

# ANNUAL CANCER REGISTRY REPORT-2013

## CANCER STATISTICS

### Distribution of neoplasms

Of a total of 4,995 new neoplasms diagnosed or treated at the Hospital from January 01, 2013 to December 31, 2013, 2,372 were seen in male (47.49%) and 2,623 (52.51%) in female patients. Four thousand, four hundred and seventy four (4,474 (89.57%)) neoplasms were found in adults, whereas, 521 (10.43%) 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.

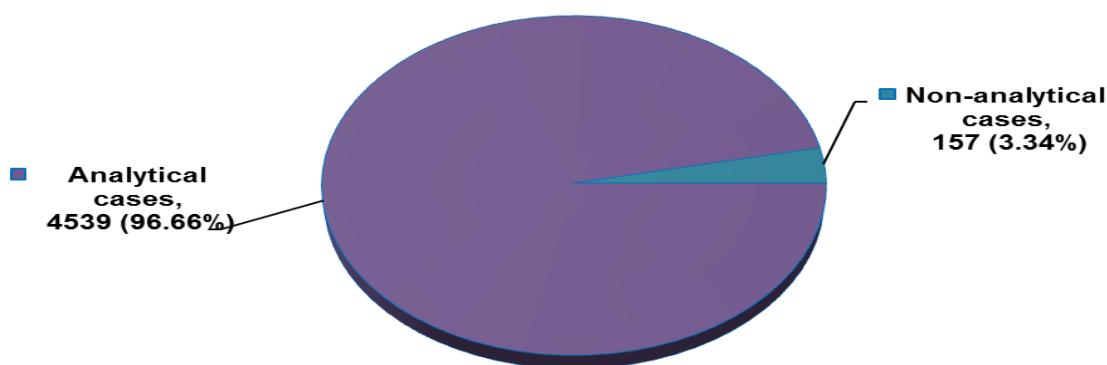
**Table 1. Distribution of neoplasms by behavior and age-group.**

Behavior	Age Group	Registered patients (4,937)	Reported neoplasm* (4995)
Malignant*	Adults	4,159	4,204
	Pediatrics	492	492
	Total	4,651	4,696
Benign <sup>€</sup> & Uncertain Behavior	Adults	268	281
	Pediatrics	18	18
	Total	286	299

### Class of Case

Of a total of 4,696 malignant cases registered at the Hospital from January 2013 to December 2013, 4,539 (96.66%) were analytical cases and 157 (3.34%) were found to be non-analytical. Figure 1 shows the stratification of analytical and non-analytical cases<sup>¥</sup>.

**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 45 and 13 patients respectively. Also 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.

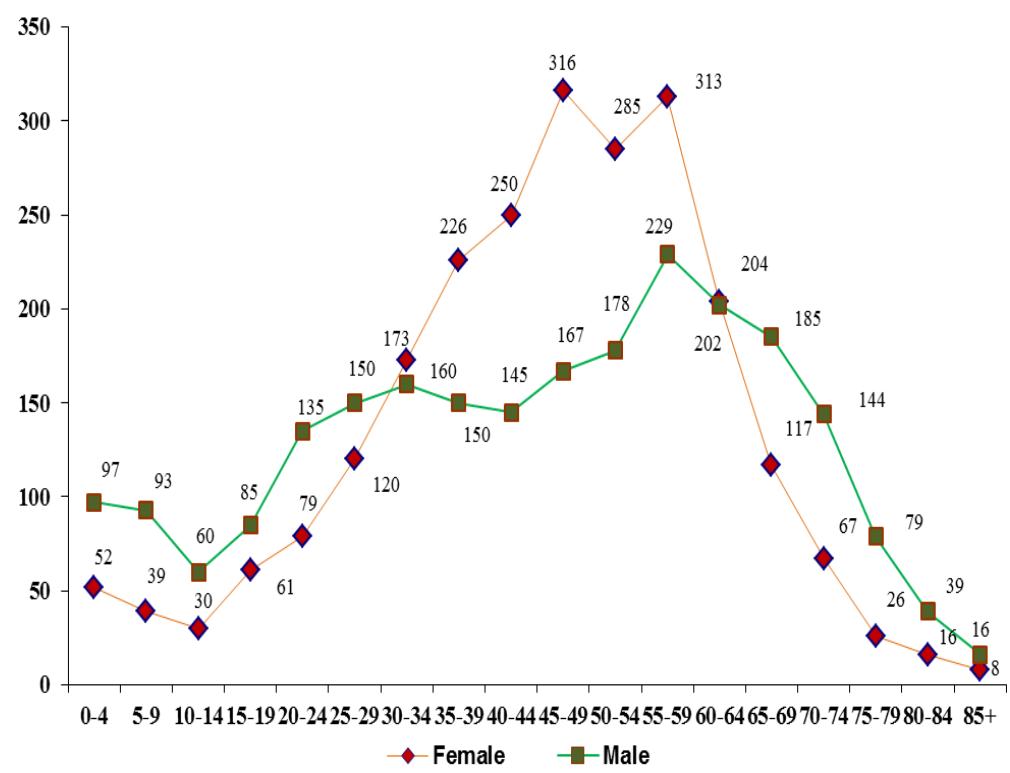
## Distribution of malignancies

In the year 2013, 4,696 malignant cases were diagnosed at the Hospital with 2,382 seen amongst females and 2,314 amongst males. Table 2 displays the distributions of female and male patients according to age-groups and gender.

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

Age range	Female	Male	Total
0-4	52	97	149
5-9	39	93	132
10-14	30	60	90
15-19	61	85	146
20-24	79	135	214
25-29	120	150	270
30-34	173	160	333
35-39	226	150	376
40-44	250	145	395
45-49	316	167	483
50-54	285	178	463
55-59	313	229	542
60-64	204	202	406
65-69	117	185	302
70-74	67	144	211
75-79	26	79	105
80-84	16	39	55
85+	8	16	24
<b>Total</b>	<b>2382</b>	<b>2314</b>	<b>4696</b>

**Fig. 2. Distribution of malignancies by age-groups and sex**



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

## Demographics

Of the 4,696 patients diagnosed with malignant cancers, nearly 61.78% (2,901) belonged to the province of Punjab and approximately 19.55% (918) to the 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. Province-wise distribution of patients**

Province/Region	Malignancies	Percentage
Punjab	2,901	61.78
Khyber Pakhtoonkhwa[1]	918	19.55
Sindh	230	4.90
F.A.T.A	118	2.51
Balochistan	82	1.75
Federal Capital	70	1.49
Azad Jammu & Kashmir	41	0.87
Afghanistan & others countries	336	7.16
<b>Total</b>	<b>4,696</b>	<b>100.00</b>

