

ANNUAL CANCER REGISTRY REPORT-2014

CANCER STATISTICS

Distribution of neoplasms

Of a total of 5,447 new neoplasms diagnosed or treated at the Hospital from January 01, 2014 to December 31, 2014, 2,704 were seen in male (49.64%) and 2,743 (50.36%) in female patients. Four thousand, nine hundred and eighteen (4,918 (90.29%)) neoplasms were found in adults, whereas, 529 (9.71%) were seen in children. Children were classified as those 18 years or less in age and adults as more than 18 years of age. Table 1 shows the stratification of cases by behavior and age-group.

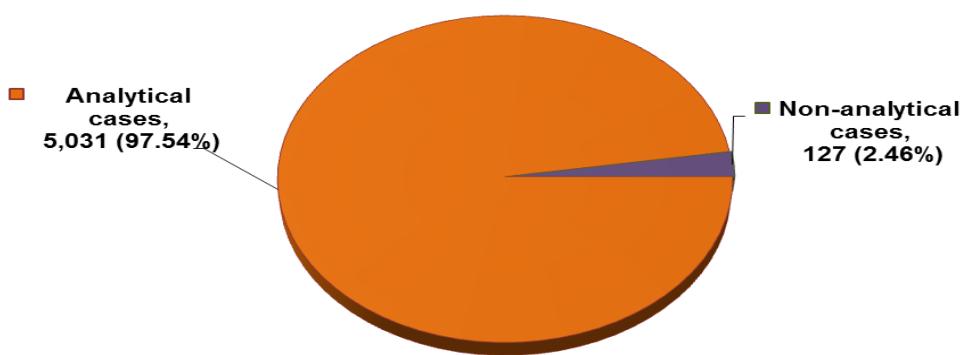
Table 1. Distribution of neoplasms by behavior and age-group.

Behavior	Age-Group	Registered patients (5,364)	Reported neoplasm* (5,447)
Malignant[♦]	Adults	4,587	4,646
	Pediatrics	511	512
	Total	5,098	5,158
Benign[€] & Uncertain Behavior	Adults	250	272
	Pediatrics	16	17
	Total	266	289

Class of Case

Of a total of 5,158 malignant cases registered at the Hospital from January 2014 to December 2014, 5,031 (97.54%) were analytical cases and 127 (2.46%) were found to be non-analytical. Figure 1 shows the stratification of analytical and non-analytical cases[¥].

Figure 1. Stratification of analytical and non-analytical cases



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

* The difference in the number of registered patients and reported neoplasms is attributed to multiple malignancies and benign neoplasms diagnosed in 60 and 23 patients, respectively. Further, 73 patients have both malignant and benign neoplasm simultaneously.

♦ Cases with behavior code /3 and /2 are considered as malignant cases.

€ Cases with behavior code /0 and /1 are considered as benign and uncertain, respectively.

¥ Class of case 0 to 2 and 3 to 9 are considered analytical cases and non-analytical cases, respectively according to the Facility Oncology Revised Data Standards (FORDS), Revised for 2004.

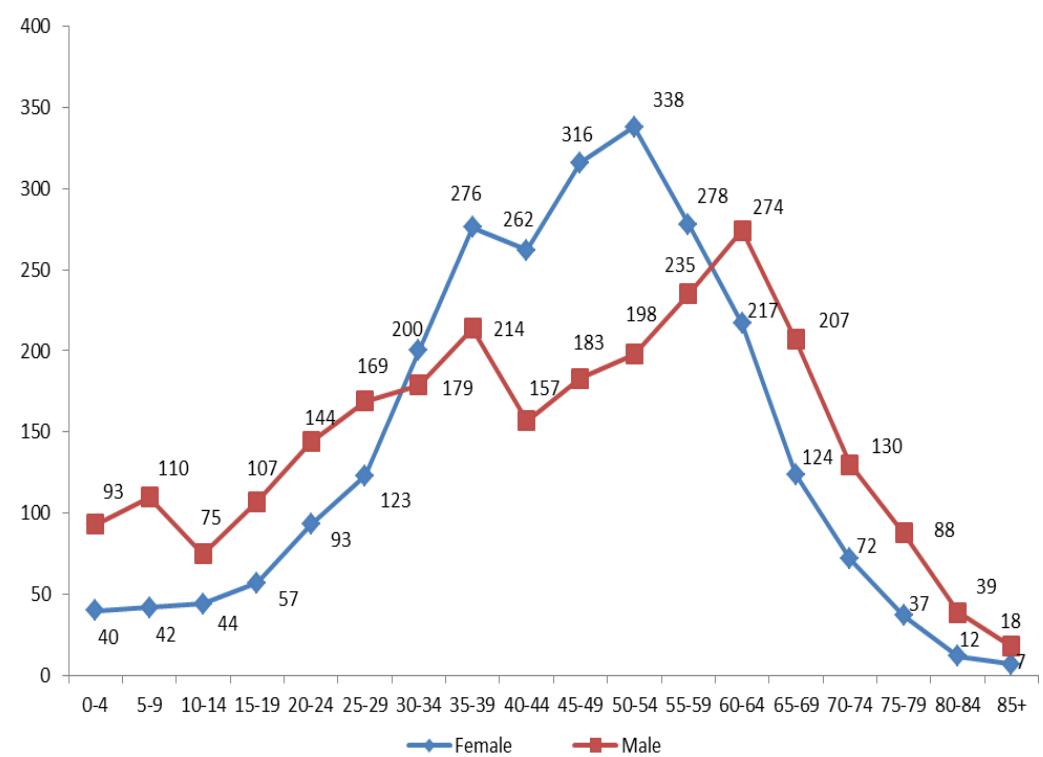
Distribution of malignancies

In the year 2014, 5,158 malignancies were diagnosed at the Hospital with 2,538 seen amongst females and 2,620 amongst males. Table 2 displays the distributions of female and male patients according to gender and age-group.

Table 2. Distribution of cancer cases by sex and age-group

Age-range	Female	Male	Total
0-4	40	93	133
5-9	42	110	152
10-14	44	75	119
15-19	57	107	164
20-24	93	144	237
25-29	123	169	292
30-34	200	179	379
35-39	276	214	490
40-44	262	157	419
45-49	316	183	499
50-54	338	198	536
55-59	278	235	513
60-64	217	274	491
65-69	124	207	331
70-74	72	130	202
75-79	37	88	125
80-84	12	39	51
85+	7	18	25
Total	2538	2620	5158

Figure 2. Distribution of malignancies by sex & age-group



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

Demographics

Of the 5,158 malignant cancers, nearly 58.67% (3,026) belonged to the province of Punjab and approximately 22.35% (1,153) to Khyber Pakhtoonkhwa (Table 3). The fact that the geographic area of residence of a vast majority of patients was Punjab can be explained in light of the information that the Hospital is situated in the provincial capital of Punjab and that, this province accounts for almost 60% of the total population of the country.

Table 3. Distribution of malignancies, according to their geographic areas

Province/Region	Malignancies	Percentage
Punjab	3,026	58.67
Khyber Pakhtoonkhwa[1]	1,153	22.35
Sindh	179	3.47
F.A.T.A	150	2.91
Balochistan	120	2.33
Federal Capital	58	1.12
Northern Areas	16	0.31
Azad Jammu & Kashmir	32	0.62
Afghanistan	424	8.22
Total	5,158	100.00

