

ANNUAL CANCER REGISTRY REPORT-2008

CANCER STATISTICS

Distribution of neoplasms

Of a total of 4,445 new neoplasms diagnosed or treated at the Hospital from January 2008 to December 2008, 2,126 were seen in male (47.83%) and 2,319 (52.17%) in female patients. Four thousand and eleven (4,011 ((90.24%)) neoplasms were found in adults, whereas, 434 (9.76%) 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-groups.

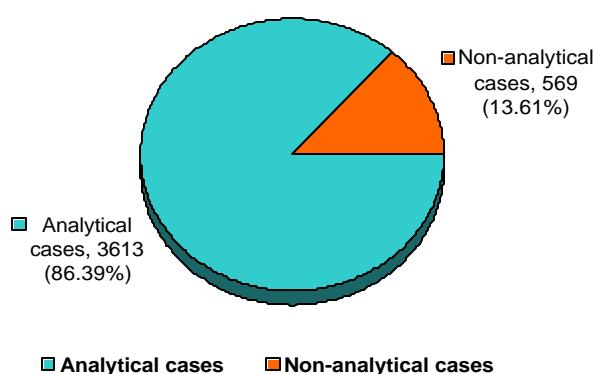
Table 1. Distribution of neoplasms by behavior and age-groups.

Behavior	Age Group	Registered patients (4,407)	Reported neoplasm? (4,445)
Malignant?	Adults	3,740	3,770
	Pediatrics	411	412
	Total	4,151	4,182
Benign [€] & Uncertain Behavior	Adults	234	241
	Pediatrics	22	22
	Total	256	263

Class of Case

Of a total 4,182 malignant cases registered at the from January 2008 to December 2008, 3,613 (86.39%) were analytical cases and 569 (13.61%) 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 31 and 7 patients respectively. Also 36 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.

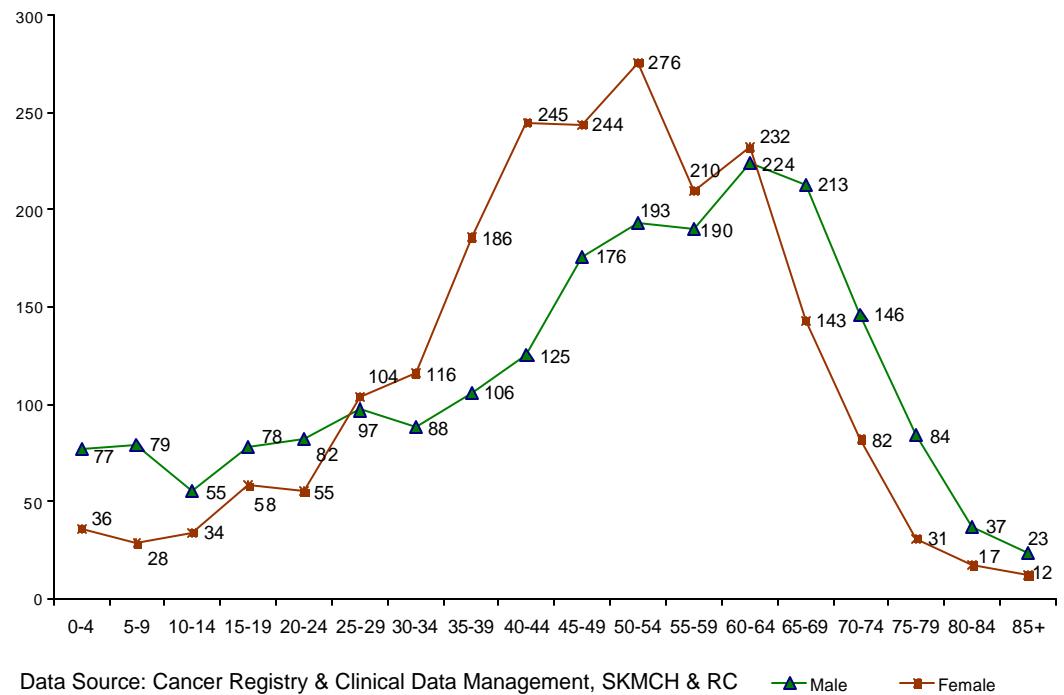
Distribution of malignancies

In the year 2008, 4,182 malignant cases were diagnosed at the Hospital with 2,073 seen amongst males and 2,109 amongst females. Table 2 displays the distributions of male and female patients according to age-groups and gender.

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

Age range	Male	Female	Total
0-4	77	36	113
5-9	79	28	107
10-14	55	34	89
15-19	78	58	136
20-24	82	55	137
25-29	97	104	201
30-34	88	116	204
35-39	106	186	292
40-44	125	245	370
45-49	176	244	420
50-54	193	276	469
55-59	190	210	400
60-64	224	232	456
65-69	213	143	356
70-74	146	82	228
75-79	84	31	115
80-84	37	17	54
85+	23	12	35
Total	2073	2109	4182

Figure 2. Distribution of malignancies by age-groups and sex



Demographics

Of the 4,182 patients diagnosed with malignant cancers, nearly 75.20% (3,145) belonged to the province of Punjab and approximately 16.95% (709) to the North West Frontier Province (N.W.F.P) (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	Patients	Percentage
Punjab	3,145	75.20
N.W.F.P	709	16.95
Sindh	56	01.34
Federal Capital	60	01.44
Balochistan	62	01.48
F.A.T.A	50	01.20
Other countries	100	02.39
Total	4,182	100.00

