

# ANNUAL CANCER REGISTRY REPORT-2020: 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 centers associated with the Trust include two hospitals: 'Shaukat Khanum Memorial Cancer Hospital and Research Center' (SKMCH&RC) in Lahore and Peshawar, the Karachi Diagnostic Center (KDC), and Shaukat Khanum Diagnostic Center Liberty (SKDCL), Lahore. SKMCH&RC Lahore is the oldest center and has been functioning since December 29, 1994; SKMCH&RC Peshawar since December 29, 2015; KDC since 2010; and SKDCL since August 01, 2019. All these centers are referred to as SKMCH&RC/hospital in this combined report.

## Distribution of neoplasms

Of a total of 7,267 new neoplasms diagnosed or treated at the aforementioned facilities in Pakistan, from January 1, 2020, to December 31, 2020, 2,960 were seen in males (40.7%) and 4,307 (59.3%) in female patients. Six-thousand, six hundred and sixty-one (6,661 (91.7%)) neoplasms were found in adults, whereas 606 (8.3%) were seen in children. Children were classified as those 18-years or less 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, Jan. 2020 to Dec. 2020.**

| <b>Behavior</b>  | <b>Age-group</b> | <b>Registered patients<br/>(6,975)</b> | <b>Reported neoplasm*<br/>(7,267)</b> |
|--|------------------|--|---------------------------------------|
| <b>Malignant<sup>†</sup></b>                           | Adults           | 6,024                                  | 6,118                                 |
|  | Pediatrics       | 589                                    | 590                                   |
|  | Total            | 6,613                                  | 6,708                                 |
| <b>Benign<sup>‡</sup> &amp;<br/>uncertain behavior</b> | Adults           | 485                                    | 543                                   |
|  | Pediatrics       | 16                                     | 16                                    |
|  | Total            | 501                                    | 559                                   |

\* The difference in the number of registered patients and reported neoplasms is attributed to multiple malignancies and benign neoplasms diagnosed in 95 and 58 patients, respectively. Further, 139 patients have both malignant and benign neoplasm simultaneously.

<sup>†</sup> Cases with behavior code /3 and /2 are considered to be malignant cases.

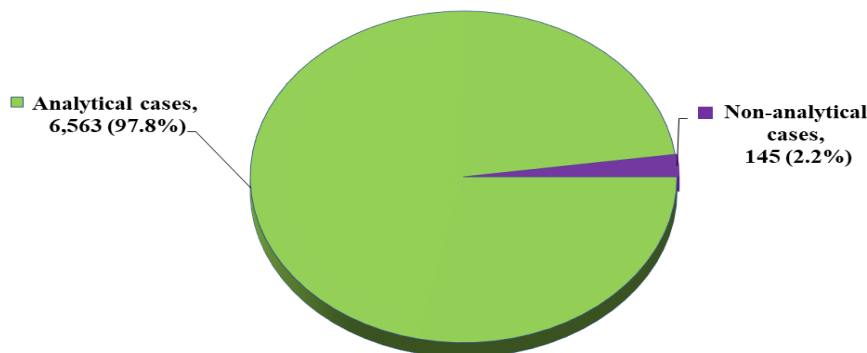
<sup>‡</sup> Cases with behavior code /0 and /1 are considered to be benign and uncertain, respectively.

<sup>§</sup> According to the Facility Oncology Revised Data Standards (FORDS), Revised for 2004, Class of Case 0 to 2 are analytical cases and included in treatment and survival analysis, whereas, Class of Case 3 to 9 are non-analytical cases, usually not included in routine treatment or survival statistics.

## Class of Case

Of a total of 6,708 malignant cases recorded in the Registry from January 2020 to December 2020, 6,563 (97.8%) were analytical cases and 145 (2.2%) non-analytical. Figure 1 shows the stratification of analytical and non-analytical cases<sup>¥</sup>.