[1] Khyber Pakhtoonkhwa formerly known as N.W.F.P

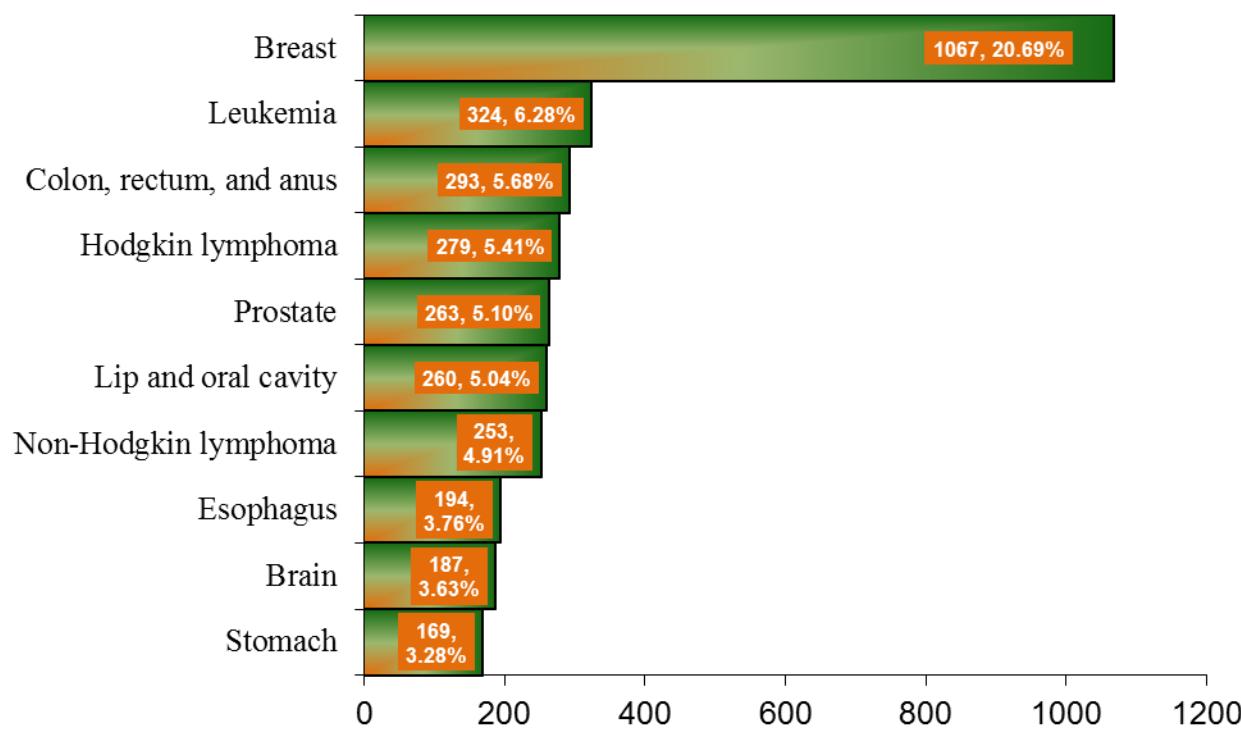
Top Ten Cancers

Tables 4 to 8 show the list of the ten commonest malignancies seen at SKMCH & RC during the year 2014. Of a total of 5,158 malignancies, breast cancer was the leading malignancy with 1,067 cases accessioned into the Registry. Leukemia and cancers of the colon, rectum & anus were the second and third most frequently seen cancers, respectively.

Table 4. Top 10 malignancies seen amongst all age-groups & both sexes combined, from Jan. 2014 to Dec. 2014.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	1,067	20.69	C50.0 - C50.9
2	Leukemia	324	6.28	M9800 - M9948
3	Colon, rectum, and anus	293	5.68	C18.0 - C21.8
4	Hodgkin lymphoma	279	5.41	M9650 - M9667
5	Prostate	263	5.10	C61.9
6	Lip and oral cavity	260	5.04	C00.0 - C08.9
7	Non-Hodgkin lymphoma	253	4.91	M9590-91, M967-972
8	Esophagus	194	3.76	C15
9	Brain	187	3.63	C71.0 – C71.9
10	Stomach	169	3.28	C16

Figure 3. Top 10 malignancies seen amongst all age-groups & both sexes combined, from Jan. 2014 to Dec. 2014.



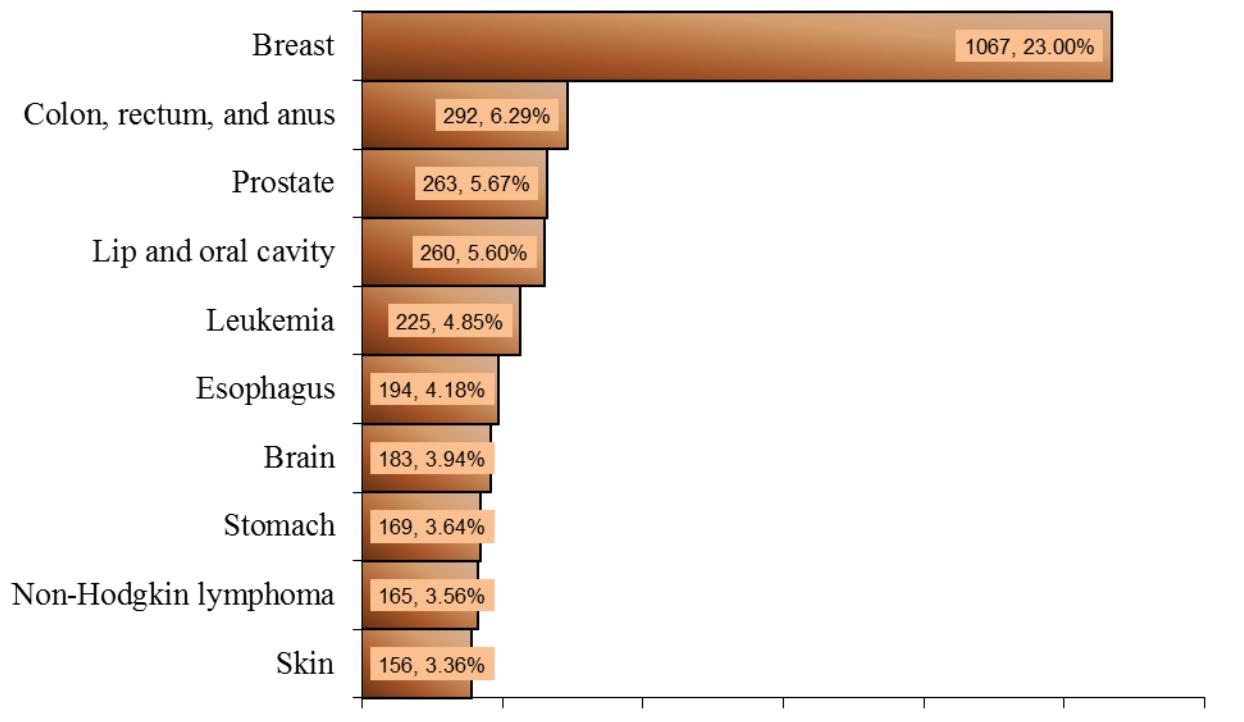
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

Amongst adults, during the year 2014, a total of 4,640 malignancies were diagnosed or treated at the Hospital. Cancers of the breast, colon-rectum, and prostate were registered as the most frequently seen cancers.

Table 5. Top 10 malignancies seen amongst adults (> 18 years), from Jan. 2014 to Dec. 2014.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	1,067	23.00	C50 - C50.9
2	Colon, rectum, and anus	292	6.29	C18.0 – C21.8
3	Prostate	263	5.67	C61.9
4	Lip and oral cavity	260	5.60	C00.0 - C08.9
5	Leukemia	225	4.85	M9800 - M9948
6	Esophagus	194	4.18	C15
7	Brain	183	3.94	C71.0 – C71.9
8	Stomach	169	3.64	C16
9	Non-Hodgkin lymphoma	165	3.56	M9590-91, M967-972
10	Skin	156	3.36	C44.0 – C44.9

Figure 4. Top 10 malignancies seen amongst adults (> 18 years), from Jan. 2014 to Dec. 2014.



