

COLLECTIVE CANCER REGISTRY REPORT FROM DECEMBER 1994 TILL DECEMBER 2017, OF THE SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL & RESEARCH CENTER, PAKISTAN

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CANCER STATISTICS

This report includes patients registered at the centers affiliated with the Shaukat Khanum Memorial Trust and accessioned into the hospital information system in Lahore. The affiliated centers include two hospitals called the 'Shaukat Khanum Memorial Cancer Hospital and Research Center' (SKMCH&RC) in Lahore and Peshawar and the Karachi Diagnostic Center (KDC). SKMCH&RC Lahore is the oldest center and has been functioning since December 29, 1994, SKMCH&RC Peshawar since December 29, 2015, and the KDC since 2010. For the purpose of presenting the results, all of these centers are referred to as SKMCH&RC/hospital in this report.

Distribution of neoplasms

Of a total of 89,629 neoplasms, 43,418 were seen in males (48.44%) and 46,211 (51.56%) in females registered at the aforementioned facilities in Pakistan in a twenty-three year period extending from December 29, 1994 till December 31, 2017. A total of eighty thousand six-hundred and seventeen (80,617 (89.95%)) tumors were found in adults, whereas, 9,012 (10.05%) in children. Children were classified as patients 18-years or less and adults as patients more than 18-years of age. Table 1 shows the stratification of cases by behavior and age-group, whereas, Table 2 shows the counts of malignancies in males and females according to age-group.

Table 1. Distribution of neoplasms by behavior and age-group, from Dec. 1994 to Dec. 2017.

Behavior	Age-groups	Registered patients (86,935)	Reported neoplasm* (89,629)
Malignant~	Adults	74,828	76,092
	Pediatrics	8,649	8,711
	Total	83,477	84,803
Benign^ &	Adults	4,294	4,525
	Pediatrics	292	300
Uncertain behavior	Total	4,586	4,825

***The difference in the number of registered patients and reported neoplasms is attributed to multiple malignancies and benign neoplasms diagnosed in 1326 and 239 patients, respectively. Further, 1129 patients have both malignant & benign neoplasm simultaneously.**

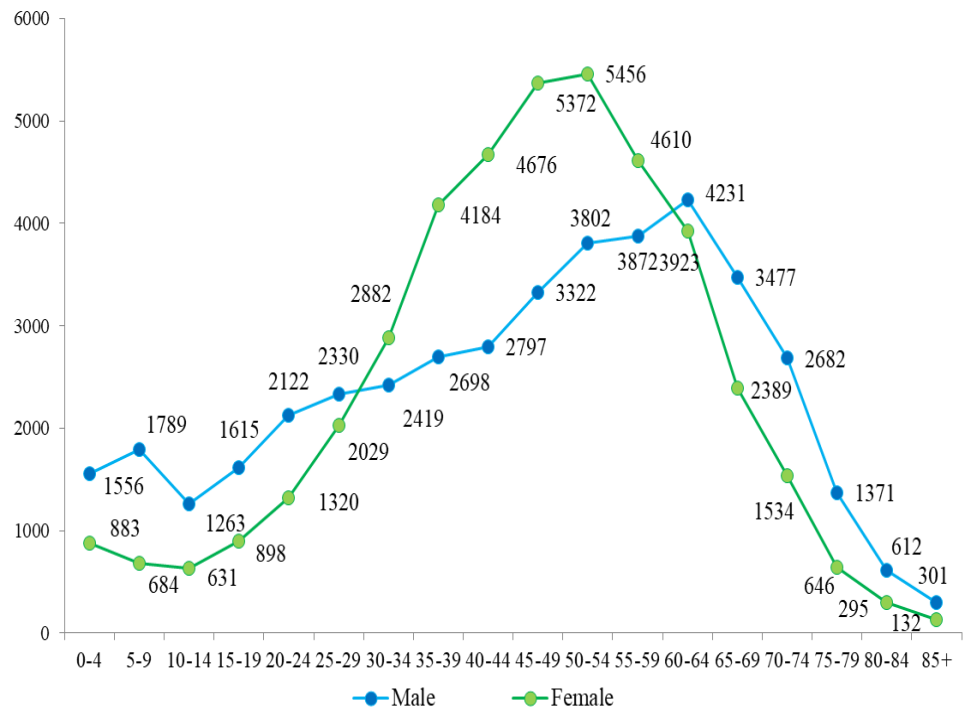
~Cases with behavior code /3 and /2 are considered as malignant cases.

^Cases with behavior code /0 and /1 are considered as benign and of uncertain behavior respectively.

Table 2. Malignancies registered at SKMCH&RC from Dec. 1994 to Dec. 2017, stratified by sex and age-group.

Age range	Male	Female	Total
0-4	1556	883	2439
5-9	1789	684	2473
10-14	1263	631	1894
15-19	1615	898	2513
20-24	2122	1320	3442
25-29	2330	2029	4359
30-34	2419	2882	5301
35-39	2698	4184	6882
40-44	2797	4676	7473
45-49	3322	5372	8694
50-54	3802	5456	9258
55-59	3872	4610	8482
60-64	4231	3923	8154
65-69	3477	2389	5866
70-74	2682	1534	4216
75-79	1371	646	2017
80-84	612	295	907
85+	301	132	433
Total	42259	42544	84803

Figure 1. Distribution of malignancies by sex and age-group (yrs.).



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

Demographics

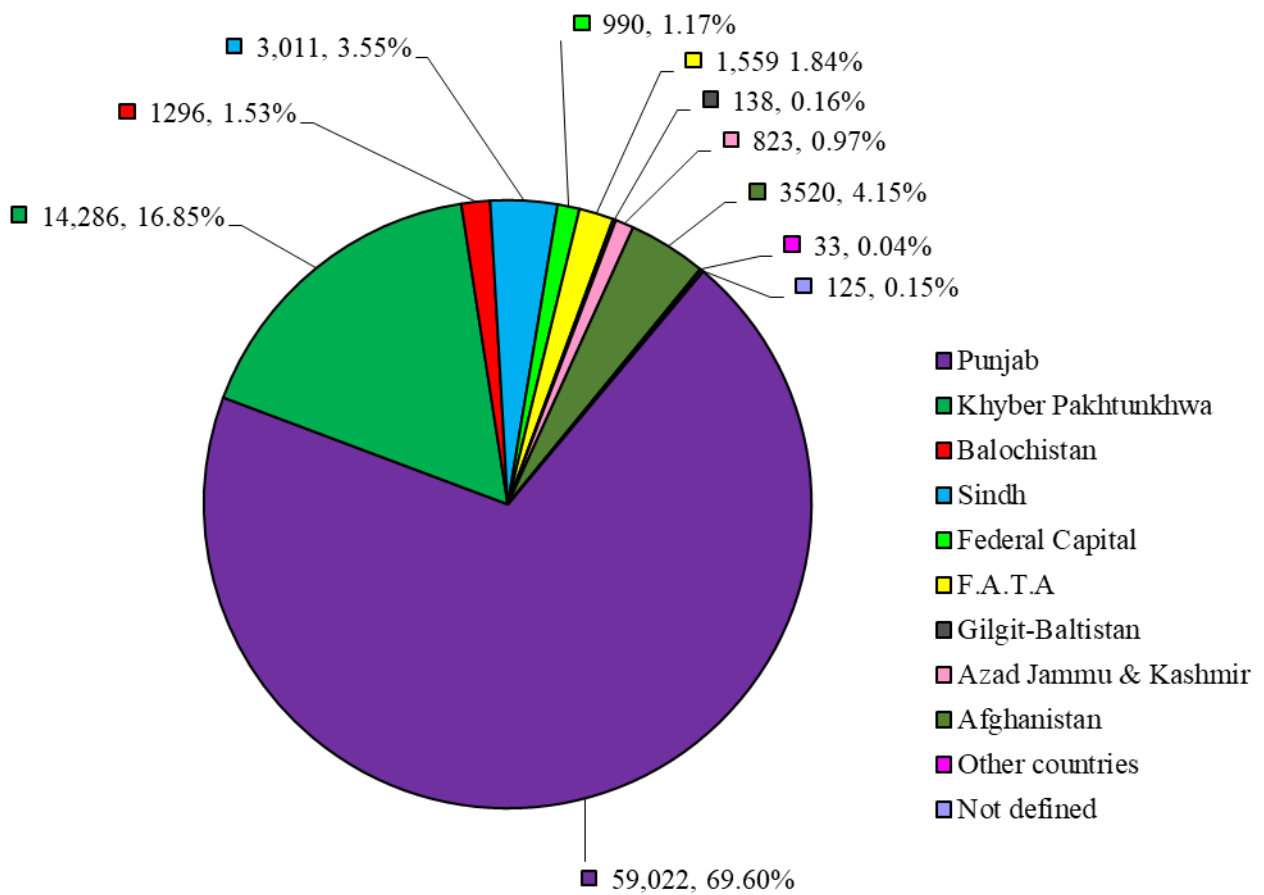
Of the 84,803 malignancies, nearly 69.60% (59,022) belonged to the province of Punjab and approximately 16.85% (14,287) to the Khyber Pakhtunkhwa (NWFP)*. The fact that the geographic area of residence of a vast majority of patients was Punjab can be explained in light of the information that the oldest SKMCH&RC hospital is situated in the provincial capital of Punjab and that, this province account for almost 50% of the total population of the country.

