

ANNUAL CANCER REGISTRY REPORT-2010

CANCER STATISTICS

Distribution of neoplasms

Of a total of 4,373 new neoplasms diagnosed or treated at the Hospital from January 01, 2010 to December 31, 2010, 2,271 were seen in male (51.93%) and 2,102 (48.07%) in female patients. Three thousand, eight hundred and forty six (3,846 ((87.95%)) neoplasms were found in adults, whereas, 527 (12.05%) 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.

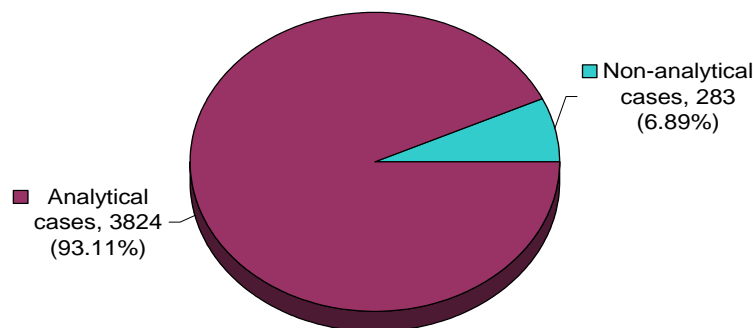
Table 1. Distribution of neoplasms by behavior and age-group.

Behavior	Age Group	Registered patients (4,333)	Reported neoplasm* (4,373)
Malignant †	Adults	3532	3566
	Pediatrics	538	541
	Total	4,070	4,107
Benign € & Uncertain Behavior	Adults	247	250
	Pediatrics	16	16
	Total	263	266

Class of Case

Of a total of 4,107 malignant cases registered at the Hospital from January 2010 to December 2010, 3,824 (93.11%) were analytical cases and 283 (6.89%) were found to be non-analytical. Figure 1 shows the stratification of analytical and non-analytical cases‡.

Fig. 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 37 and 3 patients respectively. Also 43 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.

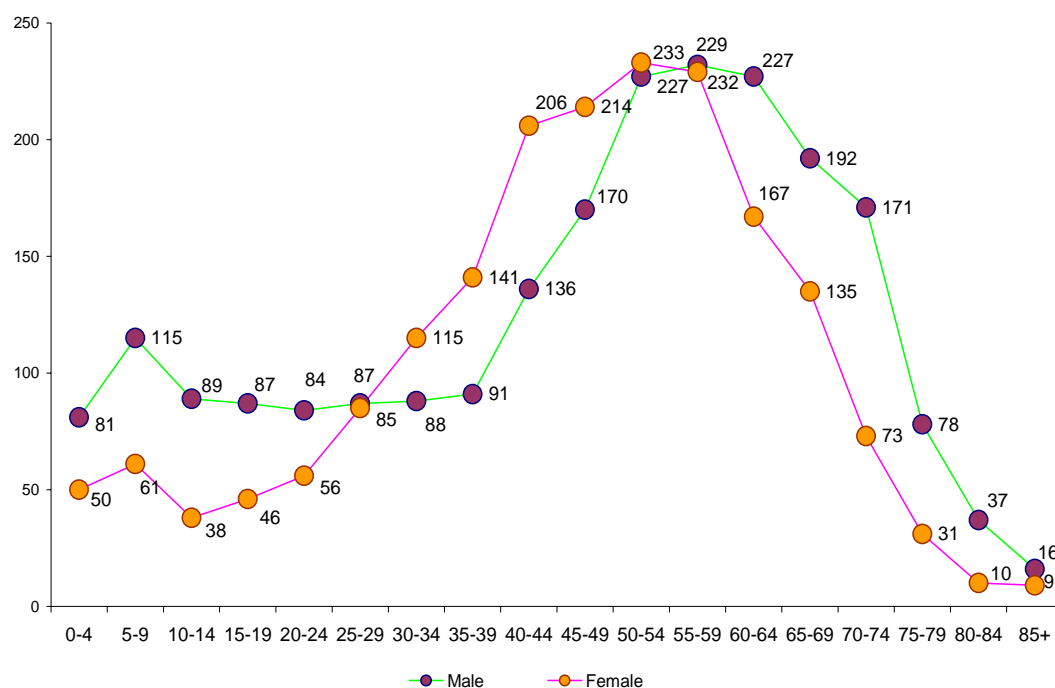
Distribution of malignancies

In the year 2010, 4,107 malignant cases were diagnosed at the Hospital with 2,208 seen amongst males and 1,899 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-group

Age range	Male	Female	Total
0-4	81	50	131
5-9	115	61	176
10-14	89	38	127
15-19	87	46	133
20-24	84	56	140
25-29	87	85	172
30-34	88	115	203
35-39	91	141	232
40-44	136	206	342
45-49	170	214	384
50-54	227	233	460
55-59	232	229	461
60-64	227	167	394
65-69	192	135	327
70-74	171	73	244
75-79	78	31	109
80-84	37	10	47
85+	16	9	25
Total	2208	1899	4107

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



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

Demographics

Of the 4,107 patients diagnosed with malignant cancers, nearly 71.10% (2,920) belonged to the province of Punjab and approximately 19.38% (796) 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	Patients	Percentage
Punjab	2,920	71.10
Khyber Pakhtoonkhwa ¹	796	19.38
Sindh	81	1.97
Federal Capital	59	1.44
Balochistan	57	1.39
F.A.T.A	75	1.82
Other countries	119	2.90
Total	4,107	100.00

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

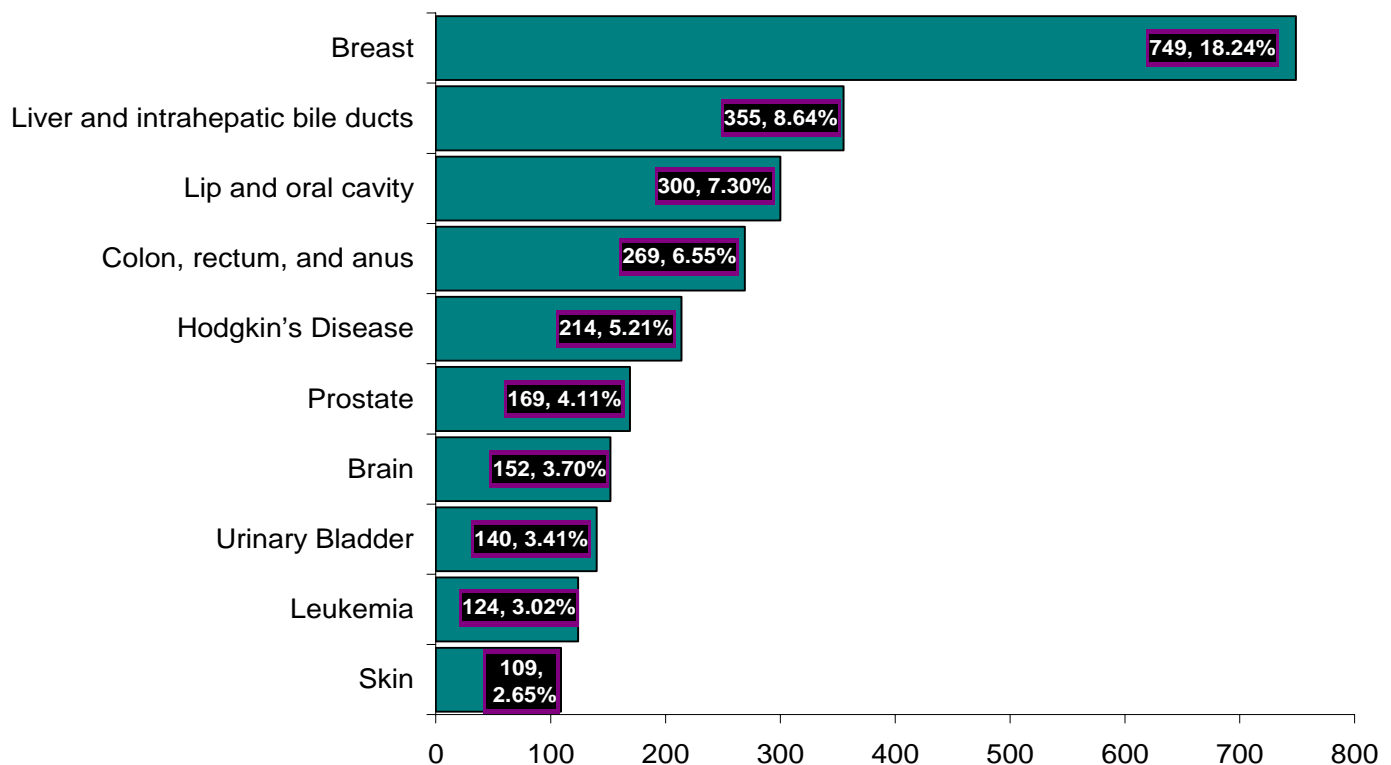
Top Ten Cancers

Table 4 shows the list of the ten commonest malignancies seen at SKMCH & RC during the year 2010. Breast cancer was the leading malignancy with 749 cases accessioned into the Registry. Liver & intra-hepatic bile ducts cancer and Lip and oral cavity cancer were the second and third most frequently seen cancers, respectively.