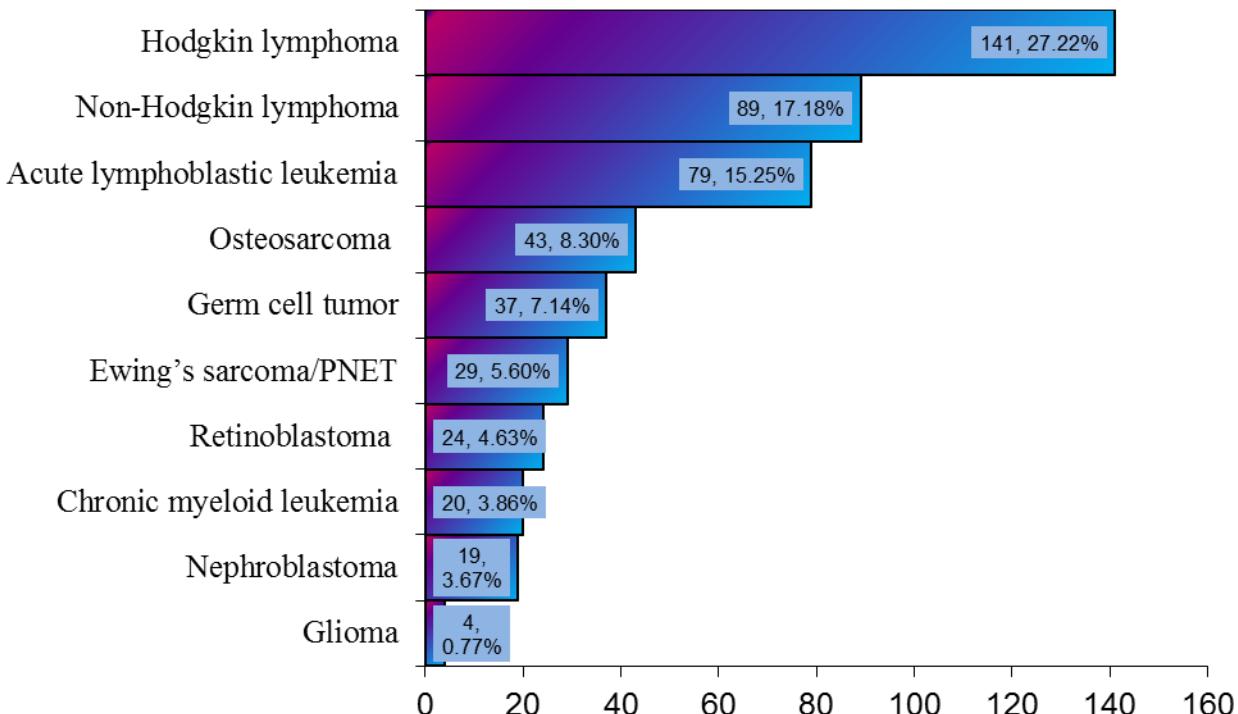
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

In 518 childhood malignancies, using the classification based on tumor morphology, Hodgkin lymphoma, non-Hodgkin lymphoma, and acute lymphoblastic leukemia 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 seen in children (</= 18 years), from Jan. 2014 to Dec. 2014.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Morphology Code
1	Hodgkin lymphoma	141	27.22	M9650 - M9667
2	Non-Hodgkin lymphoma	89	17.18	M9590, 91- M967-972
3	Acute lymphoblastic leukemia	79	15.25	M982- M983
4	Osteosarcoma	43	8.30	M9180 - M9195
5	Germ cell tumor	37	7.14	M906 - M909
6	Ewing's sarcoma/PNET	29	5.60	M9260
7	Retinoblastoma	24	4.63	M9510-M9512
8	Chronic myeloid leukemia	20	3.86	M9863
9	Nephroblastoma	19	3.67	M8960
10	Glioma	4	0.77	M938 – M948

Figure 5. Top 10 malignancies seen in children (</= 18 years), from Jan. 2014 to Dec. 2014.



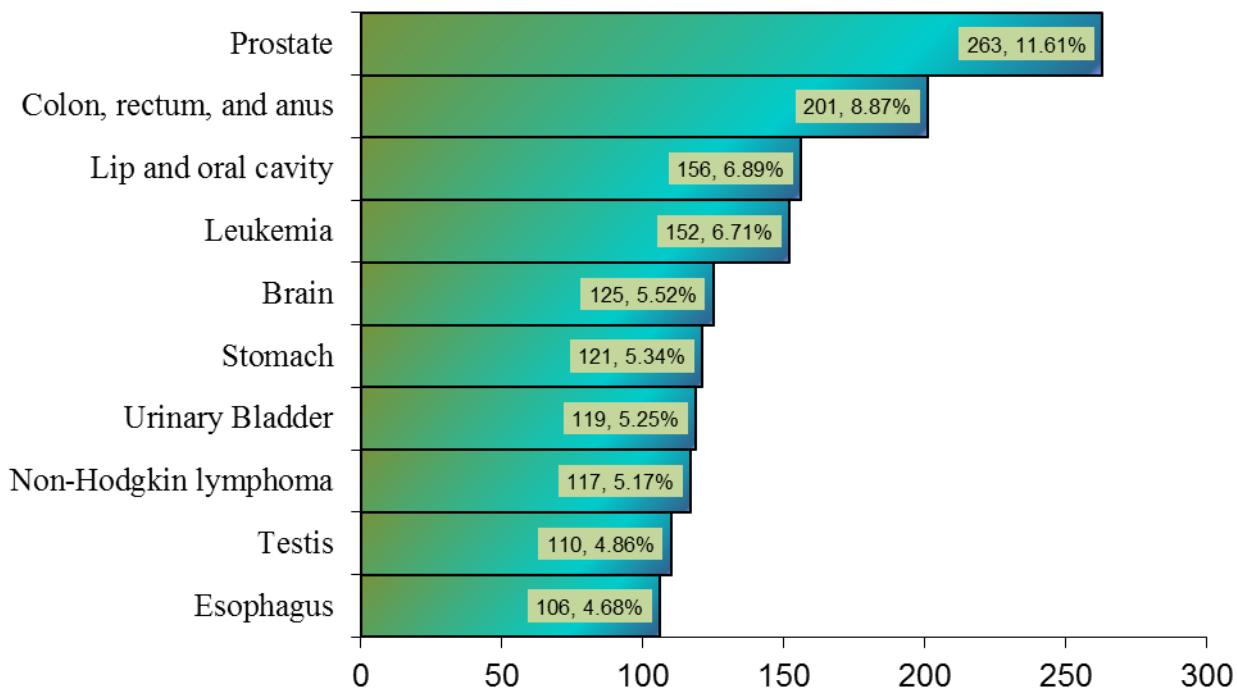
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

In adult males (2,265 malignancies), the commonest cancers were those of the prostate, colon, rectum & anus, and lip & oral cavity (Table 7).

Table 7. Top 10 malignancies seen amongst adult males, from Jan. 2014 to Dec. 2014.

Sr.No.	ICD Category	Count	Percentage	ICD-O-3 Code
1	Prostate	263	11.61	C61.9
2	Colon, rectum, and anus	201	8.87	C18 - C21.8
3	Lip and oral cavity	156	6.89	C00.0 – C08.9
4	Leukemia	152	6.71	M9800 - M9948
5	Brain	125	5.52	C71.0-C71.9
6	Stomach	121	5.34	C16.1 – C16.9
7	Urinary Bladder	119	5.25	C67.0-C67.9
8	Non-Hodgkin lymphoma	117	5.17	M9590, 91-M967-972
9	Testis	110	4.86	C62
10	Esophagus	106	4.68	C15

Figure 6. Top 10 malignancies seen amongst adult males, from Jan. 2014 to Dec. 2014.



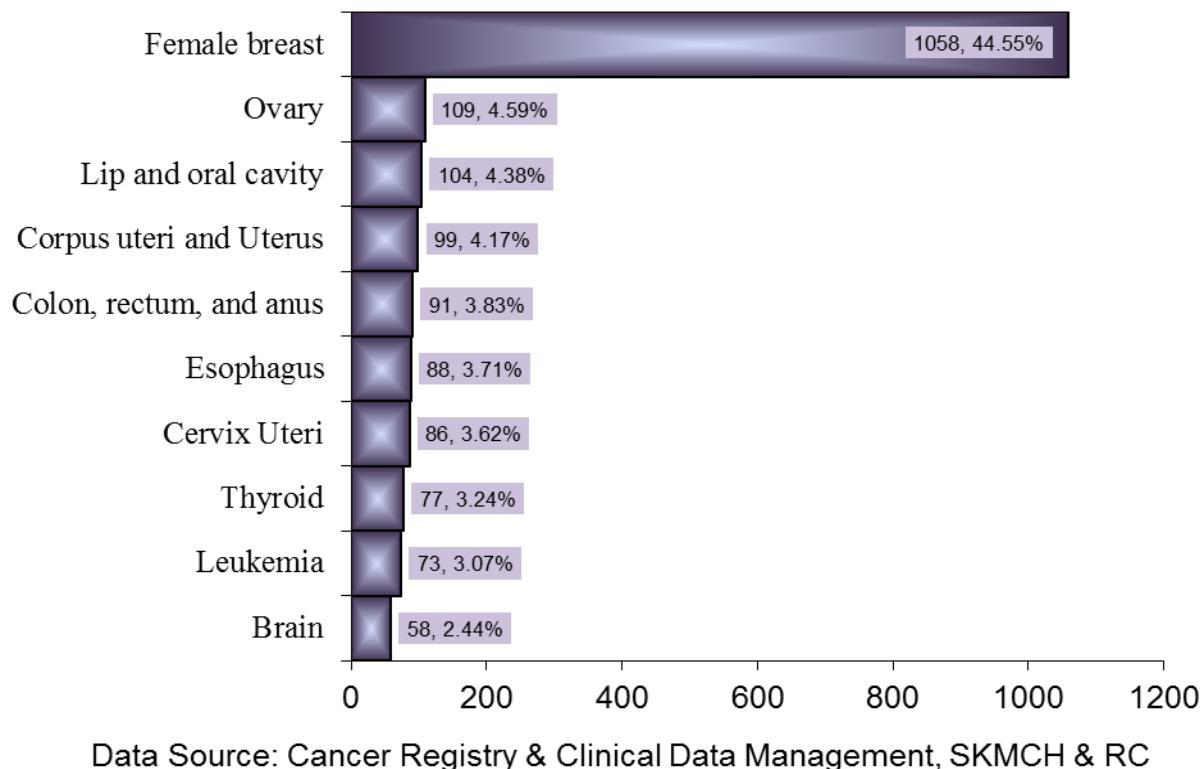
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

The most frequent diagnosis in adult women (2,375) was breast cancer accounting for 44.55% of the cancers. Ovary was ranked as the second highest cancer (4.59%) and, lip & oral cavity as the third most common malignancy with 4.38% of the total malignancies in females.