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

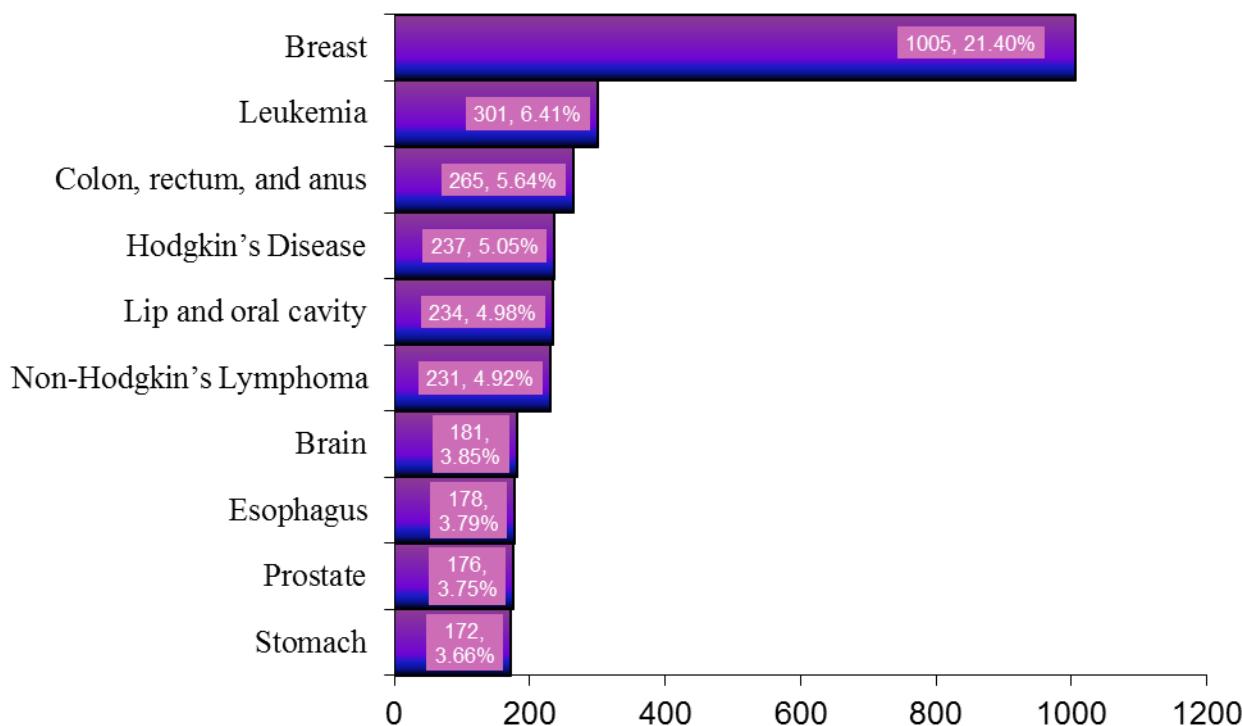
## Top Ten Cancers

Tables 4 to 8 show the list of the ten commonest malignancies seen at SKMCH & RC during the year 2013. Breast cancer was the leading malignancy with 1030 cases accessioned into the Registry. Leukemia and colorectal 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. 2013 to Dec. 2013.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	1005	21.40	C50.0 - C50.9
2	Leukemia	301	6.41	M9800 - M9948
3	Colon, rectum, and anus	265	5.64	C18.0 - C21.8
4	Hodgkin's Disease	237	5.05	M9650 - M9667
5	Lip and oral cavity	234	4.98	C00.0 - C08.9
6	Non-Hodgkin's Lymphoma	231	4.92	M9590-91, M967-972
7	Brain	181	3.85	C71.0 – C71.9
8	Esophagus	178	3.79	C15
9	Prostate	176	3.75	C61.9
10	Stomach	172	3.66	C16

**Fig. 3.** Top 10 malignancies seen amongst all age-groups & both sexes combined, from Jan. 2013 to Dec. 2013.



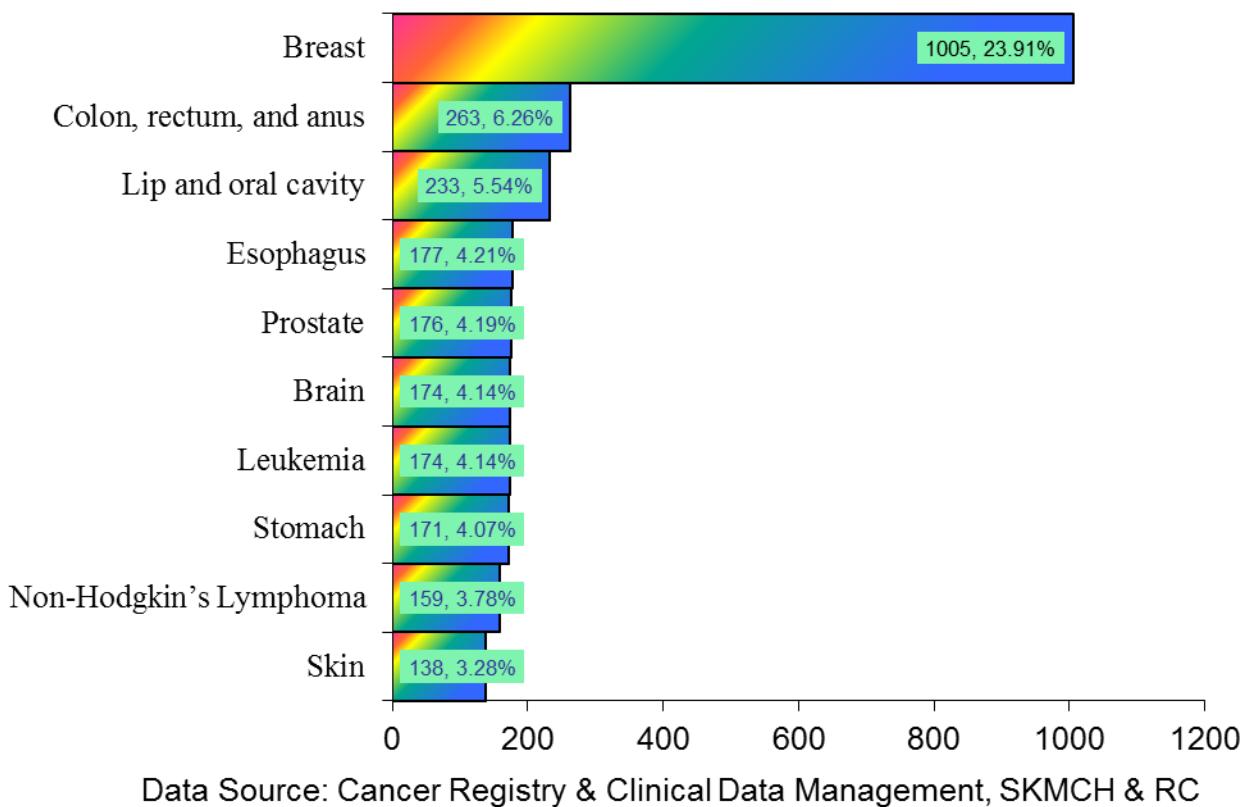
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

Amongst adults, during the year 2013, a total of 4,204 malignancies were diagnosed or treated at the Hospital. Breast cancer, colorectal and lip & oral cavity were registered as the most frequently seen cancers.

**Table 5. Top 10 malignancies seen amongst adults (> 18 years), from Jan. 2013 to Dec. 2013.**

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	1005	23.91	C50 - C50.9
2	Colon, rectum, and anus	263	6.26	C18.0 – C21.8
3	Lip and oral cavity	233	5.54	C00.0 - C08.9
4	Esophagus	177	4.21	C15
5	Prostate	176	4.19	C61.9
6	Brain	174	4.14	C71.0 – C71.9
7	Leukemia	174	4.14	M9800 - M9948
8	Stomach	171	4.07	C16
9	Non-Hodgkin's Lymphoma	159	3.78	M9590-91, M967-972
10	Skin	138	3.28	C44.0 – C44.9