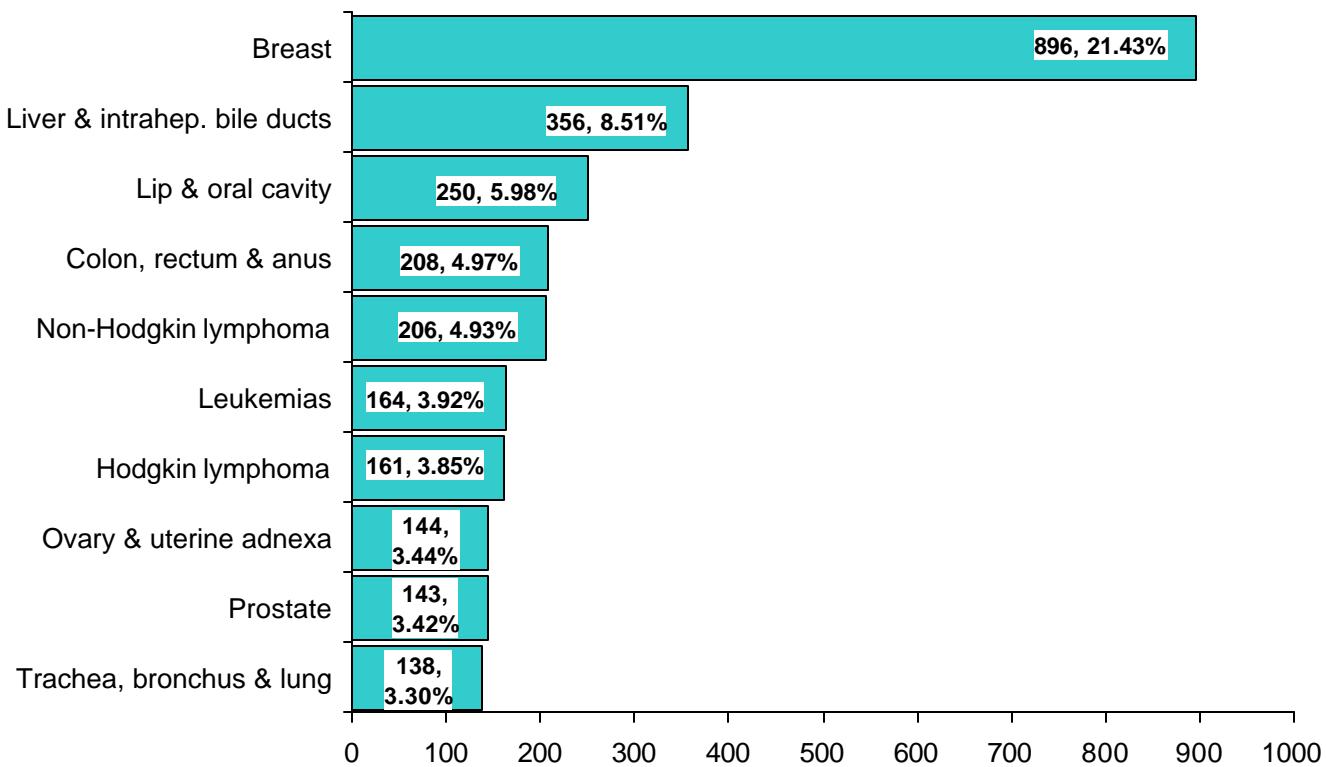
Top Ten Cancers

Table 4 shows the list of the ten commonest malignancies seen at SKMCH & RC during the year 2008. Breast cancer was the leading malignancy with 896 cases accessioned into the Registry. Liver & intra-hepatic bile ducts and lip & oral cavity cancer were the second and third most frequently seen cancers, respectively.

Table 4. Top 10 malignancies seen at SKMCH & RC from January 2008 till December 2008, in all age-groups and both sexes combined.

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	896	21.43	C50.0 - C50.9
2	Liver and intra-hepatic bile ducts	356	8.51	C22.0 - C22.1
3	Lip and oral cavity	250	5.98	C00.0 - C08.9
4	Colon, rectum, and anus	208	4.97	C18.0 - C21.8
5	Non-Hodgkin lymphoma	206	4.93	M9590,91 - M967-972
6	Leukemias	164	3.92	M982 - M994
7	Hodgkin lymphoma	161	3.85	M9650 - M9667
8	Ovary & uterine adnexa	144	3.44	C56.9 - C57.9
9	Prostate	143	3.42	C61.9
10	Trachea, bronchus, lung	138	3.30	C33.9 - C34.9

All age groups (Both sexes)



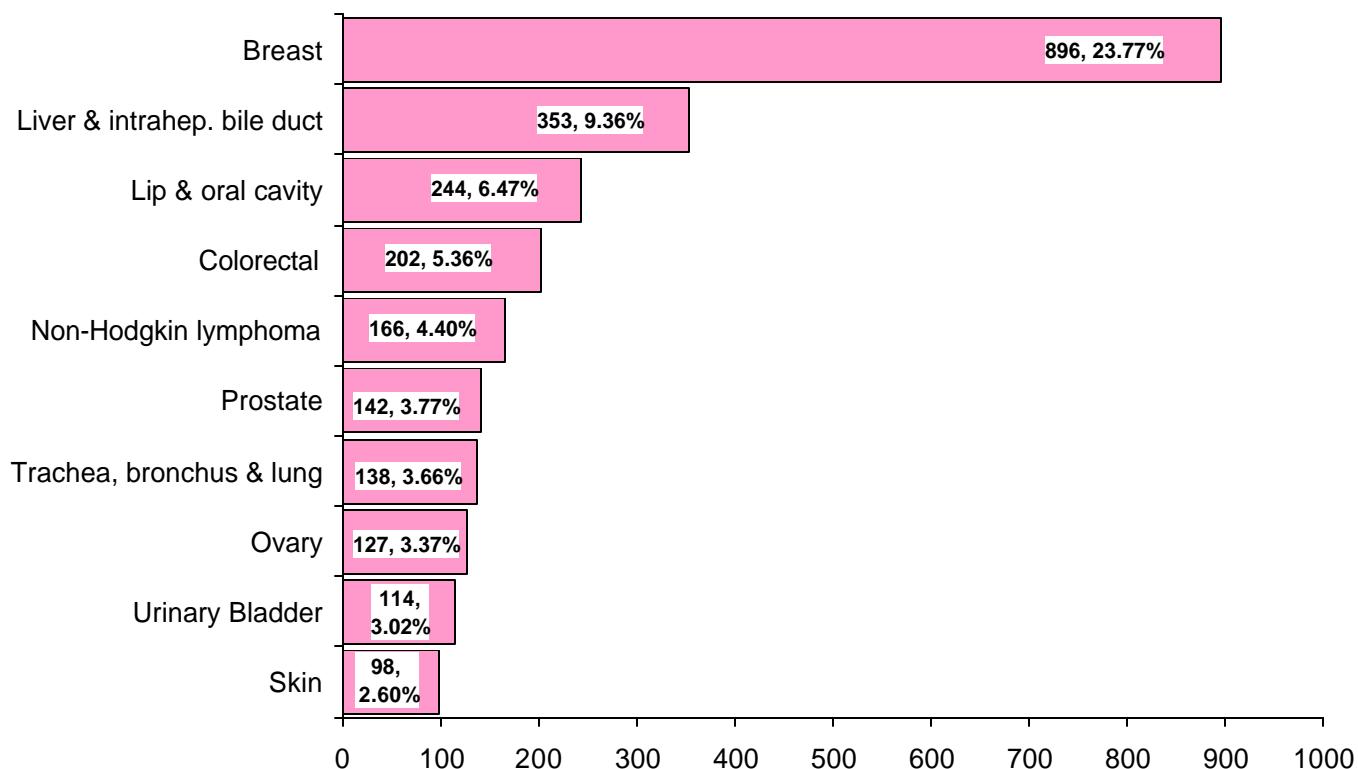
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

Amongst adults, during the year 2008, a total of 3,770 malignancies were diagnosed or treated at the Hospital. Breast cancer, liver & intra-hepatic bile ducts and lip & oral cavity were registered as the most frequently seen cancers.

Table 5. Top 10 malignancies seen amongst adults (> 18 years) at SKMCH & RC, from January 2008 till December 2008

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	896	23.77	C50 - C50.9
2	Liver and intra-hepatic bile duct	353	9.36	C22.0 - C22.1
3	Lip and oral cavity	244	6.47	C00.0 - C08.9
4	Colorectal	202	5.36	C18 - C21.8
5	Non-Hodgkin lymphoma	166	4.40	M9590,91 - M967-972
6	Prostate	142	3.77	C61.9
7	Trachea, bronchus, and lung	138	3.66	C33.9 - C34.9
8	Ovary	127	3.37	C56.9 - C57.9
9	Urinary Bladder	114	3.02	C67.0 – C67.9
10	Skin	98	2.60	C44

Adults (Both sexes)