Table 4. Top 10 malignancies seen at SKMCH & RC in all age-groups and both sexes combined (Jan. 2010-Dec. 2010).

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	749	18.24	C50.0 - C50.9
2	Liver and intrahepatic bile ducts	355	8.64	C22.0 – C22.1
3	Lip and oral cavity	300	7.30	C00.0 - C08.9
4	Colon, rectum, and anus	269	6.55	C18.0 - C21.8
5	Hodgkin's Disease	214	5.21	M9650 - M9667
6	Prostate	169	4.11	C61.9
7	Brain	152	3.70	C71.0 - C71.9
8	Urinary Bladder	140	3.41	C67.0 - C67.9
9	Leukemia	124	3.02	M9800 - M9948
10	Skin	109	2.65	C44.0 – C44.9

Fig. 3. Top 10 malignancies seen at SKMCH & RC in all age-groups and both sexes combined (Jan. 2010-Dec. 2010).



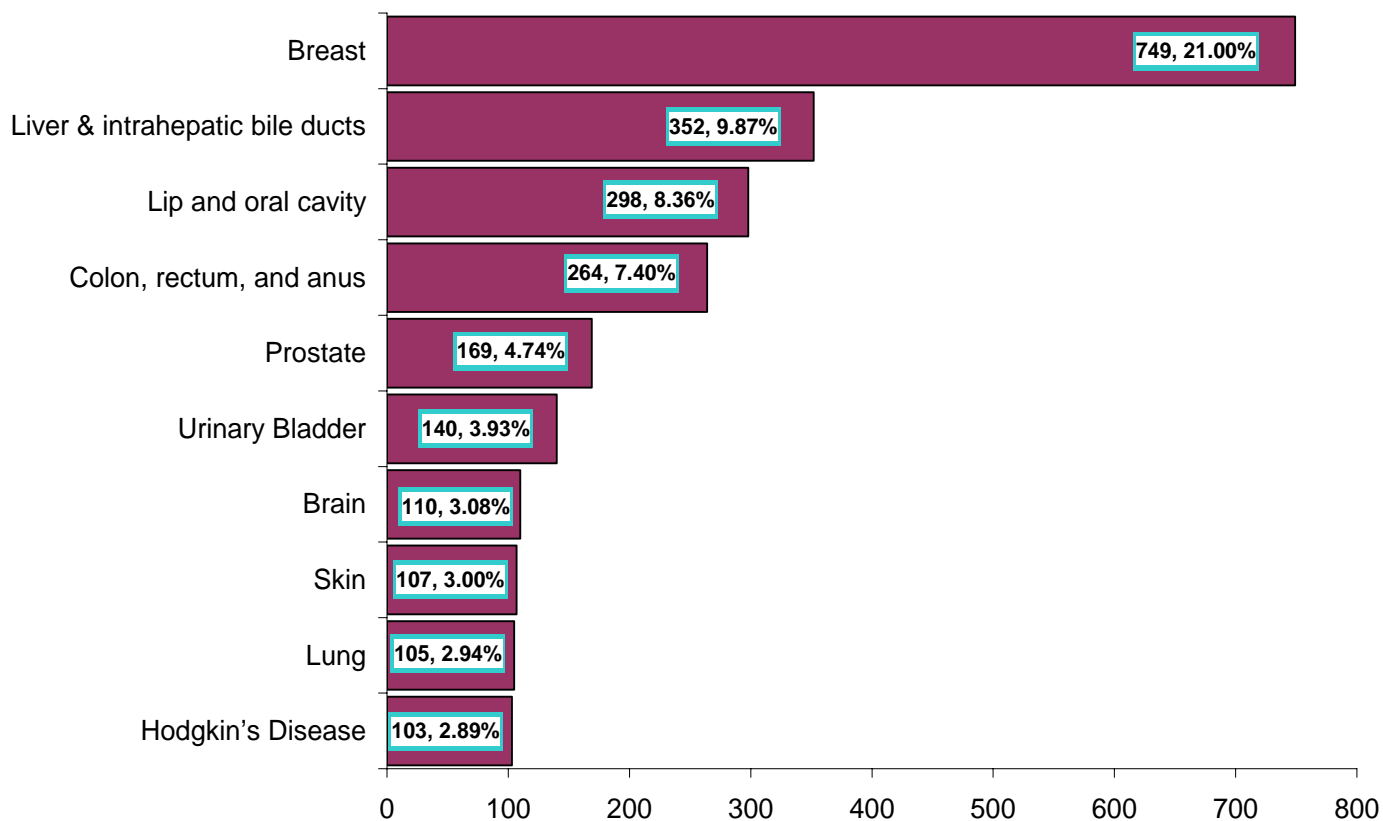
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

Amongst adults, during the year 2009, a total of 3,219 malignancies were diagnosed or treated at the Hospital. Breast cancer, lip & oral cavity and, liver & intra-hepatic bile ducts were registered as the most frequently seen cancers.

Table 5. Top 10 malignancies seen amongst adults (> 18 years) at SKMCH & RC ((Jan. 2010-Dec. 2010).

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Code
1	Breast	749	21.00	C50 - C50.9
2	Liver and intrahepatic bile ducts	352	9.87	C22.0 – C22.1
3	Lip and oral cavity	298	8.36	C00.0 - C08.9
4	Colon, rectum, and anus	264	7.40	C18 - C21.8
5	Prostate	169	4.74	C61.9
6	Urinary Bladder	140	3.93	C67.0 - C67.9
7	Brain	110	3.08	C71.0 - C71.9
8	Skin	107	3.00	C44 – C44.9
9	Lung	105	2.94	C34.0 – C34.9
10	Hodgkin’s Disease	103	2.89	M9650 - M9667

Fig. 4. Top 10 malignancies seen amongst adults (> 18 years) at SKMCH & RC (Jan. 2010-Dec. 2010)