**Fig. 4. Top 10 malignancies seen amongst adults (> 18 years), from Jan. 2013 to Dec. 2013.**

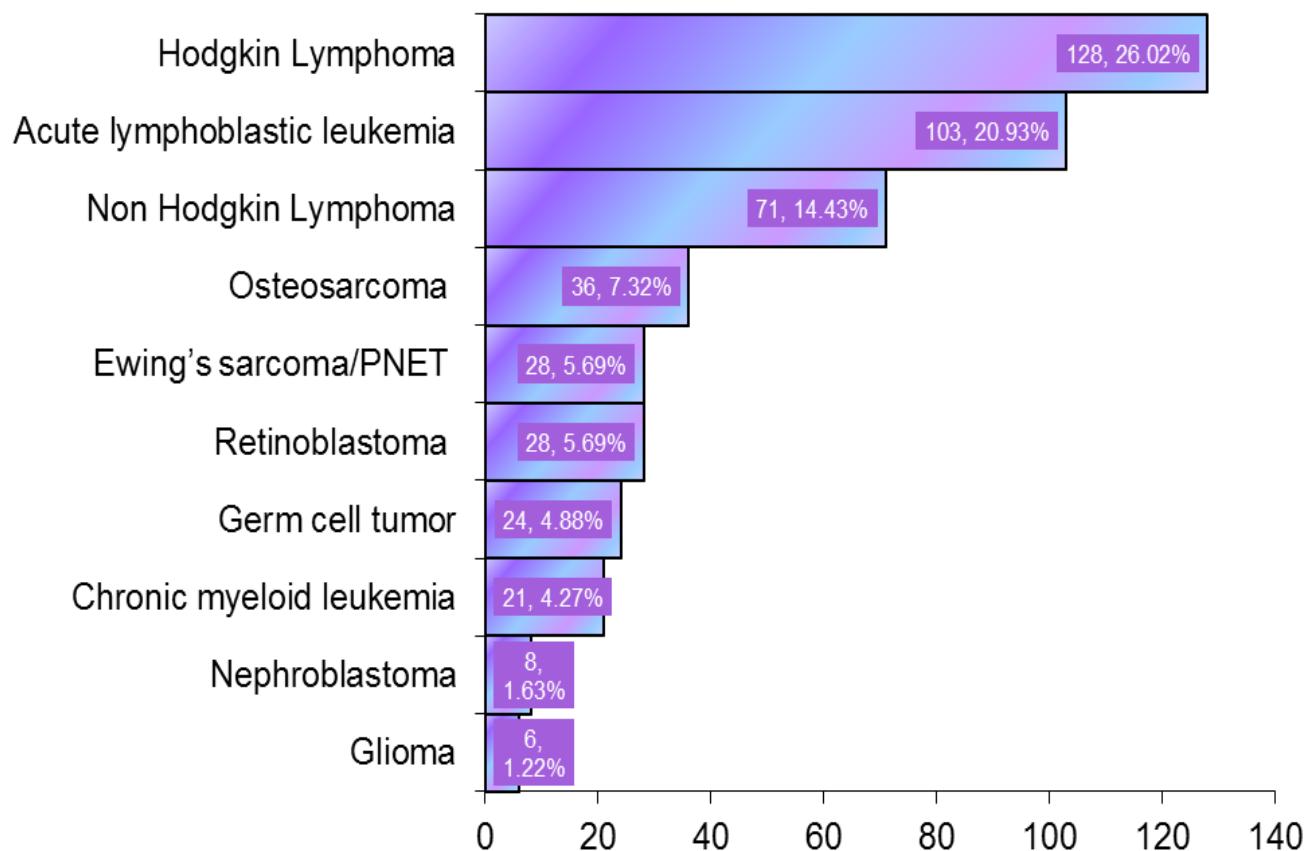


In children, using the classification based on tumor morphology, Hodgkin lymphoma, Acute lymphoblastic leukemia, and Non-Hodgkin Lymphoma were identified as the three most common malignancies diagnosed or treated at SKMCH & RC. Table 6 shows the distributions of the top ten malignancies seen in children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

**Table 6.** Top 10 malignancies seen in children (<= 18 years), from Jan. 2013 to Dec. 2013.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Morphology Code
1	Hodgkin Lymphoma	128	26.02	M9650 - M9667
2	Acute lymphoblastic leukemia	103	20.93	M982- M983
3	Non Hodgkin Lymphoma	71	14.43	M9590, 91- M967-972
4	Osteosarcoma	36	7.32	M9180 - M9195
5	Ewing's sarcoma/PNET	28	5.69	M9260
6	Retinoblastoma	28	5.69	M9510-M9512
7	Germ cell tumor	24	4.88	M906 - M909
8	Chronic myeloid leukemia	21	4.27	M9863
9	Nephroblastoma	8	1.63	M8960
10	Glioma	6	1.22	M938 – M948

**Fig. 5.** Top 10 malignancies seen in children (<= 18 years), from Jan. 2013 to Dec. 2013.



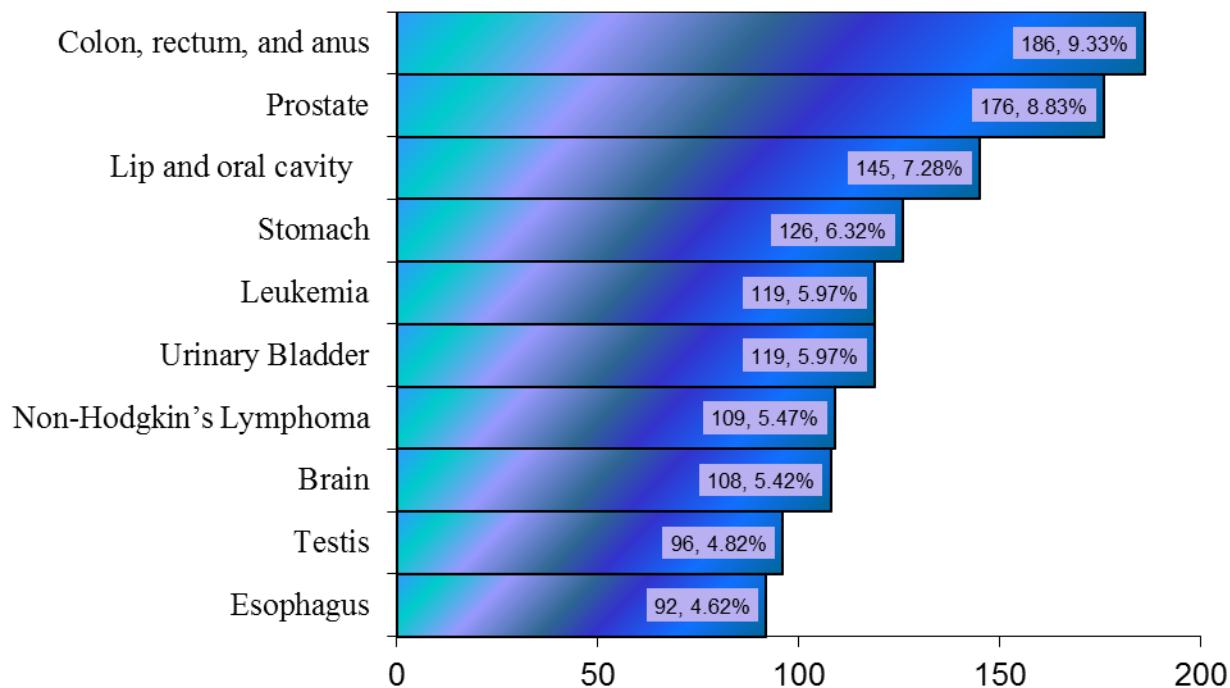
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

In adult males, the commonest malignancies were Prostate cancer, Colorectal and Non-Hodgkin's Lymphoma (Table 7).