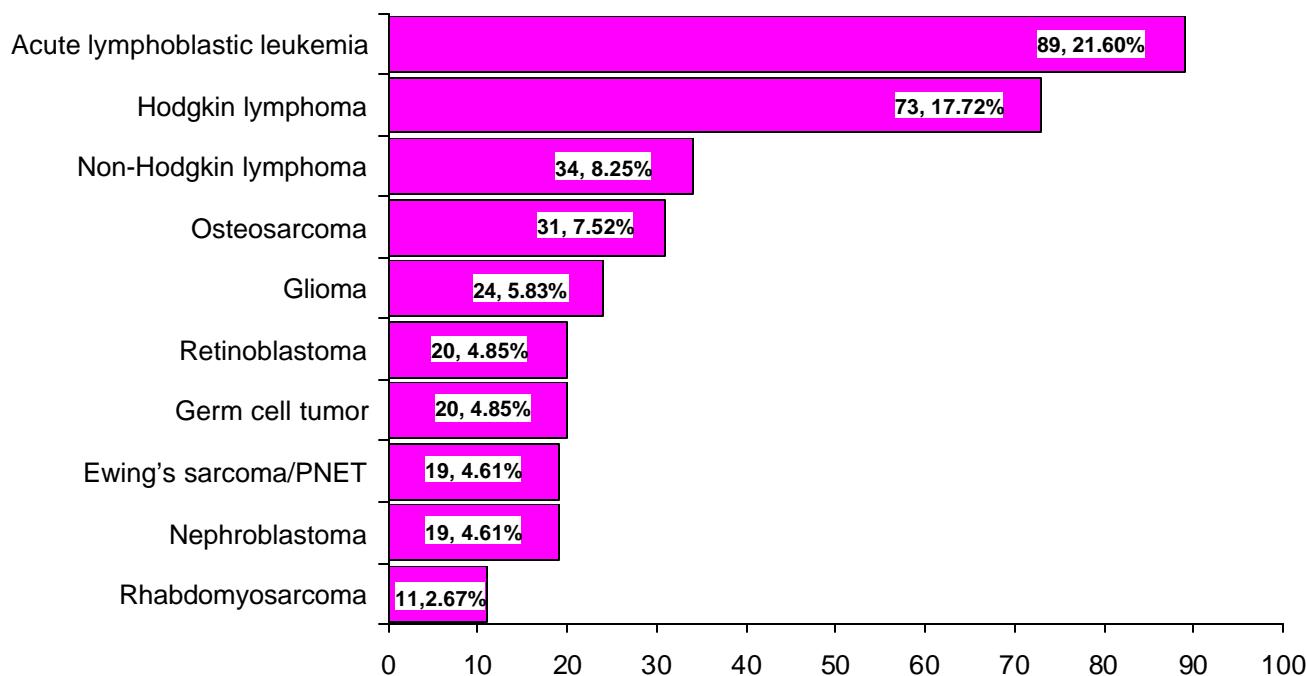
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

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

Table 6. Top 10 malignancies seen in children (<= 18 years) at SKMCH & RC, from January 2008 till December 2008

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Morphology Code
1	Acute lymphoblastic leukemia	89	21.60	M982 - M983
2	Hodgkin lymphoma	73	17.72	M9650 - M9667
3	Non-Hodgkin lymphoma	34	8.25	M9590, 91- M967-972
4	Osteosarcoma	31	7.52	M9180 - M9195
5	Glioma	24	5.83	M938 - M948
6	Retinoblastoma	20	4.85	M9510 - M9514
7	Germ cell tumor	20	4.85	M906 - M909
8	Nephroblastoma	19	4.61	M8960
9	Ewing's sarcoma/PNET	19	4.61	M9260 - M9364
10	Rhabdomyosarcoma	11	2.67	M8900 - M8921

Pediatrics (both sexes)



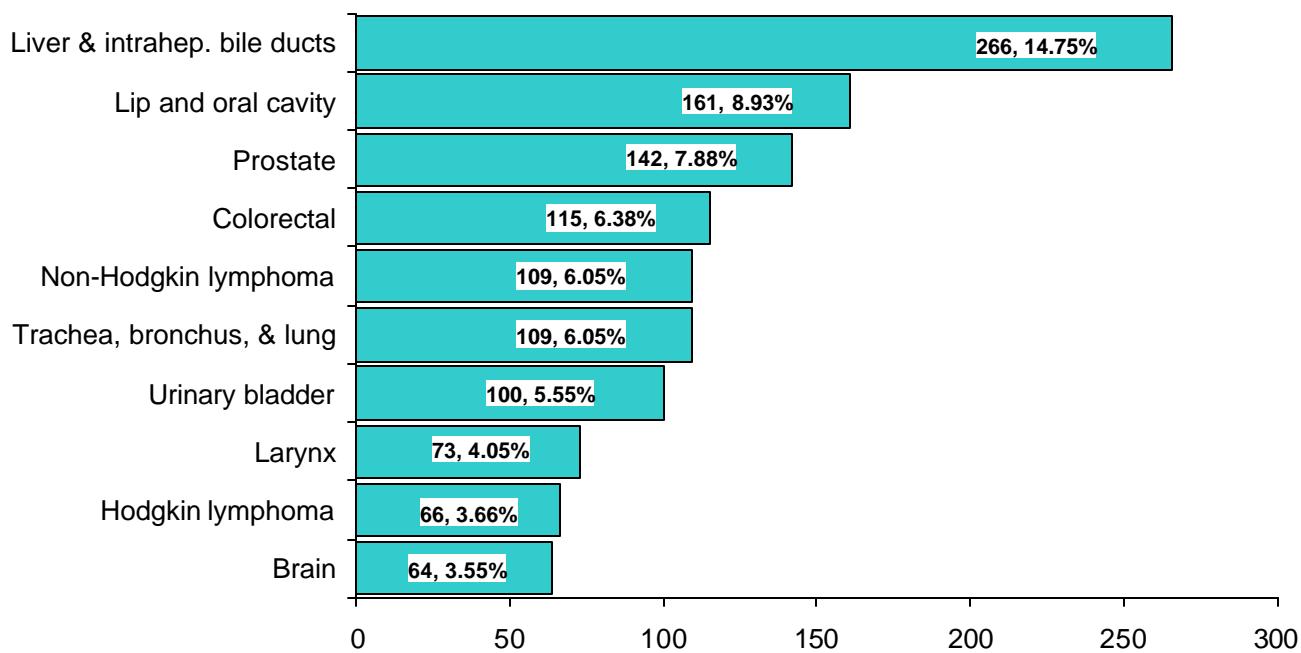
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

In adult males, the commonest malignancies were liver cancer, lip & oral cavity and Prostate (Table 7).

Table 7. Top 10 malignancies in adult males seen at SKMCH & RC from January 2008 till December 2008

Sr.No.	ICD Category	Count	Percentage	ICD-O-3 Code
1	Liver and intra-hepatic bile ducts	266	14.75	C22.0 - C22.1
2	Lip and oral cavity	161	8.93	C00.0 - C08.9
3	Prostate	142	7.88	C61.9
4	Colorectal	115	6.38	C18 - C21.8
5	Non-Hodgkin lymphoma	109	6.05	M9590, 91- M967-972
6	Trachea, bronchus, and lung	109	6.05	C33 - C34.9
7	Urinary bladder	100	5.55	C67.0 - C67.9
8	Larynx	73	4.05	C32.0 – C32.9
9	Hodgkin lymphoma	66	3.66	M9650 - M9667
10	Brain	64	3.55	C71.0 - C71.9

Adult Males



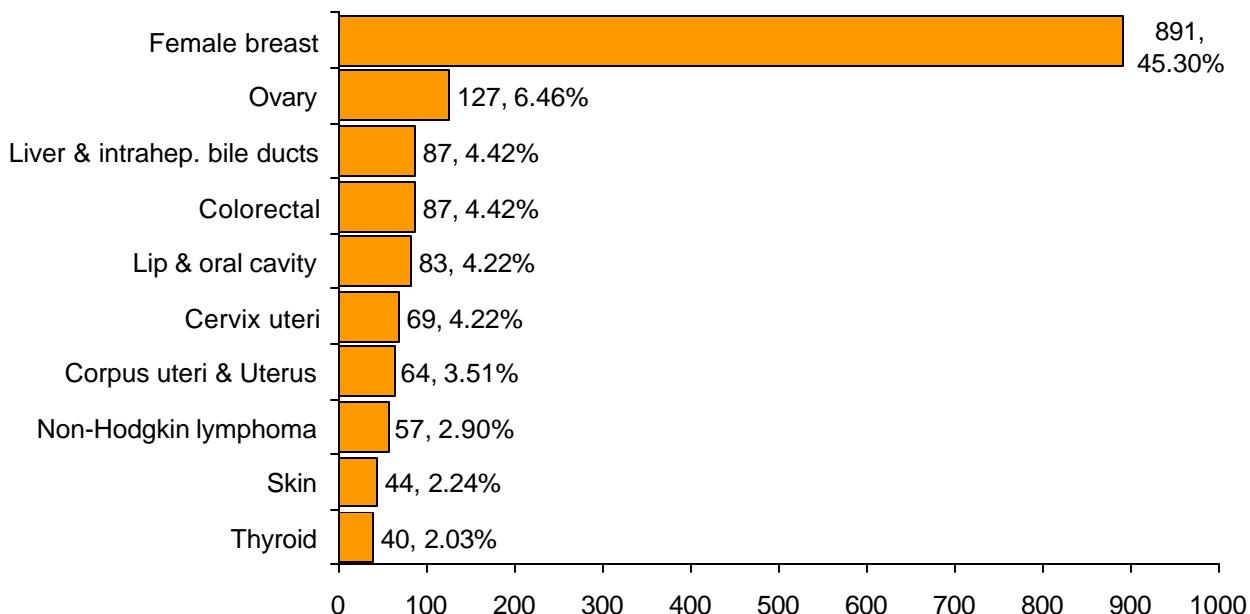
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