Table 8. Top 10 malignancies seen amongst adult females, from Jan. 2014 to Dec. 2014.

Sr. No.	ICD Category	Count	Percentage	ICD-O 3 Code
1	Female breast	1058	44.55	C50.0 - C50.9
2	Ovary	109	4.59	C56.9
3	Lip and oral cavity	104	4.38	C00.0 – C08.9
4	Corpus uteri and Uterus	99	4.17	C54.0 – C55.9
5	Colon, rectum, and anus	91	3.83	C18 - C21.8
6	Esophagus	88	3.71	C15 – C15.9
7	Cervix Uteri	86	3.62	C53.0 - C53.9
8	Thyroid	77	3.24	C73.9
9	Leukemia	73	3.07	M9800 - M9948
10	Brain	58	2.44	C71.0-C71.9

Figure 7. Top 10 malignancies seen amongst adult females, from Jan. 2014 to Dec. 2014.



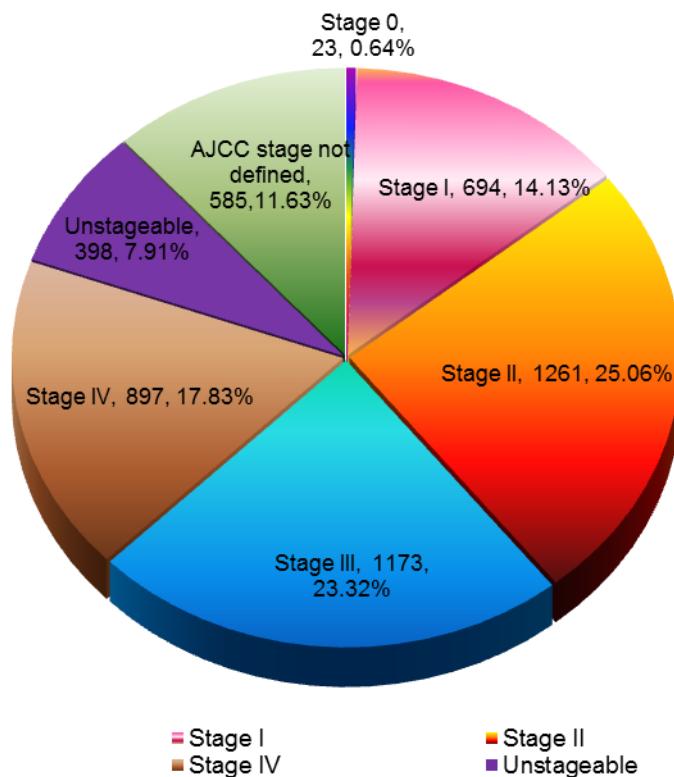
Staging

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 2014, cancer staging for 5,031 analytical cases (class of case 0, 1, 2) showed that 23 (0.46%) cases fell into 0 or in-situ category, 694 (13.79%) in stage I, 1,261 (25.06%) in stage II, 1,173 (23.32%) cases in stage III, and 897 (17.83%) in stage IV, (table 9); 398 (7.91%) cases were unstageable and 585 (11.63%) had no AJCC stage defined for that site.

Table 9. TNM Stage of cancer patients at SKMCH & RC during year 2014.

AJCC Stage	No. of Patients	Percentage
Stage 0	23	0.46
Stage I	694	13.79
Stage II	1261	25.06
Stage III	1173	23.32
Stage IV	897	17.83
Unstageable	398	7.91
AJCC stage not defined	585	11.63
Total	5,031	100

Fig. 8. TNM stage of cancer patients at SKMCH & RC during year 2014.



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

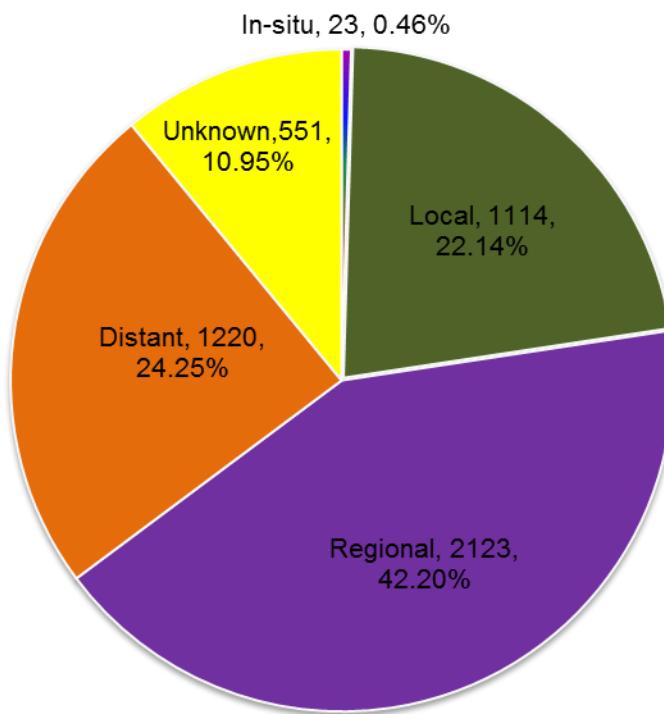
Summary Stage

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 and every site. All analytical cases (Class of case 0, 1, 2), were included to generate results. The cancer data for the year 2014 reflects that there were 0.46% in-situ cases, 22.14% localized cancers, 42.20% regional cases, 24.25% distant, and there were 10.95% cases in which the summary stage was unknown.

Table 10. Classification according to the SEER summary stage during the year 2014.

SEER Summary Stage	No. of Patients	Percentage
In-situ	23	0.46
Local	1114	22.14
Regional	2123	42.20
Distant	1220	24.25
Unknown	551	10.95
Total	5,031	100

Fig. 9: Classification according to the SEER summary stage during the year 2014.



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

Grading

International Classification of Diseases for Oncology, Third Edition (ICD-O-3) codes and guidelines being used to categorize grades for solid malignancies. All analytical cases (Class of case 0, 1, 2), were included to generate results.

Table 11. Grade of patients during year 2014.

Grade / Differentiation	Count	Percentage
Grade I	440	8.75
Grade II	1,302	25.88
Grade III	1,248	24.81
Grade IV	89	1.77
•Grade not determined	1,057	21.01
Not applicable	895	17.79
Total	5,031	100

SUPPLEMENTAL INFORMATION

Table 12 depicts the result stratified by primary sites, age-groups, and gender. According to this, cancers of the breast, colon-rectum, and lip & oral cavity, are the commonest systems/site(s) for malignancies seen at the Hospital.