**Table 7.** Top 10 malignancies seen amongst adult males, from Jan. 2013 to Dec. 2013.

Sr.No.	ICD Category	Count	Percentage	ICD-O-3 Code
1	Colon, rectum, and anus	186	9.33	C18 - C21.8
2	Prostate	176	8.83	C61.9
3	Lip and oral cavity	145	7.28	C00.0 – C08.9
4	Stomach	126	6.32	C16.1 – C16.9
5	Leukemia	119	5.97	M9800 - M9948
6	Urinary Bladder	119	5.97	C67.0-C67.9
7	Non-Hodgkin's Lymphoma	109	5.47	M9590, 91-M967-972
8	Brain	108	5.42	C71.0-C71.9
9	Testis	96	4.82	C62
10	Esophagus	92	4.62	C15

**Fig. 6.** Top 10 malignancies seen amongst adult males, from Jan. 2013 to Dec. 2013.



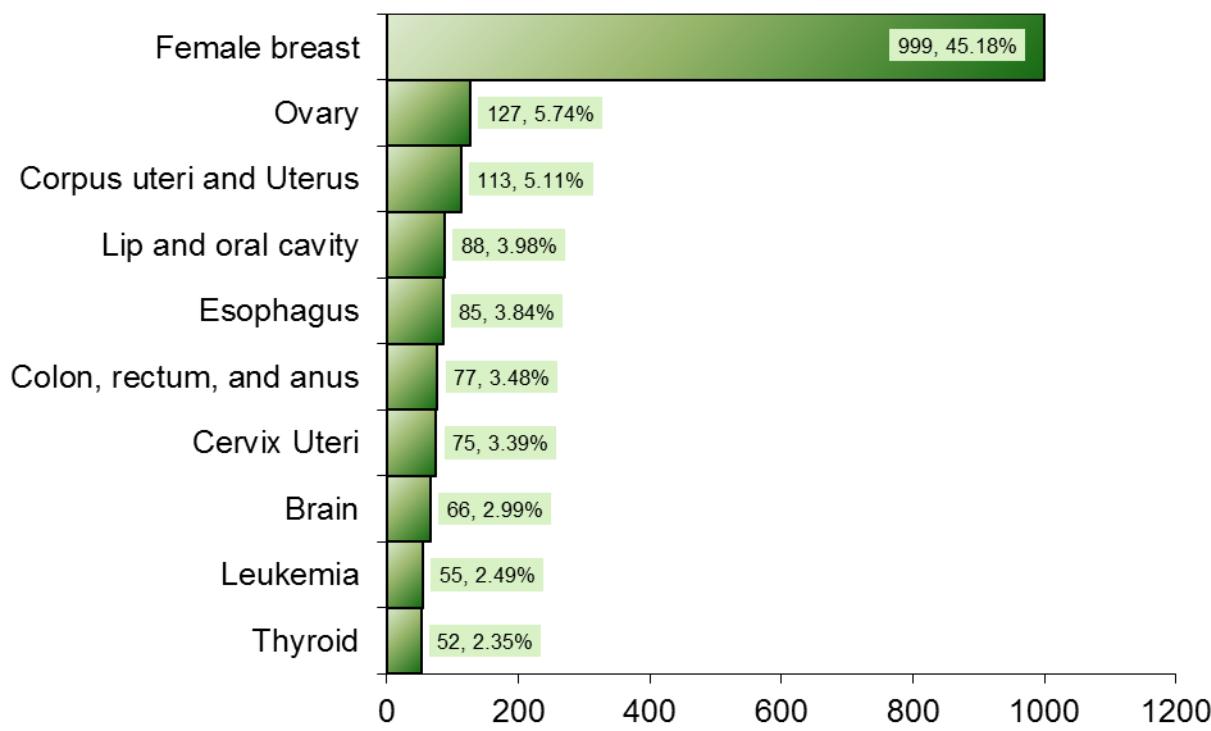
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

The most frequent diagnosis in adult women was breast cancer accounting for 44.60% of the total cancers in females. Ovary was ranked as the second highest cancer accounting for 5.88% and, Lip and oral cavity as the third most common malignancy with 4.50% of the total malignancies in females.

**Table 8. Top 10 malignancies seen amongst adult females, from Jan. 2013 to Dec. 2013.**

Sr. No.	ICD Category	Count	Percentage	ICD-O 3 Code
1	Female breast	999	45.18	C50.0 - C50.9
2	Ovary	127	5.74	C56.9
3	Corpus uteri and Uterus	113	5.11	C54.0 – C55.9
4	Lip and oral cavity	88	3.98	C00.0 – C08.9
5	Esophagus	85	3.84	C15 – C15.9
6	Colon, rectum, and anus	77	3.48	C18 - C21.8
7	Cervix Uteri	75	3.39	C53.0 - C53.9
8	Brain	66	2.99	C71.0-C71.9
9	Leukemia	55	2.49	M9800 - M9948
10	Thyroid	52	2.35	C73.9

**Fig. 7. Top 10 malignancies seen amongst adult females, from Jan. 2013 to Dec. 2013.**



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

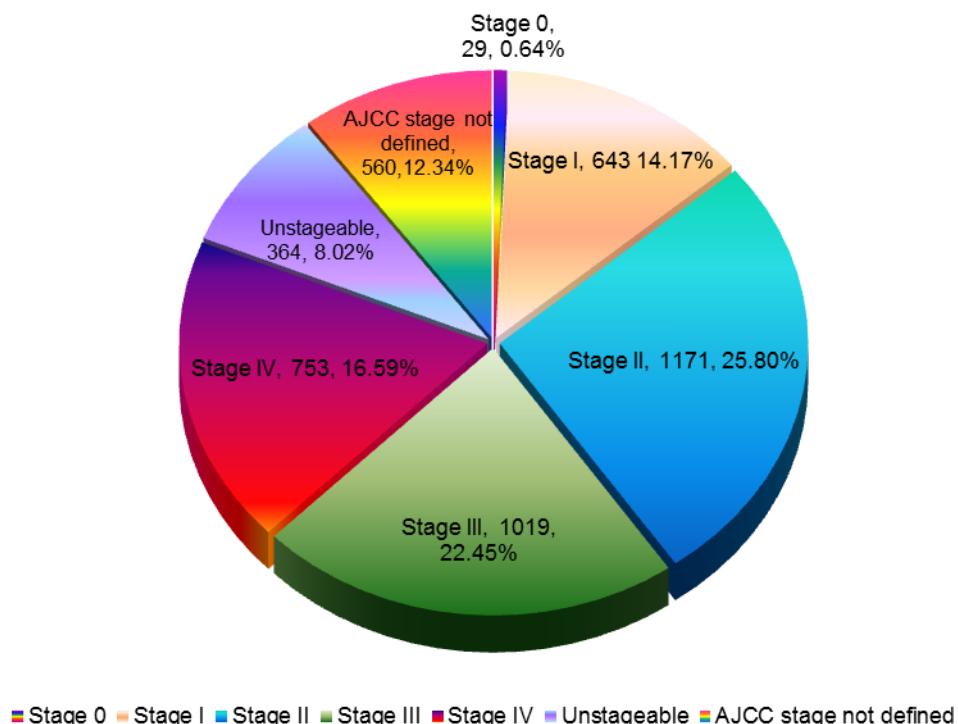
## Staging

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 2013, cancer staging for 4,539 analytical cases (class of case 0, 1, 2) showed that 29 (0.64%) cases fell into 0 or in-situ category, 643 (14.17%) in stage I, 1,171 (25.80%) in stage II, 1,019 (22.45%) cases in stage III, and 753 (16.59%) in stage IV, (table 9); 364 (8.02%) cases were Unstageable and 560 (12.34%) had no AJCC stage defined for that site.