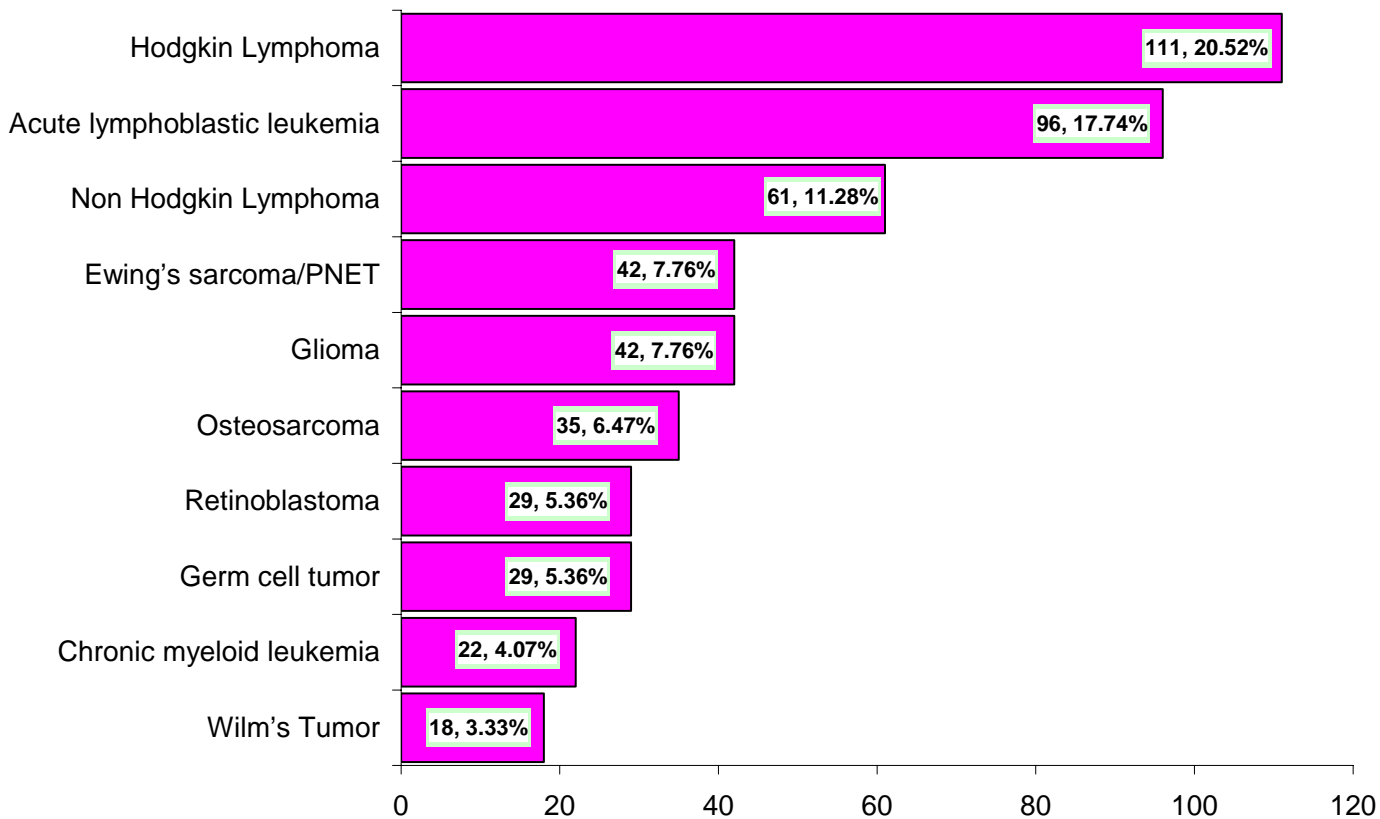
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

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) at SKMCH & RC (Jan. 2010-Dec. 2010).

Sr. No.	ICD-O-3 Category	Count	Percentage	ICD-O-3 Morphology Code
1	Hodgkin Lymphoma	111	20.52	M9650 - M9667
2	Acute lymphoblastic leukemia	96	17.74	M982- M983
3	Non Hodgkin Lymphoma	61	11.28	M9590, 91- M967-972
4	Ewing's sarcoma/PNET	42	7.76	M9260 - M9364
5	Glioma	42	7.76	M938 - M948
6	Osteosarcoma	35	6.47	M9180 - M9195
7	Retinoblastoma	29	5.36	M9510 - M9514
8	Germ cell tumor	29	5.36	M906 – M909
9	Chronic myeloid leukemia	22	4.07	M9863
10	Wilm's Tumor	18	3.33	M8960

Fig. 5. Top 10 malignancies seen in children (<= 18 years) at SKMCH & RC (Jan. 2010-Dec. 2010).



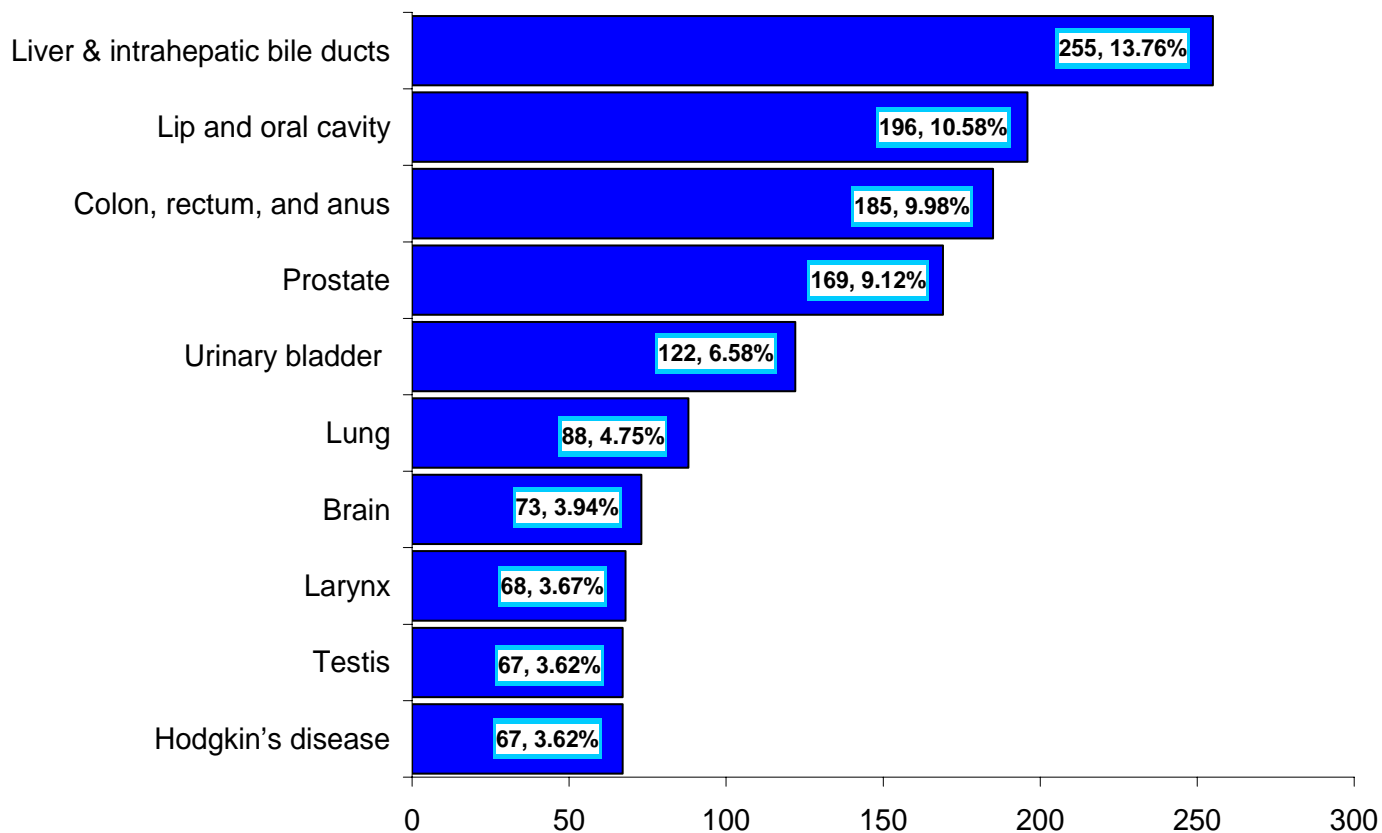
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

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

Table 7. Top 10 malignancies in adult males seen at SKMCH & RC (Jan. 2010-Dec. 2010).

Sr.No.	ICD Category	Count	Percentage	ICD-O-3 Code
1	Liver and intrahepatic bile ducts	255	13.76	C22.0 - C22.1
2	Lip and oral cavity	196	10.58	C00.0 - C08.9
3	Colon, rectum, and anus	185	9.98	C18 - C21.8
4	Prostate	169	9.12	C61.9
5	Urinary bladder	122	6.58	C67.0 – C67.9
6	Lung	88	4.75	C33-C34.9
7	Brain	73	3.94	C71.0 – C71.9
8	Larynx	68	3.67	C32.0 – C32.9
9	Testis	67	3.62	C62.0-C62.9
10	Hodgkin’s disease	67	3.62	M9650 - M9667

Fig. 6. Top 10 malignancies in adult males seen at SKMCH & RC (Jan. 2010-Dec. 2010).