**Figure 1. Stratification of analytical and non-analytical cases, Jan. 2020 to Dec. 2020.**



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

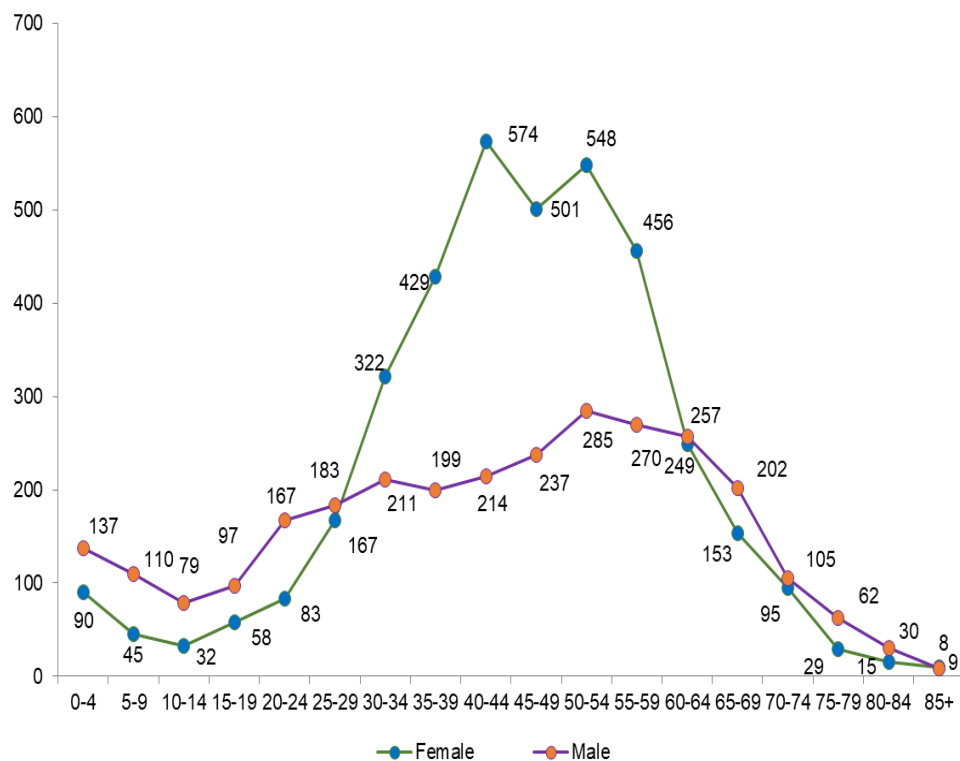
## Distribution of malignancies

In the year 2020, a total of 6,708 malignancies were diagnosed at the hospital with 3,855 seen among females and 2,853 among males. Table 2 displays the distributions of female and male patients according to sex and age-group.

**Table 2. Distribution of cancer cases by sex and age-group (years), Jan. 2020 to Dec. 2020.**

| Age-range    | Female      | Male        | Total       |
|--------------|-------------|-------------|-------------|
| 0-4          | 90          | 137         | 227         |
| 5-9          | 45          | 110         | 155         |
| 10-14        | 32          | 79          | 111         |
| 15-19        | 58          | 97          | 155         |
| 20-24        | 83          | 167         | 250         |
| 25-29        | 167         | 183         | 350         |
| 30-34        | 322         | 211         | 533         |
| 35-39        | 429         | 199         | 628         |
| 40-44        | 574         | 214         | 788         |
| 45-49        | 501         | 237         | 738         |
| 50-54        | 548         | 285         | 833         |
| 55-59        | 456         | 270         | 726         |
| 60-64        | 249         | 257         | 506         |
| 65-69        | 153         | 202         | 355         |
| 70-74        | 95          | 105         | 200         |
| 75-79        | 29          | 62          | 91          |
| 80-84        | 15          | 30          | 45          |
| 85+          | 9           | 8           | 17          |
| <b>Total</b> | <b>3855</b> | <b>2853</b> | <b>6708</b> |