**Table 9. TNM Stage of cancer patients at SKMCH & RC during year 2013.**

AJCC Stage	No. of Patients	Percentage
Stage 0	29	0.64
Stage I	643	14.17
Stage II	1171	25.80
Stage III	1019	22.45
Stage IV	753	16.59
Unstageable	364	8.02
AJCC stage not defined	560	12.34
<b>Total</b>	<b>4539</b>	<b>100</b>

**Fig. 8. TNM stage of cancer patients at SKMCH & RC during year 2013.**



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

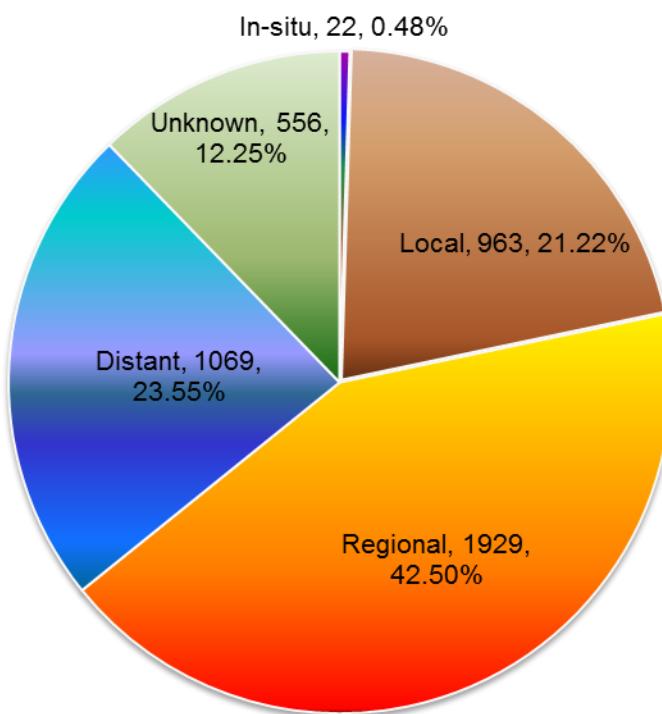
## Summary Stage

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 2013 reflects that there were 0.48% in situ cases, 21.22% localized cancers, 42.50% regional cases, 23.55% distant, and there were 12.25% cases in which the summary stage was unknown.

**Table 10. Classification according to the SEER summary stage during the year 2013.**

<b>SEER Summary Stage</b>	<b>No. of Patients</b>	<b>Percentage</b>
In-situ	22	0.48
Local	963	21.22
Regional	1929	42.50
Distant	1069	23.55
Unknown	556	12.25
<b>Total</b>	<b>4539</b>	<b>100</b>

**Fig. 9: Classification according to the SEER summary stage during the year 2013.**



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

## Grading

International Classification of Diseases for Oncology, Third Edition (ICDO-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 2013.**

<b>Grade / Differentiation</b>	<b>Count</b>	<b>Percentage</b>
Grade I	365	8.04
Grade II	1270	27.98
Grade III	1051	23.16
Grade IV	81	1.78
•Grade not determined	1513	33.33
Not applicable	259	5.71
<b>Total</b>	<b>4539</b>	<b>100</b>

## SUPPLEMENTAL INFORMATION

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

**Table 12. Distribution of Primary Malignant Sites, 2013**

**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
C00	Lip	0	0	0	0	0	0	1	0	1	0	0	0	2	0	0	1	0	0	5
C01-C02	Tongue	0	0	0	1	1	2	0	2	1	2	7	2	5	3	1	2	2	2	33
C03	Gum	0	0	0	0	0	0	0	0	0	1	1	3	1	0	1	0	0	0	7
C04-C06	Floor & other part of mouth	0	0	0	0	1	0	3	1	2	5	2	2	3	2	0	0	1	0	22
C07-C08	Salivary gland	0	0	0	0	1	3	3	4	1	3	1	2	1	1	2	0	0	0	22
C9-C10	Tonsil & oropharynx	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
C11	Nasopharynx	0	0	0	3	1	3	1	1	0	3	3	1	1	0	0	0	0	0	17
C12-C13	Pyriform sinus & hypopharynx	0	0	0	0	0	0	0	1	2	3	6	3	5	1	1	0	0	0	22
C15	Esophagus	0	0	0	0	2	2	3	9	8	15	15	11	8	4	5	1	0	2	85
C16	Stomach	0	0	0	2	0	4	5	1	6	7	5	8	5	3	0	0	0	0	46
C17	Small Intestine	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
C18	Colon	0	0	0	0	3	0	3	5	3	2	6	4	4	3	0	0	1	0	34
C19-C21	Rectum, anal canal & anus	0	0	0	1	2	5	4	2	2	7	5	4	3	7	2	0	0	0	44
C22	Liver & intrahepatic bile duct	0	0	0	0	0	0	0	0	0	1	1	2	3	5	1	0	0	0	13
C23-C24	Gall Bladder & extrahepatic bile duct	0	0	0	0	0	0	1	0	1	5	2	3	1	4	1	0	1	0	19
C25	Pancreas	0	0	0	0	0	0	0	0	1	2	1	5	1	2	1	0	1	0	14
C30-C31	Nasal cavity, middle ear and acc. Sinuses	0	0	0	0	1	0	1	1	0	1	3	0	2	0	1	0	0	0	10
C32	Larynx	0	0	0	0	0	0	0	0	0	1	0	2	0	1	0	0	0	0	4
C33-C34	Trachea, bronchus & Lung	0	0	0	0	0	0	1	1	3	0	4	2	7	2	0	1	1	0	22
C37-C38	Thymus, heart, mediastinum & pleura	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3
C40-C41	Bone & articular cartilage	0	4	7	20	5	3	0	1	1	0	0	1	0	0	0	0	0	0	42
C44	Skin	0	0	0	0	2	7	2	2	3	4	3	8	6	6	2	1	1	2	49
C47	Peripheral nerves & auto immune nervous system	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0
C49	Connective & soft tissue	0	0	1	4	2	6	2	4	3	4	1	2	1	2	0	0	1	0	33
C50	Breast	0	0	0	1	5	27	76	126	163	163	140	152	71	35	25	10	4	1	999

## 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	1	2	5	4	6	4	0	2	0	0	0	24
C53	Cervix uteri	0	0	0	1	0	1	2	6	12	6	11	14	13	4	5	0	0	1	76
C54	Corpus uteri	0	0	0	0	1	3	3	3	2	3	19	22	20	11	8	2	2	0	99
C55	Uterus	0	0	0	0	1	0	0	1	1	1	0	1	1	0	0	0	0	0	6
C56-C57	Ovary & Uterine adnexa	0	3	4	5	8	3	9	8	9	26	18	16	16	9	4	1	0	0	139
C58	Placenta	0	0	0	0	0	4	3	1	0	0	0	0	0	0	0	0	0	0	8
C64-C66	Kidney & other urinary organ	2	1	0	0	0	0	0	1	1	0	2	2	5	1	3	3	0	1	22
C67	Urinary bladder	0	0	0	0	1	1	1	1	0	1	3	3	3	1	0	0	0	0	15
C69	Eye	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
C70-C71	Brain	0	0	2	1	9	5	5	6	4	10	5	8	7	5	1	1	0	0	69
C72	Other parts of nervous system	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
C73	Thyroid gland	0	0	1	2	6	6	7	7	5	10	2	4	3	2	0	0	0	0	55
C74-C75	Endocrine gland and related structure	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
C76	Other and ill-defined sites	3	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	6
C80	Unknown primary	0	0	0	0	0	0	1	1	1	1	3	1	3	0	0	3	0	0	14
M965-M966	Hodgkin's lymphoma	2	13	5	15	9	10	6	4	0	0	0	0	1	0	0	0	0	0	65
M9590-91, 967-972	Non Hodgkin's lymphoma	5	9	4	1	7	7	13	9	2	4	1	2	2	0	0	2	0	0	68
M9731-M9732	Multiple myeloma & immuno. neoplasms	0	0	0	0	0	0	0	1	3	3	3	4	0	0	1	0	0	0	15
M982-M983	Lymphoid Leukemia	22	7	0	1	1	0	1	1	1	0	2	2	0	0	0	0	0	0	38
M984-M993	Myeloid Leukemia	2	2	5	3	6	8	6	7	3	9	4	4	0	0	0	0	0	0	59
C42.0, C42.2-4	Other lymphatic, histiocytic & hemato. tissue	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3
~	Other reportable CNS neoplasms	0	0	0	0	4	7	8	3	2	3	2	3	0	1	0	0	0	0	33
	Total	52	39	30	61	79	120	173	226	250	316	285	313	204	117	67	26	16	8	2382