The most frequent diagnosis in adult women was breast cancer accounting for 45.30% of the total cancers in females. Ovary was ranked as the second highest cancer accounting for 6.46% and, liver & intrahepatic bile ducts and colorectal are equally the third most common malignancies with 4.42% of the total malignancies in females.

Table 8. Top 10 malignancies seen at SKMCH & RC from January 2008 till December 2008 amongst adult females

Sr. No.	ICD Category	Count	Percentage	ICD-O 3 Code
1	Female breast	891	45.30	C50.0 - C50.9
2	Ovary	127	6.46	C56.9 - C57.9
3	Liver and intra-hepatic bile ducts	87	4.42	C22.0 - C22.1
4	Colorectal	87	4.42	C18.0 - C21.8
5	Lip and oral cavity	83	4.22	C00.0 - C08.9
6	Cervix uteri	69	3.51	C53.0 - C53.9
7	Corpus uteri & Uterus	64	3.25	C54.0 - C55.9
8	Non-Hodgkin lymphoma	57	2.90	M9590, 91- M967-972
9	Skin	44	2.24	C44
10	Thyroid	40	2.03	C73.9

Adult Females



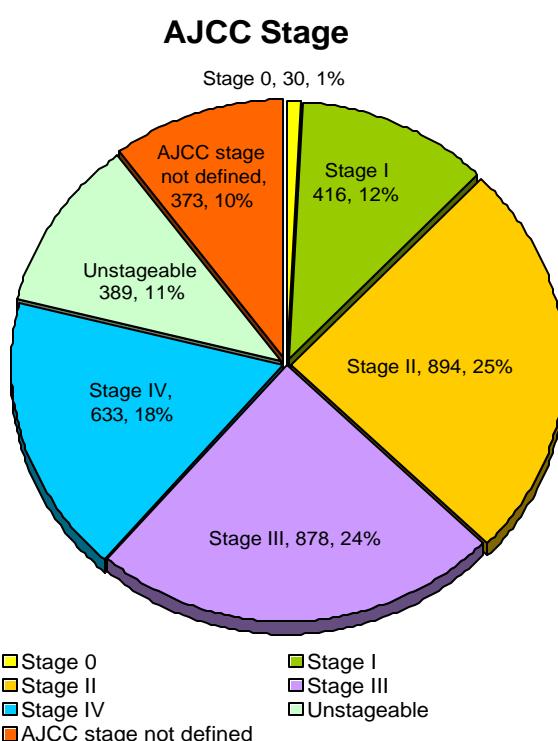
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

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 2008, cancer staging for 3,613 analytical cases (class of case 0, 1, 2) showed that 30 (0.83%) cases fell into 0 or in situ category, 416 (11.51%) in stage I, 894 (24.74%) in stage II, 878 (24.30%) cases in stage III, and 633 (17.52%) in stage IV, (table 9); 389 (10.80%) cases were unstageable and 373 (10.32%) had no AJCC stage defined for that site.

Table 9. Cancer stage of patients at SKMCH & RC during year 2008

AJCC Stage	No. of Patients
Stage 0	30
Stage I	416
Stage II	894
Stage III	878
Stage IV	633
Unstageable	389
AJCC stage not defined	373
Total	3613



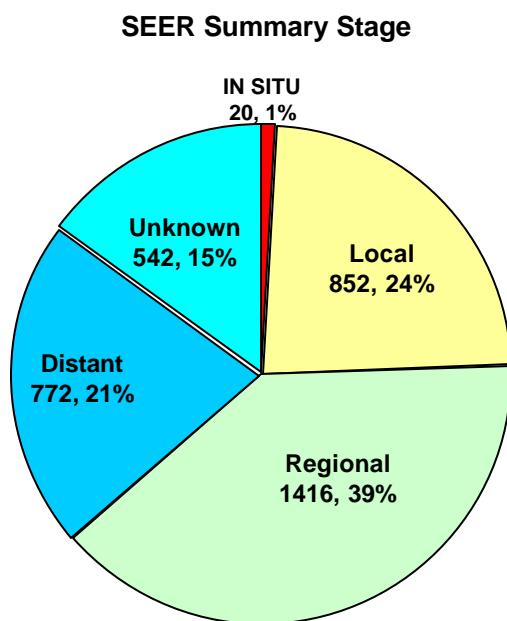
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

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 2008 reflects that there were 0.86% in situ cases, 23.58% localized cancers, 39.19% regional cases, 21.37% distant, and there were 15.00% cases in which the summary stage was unknown.

Table 10. Classification according to the SEER summary stage during the year 2008

SEER Summary Stage	
In situ	31
Local	852
Regional	1416
Distant	772
Unknown	542
TOTAL	3,613



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 2008.

Grade / Differentiation	Count	Percentage
Grade I	207	6.80
Grade II	775	25.46
Grade III	781	25.66
Grade IV	51	1.68
Grade not determined	1230	40.41
Total	3044	100.00

SUPPLEMENTAL INFORMATION

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

Table 12. Distribution of Primary Malignant Sites, 2008

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																		1	1
C01-C02	Tongue							1	1	8	3	3	6	5	3	2		1		33
C03	Gum							1	1	2						2		2		8
C04-C06	Floor & other part of mouth	1				1	1	1	1	2	6	4	4	3		2		1		27
C07-C08	Salivary gland		1		2		3	1	2		2		2	1	2					16
C9-C10	Tonsil & oropharynx													1						1
C11	Nasopharynx	1		1	1	1	1		2					1						8
C12-C13	Pyriform sinus & hypopharynx							2	2	1	1		3	1	1	1				12
C15	Esophagus						1	2	4	5	2	2	3	5	1			1		26
C16	Stomach					1	2	2	1	5	2	5	4	5	1	1				29
C17	Small Intestine											1		2						3
C18	Colon					3	7	4	1	4	1	5	4	6	1	1				37
C19-C21	Rectum, anal canal & anus		3	6	6	4	3	5	5	8	6	1	5	1						53
C22	Liver & intrahepatic bile duct	2				1		1	4	11	15	16	15	15	5	3	1			89
C23-C24	Gall Bladder & extrahepatic bile duct			1					1	4	5	4	5	5	3		2			30
C25	Pancreas						1	1		3	2	1	3	3	3	3				20
C30-C31	Nasal cavity, middle ear and acc. Sinuses			1	2	1	3	3	1	2	1	4	1		1	1				21
C32	Larynx							1			1	1	2	1						6
C33-C34	Trachea, bronchus & Lung							1	1	2	3	3	1	8	6	3	1	1		30
C37-C38	Thymus, heart, mediastinum & pleura									1	1									2
C40-C41	Bone & articular cartilage	1	3	9	5	3	4		2											27
C44	Skin				1	1	2	2	1	4	5	4	4	8	7	4		2		45
C47	Peripheral nerves & auto immune nervous system	1																		1
C48	Peritoneum & Retroperitoneum					1				1		1								3
C49	Connective & soft tissue	1	1	1	6	2	9	1	7	3	3	2	2	2	3	1				44
C50	Breast					9	35	59	105	141	127	139	87	87	48	29	10	7	8	891