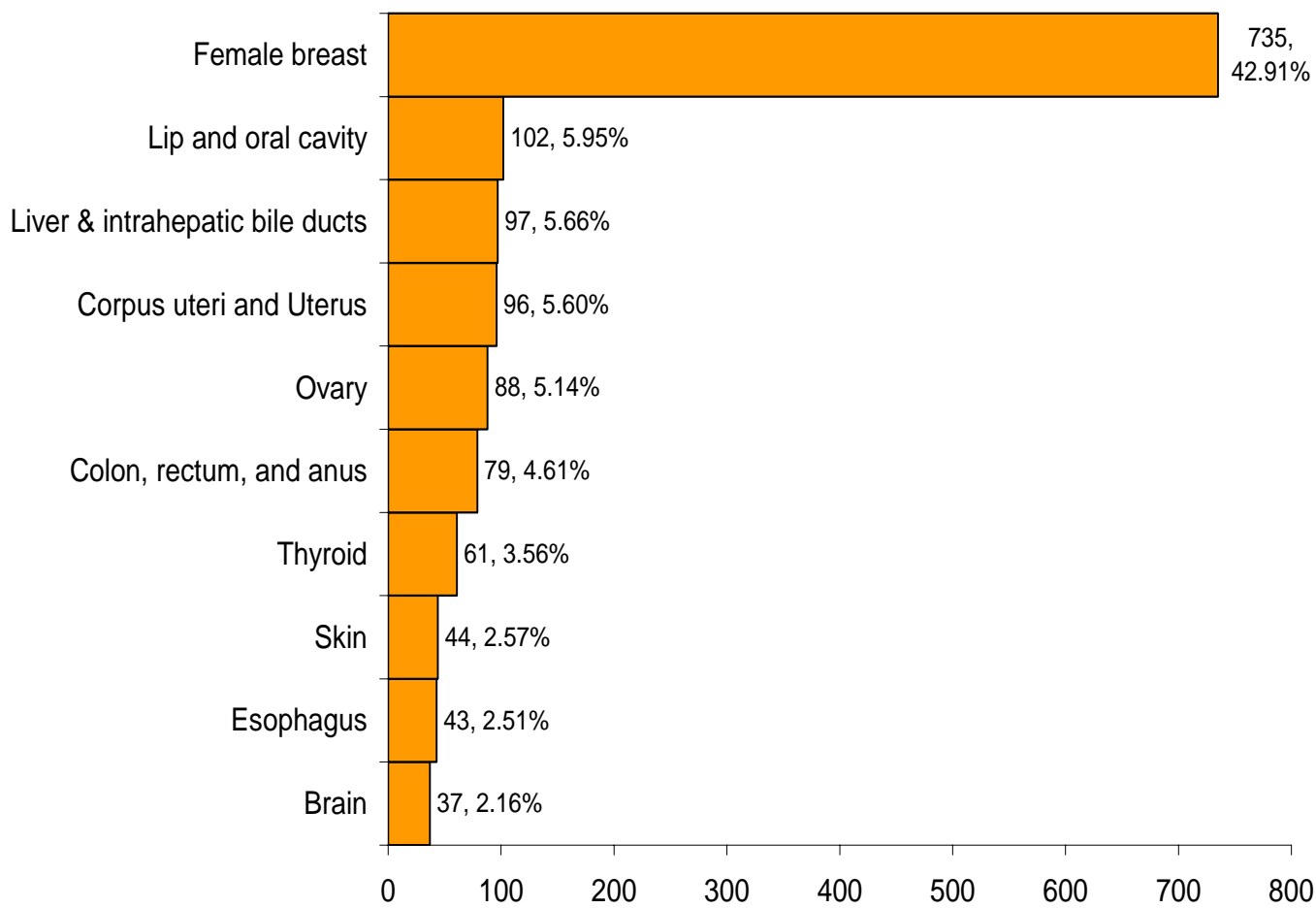
Data Source: Cancer Registry & Clinical Data Management, SKMCH & RC

The most frequent diagnosis in adult women was breast cancer accounting for 42.97% of the total cancers in females. Lip and oral cavity was ranked as the second highest cancer accounting for 5.95% and, Liver the third most common malignancy with 5.66% of the total malignancies in females.

Table 8. Top 10 malignancies seen at SKMCH & RC amongst adult females (Jan. 2010-Dec. 2010).

Sr. No.	ICD Category	Count	Percentage	ICD-O 3 Code
1	Female breast	735	42.91	C50.0 - C50.9
2	Lip and oral cavity	102	5.95	C00.0 - C08.9
3	Liver and intrahepatic bile ducts	97	5.66	C22.0 - C22.1
4	Corpus uteri and Uterus	96	5.60	C54.0 - C55.9
5	Ovary	88	5.14	C56.9
6	Colon, rectum, and anus	79	4.61	C18.0 - C21.8
7	Thyroid	61	3.56	C73.9
8	Skin	44	2.57	C44
9	Esophagus	43	2.51	C15.0-C15.9
10	Brain	37	2.16	C71.0 - C71.9

Fig. 7. Top 10 malignancies seen at SKMCH & RC amongst adult females (Jan. 2010-Dec. 2010).



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

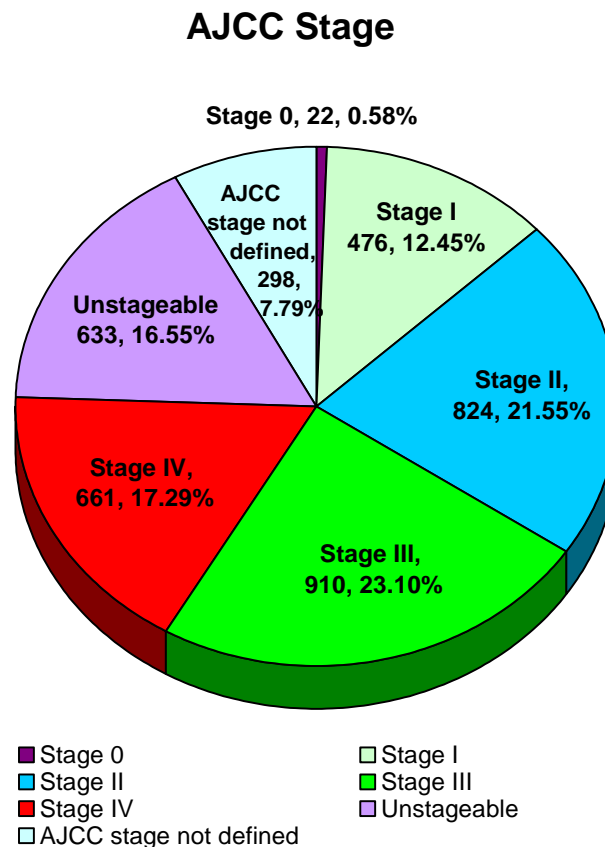
Staging

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 2010, cancer staging for 3,824 analytical cases (class of case 0, 1, 2) showed that 22 (0.58%) cases fell into 0 or in-situ category, 476 (12.44%) in stage I, 824 (21.56%) in stage II, 910 (23.80%) cases in stage III, and 661 (16.55%) in stage IV, (table 9); 633 (16.55%) cases were unstageable and 298 (7.79%) had no AJCC stage defined for that site.

Table 9. Cancer stage of patients at SKMCH & RC during year 2010.

AJCC Stage	No. of Patients	Percentage
Stage 0	22	0.58
Stage I	476	12.45
Stage II	824	21.55
Stage III	910	23.80
Stage IV	661	17.29
Unstageable	633	16.55
AJCC stage not defined	298	7.79
Total	3824	100.00

Fig. 8. Cancer stage of patients at SKMCH & RC during year 2010.



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

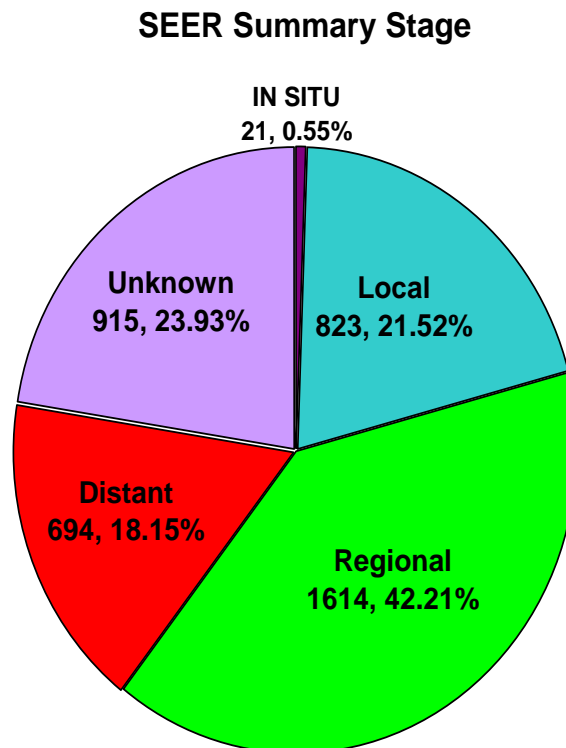
Summary Stage

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 2010 reflects that there were 0.55% in situ cases, 21.52% localized cancers, 42.21% regional cases, 18.15% distant, and there were 23.93% cases in which the summary stage was unknown.