Table 3. Distribution of malignancies according to the geographic area of residence of the patients, from Dec. 1994 to Dec. 2017.

Demographic area	Malignancies (N=84,803)	Percent (%)
Punjab	59,022	69.60
Khyber Pakhtunkhwa*	14,286	16.85
Balochistan	1,296	1.53
Sindh	3,011	3.55
Federal Capital	990	1.17
F.A.T.A	1,559	1.84
Gilgit-Baltistan	138	0.16
Azad Jammu & Kashmir	823	0.97
Afghanistan	3,520	4.15
Other countries	33	0.04
Not defined	125	0.15

* NWFP renamed as Khyber Pakhtunkhwa on April 01, 2010.

Figure 2. Distribution of malignancies according to the geographic area of residence of the patients, from Dec. 1994 to Dec. 2017.



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

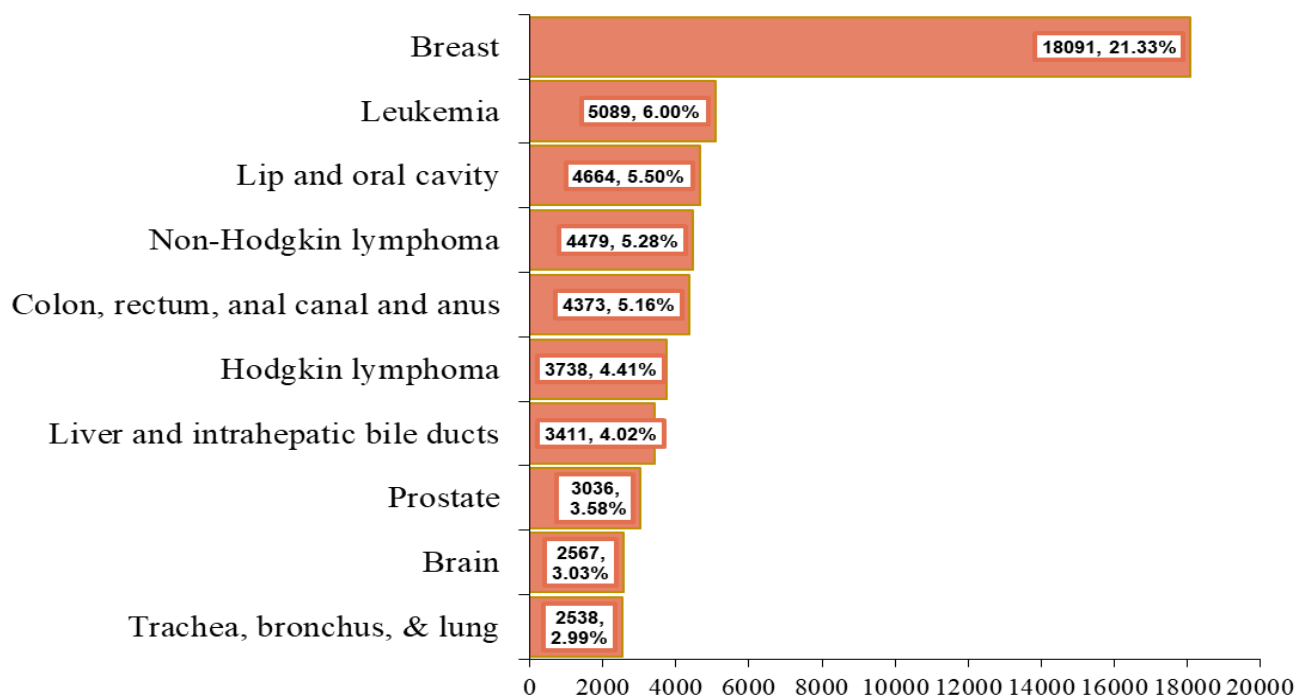
Distribution of malignancies

Tables 4-8 display lists of top 10 cancers registered at the hospital during the twenty-three years period under study. The results have been divided into those for males, females, adults, children, and all age-groups combined. The results for all age-groups, both sexes combined show that breast cancer, leukemia, lip and oral cavity cancers, non-Hodgkin lymphoma, and colon, rectum, anal canal and anus cancers were the commonest malignancies seen at the hospital (Table 4).

Table 4. Top 10 malignancies seen amongst all age-groups, both sexes combined (N=84,803), at SKMCH&RC, from Dec. 1994 to Dec. 2017.

Sr. No.	ICD Category	Count	Percentage	ICD-10-CM Code
1	Breast	18,091	21.33	C50, D05
2	Leukemia	5,089	6.00	C91 – C95
3	Lip and oral cavity	4,664	5.50	C00 – C08, C76.0, D00.0
4	Non-Hodgkin lymphoma	4,479	5.28	C82 – C87, C88.4
5	Colon, rectum, anal canal and anus	4,373	5.16	C18 – C21, D01, C7A.02
6	Hodgkin lymphoma	3,738	4.41	C81
7	Liver and intrahepatic bile ducts	3,411	4.02	C22
8	Prostate	3,036	3.58	C61, D07.5
9	Brain	2,567	3.03	C71
10	Trachea, bronchus, & lung	2,538	2.99	C33 – C34, D02.1-2, C7A.090

Figure 3. Top 10 malignancies seen amongst all age-group, both sexes combined at SKMCH&RC, from Dec. 1994 to Dec. 2017.