**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	0	1	0	0	1	0	2	1	0	1	0	0	0	6
C01-C02	Tongue	0	0	0	0	0	1	1	4	3	8	4	6	8	0	5	2	0	1	43
C03	Gum	0	0	0	0	0	0	0	4	1	2	5	6	9	5	2	3	0	1	38
C04-C06	Floor of mouth	0	0	0	0	0	1	2	2	4	6	7	7	2	1	2	1	0	0	35
C07-C08	Salivary gland	0	0	0	0	2	2	2	1	1	4	7	2	0	1	1	0	0	0	23
C9-C10	Tonsil & oropharynx	0	0	0	0	0	0	0	0	1	1	1	0	1	1	0	0	0	0	5
C11	Nasopharynx	0	0	0	4	1	3	2	3	1	8	0	7	2	0	3	0	0	0	34
C12-C13	Pyriform sinus & hypopharynx	0	0	0	0	3	2	1	3	4	3	2	1	3	0	1	0	0	0	23
C14	Other ill-defined sites lip, oral, pharynx	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	4
C15	Esophagus	0	0	0	1	4	5	1	3	9	8	16	12	11	13	8	0	1	1	93
C16	Stomach	0	0	0	0	0	1	7	7	8	10	14	26	23	10	16	2	2	0	126
C17	Small intestine	0	0	0	1	0	1	0	1	0	0	0	2	0	0	2	0	0	0	7
C18	Colon	0	0	0	0	4	6	3	12	12	8	15	9	8	4	7	1	1	0	90
C19-C21	Rectum & Anal canal	0	0	0	1	6	13	13	8	11	8	8	7	9	10	0	2	1	0	97
C22	Liver & intrahepatic bile duct	2	0	0	0	0	0	0	0	1	7	8	6	10	14	6	6	1	0	61
C23-C24	Gall Bladder & extrahepatic bile duct	0	0	0	0	0	0	1	0	5	3	2	3	3	0	0	0	0	0	17
C25	Pancreas	0	0	0	0	0	0	1	1	3	0	3	4	2	3	1	1	2	0	21
C26	Other ill-defined digestive organs	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
C30-C31	Nasal cavity, middle ear and acc. sinuses	0	0	0	0	0	0	1	3	4	0	1	2	1	1	0	0	0	0	14
C32	Larynx	0	0	0	0	0	0	2	2	5	8	10	8	11	9	2	4	0	1	62
C33-C34	Bronchus & Lung	0	0	1	0	3	0	3	1	3	9	9	7	15	17	11	8	2	1	90
C37-C38	Thymus, heart, mediastinum	0	0	0	0	2	1	0	1	2	0	0	0	0	0	0	0	0	0	6
C40-C41	Bone & articular cartilage	2	3	13	21	16	3	4	2	1	1	1	1	0	0	0	0	0	0	68
C44	Skin	0	0	0	1	2	0	3	3	4	8	7	12	9	14	11	9	5	2	90
C47	Peripheral nerves & auto immune nervous system	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
C49	Connective & soft tissue	1	0	0	1	9	3	5	0	3	2	2	3	2	3	1	0	1	0	36

## 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	0	1	0	1	1	1	0	1	0	0	1	0	0	6
C60	Penis	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
C61	Prostate	0	0	0	0	0	0	0	0	0	2	6	20	26	42	38	25	11	6	176
C62	Testis	4	0	1	2	21	25	21	10	7	3	2	2	3	1	0	1	0	0	103
C64-C66	Kidney & other urinary organ	4	2	0	0	0	0	2	3	0	2	8	4	7	3	2	4	2	1	44
C67	Urinary bladder	0	0	0	1	0	0	1	3	9	8	6	29	12	21	12	8	9	1	120
C69	Eye	9	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	14
C70-C71	Brain	0	0	0	7	8	4	20	13	12	10	5	12	11	7	4	0	0	0	113
C72	Spinal cord & other parts of nervous system	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
C73	Thyroid gland	0	0	0	0	1	8	1	2	4	4	1	2	2	1	2	0	0	0	28
C74-C75	Endocrine gland and related structure	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
C76	Other and ill-defined sites	3	0	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	7
C80	Unknown primary	0	0	0	0	0	3	0	1	0	2	1	5	0	0	1	0	0	0	13
M965-M962	Hodgkin's lymphoma	4	50	27	14	17	18	17	21	1	2	1	0	0	0	0	0	0	0	172
M9590-91, 967-972	Non Hodgkin's lymphoma	4	18	14	18	22	27	25	16	6	2	1	1	2	2	2	1	1	1	163
M9731-M9732	Multiple myeloma & immuno. neoplasms	0	0	0	0	1	0	1	0	1	5	6	7	2	0	1	0	0	0	24
M982-M983	Lymphoid Leukemia	61	11	1	0	0	1	2	3	2	3	8	7	1	0	0	0	0	0	100
M984-M993	Myeloid Leukemia	1	3	1	10	8	19	10	14	12	8	6	3	2	0	0	0	0	0	97
C42.0, C42.2-4	Other lymphatic, histiocytic & hemato. Tissue	2	2	1	1	0	0	0	1	2	3	2	0	0	0	1	0	0	0	15
~	Other reportable CNS neoplasms	0	0	0	1	2	3	4	1	2	5	1	1	0	2	0	0	0	0	22
	<b>Total</b>	<b>97</b>	<b>93</b>	<b>60</b>	<b>85</b>	<b>135</b>	<b>150</b>	<b>160</b>	<b>150</b>	<b>145</b>	<b>167</b>	<b>178</b>	<b>229</b>	<b>202</b>	<b>185</b>	<b>144</b>	<b>79</b>	<b>39</b>	<b>16</b>	<b>2314</b>

\* 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 2013**

ICD-O-3 code	Pathology	Male	Female	Total
C00 Lip	Squamous Cell Carcinoma, Nos Mucoepidermoid Carcinoma Squamous Cell Carcinoma, Keratinizing, Nos	6  1  1	3  1  1	9  1  1
C01-02 Tongue	Squamous Cell Carcinoma, Nos Squamous Cell Carcinoma, Keratinizing, Nos Adenoid Cystic Carcinoma Polymorphous Low Grade Adenocarcinoma Malignant Lymphoma, Large B-Cell Diffuse Nos Carcinoma, Nos	42     1 1	29  2  1  1	71  2  1  1
C03-06 Gum, FOM, palate, other & unspecified parts of mouth	Squamous Cell Carcinoma, Nos Adenoid Cystic Carcinoma Mucoepidermoid Carcinoma Adenocarcinoma, Nos Carcinoma, Nos Epithelial-Myoepithelial Carcinoma Malignant Melanoma, Nos Squamous Cell Carcinoma, Keratinizing, Nos	65  5   1   1 1	20  2  2  1  1 1	85  7  2  2  1  1
C07-08 Parotid and other major Salivary glands	Mucoepidermoid Carcinoma Acinar Cell Carcinoma Adenoid Cystic Carcinoma Carcinoma, Nos Squamous Cell Carcinoma, Nos Epithelial-Myoepithelial Carcinoma Clear Cell Adenocarcinoma, Nos Adenocarcinoma, Nos Follicular Lymphoma, Grade 3 Mantle Cell Lymphoma	11  1  3  4  1  3  1 1	9  5  4  2  1  3  1	20  6  7  6  1  1  1  1
C09 Tonsil	Squamous Cell Carcinoma, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos	4  1	1  1	5  1
C10 Oropharynx	Mucoepidermoid Carcinoma Plasmacytoma, Extramedullary		1  1	1  1
C11 Nasopharynx	Carcinoma, Nos Carcinoma, Undifferentiated, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos Neuroendocrine Carcinoma, Nos Epithelial-Myoepithelial Carcinoma Burkitt Lymphoma, Nos Squamous Cell Carcinoma, Nos	23  6  1   1 5	12  3  1  1  1	35  9  2  1  1
C12 Pyriform Sinus	Squamous Cell Carcinoma, Nos Neoplasm, Malignant	4  1	5  1	9  1
C13 Hypopharynx	Squamous Cell Carcinoma, Nos Squamous Cell Carcinoma, Keratinizing, Nos	18  1	17  1	35  1
C14 Other & ill-defined sites in lip, oral cavity and pharynx	Squamous Cell Carcinoma, Nos Chordoma, Nos Spindle Cell Carcinoma, Nos	2  1  1		2  1  1
C15 Esophagus	Squamous Cell Carcinoma, Nos Adenocarcinoma, Nos Adenosquamous Carcinoma Small Cell Carcinoma, Nos Neuroendocrine Carcinoma, Nos Adenocarcinoma, Intestinal Type Signet Ring Cell Carcinoma	74  11  2   1 5	80  2  1  1  1	154  13  3  1  1  5
C16 Stomach	Signet Ring Cell Carcinoma Adenocarcinoma, Nos Squamous Cell Carcinoma, Nos Gastrointestinal Stromal Sarcoma Adenocarcinoma, Intestinal Type Neuroendocrine Carcinoma, Nos Gastrointestinal Stromal Tumor, Nos	35  74  5  2   1	19  14  5  3  2  1	54  88  10  10  4  1  1