Table 12. Distribution by gender, primary malignant site, and 5-year age-group, 2014

FEMALES

ICD-O-3 Code ^a	Primary Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
C00	Lip	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	3
C01-C02	Tongue	0	0	0	0	0	1	1	5	1	5	6	8	5	6	4	2	1	0	45
C03	Gum	0	0	0	0	0	0	2	1	1	1	3	3	4	3	1	1	0	1	21
C04-C06	Floor & other part of mouth	0	0	0	0	1	1	1	1	3	2	3	2	4	1	1	1	0	0	21
C07-C08	Salivary gland	0	0	0	0	0	1	0	0	1	4	0	2	1	3	2	0	0	0	14
C9-C10	Tonsil & oropharynx	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2
C11	Nasopharynx	0	0	0	2	0	2	0	1	1	4	1	3	4	1	0	1	0	0	20
C12-C13	Pyriform sinus & hypopharynx	0	0	0	0	1	0	2	1	1	7	1	4	3	2	2	0	0	1	25
C14	Other ill-defined sites lip, oral, pharynx	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
C15	Esophagus	0	0	0	0	0	1	2	8	9	16	13	12	13	9	2	1	0	2	88
C16	Stomach	0	0	0	2	1	2	6	1	6	5	7	10	6	0	1	1	0	0	48
C17	Small Intestine	0	0	0	0	0	0	2	2	0	1	1	0	0	0	0	0	0	0	6
C18	Colon	0	0	0	0	1	3	4	4	3	7	3	4	6	1	0	0	0	0	36
C19-C21	Rectum, anal canal & anus	0	0	0	1	2	5	7	5	4	8	5	8	6	1	2	2	0	0	56
C22	Liver & intrahepatic bile duct	0	0	0	0	0	0	0	0	1	2	2	2	9	8	4	1	0	0	29
C23-C24	Gall Bladder & extrahepatic bile duct	0	0	0	0	0	0	0	2	5	1	2	0	4	3	3	3	0	0	23
C25	Pancreas	0	0	0	0	0	0	0	0	0	1	3	1	3	2	1	1	0	0	12
C30-C31	Nasal cavity, middle ear and acc. Sinuses	0	0	0	0	0	0	1	1	0	1	2	4	1	0	0	0	0	0	10
C32	Larynx	0	0	0	0	1	0	0	0	1	0	1	2	2	0	0	0	0	0	7
C33-C34	Trachea, bronchus & Lung	0	0	0	0	0	0	0	2	0	1	3	3	3	2	2	0	1	0	17
C37-C38	Thymus, heart, mediastinum & pleura	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
C40-C41	Bone & articular cartilage	0	6	16	10	7	3	3	0	2	1	1	1	0	2	0	0	0	0	52
C44	Skin	0	0	0	1	1	2	3	5	2	8	5	8	6	5	7	1	2	0	56
C47	Peripheral nerves & auto immune nervous system	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
C48	Peritoneum & Retroperitoneum	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
C49	Connective & soft tissue	0	0	0	0	1	2	2	3	3	2	2	1	3	1	1	0	1	0	22
C50	Breast	0	0	0	0	12	29	82	154	165	171	179	129	68	28	24	13	4	0	1058

FEMALES

ICD-O-3 Code	Primary Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
C51-C52	Vulva & Vagina	0	0	0	0	0	0	0	0	1	0	1	2	1	0	2	0	0	0	7
C53	Cervix uteri	0	0	1	0	1	1	5	6	7	10	24	7	12	10	2	1	0	0	87
C54	Corpus uteri	0	0	0	0	2	2	3	3	4	8	15	18	15	16	2	2	2	0	92
C55	Uterus	0	0	0	0	0	0	0	1	0	0	0	0	1	2	1	0	0	0	5
C56-C57	Ovary & Uterine adnexa	0	1	10	10	15	11	9	13	14	10	13	7	9	2	3	1	0	0	128
C58	Placenta	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
C64-C66	Kidney & other urinary organ	6	1	0	0	0	3	1	0	3	3	2	7	3	2	0	1	0	0	32
C67	Urinary bladder	0	0	0	0	0	1	1	0	1	3	3	2	9	3	0	1	0	0	24
C69	Eye	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
C70-C71	Brain	0	0	0	1	7	7	7	8	4	7	6	4	3	2	0	2	0	0	58
C72	Other parts of nervous system	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
C73	Thyroid gland	0	0	1	2	5	13	10	14	6	11	9	0	5	2	2	0	0	0	80
C74-C75	Endocrine gland and related structure	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
C76	Other and ill-defined sites	1	1	0	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	6
C80	Unknown primary	0	0	0	1	0	0	0	0	1	0	2	4	1	2	0	0	1	0	12
M965-M966	Hodgkin lymphoma	1	13	5	13	16	7	10	4	0	0	0	0	0	0	0	0	0	0	69
M9590-91, 967-972	Non-Hodgkin lymphoma	3	10	7	5	5	7	17	13	0	0	2	1	1	1	0	0	0	1	73
M9731-M9732	Multiple myeloma & immuno. neoplasms	0	0	0	0	0	1	0	0	2	3	5	2	1	1	0	0	0	0	15
M982-M983	Lymphoid leukemia	22	8	1	1	1	0	2	2	1	2	2	6	0	0	0	0	0	0	48
M984-M993	Myeloid leukemia	1	1	2	2	4	5	10	9	5	6	8	6	0	0	0	0	0	0	59
M994	Other leukemia	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
C42.0, C42.2-4	Other lymphatic, histiocytic & hemato. tissue	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	3
~	Other reportable CNS neoplasms	0	0	0	2	6	9	6	5	2	4	3	2	3	1	2	0	0	1	46
	Total	40	42	44	57	93	123	200	276	262	316	338	278	217	124	72	37	12	7	2538

MALES

ICD-O-3 Code	Primary Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
C00	Lip	0	0	0	0	0	1	0	1	0	1	2	1	2	2	1	0	0	0	11
C01-C02	Tongue	0	0	0	0	2	0	5	2	10	9	8	4	8	3	1	3	1	0	56
C03	Gum	0	0	0	0	1	0	0	1	3	5	6	3	5	0	2	2	1	0	29
C04-C06	Floor of mouth	0	0	0	0	1	0	2	3	6	8	5	6	5	2	2	1	0	1	42
C07-C08	Salivary gland	0	0	0	1	1	1	2	4	1	1	0	3	1	1	2	0	0	0	18
C9-C10	Tonsil & oropharynx	0	0	0	0	0	2	0	1	0	0	0	0	2	1	0	0	0	0	6
C11	Nasopharynx	0	0	0	3	4	2	1	5	5	3	3	3	4	3	0	1	0	0	37
C12-C13	Pyriform sinus & hypopharynx	0	0	0	1	0	2	2	4	2	2	5	5	4	2	3	4	0	1	37
C15	Esophagus	0	0	0	0	0	5	5	9	7	11	10	15	14	15	8	5	1	1	106
C16	Stomach	0	0	0	0	0	3	2	6	11	15	14	22	24	14	6	3	0	1	121
C17	Small intestine	0	0	0	0	0	1	1	1	0	1	0	0	1	2	0	0	0	0	7
C18	Colon	0	0	0	0	2	4	2	7	9	9	16	9	10	6	4	0	1	1	80
C19-C21	Rectum & Anal canal	0	0	0	0	6	10	17	9	10	10	15	10	14	13	4	1	2	0	121
C22	Liver & intrahepatic bile duct	2	0	0	0	0	0	0	0	0	5	6	10	15	6	6	2	0	1	53
C23-C24	Gall Bladder & extrahepatic bile duct	0	0	0	0	0	0	0	4	1	1	3	5	2	4	1	0	0	0	21
C25	Pancreas	0	0	0	0	0	0	0	1	2	2	2	3	6	5	2	1	1	2	27
C30-C31	Nasal cavity, middle ear and acc. sinuses	0	0	0	0	0	2	1	2	1	1	1	1	4	0	0	0	0	0	13
C32	Larynx	0	0	0	0	0	0	1	3	6	7	6	11	12	9	7	6	1	0	69
C33-C34	Bronchus & Lung	0	0	0	0	1	0	1	4	2	3	7	11	12	16	11	3	2	0	73
C37-C38	Thymus, heart, mediastinum	0	0	2	0	3	1	1	0	0	1	1	1	1	0	0	0	0	0	11
C40-C41	Bone & articular cartilage	1	4	14	22	7	2	1	3	1	1	1	0	1	0	0	0	0	0	58
C44	Skin	0	0	0	0	0	4	6	8	8	11	9	9	14	9	9	6	5	2	100
C49	Connective & soft tissue	1	2	2	1	4	5	4	0	1	2	3	4	4	2	2	0	0	0	37