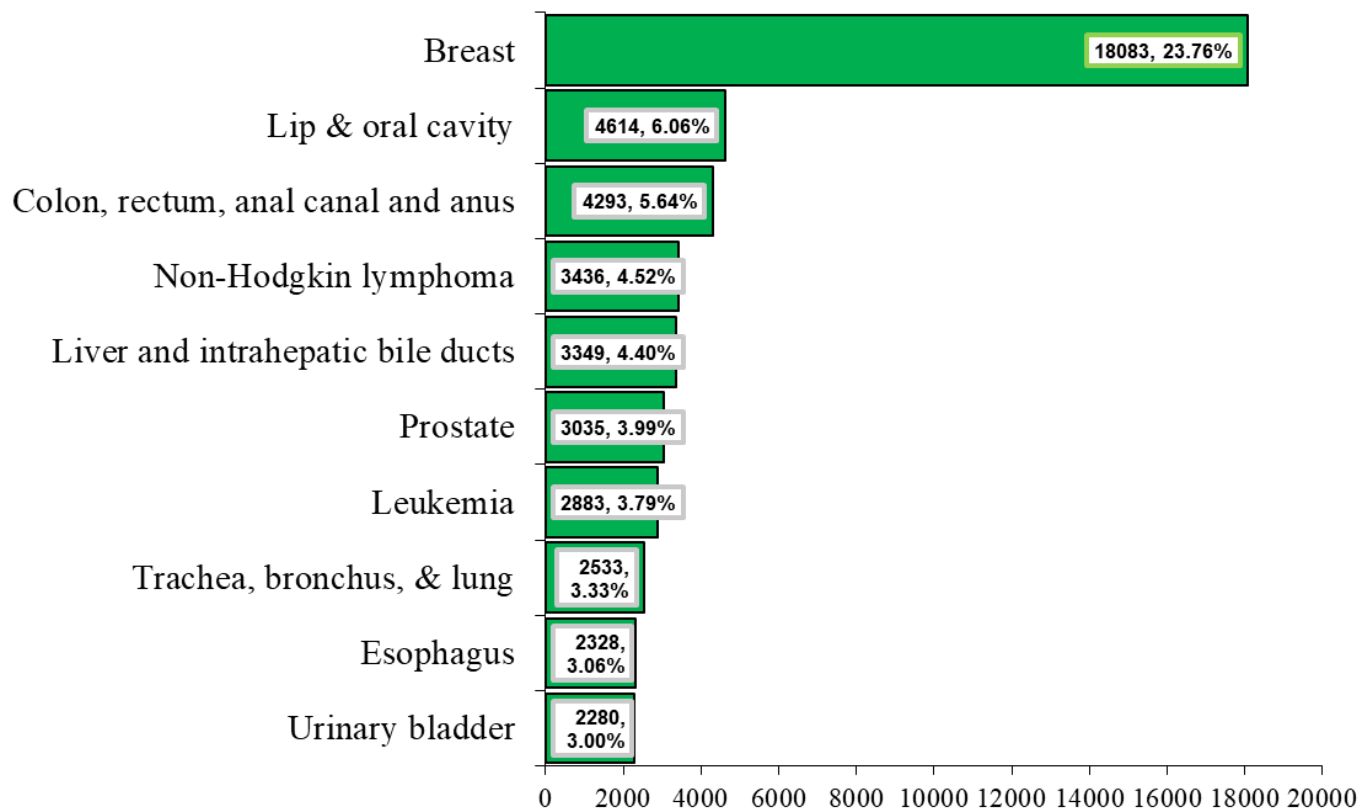
Data Source: Cancer Registry & Clinical Data Mangement, SKMCH&RC

Amongst adults (> 18 years), the commonest malignancies were breast cancer, lip & oral cavity and colon, rectum, anal canal and anus cancers (Table 5).

Table 5. Top 10 malignancies seen amongst adults (> 18-years, N=76,092), in both sexes combined, from Dec. 1994 to Dec. 2017.

Sr. No.	ICD Category	Count	Percentage	ICD-10-CM Code
1	Breast	18,083	23.76	C50, D05
2	Lip & oral cavity	4,614	6.06	C00 – C08, C76.0, D00.0
3	Colon, rectum, anal canal and anus	4,293	5.64	C18 – C21, D01, C7A.02
4	Non-Hodgkin lymphoma	3,436	4.52	C82 – C87, C88.4
5	Liver and intrahepatic bile ducts	3,349	4.40	C22
6	Prostate	3,035	3.99	C61, D07.5
7	Leukemia	2,883	3.79	C91 – C95
8	Trachea, bronchus, & lung	2,533	3.33	C33 – C34, D02.1-2, C7A.090
9	Esophagus	2,328	3.06	C15, D00.1
10	Urinary bladder	2,280	3.00	C67, D09.0

Figure 4. Top 10 malignancies seen amongst adults (> 18 years) in both sexes combined, from Dec. 1994 to Dec. 2017.



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

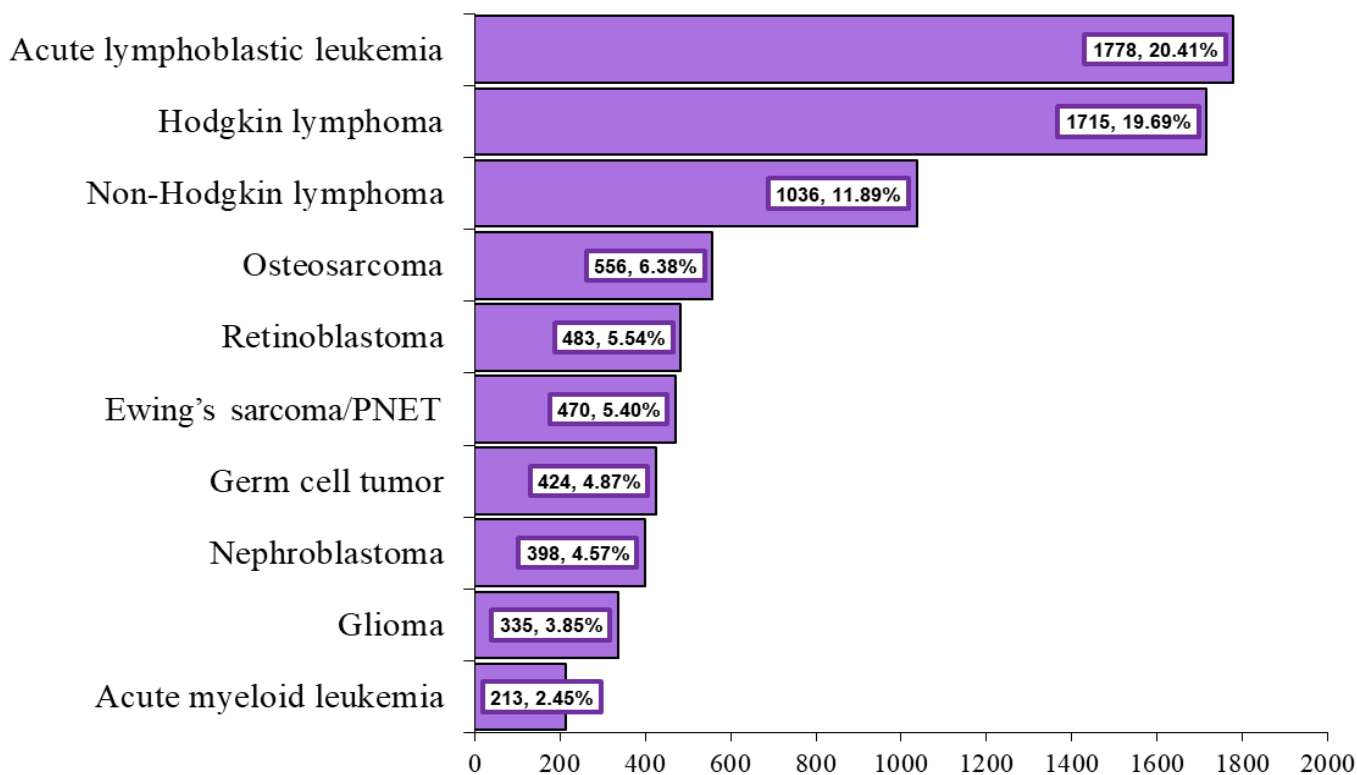
In children (<= 18 years), the most frequent cancers were acute lymphoblastic leukemia, Hodgkin lymphoma, and non-Hodgkin lymphoma (Table 6).