	Mucinous Adenocarcinoma Malignant Lymphoma, Large B-Cell Diffuse Nos Adenosquamous Carcinoma Marginal Zone B-Cell Lymphoma, Nos	2 1 1 1	1 1 1 1	3 2 1 1
C17 Small intestine	Gastrointestinal Stromal Sarcoma Neuroendocrine Carcinoma, Nos Adenocarcinoma, Nos Signet Ring Cell Carcinoma Malignant Lymphoma, Large B-Cell Diffuse Nos	1 5 1 1	1 1 1 1	2 5 1 1
C18 Colon	Adenocarcinoma, Nos Signet Ring Cell Carcinoma Mucinous Adenocarcinoma Gastrointestinal Stromal Sarcoma Neoplasm, Malignant Malignant Lymphoma, Large B-Cell Diffuse Nos Burkitt Lymphoma, Nos Adenocarcinoma In Tubulovillous Adenoma Neuroendocrine Carcinoma, Nos	61 10 12 1 2 3 3 3	23 6 3 1 1 1 3 3	84 16 15 2 1 3 3 3
C19 Rectosigmoid junction	Adenocarcinoma, Nos Carcinoma, Nos Mucinous Adenocarcinoma Neuroendocrine Carcinoma, Nos Adenocarcinoma In Tubulovillous Adenoma Signet Ring Cell Carcinoma	11 1 1 1 1 4	6 1 1 1 1 4	17 1 2 1 1 4
C20 Rectum	Adenocarcinoma, Nos Signet Ring Cell Carcinoma Malignant Melanoma, Nos Squamous Cell Carcinoma, Nos Adenocarcinoma In Tubulovillous Adenoma Neuroendocrine Carcinoma, Nos Mucinous Adenocarcinoma	37 15 2 1 3 2	18 4 2 1 1 1	55 19 2 1 4 2
C21 Anus and Anal Canal	Adenocarcinoma, Nos Mucinous Adenocarcinoma Squamous Cell Carcinoma, Nos Signet Ring Cell Carcinoma	7 2 6 7	4 2 2 1	11 4 8 8
C22 Liver & intrahepatic bile ducts	Hepatocellular Carcinoma, Nos Cholangiocarcinoma Hepatoblastoma	56 3 2	12 1 1	68 4 2
C23 Gallbladder	Adenocarcinoma, Nos Carcinoma, Nos	5	8 1	13 1
C24 Other & unspec. parts of biliary tract	Adenocarcinoma, Nos Adenocarcinoma In Tubulovillous Adenoma Neuroendocrine Carcinoma, Nos Cholangiocarcinoma Signet Ring Cell Carcinoma	11 1 1 1	7 1 1 1	18 1 1 1
C25 Pancreas	Adenocarcinoma, Nos Neoplasm, Malignant Carcinoma, Nos Neuroendocrine Carcinoma, Nos Mucinous Adenocarcinoma	12 2 2 3 3	10 2 1 1 3	22 4 3 4 3
C30 Nasal cavity and middle ear	Malignant Melanoma, Nos Carcinoma, Nos Nk/T-Cell Lymphoma, Nasal And Nasal-Type Squamous Cell Carcinoma, Nos Olfactory Neuroblastoma	1 1 1 3 1	1 1 1 3 1	2 1 2 3 1
C31 Accessory Sinuses	Adenoid Cystic Carcinoma Squamous Cell Carcinoma, Keratinizing, Nos Adenocarcinoma, Nos Squamous Cell Carcinoma, Nos Malignant Melanoma, Nos Burkitt Lymphoma, Nos Mucoepidermoid Carcinoma	4 1 1 1 1 1	3 2 1 1 1 1	7 2 1 2 1 1 1

	Adenocarcinoma, Intestinal Type Carcinoma, Nos	2 1		2 1
C32 Larynx	Squamous Cell Carcinoma, Nos	59	4	63
	Neuroendocrine Carcinoma, Nos	1		1
	Squamous Cell Carcinoma, Keratinizing, Nos	2		2
C33 Trachea	Adenoid Cystic Carcinoma	2	1	3
C34 Bronchus and Lung	Adenocarcinoma, Nos	32	10	42
	Squamous Cell Carcinoma, Nos	28	3	31
	Neuroendocrine Carcinoma, Nos	6	3	9
	Non-Small Cell Carcinoma	6	2	8
	Small Cell Carcinoma, Nos	9	2	11
	Carcinoid Tumor, Nos	1	1	2
	Adenosquamous Carcinoma	2		2
	Squamous Cell Carcinoma, Keratinizing, Nos	1		1
	Neoplasm, Malignant	1		1
	Mucinous Adenocarcinoma	2		2
C37 Thymus	Thymoma, Type B2, Malignant		2	2
	Thymic Carcinoma, Nos	1	1	2
	Thymoma, Type B1, Malignant	2		2
C38 Heart, Mediastinum & Pleura	Malignant Lymphoma, Large B-Cell Diffuse Nos	3	1	4
	Germinoma	1		1
	Precursor T-Cell Lymphoblastic Lymphoma	1		1
	Ewing Sarcoma	1		1
	Burkitt Lymphoma, Nos	1		1
	Yolk Sac Tumor	1		1
	Hodgkin Lymphoma, Nodular Sclerosis, Nos	1		1
C40-41 Bones, Joints & Articular Cartilage	Osteosarcoma, Nos	30	18	48
	Ewing Sarcoma	24	17	41
	Chondroblastic Osteosarcoma	2	6	8
	Primitive Neuroectodermal Tumor, Nos		1	1
	Malignant Lymphoma, Large B-Cell Diffuse Nos	2	1	3
	Langerhans Cell Histiocytosis, Nos	1		1
	Parosteal Osteosarcoma	1		1
	Giant Cell Tumor Of Bone, Nos	1		1
	Chondrosarcoma, Nos	4		4
	Plasmacytoma, Nos	5		5
	Small Cell Osteosarcoma	4		4
	Adamantinoma Of Long Bones	1		1
	Undifferentiated Sarcoma	1		1
	Malignant Lymphoma, Non-Hodgkin, Nos	1		1
C42 Hematopoietic and reticuloendothelial system	Chronic Myeloid Leukemia, Nos	52	33	85
	Precursor B-Cell Lymphoblastic Leukemia	67	27	94
	Chronic Myelogenous Leukemia, Bcr/Abl Positive	43	24	67
	Multiple Myeloma	16	14	30
	B-Cell Chronic Lymphocytic Leukemia/SLL	24	6	30
	Acute Myeloid Leukemia, Nos	2	2	4
	Precursor T-Cell Lymphoblastic Leukemia	6	2	8
	Precursor Cell Lymphoblastic Leukemia, Nos	2	1	3
	Hairy Cell Leukemia	8	1	9
	Essential Thrombocythemia		1	1
	Acute Leukemia, Nos	1		1
	Chronic Myeloproliferative Disease, NOS	1		1
C44 Skin	Basal Cell Carcinoma, Nos	25	14	39
	Squamous Cell Carcinoma, Nos	41	12	53
	Malignant Melanoma, Nos	3	6	9
	Sebaceous Adenocarcinoma	2	4	6
	Carcinoma, Nos	1	2	3
	Basosquamous Carcinoma	3	2	5
	Basal Cell Carcinoma, Nodular	4	2	6
	Adenoid Cystic Carcinoma		1	1
	Sclerosing Sweat Duct Carcinoma		1	1
	Squamous Cell Carcinoma, Keratinizing, Nos	1	1	2





