharyngioma	3	5	8
	Craniopharyngioma Adamantinomatous	1	2	3
	Pineocytoma	1	1	2
	Pineoblastoma	0	1	1
	Prolactinoma	1	0	1
C76 Other & ill-defined sites	Burkitt Lymphoma, NOS	3	3	6
	Malignant Lymphoma, Large B-Cell Diffuse NOS	0	6	6
	Yolk Sac Tumor	3	3	6
	Neuroendocrine Carcinoma, NOS	1	1	2
	Adenocarcinoma, NOS	0	1	1
	Dysgerminoma	1	0	1
	Mixed Germ Cell Tumor	0	1	1
C77 Lymph nodes (NHL, HL)	Hodgkin Lymphoma, Mixed Cellularity, NOS	39	108	147
	Malignant Lymphoma, Large B-Cell Diffuse NOS	50	92	142
	Hodgkin Lymphoma, Nodular Sclerosis, NOS	19	40	59
	Burkitt Lymphoma, NOS	6	27	33
	Hodgkin Lymphoma, NOS	7	22	29
	Hodgkin Lymphoma, Nodular Lymphocyte Predominance	7	20	27
	Hodgkin Lymphoma, Lymphocyte-Rich	4	5	9
	T-Cell/Histiocyte Rich Large B-Cell Lymphoma	1	7	8
	Follicular Lymphoma, Grade 3	1	6	7
	Malignant Lymphoma, Non-Hodgkin, NOS	4	1	5
	Precursor T-Cell Lymphoblastic Lymphoma	1	4	5
	Anaplastic Large Cell Lymphoma, T Cell And Null Cell Type	1	2	3
	Angioimmunoblastic T-Cell Lymphoma	2	1	3
	Composite Hodgkin And Non-Hodgkin Lymphoma	0	3	3
	Malignant Lymphoma, Large B-Cell, Diffuse, Immunoblastic, NOS	2	1	3
	Mantle Cell Lymphoma	0	3	3
	Follicular Lymphoma, Grade 1	0	2	2
	B-Cell Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma	0	1	1
	Follicular Lymphoma, NOS	0	1	1
	Malignant Lymphoma, Lymphoplasmacytic	0	1	1
	Mature T-Cell Lymphoma, NOS	0	1	1
C80 Unknown	Adenocarcinoma, NOS	10	9	19

primary site	Neoplasm, Malignant	6	9	15
	Carcinoma, NOS	4	5	9
	Squamous Cell Carcinoma, NOS	0	4	4
	Neuroendocrine Carcinoma, NOS	1	2	3
	Malignant Lymphoma, Non-Hodgkin, NOS	1	0	1
	Mucinous Adenocarcinoma	1	0	1
	Osteosarcoma, NOS	0	1	1
	Signet Ring Cell Carcinoma	0	1	1
	Squamous Cell Carcinoma, Keratinizing, NOS	1	0	1
	Yolk Sac Tumor	0	1	1
Grand Total		3855	2853	6708