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						1		3	2	3		2	1	4					16
C53	Cervix uteri				1		1	4	9	13	9	9	11	5	4	2	1			69
C54	Corpus uteri						1	2	5	2	4	5	8	21	2	5		2		57
C55	Uterus									1	1			1	2					5
C56-C57	Ovary & Uterine adnexa	1	6	13	7	8	4	9	12	21	25	20	15	2	1					144
C58	Placenta						1			1										2
C64-C68	Kidney & other urinary organ	7	1	1	1	1	1	1		1	1	3	1	3	2		1			25
C67	Urinary bladder			1					1	1	2	3	1	2	2	1		1		15
C69	Eye	5	1						1		1	1						1		11
C70-C71 ~	Brain	2	3	3	2	3	2	4	1	3	4	4	4	4		2	1	1		43
C72	Other parts of nervous system								1											1
C73	Thyroid gland		1	1	4	1	2	6	7	5	3	4	2	3	3	1	1			44
C74-C75	Endocrine gland and related structure		1																	1
C76	Other and ill-defined sites				1	2	5	2	1	1	1									13
C80	Unknown primary								1	2	1	4	6	4	3	4	7	1		33
M965-M966	Hodgkin's lymphoma		5	4	6	2	4	1	3	3	1		2	2	2					35
M9590-91, 967-972	Non Hodgkin's lymphoma	1	2	4	2	4	5	3	3	4	8	6	9	5	3	4	2			65
M9731-M9732	Multiple myeloma & immuno. neoplasms														1					1
M982-M983	Lymphoid Leukemia	12	9	3	4	1			2			2		1	1					35
M984-M993	Myeloid Leukemia				7	3	4	4	3	3	1	1		2	1					29
C42.0, C42.2-4	Other lymphatic, histiocytic & hemato. tissue	2																		2
	Total	36	28	34	59	55	104	116	186	244	244	276	211	233	143	81	30	17	12	2109

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									2	1	1			5		2		1	12
C01-C02	Tongue				1	1		3	8	6	5	4	11	3	4	2	2	1		51
C03	Gum				1			3	4	5	5	8	5	5		3				39
C04-C06	Floor of mouth		1				1	2	3	10	7	7	6	5	3	2	1			48
C07-C08	Salivary gland		1		1			3	1	3	2			1	2			1		15
C9-C10	Tonsil & oropharynx									1	1		1							3
C11	Nasopharynx	1				1	1	2		4	2	3	8	1	2	1	1			27
C12-C13	Pyriform sinus & hypopharynx						2				2	1		1		1				7
C15	Esophagus			1	1	1		4	2	4	6	3	8	3	6	1	2			42
C16	Stomach					1	1	4	2	2	6	7	10	6	7	2	4		1	53
C17	Small intestine								1					1	1	1				4
C18	Colon				1	3	2	4	3	7	4	9	3	6	4	1		1		48
C19-C21	Rectum & Anal canal		1	2	4	10	4	3	8	12	3	6	7	1	5	3				69
C22	Liver & intrahepatic bile duct	1			1			2	6	13	23	43	42	50	46	23	12	2	3	267
C23-C24	Gall Bladder & extrahepatic bile duct					1		1	1	2	3	2	4	2	3	1	2			22
C25	Pancreas						2	1		4	2	5	3	4	1		1		1	24
C30-C31	Nasal cavity, middle ear and acc. Sinuses						2	2	1		4	2	3	2	2				1	19
C32	Larynx						1		3	1	7	8	12	14	12	4	7	4		73
C33-C34	Bronchus & Lung						1	1	1	4	6	13	10	19	16	15	12	3	7	108
C37-C38	Thymus, heart, mediastinum				1	1		1	1		1									6
C40-C41	Bone & articular cartilage	5	7	22	8	4	4	2	1	2	1	1								57
C44	Skin					1	5	1	2	3	5	4	3	8	11	4	7	2	2	58
C47	Peripheral nerves & auto immune nervous system	2																		2
C48	Retroperitoneum & Peritoneum			1		1									1	1				5
C49	Connective & soft tissue	5		4	8	9	8	10		3	3	3	4	5	3	1				66

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									1		3	1							5
C61	Prostate											5	12	18	32	41	17	12	4	141
C62	Testis	6			4	13	6	9	16	4	4	1	1							64
C60,C63	Penis & Other male genital organs													1		1	1			3
C67	Urinary bladder	1					2		5	8	8	7	10	19	19	15	3	1	3	101
C64-C68	Kidney & other urinary organ	8	3		2			2	2	1	7	6	7	8	8	1	1	1		57
C69	Eye	15		2				1		2	2					2	1			25
C70-C71 ~	Brain	3	7	3	4	7	7	9	10	8	8	5	4	5	1	2	1			84
C72	Spinal cord & other parts of nervous system				1		1	1	1											4
C73	Thyroid gland				1	3	7	3	3	3	2	2		3	3	1				31
C74-C75	Endocrine gland and related structure		1	2	1		3	1		1	3	1		1						14
C76	Other and ill-defined sites								1	1	1				1	1				5
C80	Unknown primary							1	3	2	1	9	8	6	5	3	1	1		40
M965-M962	Hodgkin's lymphoma	5	25	14	18	14	15	6	1	5	7	6	2	2	4	1	1			126
M9590-91, 967-972	Non hodgkin's lymphoma	9	13	5	6	5	9	4	14	12	15	11	7	9	8	7	2	5		141
M9731-M9732	Multiple myeloma & immuno. neoplasms										1		1					1		4
M982-M983	Lymphoid Leukemia	22	23	10	1	2	3					3	1		1	1	1			68
M984-M993	Myeloid Leukemia		1	4	2	5	4	2	4	4		2	1	2	1					32
C42.0, C42.2-4	Other lymphatic, histiocytic & hematopoietic tissue										1			1		1				3
	Total	77	79	55	78	82	97	88	106	125	176	194	189	225	212	146	84	37	23	2073

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

Non-malignant primary intracranial and CNS tumors reported in 2007 and onward are also included in the Registry.

~ Benign neoplasm of brain are also included in the count.