MALES

ICD-O-3 Code	Primary Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
C50	Breast	0	0	0	0	0	1	0	0	0	0	2	3	1	0	2	0	0	0	9
C60	Penis	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
C61	Prostate	0	0	0	0	0	0	0	0	0	5	15	25	57	56	37	40	21	7	263
C62	Testis	7	0	2	9	21	29	29	15	6	5	0	1	0	1	0	0	0	0	125
C64-C66	Kidney & other urinary organ	11	4	1	2	1	1	4	5	3	5	6	6	9	3	2	1	1	0	65
C67	Urinary bladder	0	0	0	0	0	1	1	6	10	11	16	17	21	20	13	3	0	0	119
C69	Eye	16	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	20
C70-C71	Brain	0	0	0	5	10	18	22	20	9	9	10	10	7	5	3	0	1	0	129
C72	Spinal cord & other parts of nervous system	0	0	0	0	0	2	0	1	0	1	0	0	1	0	0	0	0	0	5
C73	Thyroid gland	0	0	1	3	4	9	6	6	6	3	3	3	2	1	0	1	0	0	48
C74-C75	Endocrine gland and related structure	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
C76	Other and ill-defined sites	2	0	0	0	2	1	0	1	0	1	0	1	1	1	0	1	0	0	11
C80	Unknown primary	0	0	0	0	0	1	1	0	0	1	1	0	1	3	1	2	1	0	12
M965-M962	Hodgkin lymphoma	11	61	26	23	35	22	9	18	4	0	1	0	0	0	0	0	0	0	210
M9590-91, 967-972	Non-Hodgkin lymphoma	5	27	14	23	18	15	24	34	7	3	0	2	3	2	1	1	0	1	180
M9731-M9732	Multiple myeloma & immuno. neoplasms	0	0	0	0	0	0	0	4	7	3	6	7	2	0	0	0	0	0	29
M982-M983	Lymphoid leukemia	34	8	6	1	1	1	0	2	5	8	8	8	0	0	0	0	0	0	82
M984-M993	Myeloid leukemia	0	1	6	11	13	14	23	21	11	10	5	8	0	0	0	0	0	0	123
M994	Other leukemia	0	0	0	0	0	1	2	1	2	1	0	2	1	0	0	0	0	0	10
C42.0, C42.2-4	Other lymphatic, histiocytic & hemato. Tissue	2	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5
~	Other reportable CNS neoplasms	0	0	0	2	7	8	3	2	1	6	2	3	1	0	0	1	0	0	36
	Total	93	110	75	107	144	169	179	214	157	183	198	235	274	207	130	88	39	18	2620

* Diseases are listed according 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 - Pathology, site and gender - Year 2014

ICD-O-3 code	Pathology	Female	Male	Total
C00 Lip	Squamous Cell Carcinoma, NOS Acinar Cell Carcinoma Carcinoma, NOS	3 1 1	9 1 1	12 1 1
C01-02 Tongue	Squamous Cell Carcinoma, NOS Adenoid Cystic Carcinoma Squamous Cell Carcinoma, Keratinizing, NOS Basaloid Squamous Cell Carcinoma Mucoepidermoid Carcinoma	43 1 1 1	52 1 2 1	95 2 2 1
C03-06 Gum, FOM, palate, other & unspecified parts of mouth	Squamous Cell Carcinoma, NOS Adenoid Cystic Carcinoma Mucoepidermoid Carcinoma Carcinoma, NOS Adenocarcinoma, NOS Squamous Cell Carcinoma, Keratinizing, NOS Neoplasm, Malignant Malignant lymphoma, large B-cell, diffuse, NOS Acinar Cell Carcinoma Epithelial-Myoepithelial Carcinoma	33 5 2 2 2 2 1 1 1 1 1 1	59 2 2 2 2 1 1 1 1 1 1 1	92 7 4 4 2 1 1 1 1 1 1 1
C07-08 Parotid and other major Salivary glands	Mucoepidermoid Carcinoma Carcinoma, NOS Adenoid Cystic Carcinoma Squamous Cell Carcinoma, NOS Lymphoepithelial Carcinoma Malignant lymphoma, large B-cell, diffuse, NOS Carcinoma In Pleomorphic Adenoma Adenocarcinoma, NOS Epithelial-Myoepithelial Carcinoma	5 3 2 2 2 1 1 1 1	10 2 2 2 1 1 1 1 1	15 5 4 4 1 1 1 1 1
C09 Tonsil	Squamous Cell Carcinoma, NOS Malignant lymphoma, large B-cell, diffuse, NOS Carcinoma, NOS Mucoepidermoid Carcinoma Adenocarcinoma, NOS Marginal Zone B-Cell Lymphoma, NOS	1 2 1 1 1 1	2 1 1 1 1 1	3 3 1 1 1 1
C10 Oropharynx	Squamous Cell Carcinoma, NOS Mixed Tumor, Malignant, NOS	1	1	1 1
C11 Nasopharynx	Carcinoma, NOS Carcinoma, Undifferentiated, NOS Squamous Cell Carcinoma, NOS Malignant lymphoma, large B-cell, diffuse, NOS Adenocarcinoma, NOS	17 2 1 1 1	20 12 4 3 1	37 14 5 4 1
C12 Pyriform Sinus	Squamous Cell Carcinoma, NOS	2	5	7
C13 Hypopharynx	Squamous Cell Carcinoma, NOS Squamous Cell Carcinoma, Keratinizing, NOS	21 2	29 3	50 5
C14 Other & ill-defined sites in lip, oral cavity	Malignant lymphoma, large B-cell, diffuse, NOS Squamous Cell Carcinoma, NOS		2 1	2 1
C15 Esophagus	Squamous Cell Carcinoma, NOS Adenocarcinoma, NOS Signet Ring Cell Carcinoma Adenosquamous Carcinoma Squamous Cell Carcinoma, Keratinizing, NOS Carcinoma, NOS Neuroendocrine Carcinoma, NOS	83 2 1 1 1 1 1	92 10 2 1 1 1 1	175 12 2 2 1 1 1
C16 Stomach	Adenocarcinoma, NOS Signet Ring Cell Carcinoma Gastrointestinal Stromal Sarcoma Squamous Cell Carcinoma, NOS Adenosquamous Carcinoma Malignant lymphoma, large B-cell, diffuse, NOS	19 19 7 1 1 1	56 39 9 9 4 3	75 58 16 10 4 4

	Mucinous Adenocarcinoma Neuroendocrine Carcinoma, NOS Burkitt Lymphoma, NOS	2	3 1 1	3 3 1
C17 Small intestine	Adenocarcinoma, NOS Neuroendocrine Carcinoma, NOS Gastrointestinal Stromal Sarcoma Signet Ring Cell Carcinoma Burkitt Lymphoma, NOS	1 1 3 1 1	3 3 1 1 1	4 4 4 1 1
C18 Colon	Adenocarcinoma, NOS Mucinous Adenocarcinoma Signet Ring Cell Carcinoma Adenocarcinoma In Tubulovillous Adenoma Neuroendocrine Carcinoma, NOS Burkitt Lymphoma, NOS Malignant lymphoma, large B-cell, diffuse, NOS Marginal Zone B-Cell Lymphoma, NOS	25 9 1 1 1 1 1 1	57 15 6 2 1 1 1 1	82 24 7 2 1 1 1 1
C19 Rectosigmoid junction	Adenocarcinoma, NOS Signet Ring Cell Carcinoma Mucinous Adenocarcinoma Burkitt Lymphoma, NOS Clear Cell Adenocarcinoma, NOS	7 2 3 1 1	14 3 3 1 1	21 5 3 1 1
C20 Rectum	Adenocarcinoma, NOS Signet Ring Cell Carcinoma Mucinous Adenocarcinoma Adenocarcinoma In Tubulovillous Adenoma Adenocarcinoma In Situ In Tubulovillous Adenoma Neuroendocrine Carcinoma, NOS Squamous Cell Carcinoma, NOS Adenocarcinoma In Adenomatous Polyp Malignant lymphoma, large B-cell, diffuse, NOS	22 6 1 2 1 1 1 1 1	52 13 8 1 1 1 1 1 1	74 19 9 3 1 1 1 1 1
C21 Anus and Anal Canal	Adenocarcinoma, NOS Signet Ring Cell Carcinoma Squamous Cell Carcinoma, NOS Malignant Melanoma, NOS Mucinous Adenocarcinoma Neuroendocrine Carcinoma, NOS Adenocarcinoma In Tubulovillous Adenoma	6 3 3 3 2 1 1	10 8 3 3 1 1 1	16 11 3 3 3 1 1
C22 Liver & intrahepatic bile ducts	Hepatocellular Carcinoma, NOS Cholangiocarcinoma Hepatoblastoma Neoplasm, Malignant Adenocarcinoma, NOS Combined Hepatocellular Carcinoma And Cholangiocarcinoma	26 2 2 1 1	48 2 2 1 1	74 4 2 1 1
C23 Gallbladder	Adenocarcinoma, NOS Mucinous Adenocarcinoma Neoplasm, Malignant Burkitt Lymphoma, NOS	10 1 1 1	6 1 1 1	16 2 1 1
C24 Other & unspec. parts of biliary tract	Adenocarcinoma, NOS Cholangiocarcinoma Adenocarcinoma In Villous Adenoma	11	11 1 1	22 1 1
C25 Pancreas	Adenocarcinoma, NOS Neuroendocrine Carcinoma, NOS Neoplasm, Malignant Signet Ring Cell Carcinoma Intraductal Papillary-Mucinous Carcinoma, Invasive Pseudosarcomatous Carcinoma Mucinous Adenocarcinoma Carcinoma, NOS Solid Pseudopapillary Carcinoma Mucin-Producing Adenocarcinoma	8 1 1 1 1 1 1 1 1 1	16 4 3 1 1 1 1 1 1 1	24 4 4 1 1 1 1 1 1 1
C30 Nasal cavity and middle ear	Adenoid Cystic Carcinoma Squamous Cell Carcinoma, NOS	1	1 2	2 2