Table 10. Classification according to the SEER summary stage during the year 2010.

SEER Summary Stage	No. of Patients	Percentage
In-situ	21	0.55
Local	823	21.52
Regional	1614	42.21
Distant	694	18.15
Unknown	915	23.93
Total	3824	100.00

Fig. 9: Classification according to the SEER summary stage during the year 2010.



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 2010.

Grade / Differentiation	Count	Percentage
Grade I	288	7.53
Grade II	874	22.86
Grade III	900	23.54
Grade IV	59	1.54
Grade not determined	1703	44.53
Total	3824	100.00

SUPPLEMENTAL INFORMATION

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

Table 12. Distribution of Primary Malignant Sites, 2010

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														2			1		3
C01-C02	Tongue				1	1		2	3	2	7	6	3	6	3	3	1			38
C03	Gum									2	4	5	1	3		5				20
C04-C06	Floor & other part of mouth					1	3		1	3		3	1	1	8	3	2			26
C07-C08	Salivary gland				1	2		4	1	2	1	2	1	2						16
C9-C10	Tonsil & oropharynx							1	1											2
C11	Nasopharynx			3	2	1	2	2		1	3	1								15
C12-C13	Pyriform sinus & hypopharynx					1	2	3	4	9	3	3	2	3		1				31
C14	Other ill-defined sites oral & pharynx													1						1
C15	Esophagus				1		3	1	4	5	3	7	12	5	2		1			44
C16	Stomach								1	4	3	2	3	2	7	1			1	24
C17	Small Intestine															1				1
C18	Colon					1	1	2	4	2	4	5	4	3	8	1	1		1	37
C19-C21	Rectum, anal canal & anus				1	7	2	4	2	2	4	5	7	4	2	2	1			43
C22	Liver & intrahepatic bile duct								2	2	13	21	23	17	10	5	2	2		97
C23-C24	Gall Bladder & extrahepatic bile duct					1			1	2	2	4	3	3	1	3			1	21
C25	Pancreas									1	1	1	1		3	4	1	1		13
C26	Other ill-defined digestive organs																			
C30-C31	Nasal cavity, middle ear and acc. Sinuses						1		2			4								7
C32	Larynx						1				1	1	1		1	1			1	7
C33-C34	Trachea, bronchus & Lung							2	3	3	1		3	1	2	2				17
C37-C38	Thymus, heart, mediastinum & pleura									2	1									3
C40-C41	Bone & articular cartilage	2	5	10	10	3	2				1	1								34
C44	Skin			1					2	4	6	7	3	9	6	2	2	3		45
C47	Peripheral nerves & auto immune nervous system																			0
C48	Peritoneum & Retroperitoneum																			0
C49	Connective & soft tissue	2		1	2	4	2	4	1	7	2	2	3	1	1		1			33
C50	Breast					6	26	59	81	109	107	107	99	55	53	23	13	2	2	742

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								2		1		2	3							8
C53	Cervix uteri						1		1		1		1		1						5
C54	Corpus uteri							3	3	4	8	7	18	21	10	7	1				82
C55	Uterus						1		1	2	1			4		1					10
C56-C57	Ovary & Uterine adnexa	1	2	5	10	4	6	8	2	11	15	14	10	9	4		2			1	104
C58	Placenta					1	2					1									4
C64-C68	Kidney & other urinary organ	6	5	1			2	1	2	4		2	4	4		1					32
C67	Urinary bladder						1		1		2	3	3	1	3	1	2			1	18
C69	Eye	9	3			1															13
C70-C71 ~	Brain	4	10	4	3	2	6	8	2	5	8	10	9	5	4	1					81
C72	Other parts of nervous system	1							1	1											3
C73	Thyroid gland		1		5	10	11	5	6	8	6	4	2	1	3	1			1	1	65
C74-C75	Endocrine gland and related structure									1				1							2
C76	Other and ill-defined sites	3								1			1								5
C80	Unknown primary					1			1	1	3	2	5	2		4					19
M965-M966	Hodgkin's lymphoma	4	13	3	4	9	9	5	3	3		1	3		1		1				59
M9590-91, 967-972	Non Hodgkin's Lymphoma	1	9	4	1		1	2	3	3	2	1									27
M9731-M9732	Multiple myeloma & immuno. neoplasms																				0
M982-M983	Lymphoid Leukemia	17	12	1	1																31
M984-M993	Myeloid Leukemia		1	5	4																10
C42.0, C42.2-4	Other lymphatic, histiocytic & hemato. tissue											1									1
	Total	50	61	38	46	56	85	116	141	206	214	233	228	167	135	73	31	10	9	1899	

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				1	1			1	1			2	3	1		1			11
C01-C02	Tongue						1	2	7	16	11	10	8	8	4	3	1	2	1	74
C03	Gum								2	1	5	7	8	7	6	2		2	1	41
C04-C06	Floor of mouth						1		1	8	9	7	5	5	5	2	1			44
C07-C08	Salivary gland			1		1	2		4	3	1	3	3	2	1	4	2			27
C9-C10	Tonsil & oropharynx													1		1				2
C11	Nasopharynx			4	4	2	2	2	1	6	5	4	3	1	1	2				37
C12-C13	Pyriiform sinus & hypopharynx					2	1	2	3	4	3	5	6	3	2	3	1			35
C15	Esophagus							4	2	4	8	8	6	3	7	1	2	1		46
C16	Stomach					1		5	1	3	7	6	10	7	11	6	1	2		60
C17	Small intestine				1				1							1				3
C18	Colon			1			3	3	10	12	14	11	9	6	6	3	2			80
C19-C21	Rectum & Anal canal				3	7	9	9	9	1	15	16	12	8	13	4	2	1		109
C22	Liver & intrahepatic bile duct	2	1						1	9	30	46	49	52	24	26	13	3	2	258
C23-C24	Gall Bladder & extrahepatic bile duct							1	1	1	1	4	5	2	2	2	1			20
C25	Pancreas					2		1	3	5	3	1	2	5	2	1	2			27
C30-C31	Nasal cavity, middle ear and acc. Sinuses					1	2		1	3	2	2	2	1	3	2				19
C32	Larynx							4	3	2	5	8	12	14	8	7	4	1		68
C33-C34	Bronchus & Lung			1			1	1	1	2	8	10	19	14	12	14	5	1		89
C37-C38	Thymus, heart, mediastinum		1		4	2		1				1							1	10
C40-C41	Bone & articular cartilage		6	21	20	13	3	3		3	2	1					1			73
C44	Skin			1		1	1	3	4	4	4	2	10	6	5	10	5	3	5	64
C47	Peripheral nerves & auto immune nervous system																			0
C48	Retroperitoneum & Peritoneum	1			1	1														3
C49	Connective & soft tissue	2		3	2	8	4	8	2	5	1	6	3	1			1			46

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			1	3	1	1			7
C61	Prostate										2	6	13	26	42	42	17	16	5	169
C62	Testis	3			8	13	15	10	5	9	2	6	2	1	1					75
C60,C63	Penis & Other male genital organs												1	2			1			4
C67	Urinary bladder						2	2	4	4	7	12	20	21	16	22	9	2	1	122
C64-C68	Kidney & other urinary organ	6	1	1				1	5	7	1	18	7	5	7	1	1	1		62
C69	Eye	12	5									1		1	1					20
C70-C71 ~	Brain	5	11	6	7	11	19	9	5	13	7	11	8	7	1	3	2			125
C72	Spinal cord & other parts of nervous system	1						1		1	1									4
C73	Thyroid gland				2	1	3	1	3	1	1	5	3	1	2	2				25
C74-C75	Endocrine gland and related structure		1			1				1		1			1					5
C76	Other and ill-defined sites	3					1													4
C80	Unknown primary						2	1	1	1	2	1	3	9	1	4	1	2		28
M965-M962	Hodgkin's lymphoma	3	42	27	19	11	13	12	7	2	10	4	1	2	2		1			156
M9590-91, 967-972	Non hodgkin's lymphoma	5	23	13	6	4	1	2	3	4	2	4		2	2	2				73
M9731-M9732	Multiple myeloma & immuno. neoplasms																			0
M982-M983	Lymphoid Leukemia	36	21	5	3	1	1													67
M984-M993	Myeloid Leukemia	2	3	4	6															15
C42.0, C42.2-4	Other lymphatic, histiocytic & hemato. Tissue			1																1
	Total	81	115	89	87	84	87	88	91	136	170	227	232	227	192	171	78	37	16	2208