Table 13 - Pathology, site and gender - Year 2008

ICD-O-3 Site	Pathology	Female	Male	Total
C00 Lip	Squamous Cell Carcinoma, Nos Squamous Cell Carcinoma, Keratinizing, Nos	1 1	11 1	12 1
C01-C02 Tongue	Squamous Cell Carcinoma, Nos Squamous Cell Carcinoma, Keratinizing, Nos Adenoid Cystic Carcinoma Carcinoma, Nos	28 4 1	47 2 2 1	75 6 2 1
C03-C06 Gum, FOM, palate, other & unspecified parts of mouth	Squamous Cell Carcinoma, Nos Squamous Cell Carcinoma, Keratinizing, Nos Verrucous Carcinoma, Nos Carcinoma, Nos Adenoid Cystic Carcinoma Adenocarcinoma, Nos Mucoepidermoid Carcinoma Malignant Melanoma, Nos Germinoma Polymorphous Low Grade Adenocarcinoma Nk/T-Cell Lymphoma, Nasal And Nasal-Type	29 2 2 3 2 1 1 1 1 1 1 1	69 7 2 3 2 1 1 1 1 1 1 1	98 9 4 3 2 1 1 1 1 1 1 1
C07 - C08 Parotid and other major Salivary glands	Mucoepidermoid Carcinoma Carcinoma, Nos Adenocarcinoma, Nos Adenoid Cystic Carcinoma Squamous Cell Carcinoma, Nos Acinar Cell Carcinoma Dermatofibrosarcoma, Nos Carcinosarcoma, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos Malignant Lymphoma, Non-Hodgkin, Nos Malignant Myoepithelioma	6 2 3 3 1 1 1 1 1 1 1 1	5 4 2 1 1 1 1 1 1 1 1 1	11 6 5 4 2 1 1 1 1 1 1 1
C09 Tonsil	Malignant Lymphoma, Large B-Cell Diffuse Nos Squamous Cell Carcinoma, Nos Adenoid Cystic Carcinoma Burkitt Lymphoma, Nos	5 1	6 1 1 1	11 2 1 1
C10 Oropharynx	Malignant Lymphoma, Large B-Cell Diffuse Nos Squamous Cell Carcinoma, Nos		1 1	1 1
C11 Nasopharynx	Carcinoma, Nos Squamous Cell Carcinoma, Nos Carcinoma, Undifferentiated, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos Burkitt Lymphoma, Nos Malignant Lymphoma, Non-Hodgkin, Nos Mature T-Cell Lymphoma, Nos Spindle Cell Carcinoma, Nos Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, Nos	6 1 1 1 1 1 1 1 1	21 2 2 2 1 1 1 1 1	27 3 3 2 1 1 1 1 1
C12 Pyriform sinus	Squamous Cell Carcinoma, Nos	1	1	2
C13 Hypopharynx	Squamous Cell Carcinoma, Nos Carcinoma, Nos Squamous Cell Carcinoma, Keratinizing, Nos Neoplasm, Malignant	8 1 1 1	5 1 1 1	13 2 1 1
C15 Oesophagus	Squamous Cell Carcinoma, Nos Adenocarcinoma, Nos Carcinoma, Nos Squamous Cell Carcinoma In Situ, Nos Squamous Cell Carcinoma, Keratinizing, Nos	23 1 1 1 1	27 12 3 1 1	50 13 3 2 1
C16 Stomach	Adenocarcinoma, Nos Signet Ring Cell Carcinoma Malignant Lymphoma, Large B-Cell Diffuse Nos Carcinoma, Nos Marginal Zone B-Cell Lymphoma, Nos Carcinoid Tumor, Nos Mucinous Adenocarcinoma Adenocarcinoma, Intestinal Type Carcinoma, Diffuse Type Mature T-Cell Lymphoma, Nos Neuroendocrine Carcinoma, Nos	11 13 2 2 1 1 1 1 1 1	28 17 4 3 2 1 1 1 1 1	39 30 6 5 3 2 2 1 1 1

ICD-O-3 Site	Pathology	Female	Male	Total
C17 Small Intestine	Malignant Lymphoma, Large B-Cell Diffuse Nos Adenocarcinoma, Nos Burkitt Lymphoma, Nos Malignant Lymphoma, Non-Hodgkin, Nos Hodgkin Lymphoma, Nos Carcinoid Tumor, Nos Mature T-Cell Lymphoma, Nos	3 2 1	5 4 3 1 1 1	8 6 3 1 1 1
C18 Colon	Adenocarcinoma, Nos Mucinous Adenocarcinoma Signet Ring Cell Carcinoma Burkitt Lymphoma, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos Neuroendocrine Carcinoma, Nos Hodgkin Lymphoma, Nos Carcinoma, Nos Marginal Zone B-Cell Lymphoma, Nos	26 7 3 2 1 1	36 5 6 3 2 1 1 1	62 12 9 3 2 1 1 1
C19 Rectosigmoid junction	Adenocarcinoma, Nos Mucinous Adenocarcinoma Signet Ring Cell Carcinoma Malignant Lymphoma, Large B-Cell Diffuse Nos	3 2 1 1	3 3 2 1	6 5 3 1
C20 Rectum	Adenocarcinoma, Nos Signet Ring Cell Carcinoma Mucinous Adenocarcinoma Carcinoma, Nos Adenocarcinoma In Tubulovillous Adenoma Malignant Melanoma, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos Malignant Lymphoma, Non-Hodgkin, Nos	27 7 5 3 2 1 1	37 8 7 1 2 1 1 1	64 15 12 4 2 2 1 1
C21 Anus & Anal canal	Squamous Cell Carcinoma, Nos Adenocarcinoma, Nos Signet Ring Cell Carcinoma Mucinous Adenocarcinoma Basaloid Squamous Cell Carcinoma Basaloid Carcinoma	1 2 1 1	3 1 2 1 1 1	3 2 2 1 1 1
C22 Liver & Intrahepatic bile ducts	Hepatocellular Carcinoma, Nos Cholangiocarcinoma Hepatoblastoma Carcinoma, Nos Klatskin Tumor	84 3 2 1 1	260 2 1 2 1	344 5 3 2 1
C23 Gall Bladder	Adenocarcinoma, Nos Carcinoma, Nos Papillary Adenocarcinoma, Nos Adenosquamous Carcinoma	21 2 1 1	10 3 1 1	31 5 1 1
C24 Other & unspecified parts of biliary tract	Adenocarcinoma, Nos Carcinoma, Nos Cholangiocarcinoma	4 1 1	7 1 1	11 2 1
C25 Pancreas	Adenocarcinoma, Nos Carcinoma, Nos Neuroendocrine Carcinoma, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos Vipoma, Malignant Malignant Melanoma, Nos Neoplasm, Malignant	11 6 1 1 1 1	18 3 2 1 1 1	29 9 3 2 1 1
C26 Other & Ill-Defined digestive organs	Burkitt Lymphoma, Nos	1		1
C30 Nasal Cavity & Middle Ear	Malignant Melanoma, Nos Squamous Cell Carcinoma, Nos Nk/T-Cell Lymphoma, Nasal And Nasal-Type Adenocarcinoma, Nos Mature T-Cell Lymphoma, Nos Olfactory Neuroblastoma Malignant Lymphoma, Large B-Cell Diffuse Nos Basaloid Squamous Cell Carcinoma Adenoid Cystic Carcinoma	1 1 1 1 1 1 1	2 1 2 1 1 1 1	3 2 2 1 1 1 1