	Nk/T-Cell Lymphoma, Nasal And Nasal-Type Malignant lymphoma, large B-cell, diffuse, NOS Malignant Melanoma, NOS		1 1 1	1 1 1
C31 Accessory Sinuses	Squamous Cell Carcinoma, NOS Adenoid Cystic Carcinoma Carcinoma, NOS Neuroendocrine Carcinoma, NOS Adenocarcinoma, NOS Squamous Cell Carcinoma, Keratinizing, NOS Spindle Cell Carcinoma, NOS Olfactory Neuroblastoma Plasmacytoma, NOS Nk/T-Cell Lymphoma, Nasal And Nasal-Type	3 1 1 1 1 1 1 1 1 1	1 3 2 2 1 1 1 1 1	4 4 3 2 2 1 1 1 1 1
C32 Larynx	Squamous Cell Carcinoma, NOS Squamous Cell Carcinoma, Keratinizing, NOS Squamous Cell Carcinoma, Spindle Cell Embryonal Rhabdomyosarcoma, NOS Adenoid Cystic Carcinoma Squamous Cell Carcinoma In Situ, NOS	5 	63 3 2 1 1 1	68 3 2 1 1 1
C33 Trachea	Adenoid Cystic Carcinoma		1	1
C34 Bronchus and Lung	Adenocarcinoma, NOS Squamous Cell Carcinoma, NOS Small Cell Carcinoma, NOS Neuroendocrine Carcinoma, NOS Neoplasm, Malignant Adenosquamous Carcinoma Papillary Adenocarcinoma, NOS Squamous Cell Carcinoma, Keratinizing, NOS Mucinous Adenocarcinoma Pseudosarcomatous Carcinoma	5 4 2 3 1 1 1 1 1 1	27 26 10 3 2 1 1 1 1 1	32 30 12 6 3 2 1 1 1 1
C37 Thymus	Thymoma, Malignant, NOS Thymoma, Type B3, Malignant Thymic Carcinoma, NOS Squamous Cell Carcinoma, NOS Thymoma, Type B2, Malignant		2 1 1 1 1	2 2 1 1 1
C38 Heart, Mediastinum & Pleura	Germinoma Mixed Germ Cell Tumor Precursor T-Cell Lymphoblastic Lymphoma Neuroendocrine Carcinoma, NOS Mediastinal Large B-Cell, Lymphoma Malignant lymphoma, large B-cell, diffuse, NOS Yolk Sac Tumor Mesothelioma, Malignant		2 1 1 1 1 1 1 1	2 1 1 1 1 1 1 1
C40-41 Bones, Joints & Articular Cartilage	Osteosarcoma, NOS Ewing Sarcoma Chondroblastic Osteosarcoma Malignant lymphoma, large B-cell, diffuse, NOS Plasmacytoma, NOS Chondrosarcoma, NOS Langerhans Cell Histiocytosis, NOS Dedifferentiated Chondrosarcoma Spindle Cell Sarcoma Telangiectatic Osteosarcoma Mesenchymal Chondrosarcoma Juxtacortical Chondrosarcoma Chondroblastoma, NOS Synovial Sarcoma, NOS Precursor T-Cell Lymphoblastic Lymphoma Small Cell Osteosarcoma Clear Cell Chondrosarcoma	21 17 5 2 2 3 1 1 2 1 1 1 1 1 1 1 1	26 16 6 5 2 1 2 1 2 1 1 1 1 1 1 1 1	47 33 11 7 4 4 3 2 2 2 2 1 1 1 1 1 1
C42 Hematopoietic and reticuloendothelial	Chronic Myelogenous Leukemia, Bcr/Abl Positive Precursor B-Cell Lymphoblastic Leukemia	39 32	87 48	126 80

system	Chronic Myeloid Leukemia, NOS	20	35	55
	B-Cell Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma	15	30	45
	Multiple Myeloma	14	27	41
	Hairy Cell Leukemia	2	10	12
	Precursor T-Cell Lymphoblastic Leukemia	1	4	5
	Waldenstrom Macroglobulinemia		3	3
	Essential Thrombocythemia	1	1	2
	Acute Myeloid Leukemia, NOS	1	1	1
C44 Skin	Squamous Cell Carcinoma, NOS	18	48	66
	Basal Cell Carcinoma, NOS	22	26	48
	Basal Cell Carcinoma, Nodular	5	12	17
	Malignant Melanoma, NOS	4	1	5
	Basosquamous Carcinoma	1	3	4
	Sebaceous Adenocarcinoma	2	2	4
	Dermatofibrosarcoma, NOS	1	2	3
	Nodular Melanoma		1	1
	Langerhans Cell Histiocytosis, Disseminated		1	1
	Spindle Cell Melanoma, NOS		1	1
	Pilomatrix Carcinoma		1	1
	Adenoid Basal Carcinoma		1	1
	Eccrine Adenocarcinoma	1		1
	Adenoid Cystic Carcinoma	1		1
	Squamous Cell Carcinoma In Situ, NOS		1	1
	Eccrine Poroma, Malignant	1		1
	Infiltrating Basal Cell Carcinoma, NOS		1	1
C47 Periph. nerves & auto-immune N.S.	Malignant Peripheral Nerve Sheath Tumor	1		1
C48 Retroperitoneum and Peritoneum	Liposarcoma, NOS	1		1
C49 Connective, subcutaneous & other soft tissues	Synovial Sarcoma, NOS	5	6	11
	Ewing Sarcoma	1	6	7
	Fibromyxosarcoma	3	2	5
	Dedifferentiated Liposarcoma	1	4	5
	Leiomyosarcoma NOS	2	2	4
	Rhabdomyosarcoma, NOS	1	2	3
	Synovial Sarcoma, Spindle Cell	1	2	3
	Spindle Cell Sarcoma	2		2
	Undifferentiated Sarcoma		2	2
	Myxoid Liposarcoma	2		2
	Liposarcoma, NOS		2	2
	Sarcoma, NOS		1	1
	Chondroblastic Osteosarcoma		1	1
	Synovial Sarcoma, Biphasic		1	1
	Malignant Peripheral Nerve Sheath Tumor	1		1
	Giant Cell Sarcoma		1	1
	Myosarcoma		1	1
	Alveolar Soft Part Sarcoma	1		1
	Chondrosarcoma, NOS		1	1
	Epithelioid Sarcoma		1	1
	Neuroblastoma, NOS		1	1
	Pleomorphic Liposarcoma		1	1
	Alveolar Rhabdomyosarcoma	1		1
	Liposarcoma, Well Differentiated	1		1
C50 Breast	Infiltrating Duct Carcinoma, NOS	879	9	888
	Lobular Carcinoma, NOS	73		73
	Infiltrating Duct Mixed With Other Types Of Carcinoma	23		23
	Carcinoma, NOS	10		10
	Paget Disease And Infiltrating Duct Carcinoma Of Breast	9		9
	Ductal Carcinoma In Situ, Solid Type	9		9
	Neoplasm, Malignant	8		8
	Metaplastic Carcinoma, NOS	8		8