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

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

Table 13 - Pathology, site and gender - Year 2010

ICD-O-3 Site	Pathology	Female	Male	Total
C00 Lip	Squamous Cell Carcinoma, Nos	2	11	13
	Carcinoma, Nos	1		1
C01-C02 Tongue	Squamous Cell Carcinoma, Nos	31	57	88
	Squamous Cell Carcinoma, Keratinizing, Nos	5	12	17
	Carcinoma, Nos		3	3
	Adenoid Cystic Carcinoma	1	1	2
	Adenocarcinoma, Nos	1		1
	Mucoepidermoid Carcinoma		1	1
C03-C06 Gum, FOM, palate, other & unspecified parts of mouth	Squamous Cell Carcinoma, Nos	42	67	109
	Squamous Cell Carcinoma, Keratinizing, Nos	1	8	9
	Adenocarcinoma, Nos	1	2	3
	Adenoid Cystic Carcinoma	2	1	3
	Mucoepidermoid Carcinoma		2	2
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing		2	2
	Squamous Cell Carcinoma In Situ, Nos		1	1
	Malignant Melanoma, Nos		1	1
	Mucinous Adenocarcinoma		1	1
C07 - C08 Parotid and other major Salivary glands	Mucoepidermoid Carcinoma	6	10	16
	Adenoid Cystic Carcinoma	5	6	11
	Carcinoma, Nos	2	7	9
	Adenocarcinoma, Nos	1	1	2
	Acinar Cell Carcinoma	1		1
	Carcinoma In Pleomorphic Adenoma	1		1
	Carcinoma, Undifferentiated, Nos		1	1
	Malignant Myoepithelioma		1	1
	Squamous Cell Carcinoma, Nos		1	1
C09 Tonsil	Squamous Cell Carcinoma, Nos		2	2
	Burkitt Lymphoma, Nos		1	1
	Carcinoma, Nos	1		1
	Mucoepidermoid Carcinoma	1		1
C11 Nasopharynx	Carcinoma, Nos	14	28	42
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing	1	3	4
	Squamous Cell Carcinoma, Nos		3	3
	Carcinoma, Undifferentiated, Nos		2	2
	Adenoid Cystic Carcinoma		1	1
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1		1
C12 Pyriform sinus	Squamous Cell Carcinoma, Nos	4	8	12
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing		2	2
	Carcinoma, Nos		1	1
	Squamous Cell Carcinoma, Keratinizing, Nos		1	1
C13 Hypopharynx	Squamous Cell Carcinoma, Nos	23	21	44
	Squamous Cell Carcinoma, Keratinizing, Nos	2	2	4
	Carcinoma, Nos	1		1
	Squamous Cell Carcinoma In Situ, Nos	1		1
C14 Other and ill-defined sites in lip,oral cavity and pharynx	Squamous Cell Carcinoma, Nos	1		1
C15 Oesophagus	Squamous Cell Carcinoma, Nos	41	29	70
	Adenocarcinoma, Nos		11	11
	Signet Ring Cell Carcinoma	1	3	4
	Squamous Cell Carcinoma, Keratinizing, Nos	1	2	3
	Adenosquamous Carcinoma		1	1
	Carcinoma, Nos	1		1
C16 Stomach	Adenocarcinoma, Nos	12	35	47
	Signet Ring Cell Carcinoma	10	16	26
	Squamous Cell Carcinoma, Nos	1	3	4
	Carcinoma, Nos		3	3
	Mucinous Adenocarcinoma		3	3
	Linitis Plastica	1		1
	Malignant Lymphoma, Large B-Cell Diffuse NOS		1	1
C17 Small Intestine	Anaplastic Large Cell Lymphoma, T Cell And Null Cell type		2	2
	Carcinoid Tumor, Nos		1	1
	Carcinoma, Nos		1	1
	Neuroendocrine Carcinoma, Nos	1		1
	Signet Ring Cell Carcinoma		1	1

ICD-O-3 Site	Pathology	Female	Male	Total
C18 Colon	Adenocarcinoma, Nos	24	57	81
	Mucinous Adenocarcinoma	10	16	26
	Signet Ring Cell Carcinoma	1	5	6
	Adenocarcinoma In Tubulovillous Adenoma	2		2
	Atypical Carcinoid Tumor		1	1
	Burkitt Lymphoma, Nos		1	1
	Carcinoma, Nos		1	1
C19 Rectosigmoid junction	Adenocarcinoma, Nos	4	13	17
	Signet Ring Cell Carcinoma	1	5	6
	Mucinous Adenocarcinoma	1	3	4
	Adenocarcinoma In Tubulovillous Adenoma	1	1	2
C20 Rectum	Adenocarcinoma, Nos	19	40	59
	Mucinous Adenocarcinoma	3	10	13
	Signet Ring Cell Carcinoma	4	8	12
	Adenocarcinoma In Tubulovillous Adenoma	2	3	5
	Carcinoma, Nos		4	4
	Malignant Melanoma, Nos		4	4
	Gastrointestinal Stromal Sarcoma		1	1
	Mucin-Producing Adenocarcinoma	1		1
	Neuroendocrine Carcinoma, Nos		1	1
	Sarcoma, Nos	1		1
	Squamous Cell Carcinoma, Nos	1		1
C21 Anus & Anal canal	Adenocarcinoma, Nos	4	3	7
	Squamous Cell Carcinoma, Keratinizing, Nos		3	3
	Squamous Cell Carcinoma, Nos		3	3
	Mucinous Adenocarcinoma		2	2
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing		2	2
	Adenocarcinoma In Tubulovillous Adenoma		1	1
	Basaloid Squamous Cell Carcinoma		1	1
	Malignant Melanoma, Nos	1		1
Signet Ring Cell Carcinoma		1	1	
C22 Liver & Intrahepatic bile ducts	Hepatocellular Carcinoma, Nos	96	249	345
	Hepatoblastoma		3	3
	Adenocarcinoma, Nos		2	2
	Cholangiocarcinoma	1	1	2
	Malignant Lymphoma, Large B-Cell Diffuse NOS	1	1	2
	Carcinoma, Nos		1	1
	Hepatocellular Carcinoma, Pleomorphic Type		1	1
Leiomyosarcoma Nos		1	1	
C23 Gall Bladder	Adenocarcinoma, Nos	11	7	18
	Adenocarcinoma, Intestinal Type	1		1
	Carcinoma, Nos		1	1
	Cholangiocarcinoma		1	1
C24 Other & unspecified parts of biliary tract	Adenocarcinoma, Nos	9	9	18
	Cholangiocarcinoma		1	1
	Neoplasm, Malignant		1	1
C25 Pancreas	Adenocarcinoma, Nos	7	20	27
	Carcinoma, Nos	2	4	6
	Neuroendocrine Carcinoma, Nos	2	1	3
	Mucinous Adenocarcinoma	1	1	2
	Neoplasm, Malignant	1	1	2
C30 Nasal Cavity & Middle Ear	Adenoid Cystic Carcinoma		2	2
	Olfactory Neuroblastoma		2	2
	Adenocarcinoma, Nos	1		1
	Carcinoma, Nos	1		1
	Ewing Sarcoma		1	1
	Hodgkin Lymphoma, Mixed Cellularity, Nos		1	1
	Malignant Melanoma, Nos		1	1
	Squamous Cell Carcinoma, Keratinizing, Nos		1	1
Squamous Cell Carcinoma, Nos	1		1	
C31 Accessory Sinuses	Adenoid Cystic Carcinoma	2	3	5
	Squamous Cell Carcinoma, Nos		5	5
	Carcinoma, Nos	2	1	3
	Burkitt Lymphoma, Nos	1		1
	Spindle Cell Carcinoma, Nos		1	1
	Squamous Cell Carcinoma, Large Cell, Nonkeratinizing		1	1
	Teratocarcinoma		1	1