Table 6. Top 10 malignancies seen in children (<= 18 years, N=8,711), in both sexes combined, from Dec. 1994 to Dec. 2017.

Sr. No.	ICD Category	Count	%	Morphology Code [^]
1	Acute lymphoblastic leukemia	1,778	20.41	M983
2	Hodgkin lymphoma	1,715	19.69	M965-966
3	Non-Hodgkin lymphoma	1,036	11.89	M959, M967-972
4	Osteosarcoma	556	6.38	M918
5	Retinoblastoma	483	5.54	M951
6	Ewing's sarcoma/PNET	470	5.40	M9260, M9364
7	Germ cell tumor	424	4.87	M906 - M909
8	Nephroblastoma	398	4.57	M8960
9	Glioma	335	3.85	M938-M948
10	Acute myeloid leukemia	213	2.45	M9840,9861, 9866-9874,9891-9920

[^] Classification of childhood cancers is based on tumor morphology using the ICD-O-3 coding scheme for childhood cancers.

Figure 5. Top 10 malignancies seen in children (<= 18 years), in both sexes combined, from Dec. 1994 to Dec. 2017.



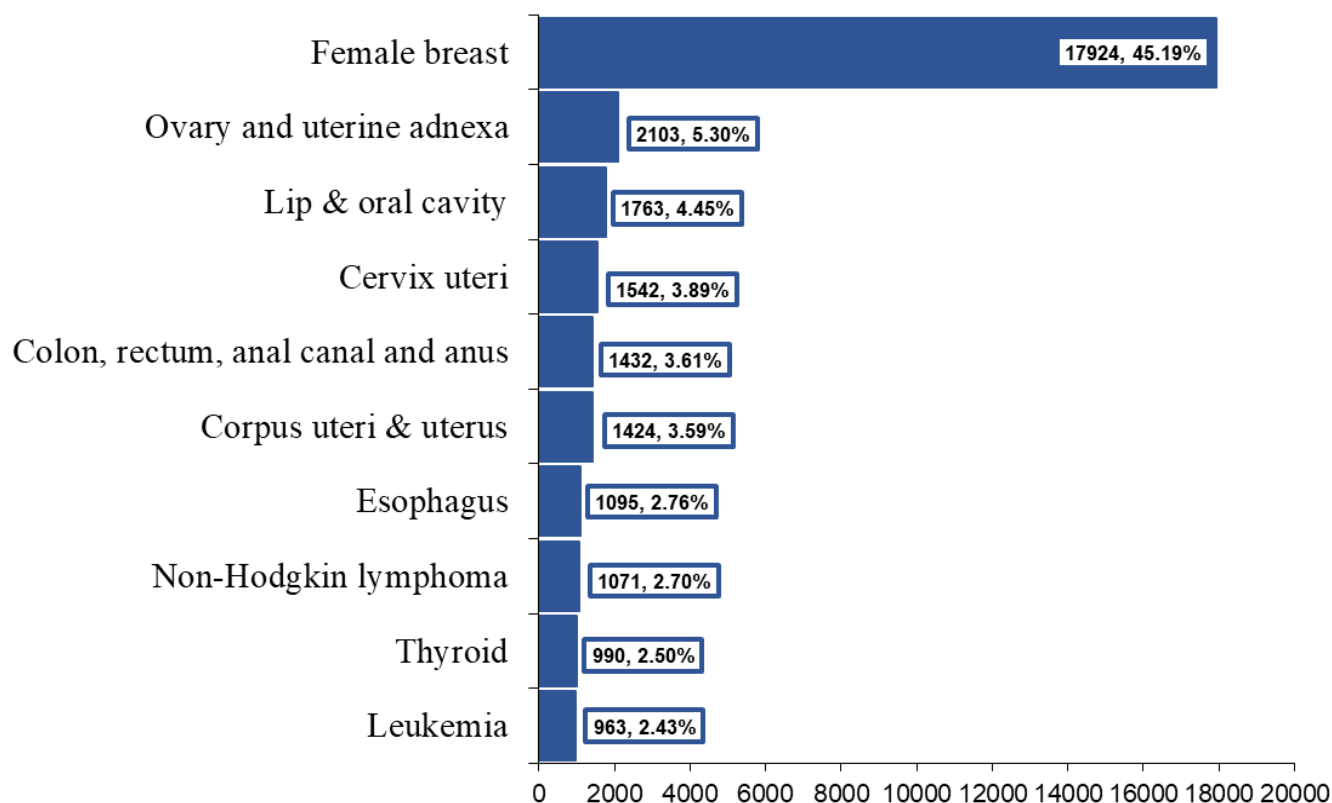
Data Source: Cancer Registry & Clinical Data Mangement, SKMCH&RC

The most frequent cancers, amongst adult females were cancers of breast, ovary and uterine adnexa, lip & oral cavity, cervix uteri and colon, rectum, anal canal and anus (Table 7), whereas, amongst adult males, cancers of the prostate, colon, rectum, anal canal and anus, lip & oral cavity, liver & intrahepatic bile ducts and Non-Hodgkin lymphoma (Table 8).

Table 7. Top 10 malignancies seen in adult females (> 18 years, N=39,663), from Dec. 1994 to Dec. 2017.

Sr. No.	ICD Category	Count	Percentage	ICD-10-CM Code
1	Female breast	17,924	45.19	C50, D05
2	Ovary and uterine adnexa	2,103	5.30	C56
3	Lip & oral cavity	1,763	4.45	C00 – C08, C76.0, D00.0
4	Cervix uteri	1,542	3.89	C53, D06
5	Colon, rectum, anal canal and anus	1,432	3.61	C18 – C21, D01, C7A.02
6	Corpus uteri & uterus	1,424	3.59	C54 – C55, C58, D07.0
7	Esophagus	1,095	2.76	C15, D00.1
8	Non-Hodgkin lymphoma	1071	2.70	C82 – C88
9	Thyroid	990	2.50	C73
10	Leukemia	963	2.43	C91 – C95

Figure 6. Top 10 malignancies seen in adult females (> 18 years), from Dec. 1994 to Dec. 2017.