ICD-O-3 Site	Pathology	Female	Male	Total
C31 Accessory Sinuses	Squamous Cell Carcinoma, Nos Adenoid Cystic Carcinoma Adenocarcinoma, Nos Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, Nos Acinar Cell Carcinoma Malignant Lymphoma, Large B-Cell Diffuse Nos Liposarcoma, Nos Embryonal Rhabdomyosarcoma, Nos Carcinoma, Nos Basal Cell Adenocarcinoma Neoplasm, Malignant Pseudosarcomatous Carcinoma Neuroendocrine Carcinoma, Nos	4 4 1 2 1 1 1 1 1 1 1 1 1 1 1	5 2 3 1 1 1 1 1 1 1 1 1 1 1	9 6 4 3 1 1 1 1 1 1 1 1 1 1
C32 Larynx	Squamous Cell Carcinoma, Nos Squamous Cell Carcinoma, Keratinizing, Nos Squamous Cell Carcinoma In Situ, Nos Carcinoma In Situ, Nos Verrucous Carcinoma, Nos Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, Nos Spindle Cell Carcinoma, Nos Sarcoma, Nos Carcinoma, Nos	5 	63 3 2 1 1 1 1 1 1	68 3 2 1 1 1 1 1 1
C34 Bronchus & Lung	Non-Small Cell Carcinoma Small Cell Carcinoma, Nos Squamous Cell Carcinoma, Nos Adenocarcinoma, Nos Carcinoma, Nos Neuroendocrine Carcinoma, Nos Carcinoid Tumor, Nos Mature T-Cell Lymphoma, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos Neoplasm, Malignant Malignant Lymphoma, Nos Bronchiolo-Alveolar Adenocarcinoma, Nos Adenoid Cystic Carcinoma	15 4 1 5 1 1 1 1 1 1 1 1 1 1	37 25 27 12 4 1 1 1 1 1 1 1 1 1	52 29 28 17 5 2 2 1 1 1 1 1 1 1
C37 Thymus	Thymoma, Malignant, Nos			1 1
C38 Heart, Mediastinum & Pleura	Hodgkin Lymphoma, Mixed Cellularity, Nos Hodgkin Lymphoma, Nodular Sclerosis, Nos Seminoma, Nos Mesothelioma, Malignant Teratoma, Malignant, Nos Malignant Peripheral Nerve Sheath Tumor Malignant Lymphoma, Large B-Cell Diffuse Nos Precursor Cell Lymphoblastic Lymphoma, Nos Precursor T-Cell Lymphoblastic Lymphoma	1 	2 2 3 1 1 1 1 1	3 2 3 2 2 1 1 1
C40 - C41 Bones, Joints & Articular Cartilage	Osteosarcoma, Nos Ewing Sarcoma Chondroblastic Osteosarcoma Chondrosarcoma, Nos Malignant Lymphoma, Large B-Cell Diffuse Nos Adamantinoma Of Long Bones Parosteal Osteosarcoma Synovial Sarcoma, Nos Myxoid Chondrosarcoma Malignant Fibrous Histiocytoma Leiomyosarcoma Nos Giant Cell Tumor Of Bone, Malignant Spindle Cell Sarcoma Sarcoma, Nos Small Cell Osteosarcoma	11 11 3 1 2 2 1 1 1 1 1 1 1 1	31 13 1 3 3 2 1 1 1 1 1 1 1 1	42 24 4 4 5 2 1 1 1 1 1 1 1 1

ICD-O-3 Site	Pathology	Female	Male	Total
C42 Bone Marrow	Precursor B-Cell Lymphoblastic Leukemia	23	50	73
	Chronic Myeloid Leukemia, Nos	22	23	45
	B-Cell Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma	5	7	12
	Precursor T-Cell Lymphoblastic Leukemia	4	8	12
	Acute Myeloid Leukemia, Nos	5	4	9
	Precursor Cell Lymphoblastic Leukemia, Nos	3	3	6
	Acute Promyelocytic Leukemia	1	2	3
	Multiple Myeloma	1	3	4
	Myelodysplastic Syndrome, Nos		2	2
	Acute Myeloid Leukemia With Maturation Fab M2, Nos		1	1
	Chronic Myelogenous Leukemia, Bcr/Abl Positive		1	1
	Acute Myelomonocytic Leukemia Fab M4	1		1
	Hairy Cell Leukemia		1	1
	Acute Myeloid Leukemia, M6 Type		1	1
C44 Skin	Squamous Cell Carcinoma, Nos	17	20	37
	Basal Cell Carcinoma, Nos	9	13	22
	Malignant Melanoma, Nos	4	6	10
	Dermatofibrosarcoma, Nos	4	5	9
	Basal Cell Carcinoma, Nodular	2	5	7
	Squamous Cell Carcinoma, Keratinizing, Nos	2	4	6
	Malignant Lymphoma, Large B-Cell Diffuse Nos	1	2	3
	Squamous Cell Carcinoma In Situ, Nos	1	2	3
	Kaposi Sarcoma		2	2
	Basal Cell Adenocarcinoma	1		1
	Infiltrating Basal Cell Carcinoma, Nos	1		1
	Nodular Melanoma		1	1
	Carcinosarcoma, Nos	1		1
	Skin appendage Carcinoma, Nos		1	1
	Bowen Disease	1		1
	Merkel Cell Carcinoma	1		1
	Neoplasm, Malignant	1		1
C47 Peripheral Nerves & Auto Immune Nervous System	Neuroblastoma, Nos	1	2	3
C48 Retroperitoneum & Peritoneum	Leiomyosarcoma Nos	1	1	2
	Neoplasm, Malignant		1	1
	Liposarcoma, Well Differentiated	1		1
	Liposarcoma, Nos	1		1
	Spindle Cell Sarcoma		1	1
	Dysgerminoma	1		1
C49 Connective, Subcutaneous & Other Soft Tissues	Synovial Sarcoma, Nos	10	14	24
	Spindle Cell Sarcoma	6	11	17
	Sarcoma, Nos	9	3	12
	Ewing Sarcoma	1	6	7
	Myxoid Liposarcoma		6	6
	Embryonal Rhabdomyosarcoma, Nos	1	4	5
	Rhabdomyosarcoma, Nos	2	3	5
	Gastrointestinal Stromal Sarcoma	2	2	4
	Leiomyosarcoma Nos	4	1	5
	Synovial Sarcoma, Spindle Cell	1	3	4
	Fibromyxosarcoma	2	2	4
	Malignant Peripheral Nerve Sheath Tumor	1	2	3
	Alveolar Soft Part Sarcoma		2	2
	Epithelioid Sarcoma	1	1	2
	Liposarcoma, Well Differentiated		2	2
	Synovial Sarcoma, Biphasic	2		2
	Malignant Fibrous Histiocytoma		1	1
	Round Cell Liposarcoma		1	1
	Fibrosarcoma, Nos	1		1
	Mesenchymal Chondrosarcoma		1	1
	Undifferentiated Sarcoma		1	1
	Liposarcoma, Nos	1		1
	Spindle Cell Rhabdomyosarcoma		1	1

ICD-O-3 Site	Pathology	Female	Male	Total
C50 Breast	Infiltrating Duct Carcinoma, Nos	723	4	727
	Lobular Carcinoma, Nos	37		37
	Infiltrating Duct And Lobular Carcinoma	36		36
	Carcinoma, Nos	33	1	34
	Intraductal Carcinoma, Noninfiltrating, Nos	13		13
	Mucinous Adenocarcinoma	8		8
	Phyllodes Tumor, Malignant	5		5
	Ductal Carcinoma In Situ, Solid Type	4		4
	Metaplastic Carcinoma, Nos	4		4
	Infiltrating Duct Mixed With Other Types Of Carcinoma	4		4
	Paget Disease And Infiltrating Duct Carcinoma Of Breast	4		4
	Adenocarcinoma, Nos	3		3
	Intraductal Micropapillary Carcinoma	3		3
	Comedocarcinoma, Noninfiltrating	2		2
	Malignant Lymphoma, Large B-Cell Diffuse Nos	2		2
	Medullary Carcinoma, Nos	2		2
	Neoplasm, Malignant	2		2
	Spindle Cell Sarcoma	2		2
	Serous adenocarcinoma, Nos	1		1
	Malignant Lymphoma, Non-Hodgkin, Nos	1		1
	Inflammatory Carcinoma	1		1
	Comedocarcinoma, noninfiltrating Nos	1		1
	Intracystic Carcinoma, Nos	1		1
	Papillary Adenocarcinoma, Nos	1		1
	Anaplastic Large Cell Lymphoma, T Cell And Null Cell Type	1		1
C51 Vulva	Squamous Cell Carcinoma, Nos	8		8
	Adenoid Cystic Carcinoma	1		1
	Squamous Cell Carcinoma, Keratinizing, Nos	1		1
	Basaloid Squamous Cell Carcinoma	1		1
	Basal Cell Carcinoma, Nos	1		1
C52 Vagina	Squamous Cell Carcinoma, Nos	2		2
	Papillary Carcinoma, Nos	1		1
	Squamous Cell Carcinoma, Keratinizing, Nos	1		1
C53 Cervix Uteri	Squamous Cell Carcinoma, Nos	21		21
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, Nos	19		19
	Squamous Cell Carcinoma, Keratinizing, Nos	11		11
	Adenocarcinoma, Nos	4		4
	Carcinoma, Nos	4		4
	Clear Cell Adenocarcinoma, Nos	3		3
	Adenosquamous Carcinoma	2		2
	Squamous Cell Carcinoma, Small Cell, Nonkeratinizing	1		1
	Mucinous Adenocarcinoma	1		1
	Squamous Intraepithelial Neoplasia, Grade Iii	1		1
	Basaloid Squamous Cell Carcinoma	1		1
	Endometrioid Adenocarcinoma, Nos	1		1
C54 Corpus Uteri	Endometrioid Adenocarcinoma, Nos	32		32
	Adenocarcinoma, Nos	5		5
	Carcinoma, Nos	5		5
	Serous adenocarcinoma, Nos	4		4
	Papillary Serous Cystadenocarcinoma	2		2
	Mullerian Mixed Tumor	2		2
	Papillary Adenocarcinoma, Nos	1		1
	Endometrial Stromal Sarcoma, Nos	1		1
	Endometrial Stromal Sarcoma, Low Grade	1		1
	Clear Cell Adenocarcinoma, Nos	1		1
	Carcinosarcoma, Nos	1		1
	Stromal Sarcoma, Nos	1		1
	Adenosquamous Carcinoma	1		1
C55 Uterus, Nos	Mullerian Mixed Tumor	2		2
	Adenocarcinoma, Nos	1		1
	Leiomyosarcoma Nos	1		1
	Clear Cell Adenocarcinoma, Nos	1		1