ICD-O-3 Site	Pathology	Female	Male	Total
C32 Larynx	Squamous Cell Carcinoma, Nos	4	50	54
	Squamous Cell Carcinoma, Keratinizing, Nos	2	11	13
	Carcinoma, Nos	1	4	5
	Glomus Tumor, Malignant		1	1
	Neoplasm, Malignant		1	1
	Squamous Cell Carcinoma In Situ, Nos		1	1
C34 Bronchus & Lung	Squamous Cell Carcinoma, Nos	1	34	35
	Non-Small Cell Carcinoma	4	18	22
	Adenocarcinoma, Nos	4	13	17
	Small Cell Carcinoma, Nos	1	14	15
	Carcinoid Tumor, Nos	2	1	3
	Carcinoma, Nos	1	2	3
	Neuroendocrine Carcinoma, Nos	1	2	3
	Adenoid Cystic Carcinoma	1		1
	Large Cell Neuroendocrine Carcinoma		1	1
	Mesothelioma, Malignant	1		1
	Mucinous Adenocarcinoma	1		1
	Mucoepidermoid Carcinoma		1	1
	Neoplasm, Malignant		1	1
	Sarcoma, Nos		1	1
	Squamous Cell Carcinoma, Keratinizing, Nos		1	1
C37 Thymus	Thymoma, Malignant, Nos	2	1	3
	Thymoma, Type Ab, Malignant		1	1
	Thymoma, Type B1, Malignant		1	1
C38 Heart, Mediastinum & Pleura	Carcinoma, Nos		1	1
	Germinoma	1	1	2
	Mixed Germ Cell Tumor		1	1
	Seminoma, Nos		3	3
	Synovial Sarcoma, Nos		1	1
C40 - C41 Bones, Joints & Articular Cartilage	Ewing Sarcoma	16	30	46
	Osteosarcoma, Nos	13	25	38
	Chondroblastic Osteosarcoma	3	5	8
	Chondrosarcoma, Nos	1	5	6
	Ameloblastoma, Malignant		2	2
	Langerhans Cell Histiocytosis, Disseminate		1	1
	Malignant Lymphoma, Non-Hodgkin, Nos		1	1
	Chondroblastoma, Malignant		1	1
	Chordoma, Nos		1	1
	Giant Cell Tumor Of Bone, Malignant		1	1
	Mesenchymal Chondrosarcoma		1	1
	Neoplasm, Malignant		1	1
	Parosteal Osteosarcoma		1	1
	Primitive Neuroectodermal Tumor, Nos	1		1
C42 Hematopoietic and reticuloendothelial systems	Precursor B-Cell Lymphoblastic Leukemia	26	53	79
	Chronic Myeloid Leukemia, Nos	9	13	22
	Precursor T-Cell Lymphoblastic Leukemia	5	11	16
	Precursor Cell Lymphoblastic Leukemia, Nos		4	4
	Acute Myeloid Leukemia, Nos	1	2	3
	Acute Leukemia, Nos	1		1
C44 Skin	Basal Cell Carcinoma, Nos	19	22	41
	Squamous Cell Carcinoma, Nos	9	25	34
	Basal Cell Carcinoma, Nodular	4	6	10
	Dermatofibrosarcoma, Nos	4	2	6
	Squamous Cell Carcinoma, Keratinizing, Nos	2	4	6
	Malignant Melanoma, Nos	2	2	4
	Basosquamous Carcinoma	1	2	3
	Carcinoma, Nos	1	1	2
	Merkel Cell Carcinoma	1		1
	Mucoepidermoid Carcinoma	1		1
Squamous Cell Carcinoma, Large Cell, Nonkeratinizing	1		1	
C47 Peripheral Nerves & Auto Immune Nervous	Neuroblastoma, Nos	1		1
C48 Retroperitoneum & Peritoneum	Choriocarcinoma, Nos		1	1
	Ewing Sarcoma		1	1
	Myxoid Liposarcoma	1		1
	Neuroblastoma, Nos		1	1

ICD-O-3 Site	Pathology	Female	Male	Total	
C49 Connective, Subcutaneous & Other Soft Tissues	Gastrointestinal Stromal Sarcoma	8	9	17	
	Synovial Sarcoma, Nos	5	11	16	
	Ewing Sarcoma	4	2	6	
	Spindle Cell Sarcoma	4	4	8	
	Leiomyosarcoma Nos	2	3	5	
	Sarcoma, Nos	2	2	4	
	Pleomorphic Liposarcoma	2	1	3	
	Embryonal Rhabdomyosarcoma, Nos		2	2	
	Epithelioid Sarcoma		2	2	
	Giant Cell Sarcoma		2	2	
	Rhabdomyosarcoma, Nos	1	1	2	
	Fibromyxosarcoma		1	1	
	Hemangioendothelioma, Malignant	1		1	
	Hemangiosarcoma		1	1	
	Histiocytic Sarcoma		1	1	
	Liposarcoma, Nos	1		1	
	Liposarcoma, Well Differentiated	1		1	
	Malignant Lymphoma, Large B-Cell Diffuse NOS		1	1	
	Myxoid Liposarcoma		1	1	
	Neuroblastoma, Nos		1	1	
	Round Cell Liposarcoma		1	1	
	Synovial Sarcoma, Biphasic	1		1	
	Synovial Sarcoma, Spindle Cell		1	1	
	C50 Breast	Infiltrating Duct Carcinoma, Nos	621	6	627
		Lobular Carcinoma, Nos	35		35
		Carcinoma, Nos	22	1	23
Mucinous Adenocarcinoma		10		10	
Intraductal Carcinoma, Noninfiltrating, Nos		7		7	
Infiltrating Duct Mixed With Other Types other type of carcinoma		6		6	
Paget Disease And Infiltrating Duct Carcinoma		6		6	
Infiltrating Duct And Lobular Carcinoma		4		4	
Metaplastic Carcinoma, Nos		4		4	
Papillary Carcinoma, Nos		4		4	
Phyllodes Tumor, Malignant		4		4	
Comedocarcinoma, Noninfiltrating		3		3	
Inflammatory Carcinoma		3		3	
Intraductal Micropapillary Carcinoma		2		2	
Paget Disease And Intraductal Carcinoma Of Breast		2		2	
Adenoid Cystic Carcinoma		1		1	
Ductal Carcinoma In Situ, Solid Type		1		1	
Hemangiosarcoma		1		1	
Infiltrating Duct And Lobular Carcinoma		1		1	
Infiltrating Duct Mixed With Other Types of carcinoma		1		1	
Intraductal Carcinoma, Noninfiltrating, No		1		1	
Lobular Carcinoma In Situ, Nos		1		1	
Neoplasm, Malignant		1		1	
Noninfiltrating Intraductal Papillary Adenocarcinoma	1		1		
C51 Vulva	Squamous Cell Carcinoma, Nos	5		5	
	Squamous Cell Carcinoma, Keratinizing, Nos	2		2	
	Basosquamous Carcinoma	1		1	
C52 Vagina	Adenocarcinoma, Nos	1		1	

ICD-O-3 Site	Pathology	Female	Male	Total
C53 Cervix Uteri	Squamous Cell Carcinoma, Keratinizing, Nos	2		2
	Squamous Cell Carcinoma, Nos	2		2
	Leiomyosarcoma Nos	1		1
C54 Corpus Uteri	Endometrioid Adenocarcinoma, Nos	52		52
	Adenocarcinoma, Nos	5		5
	Papillary Serous Cystadenocarcinoma	4		4
	Serous Cystadenocarcinoma, Nos	4		4
	Carcinosarcoma, Nos	3		3
	Endometrial Stromal Sarcoma, Nos	2		2
	Serous Surface Papillary Carcinoma	2		2
	Carcinoma, Nos	1		1
	Endometrial Stromal Sarcoma, Low Grade	1		1
	Leiomyosarcoma Nos	1		1
Mullerian Mixed Tumor	1		1	
C55 Uterus, Nos	Leiomyosarcoma Nos	6		6
	Carcinosarcoma, Nos	2		2
	Adenocarcinoma, Nos	1		1
	Clear Cell Adenocarcinoma, Nos	1		1
	Endometrial Stromal Sarcoma, Low Grade	1		1
	Endometrial Stromal Sarcoma, Nos	1		1
	Endometrioid Adenocarcinoma, Nos	1		1
	Mucinous Adenocarcinoma	1		1
	Mullerian Mixed Tumor	1		1
	Sarcoma, Nos	1		1
C56 Ovary	Endometrioid Adenocarcinoma, Nos	14		14
	Carcinoma, Nos	11		11
	Dysgerminoma	11		11
	Adenocarcinoma, Nos	9		9
	Papillary Serous Cystadenocarcinoma	9		9
	Serous Cystadenocarcinoma, Nos	8		8
	Yolk Sac Tumor	8		8
	Granulosa Cell Tumor, Malignant	6		6
	Mixed Germ Cell Tumor	4		4
	Mucinous Adenocarcinoma	3		3
	Mucinous Cystadenocarcinoma, Nos	3		3
	Serous Surface Papillary Carcinoma	3		3
	Teratoma, Malignant, Nos	3		3
	Carcinosarcoma, Nos	2		2
	Clear Cell Adenocarcinoma, Nos	2		2
	Granular Cell Tumor, Malignant	2		2
	Fibrosarcoma, Nos	1		1
	Mullerian Mixed Tumor	1		1
	Neoplasm, Malignant	1		1
Transitional Cell Carcinoma, Nos	1		1	
C57 Other & Unspecified female genital organs	Papillary Serous Cystadenocarcinoma	1		1
C58 Placenta	Choriocarcinoma, Nos	3		3
	Trophoblastic Tumor, Epithelioid	1		1
C60 Penis	Squamous Cell Carcinoma, Nos		4	4
C61 Prostate	Adenocarcinoma, Nos		153	153
	Carcinoma, Nos		16	16
C62 Testis	Mixed Germ Cell Tumor		34	34
	Seminoma, Nos		21	21
	Yolk Sac Tumor		6	6
	Teratoma, Malignant, Nos		5	5
	Choriocarcinoma, Nos		2	2
	Embryonal Carcinoma, Nos		2	2
	Germinoma		2	2
	Germ Cell Tumor, Nonseminomatous		1	1
	Spermatocytic Seminoma		1	1
Teratocarcinoma		1	1	
C64 Kidney	Nephroblastoma, Nos	12	6	18
	Clear Cell Adenocarcinoma, Nos	1	1	2
	Carcinoma, Nos		1	1
	Clear Cell Sarcoma Of Kidney		1	1
	Neoplasm, Malignant		1	1
	Renal Cell Carcinoma, Nos	13	41	54