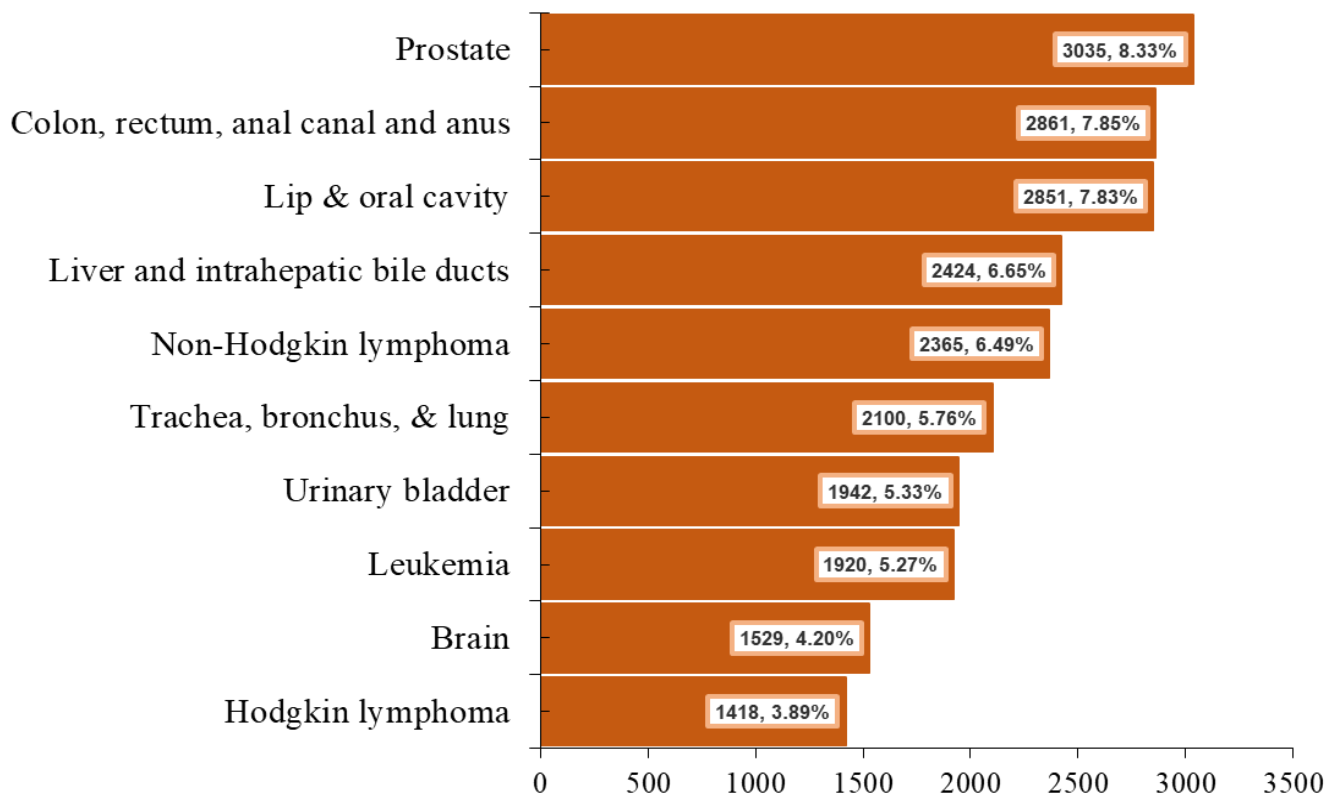


Data Source: Cancer Registry & Clinical Data Mangement, SKMCH&RC

Table 8. Top 10 malignancies seen in adult males (> 18 years, N=36,429), from Dec. 1994 to Dec. 2017.

Sr. No.	ICD Category	Count	Percentage	ICD-10-CM Code
1	Prostate	3,035	8.33	C61, D07.5
2	Colon, rectum, anal canal and anus	2,861	7.85	C18 – C21, D01, C7A.02
3	Lip & oral cavity	2,851	7.83	C00 – C08, C76.0, D00.0
4	Liver and intrahepatic bile ducts	2,424	6.65	C22
5	Non-Hodgkin lymphoma	2,365	6.49	C82 – C87, C88.4
6	Trachea, bronchus, & lung	2,100	5.76	C33 – C34, D02.1-2, C7A.090
7	Urinary bladder	1,942	5.33	C67, D09.0
8	Leukemia	1,920	5.27	C91 – C95
9	Brain	1,529	4.20	C71
10	Hodgkin lymphoma	1,418	3.89	C81

Figure 7. Top 10 malignancies seen in adult males (> 18 years), from Dec. 1994 to Dec. 2017.



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

SUPPLEMENTAL INFORMATION

Table 9 the result stratified by primary site, age-group, and gender. According to this, cancers of the breast, leukemia, lymphoma, lip & oral cavity and colon, rectum, anal canal and anus are the commonest site(s) for malignancies seen at the hospital.

Table 9. Distribution by gender, primary malignant site, and 5-year age-group, 1994-2017.