ICD-O-3 Site	Pathology	Female	Male	Total
C56 Ovary	Endometrioid Adenocarcinoma, Nos	24		24
	Carcinoma, Nos	19		19
	Adenocarcinoma, Nos	17		17
	Papillary Serous Cystadenocarcinoma	17		17
	Serous adenocarcinoma, Nos	15		15
	Dysgerminoma	8		8
	Granulosa Cell Tumor, malignant	6		6
	Clear Cell Adenocarcinoma, Nos	5		5
	Yolk Sac Tumor	5		5
	Mixed Germ Cell Tumor	4		4
	Teratoma, Malignant, Nos	3		3
	Sertoli-Leydig Cell Tumor, Poorly Differentiated	2		2
	Papillary Cystadenocarcinoma, Nos	2		2
	Mucinous Adenocarcinoma	2		2
	Teratocarcinoma	1		1
	Serous Cystadenocarcinoma	1		1
	Granulosa Cell Tumor	1		1
	Germinoma	1		1
	Papillary Adenocarcinoma, Nos	1		1
	Embryonal Carcinoma, Nos	1		1
	Serous Surface Papillary Carcinoma	1		1
	Mucinous Cystadenocarcinoma, Nos	1		1
	Choriocarcinoma, Nos	1		1
	Carcinosarcoma, Nos	1		1
	Neoplasm, Malignant	1		1
	Carcinoma In Situ, Nos	1		1
C57 Other & Unspecified female genital organs	Carcinoma In Situ, Nos	1		1
	Teratoma, Malignant, Nos	1		1
C58 Placenta	Choriocarcinoma, Nos	2		2
C60 Penis	Squamous Cell Carcinoma, Nos		3	3
C61 Prostate	Adenocarcinoma, Nos		124	124
	Carcinoma, Nos		16	16
	Neoplasm, Malignant		1	1
C62 Testis	Mixed Germ Cell Tumor		25	25
	Seminoma, Nos		22	22
	Yolk Sac Tumor		9	9
	Embryonal Carcinoma, Nos		4	4
	Malignant Lymphoma, Large B-Cell Diffuse Nos		4	4
	Germinoma		2	2
	Teratoma, Malignant, Nos		1	1
	Stromal Sarcoma, Nos		1	1
C64 Kidney	Renal Cell Carcinoma, Nos	13	25	38
	Nephroblastoma, Nos	8	11	19
	Transitional Cell Carcinoma, Nos	1	4	5
	Renal Cell Carcinoma, Sarcomatoid		4	4
	Papillary Adenocarcinoma, Nos		4	4
	Clear Cell Adenocarcinoma, Nos		2	2
	Papillary Transitional Cell Carcinoma		2	2
	Renal Cell Carcinoma, Chromophobe Type	1	1	2
	Neoplasm, Malignant		1	1
	Leiomyosarcoma Nos		1	1
	Clear Cell Sarcoma Of Kidney	1	1	2
C67 Bladder	Transitional Cell Carcinoma, Nos	9	74	83
	Papillary Transitional Cell Carcinoma	2	18	20
	Carcinoma, Nos	3	2	5
	Squamous Cell Carcinoma, Nos		2	2
	Adenocarcinoma, Nos	1		1
	Papillary Transitional Cell Carcinoma, Non-Invasive		1	1
	Papillary Carcinoma In Situ		1	1
	Mucinous Adenocarcinoma		1	1
	Embryonal Rhabdomyosarcoma, Nos		1	1
	Small Cell Carcinoma, Nos		1	1
C68 Other & Unspecified urinary organs	Squamous Cell Carcinoma, Nos	1	1	2

ICD-O-3 Site	Pathology	Female	Male	Total
C77 Lymph Nodes	Hodgkin Lymphoma, Mixed Cellularity, Nos	14	76	90
	Malignant Lymphoma, Large B-Cell Diffuse Nos	19	42	61
	Hodgkin Lymphoma, Nodular Sclerosis, Nos	14	20	34
	Hodgkin Lymphoma, Nos	3	14	17
	Burkitt Lymphoma, Nos	2	9	11
	Hodgkin Lymphoma, Nodular Lymphocyte Predominance	3	7	10
	Anaplastic Large Cell Lymphoma, T Cell And Null Cell Type	1	5	6
	Follicular Lymphoma, Grade 1	3	2	5
	Malignant Lymphoma, Non-Hodgkin, Nos	1	4	5
	B-Cell Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma	1	4	5
	Precursor Cell Lymphoblastic Lymphoma, Nos		3	3
	Precursor T-Cell Lymphoblastic Lymphoma	1	2	3
	Mantle Cell Lymphoma		2	2
	Langerhans Cell Histiocytosis, Disseminated	2		2
	Follicular Lymphoma, Grade 2	1	1	2
	Hodgkin Lymphoma, Lymphocyte Depletion, Nos		2	2
	Follicular Lymphoma, Grade 3	1	1	2
	Malignant Lymphoma, Large B-Cell, Diffuse, Immunoblastic, Nos		1	1
	Follicular Lymphoma, Nos	1		1
	Mature T-Cell Lymphoma, Nos	1		1
	Malignant Lymphoma, Small B Lymphocytic, Nos	1		1
	Hodgkin Lymphoma, Lymphocyte-Rich		1	1
C80 Unknown Primary Site	Carcinoma, Nos	4	17	21
	Adenocarcinoma, Nos	17	11	28
	Neoplasm, Malignant	6	8	14
	Signet Ring Cell Carcinoma	2	2	4
	Mucinous Adenocarcinoma	1	1	2
	Neuroendocrine Carcinoma, Nos	1		1
	Marginal Zone B-Cell Lymphoma, Nos	1		1
	Squamous Cell Carcinoma, Nos		1	1
	Small Cell Carcinoma, Nos	1		1
**Other Reportable Benign Neoplasms	Pituitary Adenoma, Nos	12	8	20
	Meningioma, Nos	8	5	13
	Craniopharyngioma		6	6
	Subependymal Giant Cell Astrocytoma	1		1
	Neurilemoma, Nos	1		1
	Myxopapillary Ependymoma	1		1
	Psammomatous Meningioma	1		1
	Hemangiopericytoma, Nos	1		1
Total		2109	2073	4182