	Infiltrating Duct And Lobular Carcinoma	6		6
	Mucinous Adenocarcinoma	4		4
	Papillary Carcinoma, NOS	4		4
	Comedocarcinoma, Noninfiltrating	4		4
	Paget Disease And Intraductal Carcinoma Of Breast	3		3
	Phyllodes Tumor, Malignant	3		3
	Paget Disease, Mammary	3		3
	Inflammatory Carcinoma	3		3
	Intraductal Micropapillary Carcinoma	2		2
	Noninfiltrating Intraductal Papillary Adenocarcinoma	2		2
	Malignant lymphoma, large B-cell, diffuse, NOS	2		2
	Paget Disease and intraductal carcinoma of breast	1		1
	Small Cell Carcinoma, NOS	1		1
	Secretory Carcinoma Of Breast	1		1
	Cribriform Carcinoma In Situ	1		1
	Malignant Lymphoma, non-Hodgkin, NOS	1		1
	Papillary Carcinoma, Encapsulated	1		1
C51 Vulva	Squamous Cell Carcinoma, NOS	3		3
	Neuroendocrine Carcinoma, NOS	1		1
	Squamous Cell Carcinoma, Keratinizing, NOS	1		1
C52 Vagina	Squamous Cell Carcinoma, NOS	1		1
	Papillary Squamous Cell Carcinoma	1		1
C53 Cervix uteri	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS	24		24
	Squamous Cell Carcinoma, Keratinizing, NOS	20		20
	Squamous Cell Carcinoma, NOS	19		19
	Adenocarcinoma, NOS	5		5
	Adenosquamous Carcinoma	4		4
	Adenocarcinoma, Endocervical Type	4		4
	Neoplasm, Malignant	2		2
	Squamous Cell Carcinoma, Small Cell, Nonkeratinizing	2		2
	Carcinosarcoma, NOS	1		1
	Endometrioid Adenocarcinoma, NOS	1		1
	Squamous Cell Carcinoma In Situ, NOS	1		1
	Leiomyosarcoma NOS	1		1
	Yolk Sac Tumor	1		1
	Malignant Melanoma, NOS	1		1
	Mucinous Adenocarcinoma	1		1
C54 Corpus uteri	Endometrioid Adenocarcinoma, NOS	59		59
	Serous Cystadenocarcinoma, NOS	10		10
	Clear Cell Adenocarcinoma, NOS	5		5
	Leiomyosarcoma NOS	4		4
	Carcinosarcoma, NOS	3		3
	Endometrial Stromal Sarcoma, NOS	3		3
	Papillary Serous Cystadenocarcinoma	2		2
	Undifferentiated Sarcoma	1		1
	Neoplasm, Malignant	1		1
	Endometrial Stromal Sarcoma, Low Grade	1		1
	Mullerian Mixed Tumor	1		1
	Carcinoma, NOS	1		1
	Adenocarcinoma, NOS	1		1
C55 Uterus	Carcinosarcoma, NOS	2		2
	Leiomyosarcoma NOS	1		1
	Serous Cystadenocarcinoma, NOS	1		1
	Endometrioid Adenocarcinoma, NOS	1		1
C56 Ovary	Serous Cystadenocarcinoma, NOS	24		24
	Endometrioid Adenocarcinoma, NOS	16		16
	Dysgerminoma	12		12
	Papillary Serous Cystadenocarcinoma	11		11
	Yolk Sac Tumor	10		10
	Mixed Germ Cell Tumor	10		10
	Adenocarcinoma, NOS	9		9
	Mucinous Cystadenocarcinoma, NOS	7		7

	Clear Cell Adenocarcinoma, NOS Mucinous Adenocarcinoma Carcinoma, NOS Neoplasm, Malignant Teratoma, Malignant, NOS Serous Surface Papillary Carcinoma Germinoma Granulosa Cell Tumor, Malignant Granulosa Cell Tumor, Adult Type Stromal Sarcoma, NOS Leydig Cell Tumor, Malignant Papillary Cystadenocarcinoma, NOS Leiomyosarcoma NOS	4 4 3 3 2 2 2 2 1 1 1 1 1 1		4 4 3 3 2 2 2 2 1 1 1 1 1
C57 Other and unspecified female	Endometrioid Adenocarcinoma, NOS Dysgerminoma	1 1		1 1
C58 Placenta	Choriocarcinoma, NOS	3		3
C60 Penis	Squamous Cell Carcinoma, NOS Squamous Cell Carcinoma, Keratinizing, NOS		3 1	3 1
C61 Prostate	Adenocarcinoma, NOS Neoplasm, Malignant Malignant lymphoma, large B-cell, diffuse, NOS Acinar Cell Carcinoma Carcinoma, NOS		255 6 1 1 1	255 6 1 1 1
C62-63 Testis & other male genital organs	Mixed Germ Cell Tumor Seminoma, NOS Yolk Sac Tumor Germinoma Spermatocytic Seminoma Embryonal Rhabdomyosarcoma, NOS Embryonal Carcinoma, NOS Leydig Cell Tumor, Malignant Teratoma, Malignant, NOS Germ Cell Tumor, Nonseminomatous Mature T-Cell Lymphoma, NOS		56 32 22 4 3 2 2 2 1 1 1	56 32 22 4 3 2 2 2 1 1 1
C64 Kidney	Renal Cell Carcinoma, NOS Nephroblastoma, NOS Papillary Adenocarcinoma, NOS Neoplasm, Malignant Clear Cell Sarcoma Of Kidney Renal Cell Carcinoma, Chromophobe Type Ewing Sarcoma Synovial Sarcoma, NOS Renal Cell Carcinoma, Sarcomatoid Carcinoma, NOS Cyst-Associated Renal Cell Carcinoma Neuroendocrine Carcinoma, NOS	18 6 3 5 1 2 2 1 1 1 1	36 13 4 5 2 2 2 1 1 1 1	54 19 7 5 3 2 2 1 1 1 1
C67 Bladder	Papillary Transitional Cell Carcinoma Transitional Cell Carcinoma, NOS Adenocarcinoma, NOS Carcinoma, Undifferentiated, NOS Carcinoma, NOS Transitional Cell Carcinoma, Spindle Cell Leiomyosarcoma NOS Pseudosarcomatous carcinoma	11 8 1 1 1 1 1 1	80 36 2 1 1 1 1 1	91 44 3 1 1 1 1 1
C69 Eye and Adnexa	Retinoblastoma, NOS Retinoblastoma, Undifferentiated Undifferentiated Sarcoma Ewing Sarcoma Squamous Cell Carcinoma, NOS Malignant lymphoma, large B-cell, diffuse, NOS Adenoid Cystic Carcinoma Retinoblastoma, Differentiated	4 2 1 1 1 1 1 1	16 1 1 1 1 1 1 1	20 3 1 1 1 1 1 1

	Hodgkin Lymphoma, Nodular Sclerosis, NOS	24	48	72
	Hodgkin Lymphoma, NOS	12	42	54
	Burkitt Lymphoma, NOS	10	21	31
	Hodgkin Lymphoma, Nodular Lymphocyte Predominance	1	21	22
	Precursor T-Cell Lymphoblastic Lymphoma	2	12	14
	Anaplastic Large Cell Lymphoma, T Cell And Null Cell Type	4	9	13
	Malignant Lymphoma, non-Hodgkin, NOS	1	4	5
	Follicular Lymphoma, Grade 1	1	4	5
	Mature T-Cell Lymphoma, NOS	2	2	4
	Mantle Cell Lymphoma		3	3
	Precursor B-Cell Lymphoblastic Lymphoma	1	2	3
	Composite Hodgkin and non-Hodgkin Lymphoma		2	2
	Marginal Zone B-Cell Lymphoma, NOS	2		2
	Langerhans Cell Histiocytosis, NOS	1	1	2
	Hodgkin Lymphoma, Lymphocyte-Rich	1	1	2
	Follicular Lymphoma, Grade 2		1	1
	Follicular Lymphoma, NOS	1		1
	Follicular Lymphoma, Grade 3		1	1
	T-Cell/Histiocyte Rich Large B-Cell Lymphoma		1	1
	Malignant Lymphoma, NOS		1	1
	Malignant Lymphoma, Small B Lymphocytic, NOS		1	1
C80 Unknown primary site	Neuroendocrine Carcinoma, NOS		7	7
	Adenocarcinoma, NOS	4	2	6
	Neoplasm, Malignant	4	2	6
	Carcinoma, NOS	2		2
	Squamous Cell Carcinoma, NOS		1	1
	Ewing Sarcoma	1		1
	Gastrointestinal Stromal Sarcoma	1		1
Grand Total		2538	2620	5158

"NOS" is an abbreviation for Not Otherwise Specified