Female

ICD-10-CM Code **	Primary Site	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	Total
C00	Lip	0	0	0	0	1	0	2	1	1	2	8	11	12	12	7	2	1	2	62
C01-C02, D00.07	Tongue	0	1	0	3	10	22	24	54	48	100	114	87	89	59	40	20	7	5	683
C03	Gum	0	1	0	2	1	3	6	9	16	36	32	47	36	25	25	16	5	3	263
C04-C06, D00.02-06	Floor and other parts of mouth	1	0	0	3	11	12	20	33	49	62	78	61	68	48	37	23	9	2	517
C07	Parotid gland	0	1	3	9	24	23	22	28	14	25	18	13	15	10	11	0	2	0	218
C08	Other salivary glands	0	0	1	2	4	3	10	5	6	6	7	5	7	3	0	0	0	0	59
C9-C10	Oropharynx	0	0	0	0	0	1	2	2	7	7	4	5	8	4	4	1	1	0	46
C11	Nasopharynx	1	1	10	21	29	29	24	21	24	25	20	17	10	8	4	1	0	0	245
C12-C13	Hypopharynx & pyriform sinus	0	0	0	5	9	16	24	49	45	44	50	33	43	20	15	3	0	2	358
C14	Other sites of lip, oral cavity & pharynx	0	0	0	0	0	1	0	0	0	3	2	1	7	1	0	1	1	0	17
C15, D00.1	Esophagus	0	0	0	4	12	25	38	81	119	165	174	176	127	93	46	20	12	7	1099
C16, D00.2	Stomach	0	0	0	6	9	22	41	49	62	60	84	100	63	47	21	5	4	1	574
C17, C7A.01	Small intestine	0	0	0	1	2	1	8	7	4	10	15	13	11	4	2	1	0	0	79
C18, D01.0, C7A.020-5	Colon	0	0	2	3	24	37	51	55	52	63	84	88	76	39	26	8	8	2	618
C19	Rectosigmoid	0	0	1	1	5	4	13	8	12	12	7	14	11	4	8	3	0	0	103
C20, D01.2, C7A.026	Rectum	0	1	1	9	49	69	58	53	40	61	65	58	50	33	18	13	4	4	586
C21, D01.3	Anal canal & anus	0	0	0	4	9	13	13	13	11	16	17	13	15	10	10	3	0	0	147
C22	Liver & intrahepatic bile ducts	16	1	4	3	2	2	6	28	35	90	165	178	179	128	72	32	5	1	947
C23-C24, D01.5	Gall bladder & extrahepatic bile ducts	0	0	0	1	2	6	9	22	64	76	120	111	115	77	56	22	15	7	703
C25	Pancreas	0	0	0	2	1	5	7	16	16	37	48	53	50	53	39	15	8	2	352
C26	Other & ill-defined digestive organs	0	0	0	0	0	1	0	2	0	1	0	0	0	1	0	0	0	0	5
C30-C31	Nasal cavity & sinuses	1	0	1	7	4	8	14	19	14	19	32	20	27	6	6	2	2	0	182
C32, D02.0	Larynx	0	1	0	1	2	2	6	7	12	10	16	26	23	8	8	4	2	2	130
C33-C34, D02.2, C7A.090-91	Trachea, bronchus & lung	1	1	0	0	1	11	24	19	35	34	60	61	68	54	39	12	13	2	435
C37-C39	Thymus, heart, mediastinum & pleura	3	0	2	1	3	5	3	8	7	5	7	1	5	4	3	1	0	0	58
C40-C41	Bone & articular cartilage	19	73	150	155	87	44	26	22	13	7	13	12	4	5	1	2	0	0	633
C43-C44, D03-D04	Melanoma & other malignant neoplasm of skin	0	1	2	11	23	32	36	46	54	73	94	99	120	88	81	39	32	16	847
C47	Peripheral nerves & autonomic nervous system	6	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	8
C48	Retroperitoneum	2	1	2	1	1	2	1	6	3	3	5	3	2	2	0	0	0	0	34
C49	Connective & soft tissue	28	14	25	59	46	74	52	68	49	50	39	34	39	26	17	9	3	1	633
C50, D05	Breast	0	1	1	11	147	654	1394	2278	2780	2902	2655	2013	1480	775	501	205	92	43	17932
C51-C52, D07.1-2	Vulva & vagina	8	0	2	0	3	7	12	18	16	25	27	36	38	20	19	9	2	0	242
C53, D06	Cervix	0	0	2	11	7	26	69	182	213	242	257	192	169	94	53	24	9	3	1553
C54-C55, C58, D07.0	Corpus, uterus & placenta	0	0	3	5	32	48	51	74	89	122	206	229	265	170	84	36	14	2	1430
C56	Ovary	7	24	77	115	142	147	154	190	223	298	298	227	203	95	52	21	9	5	2287
C57	Other female genital organs	0	0	1	1	0	1	1	1	1	3	0	1	0	0	1	0	0	0	11
C64-C66, C7A.093	Kidney & other urinary organ	121	48	8	9	10	22	14	35	25	39	47	67	50	50	17	12	3	1	578
C67, D09.0	Urinary bladder	3	1	2	0	1	4	13	19	24	37	41	52	52	41	29	15	6	4	344
C69, D09.2	Eye and adnexa	180	31	6	3	6	0	3	1	3	5	3	2	4	1	2	0	1	0	251
C70-C71	Brain & meninges	19	42	29	36	69	65	74	78	63	78	71	60	53	38	14	7	3	0	799
C72	Spinal cord	3	4	4	1	2	5	3	7	2	5	3	2	1	2	0	0	0	0	44
C73	Thyroid	0	3	7	43	110	148	146	126	95	106	68	62	50	30	28	5	6	2	1035
C74	Adrenal gland	10	2	0	0	3	3	0	1	4	2	2	2	1	0	0	0	0	0	30
C75	Other endocrine glands	2	1	3	2	0	3	0	1	1	1	0	1	2	0	1	0	0	0	18
C76	Other & ill-defined sites	44	10	3	7	10	4	2	4	8	10	9	8	7	6	5	2	0	2	141
C80	Unknown primary	2	2	5	8	12	19	42	43	81	105	81	88	62	47	23	7	5	634	
C81	Hodgkin lymphoma	30	153	82	131	151	120	93	77	40	33	16	14	15	10	1	3	1	1	971
C82-C87, C88.4	Non-Hodgkin lymphoma	49	87	70	66	95	108	111	136	87	112	104	82	82	73	46	20	7	3	1338
C90	Multiple myeloma & immuno. neoplasms	0	0	0	0	3	2	2	9	12	27	44	34	21	14	11	1	0	0	180
C91	Lymphoid leukemia	295	140	65	53	32	24	18	22	14	22	31	36	17	9	8	1	0	0	787
C92	Myeloid leukemia	19	34	52	72	77	100	105	109	77	75	62	41	17	11	9	2	0	0	862
C93-C95	Other specified leukemia	1	0	1	0	1	1	3	2	0	4	2	2	2	2	1	0	0	0	22
C96, C88.0-3,5-9	Other lymphatic, histiocytic & hemato. Tissue	8	3	1	1	1	1	0	0	1	0	2	1	0	1	0	0	0	0	20
D32-33, D35.2-4, D42- D43, D44.3-D44.5 *	Other reportable CNS neoplasms	4	0	6	12	39	51	53	41	42	39	25	24	21	11	8	2	1	2	381
D46	Myelodysplastic syndrome	0	1	0	0	0	0	0	0	1	2	0	1	5	2	1	0	0	0	13
Total	Total	883	684	631	898	1320	2029	2882	4184	4676	5372	5456	4610	3923	2389	1534	646	295	132	42544