	Embryonal Carcinoma, Nos Yolk Sac Tumor Teratoma, Malignant, Nos Squamous Cell Carcinoma, Nos Adenoid Cystic Carcinoma Spermatocytic Seminoma Granulosa Cell Tumor, Adult Type Neoplasm, Malignant	6 5 4 2 1 1 1 1		6 5 4 2 1 1 1 1
C64 Kidney	Renal Cell Carcinoma, Nos Nephroblastoma, Nos Neoplasm, Malignant Renal Cell Carcinoma, Sarcomatoid Papillary Adenocarcinoma, Nos Small Cell Carcinoma, Nos Transitional Cell Carcinoma, Nos Papillary Carcinoma, Nos Renal Cell Carcinoma, Chromophobe Type	23 6 5 3 3 1 1 1 3	15 2 1 3 3 1 1 1 3	38 8 6 3 3 1 1 1 3
C66 Ureter	Transitional Cell Carcinoma, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos	2	1	2 1
C67 Bladder	Papillary Transitional Cell Carcinoma Transitional Cell Carcinoma, Nos Neuroendocrine Carcinoma, Nos Small Cell Carcinoma, Nos Pseudosarcomatous Carcinoma Carcinoma, Nos Embryonal Rhabdomyosarcoma, Nos Carcinoma In Situ, Nos	59 53 3 2 1 1 1 1	7 7 3 2 1 1 1 1	66 60 3 2 1 1 1 1
C69 Eye and Adnexa	Retinoblastoma, Nos Retinoblastoma, Undifferentiated Carcinoma, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos Marginal Zone B-Cell Lymphoma, Nos Retinoblastoma, Differentiated	11 2 1 1 1 3	12 2 1 1 1 3	23 2 1 1 2 3
C70 Meninges	Meningioma, Nos Meningioma, Malignant	1	4 1	5 1
C71 Brain	Glioblastoma, Nos Glioma, Malignant Astrocytoma, Nos Oligodendrogioma, Nos Gliosarcoma Astrocytoma, Anaplastic Neoplasm, Uncertain Whether Benign Or Malignant Neoplasm, Malignant Medulloblastoma, Nos Central Neurocytoma Mixed Glioma Oligodendrogioma, Anaplastic Primitive Neuroectodermal Tumor, Nos Ependymoma, Anaplastic Hemangioblastoma Gemistocytic Astrocytoma Malignant Lymphoma, Large B-Cell Diffuse Nos	37 31 14 10 5 5 3 3 3 2 2 1 1 1 1 1 1 2 2	26 19 5 7 1 3 4 1 1 1 3 4 1 1 1 1 1 2 2	63 50 19 17 6 8 7 4 4 3 2 4 1 1 1 1 1 2 2
C72 Spinal cord, cranial nerves & other parts of CNS	Malignant Lymphoma, Large B-Cell Diffuse Nos Neurilemoma, Nos Ependymoma, Anaplastic Oligodendrogioma, Nos Astrocytoma, Nos Ependymoma, Nos	3 2 1 1 1 1	1 2 1 1 1 1	4 2 1 1 1 1
C73 Thyroid	Papillary Carcinoma, Nos Papillary Carcinoma, Follicular Variant Oxyphilic Adenocarcinoma Papillary Microcarcinoma	18 6 2 1	36 8 2 1	54 14 2 2

	Follicular Carcinoma, Minimally Invasive	1	4	5
	Carcinoma, Anaplastic, Nos		1	1
	Carcinoma, Nos		1	1
	Papillary Carcinoma, Encapsulated		1	1
	Follicular Adenocarcinoma, Nos		3	3
C74 Adrenal gland	Adrenal Cortical Carcinoma	1		1
	Pheochromocytoma, Malignant		1	1
C75 Other endocrine glands & related structures	Pituitary Adenoma, Nos	13	25	38
	Craniopharyngioma	1		1
	Adenoma, Nos		1	1
C76 Other & ill-defined sites	Malignant Lymphoma, Large B-Cell Diffuse Nos	4	2	6
	Embryonal Carcinoma, Nos	2		2
	Mixed Germ Cell Tumor	2	2	4
	Gastrointestinal Stromal Sarcoma	1	1	2
	Teratoma, Malignant, Nos	1		1
	Yolk Sac Tumor	1	1	2
	Neuroendocrine Carcinoma, Nos		1	1
	Burkitt Lymphoma, Nos		2	2
	Dysgerminoma		1	1
C77 Lymph nodes	Hodgkin Lymphoma, Mixed Cellularity, Nos	74	27	101
	Malignant Lymphoma, Large B-Cell Diffuse Nos	72	27	99
	Hodgkin Lymphoma, Nodular Sclerosis, Nos	57	31	88
	Hodgkin Lymphoma, Nos	31	3	34
	Burkitt Lymphoma, Nos	24	10	34
	Anaplastic Large Cell Lymphoma, T Cell And Null Cell Type	12	7	19
	Precursor T-Cell Lymphoblastic Lymphoma	8	2	10
	Hodgkin Lymphoma, Lymphocyte-Rich	5	1	6
	Malignant Lymphoma, Non-Hodgkin, Nos	4	1	5
	Langerhans Cell Histiocytosis, Nos	3		3
	Hodgkin Lymphoma, Nodular Lymphocyte Predominance	3	2	5
	Follicular Lymphoma, Grade 2	2		2
	B-Cell Chronic Lymphocytic Leukemia/SLL	2	1	3
	Follicular Lymphoma, Grade 3	1	1	2
	Composite Hodgkin And Non-Hodgkin Lymphoma	1		1
	Plasmacytoma, Extramedullary	1		1
	Plasmoblastic Lymphoma	1		1
	Malignant Lymphoma, Large B-Cell, Diffuse, Immunoblastic, Nos	1		1
	Histiocytic Sarcoma	1		1
	Precursor B-Cell Lymphoblastic Lymphoma	1	1	2
	Hodgkin Lymphoma, Lymphocyte Depletion, Nos	1		1
	Langerhans Cell Histiocytosis, Disseminated		1	1
	Nk/T-Cell Lymphoma, Nasal And Nasal-Type		1	1
	Follicular Lymphoma, Grade 1		1	1
	Follicular Lymphoma, Nos		1	1
	Hodgkin Lymphoma, Nodular Sclerosis, Grade 2		1	1
C80 Unknown primary site	Adenocarcinoma, Nos	4	3	7
	Neoplasm, Malignant	3	6	9
	Carcinoma, Nos	2	1	3
	Neuroendocrine Carcinoma, Nos	2	3	5
	Malignant Lymphoma, Lymphoplasmacytic	1		1
	Small Cell Carcinoma, Nos	1		1
	Mixed Germ Cell Tumor	1		1
	Gastrointestinal Stromal Sarcoma		1	1