ICD-O-3 Site	Pathology	Female	Male	Total
	Papillary Adenocarcinoma, Nos	1	4	5
	Transitional Cell Carcinoma, Nos	1	2	3
	Renal Cell Carcinoma, Chromophobe Type	1	1	2
	Papillary Transitional Cell Carcinoma	1		1
	Peripheral Neuroectodermal Tumor		1	1
	Renal Cell Carcinoma, Sarcomatoid		1	1
	Synovial Sarcoma, Nos	1		1
C65 Renal pelvis	Transitional Cell Carcinoma, Nos	1	1	2
C66 Ureter	Transitional Cell Carcinoma, Nos		1	1
C67 Bladder	Transitional Cell Carcinoma, Nos	11	68	79
	Papillary Transitional Cell Carcinoma	3	44	47
	Adenocarcinoma, Nos	2	1	3
	Carcinoma, Nos		3	3
	Papillary Transitional Cell Carcinoma, Non-Invasive		2	2
	Transitional Cell Carcinoma In Situ	1	1	2
	Neoplasm, Malignant	1		1
	Neuroendocrine Carcinoma, Nos		1	1
	Papillary Carcinoma, Nos		1	1
	Signet Ring Cell Carcinoma		1	1
C69 Eye & Adnexa	Retinoblastoma, Nos	11	16	27
	Squamous Cell Carcinoma, Nos		2	2
	Adenocarcinoma, Nos		1	1
	Adenoid Cystic Carcinoma	1		1
	Carcinoma, Nos		1	1
	Langerhans Cell Histiocytosis, Disseminate		1	1
	Retinoblastoma, Undifferentiated	1		1
C70 Meninges	Meningioma, Malignant	2	1	3
C71 Brain	Glioblastoma, Nos	19	37	56
	Glioma, Malignant	12	18	30
	Astrocytoma, Nos	8	12	20
	Medulloblastoma, Nos	3	7	10
	Oligodendroglioma, Nos	3	6	9
	Primitive Neuroectodermal Tumor, Nos	1	3	4
	Desmoplastic Nodular Medulloblastoma	1	2	3
	Ependymoma, Anaplastic	1	2	3
	Mixed Glioma	2	1	3
	Oligodendroglioma, Anaplastic	2	1	3
	Astrocytoma, Anaplastic		2	2
	Pilocytic Astrocytoma	2	2	4
	Pleomorphic Xanthoastrocytoma		2	2
	Ependymoma, Nos	1		1
	Ganglioglioma, Nos	1		1
	Gliosarcoma		1	1
	Malignant Lymphoma, Large B-Cell Diffuse NOS		1	1
	Meningioma, Malignant	1		1
	Neoplasm, Malignant		1	1
C72 Spinal Cord, Cranial Nerves & Other parts of CNS	Astrocytoma, Nos		1	1
	Ependymoma, Nos		1	1
	Glioblastoma, Nos	1		1
	Malignant Lymphoma, Non-Hodgkin, Nos		1	1
	Pilocytic Astrocytoma		1	1

ICD-O-3 Site	Pathology	Female	Male	Total
C73 Thyroid Gland	Papillary Carcinoma, Nos	32	10	42
	Papillary Carcinoma, Follicular Variant	16	2	18
	Papillary Adenocarcinoma, Nos	5	3	8
	Follicular Adenocarcinoma, Nos	3	3	6
	Medullary Carcinoma, Nos	1	5	6
	Follicular Carcinoma, Minimally Invasive	4	1	5
	Carcinoma, Anaplastic, Nos	3	1	4
	Carcinoma, Nos	1		1
C74 Adrenal gland	Adrenal Cortical Carcinoma	2	1	3
	Adenocarcinoma, Nos		1	1
	Carcinoma, Nos		1	1
C75 Other Endocrine glands & related structures	Neoplasm, Malignant		1	1
	Pineoblastoma		1	1
C76 Other and Ill-Defined sites	Burkitt Lymphoma, Nos	1	2	3
	Germinoma	1	1	2
	Yolk Sac Tumor	1	1	2
	Carcinoid Tumor, Nos	1		1
	Chondrosarcoma, Nos		1	1
	Mixed Germ Cell Tumor	1		1
	Neuroblastoma, Nos		1	1
	Neuroendocrine Carcinoma, Nos	1		1
C77 Lymph Nodes	Precursor T-Cell Lymphoblastic Lymphoma		1	1
	Hodgkin Lymphoma, Mixed Cellularity, Nos	32	89	121
	Hodgkin Lymphoma, Nodular Sclerosis, Nos	16	38	54
	Malignant Lymphoma, Large B-Cell Diffuse NOS	10	23	33
	Hodgkin Lymphoma, Nos	8	19	27
	Burkitt Lymphoma, Nos	6	16	22
	Hodgkin Lymphoma, Lymphocyte-Rich	2	6	8
	Anaplastic Large Cell Lymphoma, T Cell And Null Cell type	3	3	6
	Malignant Lymphoma, Non-Hodgkin, Nos		5	5
	Precursor T-Cell Lymphoblastic Lymphoma	1	4	5
	Follicular Lymphoma, Grade 3	1	2	3
	Hodgkin Lymphoma, Nodular Lymphocyte Predominance	1	2	3
	Precursor Cell Lymphoblastic Lymphoma, Nos	1	1	2
	Composite Hodgkin And Non-Hodgkin Lymphoma		1	1
	Follicular Lymphoma, Grade 1		1	1
	Follicular Lymphoma, Grade 2		1	1
Hodgkin Lymphoma, Lymphocyte Depletion, Nos		1	1	
C80 Unknown Primary Site	Carcinoma, Nos	7	13	20
	Adenocarcinoma, Nos	6	8	14
	Neoplasm, Malignant	3	4	7
	Neuroendocrine Carcinoma, Nos	2	2	4
	Germinoma		1	1
	Malignant Lymphoma, Non-Hodgkin, Nos		1	1
	Mucinous Adenocarcinoma	1		1
**Other Reportable Benign Neoplasms	Meningioma, Nos	12	6	18
	Pituitary Adenoma, Nos	4	10	14
	Neurilemoma, Nos	2	3	5
	Myxopapillary Ependymoma		3	3
	Adenoma, Nos		2	2
	Craniopharyngioma		2	2
	Neoplasm, Uncertain Whether Benign Or Malignant	2		2
	Ganglioglioma, Nos	1		1
	Glomus Tumor, Nos	1		1
	Hemangioblastoma		1	1
	Magnocellular Nevus	1		1
	Neuroma, Nos	1		1
	Neoplasm, Malignant, Uncertain Whether Primary or Secondary		1	1
	Total		1899	2208