Male

ICD-10-CM Code**	Primary Site	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+	Total
C00	Lip	0	0	0	2	2	3	5	9	13	11	21	24	22	23	13	6	0	4	158
C01-C02, D00.07	Tongue	2	2	0	6	14	20	62	97	110	128	148	126	136	80	58	27	13	6	1035
C03	Gum	0	1	1	3	5	8	19	32	34	55	79	78	96	45	38	16	8	3	521
C04-C06, D00.02-06	Floor and other parts of mouth	0	0	2	1	8	22	36	72	103	141	136	107	94	55	44	29	4	5	859
C07	Parotid gland	1	2	5	10	12	21	22	26	11	41	24	19	23	13	9	9	4	1	253
C08	Other salivary glands	0	0	0	1	4	4	4	3	8	13	19	8	7	3	3	2	0	2	81
C10	Oropharynx	0	0	0	0	0	3	3	10	11	10	8	8	18	6	5	3	0	1	86
C11	Nasopharynx	2	3	29	37	58	40	44	48	55	67	72	61	44	30	14	6	2	1	613
C12-C13	Hypopharynx & pyriform sinus	0	0	0	5	17	18	31	38	35	43	43	42	58	34	26	17	8	1	416
C14	Other sites of lip, oral cavity, pharynx	0	0	0	0	0	1	1	1	0	2	0	4	3	0	1	0	0	0	13
C15, D00.1	Esophagus	0	1	0	7	16	36	47	78	87	142	172	171	174	136	104	43	16	10	1240
C16	Stomach	0	0	1	3	11	43	45	70	114	158	182	208	201	147	111	43	18	5	1360
C17, C7A.01	Small intestine	0	1	1	4	4	5	11	17	16	9	15	22	22	8	7	3	1	0	146
C18, D01.0,C7A.020-5	Colon	0	0	9	18	42	62	79	120	148	139	152	102	125	78	62	21	13	6	1176
C19	Rectosigmoid	0	0	1	8	12	16	17	23	18	19	20	15	23	18	8	8	4	0	210
C20, D01.2, C7A.026	Rectum	0	1	6	30	96	125	126	124	111	122	121	109	111	89	47	28	12	3	1261
C21, D01.3	Anal canal & anus	0	0	0	3	12	12	27	31	33	32	24	29	22	25	8	9	5	0	272
C22	Liver & intrahepatic bile ducts	31	4	2	4	8	10	25	59	103	244	379	431	452	340	226	96	39	11	2464
C23-C24, D01.5	Gall Bladder & extrahepatic bile ducts	0	0	0	1	1	6	18	24	30	47	57	77	73	48	43	18	10	4	457
C25	Pancreas	0	2	0	1	2	7	14	22	49	43	72	86	92	71	41	21	12	8	543
C26	Other & ill-defined digestive organs	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	5
C30-C31	Nasal cavity & sinuses	1	1	3	7	10	21	20	20	37	34	41	22	36	21	18	4	3	2	301
C32, D02.0	Larynx	0	0	0	1	4	7	27	52	75	92	135	176	179	154	112	63	28	11	1116
C33-C34, D02.2, C7A.090-91	Trachea, bronchus & lung	0	0	2	1	9	18	43	53	96	153	228	280	361	361	256	163	54	25	2103
C37-C39	Thymus, heart & mediastinum	6	3	7	12	15	14	8	16	17	16	17	8	7	5	5	1	0	1	158
C40-C41	Bone & articular cartilage	12	81	224	337	185	79	46	39	22	22	16	13	11	7	3	2	1	0	1100
C43-C44, D03-D04	Melanoma and other malignant neoplasm of skin	0	6	3	8	28	46	56	73	91	99	134	139	166	144	140	86	52	41	1312
C47	Peripheral nerves & auto nervous system	1	1	0	0	2	0	0	1	0	0	0	1	0	0	0	0	0	0	6
C48	Retroperitoneum	8	2	1	2	7	10	5	5	2	7	2	4	5	3	1	2	0	0	66
C49	Connective & soft tissue	43	25	38	77	131	108	112	76	85	53	73	62	72	56	38	16	10	2	1077
C50, D05	Breast	0	0	0	0	2	3	5	5	11	20	18	27	25	15	17	9	1	1	159
C60	Penis	0	0	0	0	1	1	1	1	4	0	2	5	11	2	4	3	0	0	35
C61	Prostate	0	1	0	1	0	3	3	4	10	56	159	294	555	683	658	359	169	81	3036
C62-C63, D07.6	Testis & other male genital organs	81	4	7	88	272	335	279	170	118	59	43	23	11	10	1	2	1	0	1504
C64-C66,C7A.093	Kidney & other urinary organ	188	61	11	6	16	15	33	77	88	121	137	106	124	76	49	29	14	4	1155
C67, D09.0	Urinary bladder	7	1	2	2	10	19	31	94	138	196	212	295	294	283	208	93	40	28	1953
C68	Other & unspecified urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
C69, D09.2	Eye and adnexa	243	45	7	4	3	1	7	4	7	6	7	4	9	6	4	3	3	1	364
C70-C71	Brain & meninges	34	86	72	71	137	174	202	188	166	171	132	126	96	59	35	12	4	3	1768
C72	Spinal cord	7	1	1	6	3	14	13	10	8	8	6	2	4	0	0	0	0	0	83
C73	Thyroid	0	1	6	25	45	65	46	60	45	51	46	37	30	23	21	5	2	1	509
C74	Adrenal gland	12	6	3	0	0	2	3	3	4	4	1	2	1	2	0	0	0	0	43
C75	Other endocrine glands	2	3	2	1	1	5	2	1	1	1	0	1	1	0	0	0	0	0	22
C76	Other & ill-defined sites	38	11	8	3	23	20	14	9	12	17	22	7	14	12	4	4	3	2	223
C80	Unknown primary	1	3	2	5	19	32	33	39	62	78	97	94	105	91	78	41	16	10	806
C81	Hodgkin lymphoma	118	678	338	294	310	261	209	189	107	99	55	33	42	26	10	5	4	1	2779
C82-C87, C88.4	Non-Hodgkin lymphoma	128	324	168	206	252	275	296	320	212	224	190	145	160	100	90	37	22	12	3161
C90	Multiple myeloma & immuno. neoplasms	0	0	0	1	1	3	8	18	42	42	58	65	37	28	8	8	4	2	325
C91	Lymphoid leukemia	549	350	190	173	112	68	39	43	59	62	98	92	32	22	18	7	9	0	1923
C92	Myeloid leukemia	23	60	92	116	156	209	190	169	135	105	78	53	26	20	23	6	2	1	1464
C93-C95	Other specified leukemia	2	1	1	0	1	2	0	5	9	7	3	2	2	0	1	0	0	0	36
C96, C88.0-3,5-9	Other lymphatic, histiocytic & hematopoietic tissue	13	10	7	2	3	2	6	3	3	3	5	4	2	2	1	1	0	0	67
D32-33,D35.2-4, D42-D43, D44.3-D44.5*	Other reportable CNS neoplasms	0	4	10	21	40	56	46	45	39	49	37	22	11	13	9	4	0	1	407
D46	Myelodysplastic syndrome	3	3	1	1	0	0	0	2	3	1	3	0	4	3	2	1	1	0	28
	Total	1556	1789	1263	1615	2122	2330	2419	2698	2797	3322	3802	3872	4231	3477	2682	1371	612	301	42259

** Diseases are listed according the International Classification of Disease, Tenth Revision, Clinical Modification (ICD-10-CM) codes.

* Non-malignant primary intracranial and CNS tumors reported since 2004 are also included in the Registry.

Table 10. Count and percentage of cancer cases by province, district and gender, 1994-2017.

Province/Country	District	Female	Male	Total
Punjab	Attock	165 .5%	139 .5%	304 .5%
	Bahawalnagar	357 1.1%	382 1.4%	739 1.3%
	Bahawalpur	279 .9%	322 1.2%	601 1.0%
	Bhakkar	252 .8%	291 1.0%	543 .9%
	Chakwal	175 .6%	209 .8%	384 .7%
	Chiniot	2 .0%	2 .0%	4 .0%
	D.G.Khan	253 .8%	396 1.4%	649 1.1%
	Faisalabad	1874 6.0%	1772 6.4%	3646 6.2%
	Gujranwala	1916 6.1%	1729 6.2%	3645 6.2%
	Gujrat	885 2.8%	796 2.9%	1681 2.8%
	Hafizabad	203 .6%	216 .8%	419 .7%
	Jehlum	331 1.1%	271 1.0%	602 1.0%
	Jhang	528 1.7%	509 1.8%	1037 1.8%
	Kasur	576 1.8%	544 2.0%	1120 1.9%
	Khanewal	293 .9%	343 1.2%	636 1.1%
	Khushab	246 .8%	284 1.0%	530 .9%
	Lahore	13319 42.6%	9982 36.0%	23301 39.5%
	Layyah	151 .5%	214 .8%	365 .6%
	Lodhran	69 .2%	115 .4%	184 .3%
	Mandi Bahuddin	263 .8%	284 1.0%	547 .9%
	Mianwali	375 1.2%	464 1.7%	839 1.4%
	Multan	832 2.7%	725 2.6%	1557 2.6%
	Muzaffargarh	197 .6%	310 1.1%	507 .9%
	Nankana Sahib	91 .3%	69 .2%	160 .3%
	Narowal	256 .8%	230 .8%	486 .8%
	Okara	571 1.8%	588 2.1%	1159 2.0%
	Pakpattan	275 .9%	273 1.0%	548 .9%
	RahimYar Khan	394 1.3%	464 1.7%	858 1.5%
	Rajanpur	92 .3%	138 .5%	230 .4%

	Rawalpindi	686 2.2%	686 2.5%	1372 2.3%
	Sahiwal	639 2.0%	566 2.0%	1205 2.0%
	Sargodha	939 3.0%	813 2.9%	1752 3.0%
	Sheikhupura	846 2.7%	729 2.6%	1575 2.7%
	Sialkot	1524 4.9%	1359 4.9%	2883 4.9%
	T.T.Singh	369 1.2%	350 1.3%	719 1.2%
	Vehari	366 1.2%	381 1.4%	747 1.3%
	Unknown Punjab	690 2.2%	798 2.9%	1488 2.5%
	Total Punjab	31279 100.0%	27743 100.0%	59022 100.0%
Khyber Pakhtunkhwa	Abbottabad	218 3.5%	226 2.8%	444 3.1%
	Bannu	215 3.4%	312 3.9%	527 3.7%
	Batgram	28 .4%	60 .7%	88 .6%
	Bunair	1 .0%	2 .0%	3 .0%
	Buner	63 1.0%	127 1.6%	190 1.3%
	Charsadda	359 5.7%	472 5.9%	831 5.8%
	Chitral	36 .6%	87 1.1%	123 .9%
	Dera Ismail Khan	223 3.6%	262 3.3%	485 3.4%
	Hangu	126 2.0%	151 1.9%	277 1.9%
	Haripur	109 1.7%	120 1.5%	229 1.6%
	Karak	107 1.7%	119 1.5%	226 1.6%
	Kohat	250 4.0%	307 3.8%	557 3.9%
	Kohistan	9 .1%	40 .5%	49 .3%
	Lakki Marwat	121 1.9%	138 1.7%	259 1.8%
	Lower Dir	328 5.2%	441 5.5%	769 5.4%
	Malakand P/A	205 3.3%	239 3.0%	444 3.1%
	Mansehra	144 2.3%	236 2.9%	380 2.7%
	Mardan	629 10.1%	805 10.0%	1434 10.0%
	Nowshera	359 5.7%	401 5.0%	760 5.3%
	Parachinar	19 .3%	29 .4%	48 .3%
	Peshawar	1497 24.0%	1568 19.5%	3065 21.5%
	Risalpur	4 .1%	1 .0%	5 .0%

	Shangla	39 .6%	74 .9%	113 .8%
	Swabi	274 4.4%	402 5.0%	676 4.7%
	Swat	608 9.7%	893 11.1%	1501 10.5%
	Tank	46 .7%	73 .9%	119 .8%
	Upper Dir	118 1.9%	244 3.0%	362 2.5%
	Unknown Khyber Pakhtunkhwa	114 1.8%	208 2.6%	322 2.2%
	Total Khyber Pakhtunkhwa	6249 100.0%	8037 100.0%	14286 100.0%
Sindh	Badin	8 .5%	25 1.7%	33 1.1%
	Dadu	12 .8%	25 1.7%	37 1.2%
	Ghotki	45 2.9%	68 4.6%	113 3.8%
	Hyderabad	93 6.0%	97 6.6%	190 6.3%
	Jacobabad	31 2.0%	74 5.0%	105 3.5%
	Jamshoro	4 .3%	3 .2%	7 .2%
	Karachi	1055 68.6%	788 53.5%	1843 61.2%
	Khairpur	15 1.0%	20 1.4%	35 1.2%
	Larkana	17 1.1%	37 2.5%	54 1.8%
	Malir	6 .4%	3 .2%	9 .3%
	Mirpur Khas	14 .9%	17 1.2%	31 1.0%
	Naushahro Feroze	12 .8%	21 1.4%	33 1.1%
	Nawab Shah	14 .9%	28 1.9%	42 1.4%
	Sanghar	25 1.6%	43 2.9%	68 2.3%
	Shikarpur	16 1.0%	18 1.2%	34 1.1%
	Sukkur	58 3.8%	61 4.1%	119 4.0%
	Tharparkar	1 .1%	1 .1%	2 .1%
	Thatta	13 .8%	11 .7%	24 .8%
	Umerkot	7 .5%	7 .5%	14 .5%
	Unknown Sidh	93 6.0%	125 8.5%	218 7.2%
	Total Sindh	1539 100.0%	1472 100.0%	3011 100.0%
Balochistan	Awaran	0 0.0%	1 .1%	1 .1%
	Barkhan	3 .6%	14 1.7%	17 1.3%
	Bolan	4 .8%	5 .6%	9 .7%

Chaghi	11 2.3%	18 2.2%	29 2.2%
Dera Bugti	4 .8%	16 2.0%	20 1.5%
Gwadar	4 .8%	3 .4%	7 .5%
Jafarabad	8 1.7%	28 3.4%	36 2.8%
Jhal Magsi	0 0.0%	2 .2%	2 .2%
Kalat	3 .6%	7 .9%	10 .8%
Kech	6 1.3%	12 1.5%	18 1.4%
Kharan	1 .2%	3 .4%	4 .3%
Khuzdar	8 1.7%	8 1.0%	16 1.2%
Killa Abdullah	31 6.5%	53 6.5%	84 6.5%
Killa Saifullah	6 1.3%	8 1.0%	14 1.1%
Kohlu	3 .6%	5 .6%	8 .6%
Lasbela	2 .4%	7 .9%	9 .7%
Loralai	51 10.7%	102 12.4%	153 11.8%
Mastung	3 .6%	6 .7%	9 .7%
Nasirabad	6 1.3%	22 2.7%	28 2.2%
Panjugur	2 .4%	0 0.0%	2 .2%
Pishin	16 3.4%	33 4.0%	49 3.8%
Quetta	239 50.2%	352 42.9%	591 45.6%
Sibi	9 1.9%	20 2.4%	29 2.2%
Zhob	24 5.0%	47 5.7%	71 5.5%
Ziarat	12 2.5%	9 1.1%	21 1.6%
Unknown Balochistan	20 4.2%	39 4.8%	59 4.6%
Total Balochistan	476 100.0%	820 100.0%	1296 100.0%
F.A.T.A			
Bajaur	103 19.7%	205 19.8%	308 19.8%
Khyber	109 20.8%	234 22.6%	343 22.0%
Kurram	67 12.8%	128 12.4%	195 12.5%
Mohmand	64 12.2%	83 8.0%	147 9.4%
N.Waziristan	72 13.8%	180 17.4%	252 16.2%
Orakzai	18 3.4%	41 4.0%	59 3.8%
S.Waziristan	85 16.3%	152 14.7%	237 15.2%

	Unknown F.A.T.A	5 1.0%	13 1.3%	18 1.2%
	Total F.A.T.A	523 100.0%	1036 100.0%	1559 100.0%
Azad Jammu & Kashmir	Bagh	39 10.2%	57 13.0%	96 11.7%
	Bhimber	60 15.7%	64 14.5%	124 15.1%
	Kotli	28 7.3%	52 11.8%	80 9.7%
	Mirpur	144 37.6%	120 27.3%	264 32.1%
	Muzaffarabad	55 14.4%	63 14.3%	118 14.3%
	Poonch	38 9.9%	58 13.2%	96 11.7%
	Sudhnoti	9 2.3%	11 2.5%	20 2.4%
	Unknown Azad Jammu & Kashmir	10 2.6%	15 3.4%	25 3.0%
	Total Azad Jammu & Kashmir	383 100.0%	440 100.0%	823 100.0%
	Gilgit-Baltistan	Astore	1 2.4%	1 1.0%
Diamir		19 45.2%	29 30.2%	48 34.8%
Ghanche		1 2.4%	13 13.5%	14 10.1%
Ghizer		1 2.4%	2 2.1%	3 2.2%
Gilgit		14 33.3%	21 21.9%	35 25.4%
Hunza-Nagar		5 11.9%	17 17.7%	22 15.9%
Kharmang		1 2.4%	0 0.0%	1 .7%
Shigar		0 0.0%	4 4.2%	4 2.9%
Skardu		0 0.0%	9 9.4%	9 6.5%
Total Gilgit Baltistan		42 100.0%	96 100.0%	138 100.0%
Federal Capital	Islamabad	571 100.0%	419 100.0%	990 100.0%
Afghanistan	Districts are not listed	1410 100.0%	2110 100.0%	3520 100.0%
Other countries	Districts are not listed	14 100.0%	19 100.0%	33 100.0%
Districts and provinces are not defined		58 100.0%	67 100.0%	125 100.0%
Grand Total		42544 50.2%	42259 49.8%	84803 100.0%