**Figure 2. Cancer cases by sex and age-group (years), Jan.-Dec. 2020.**



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

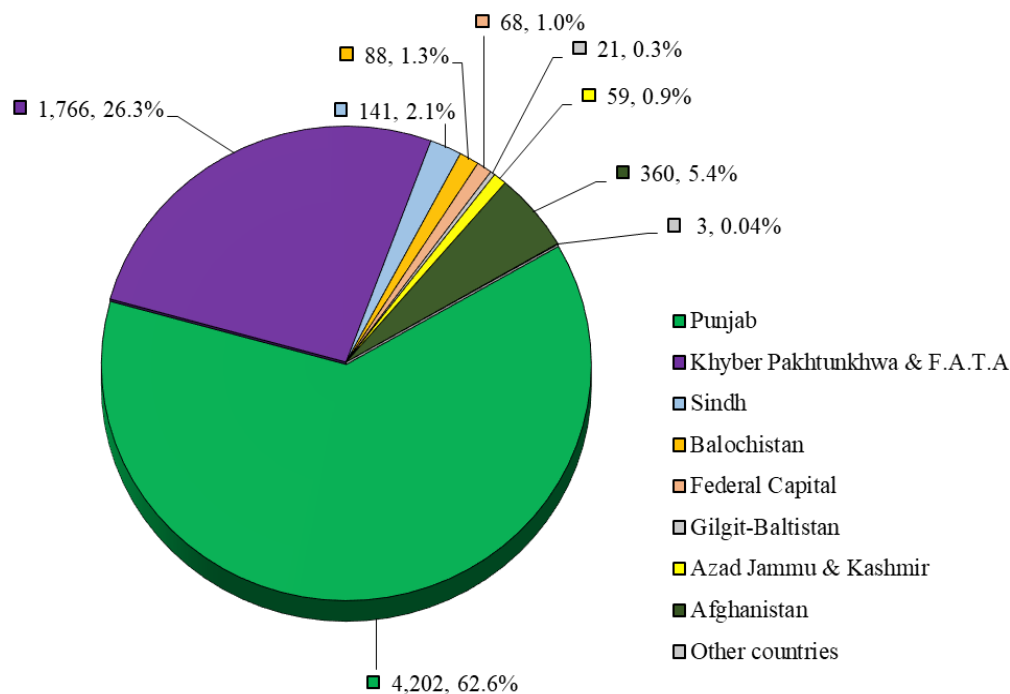
## Demographics

Of the 6,708 malignant cancers, nearly 62.6% (4,202) belonged to the province of Punjab and approximately 26.3% (1,766) to Khyber Pakhtunkhwa (Table 3). The fact that the geographic area of residence of a vast majority of patients was Punjab can be explained considering the information that the oldest affiliate is situated in the provincial capital of Punjab and that, this province accounts 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, Jan. 2020 to Dec. 2020.**

| Province/Region                          | Malignancies | Percentage   |
|--|--------------|--------------|
| Punjab                                   | 4,202        | 62.6         |
| Khyber Pakhtunkhwa including F.A.T.A [1] | 1,766        | 26.3         |
| Sindh                                    | 141          | 2.1          |
| Balochistan                              | 88           | 1.3          |
| Federal Capital                          | 68           | 1.0          |
| Gilgit-Baltistan                         | 21           | 0.3          |
| Azad Jammu & Kashmir                     | 59           | 0.9          |
| Afghanistan                              | 360          | 5.4          |
| Other countries                          | 3            | 0.04         |
| <b>Total</b>                             | <b>6,708</b> | <b>100.0</b> |

**Figure 3. Distribution of malignancies according to the geographic area of residence of the patients, Jan. 2020 to Dec. 2020.**



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

[1] The administrative unit F.A.T.A was merged with the province of Khyber Pakhtunkhwa on May 28, 2018.

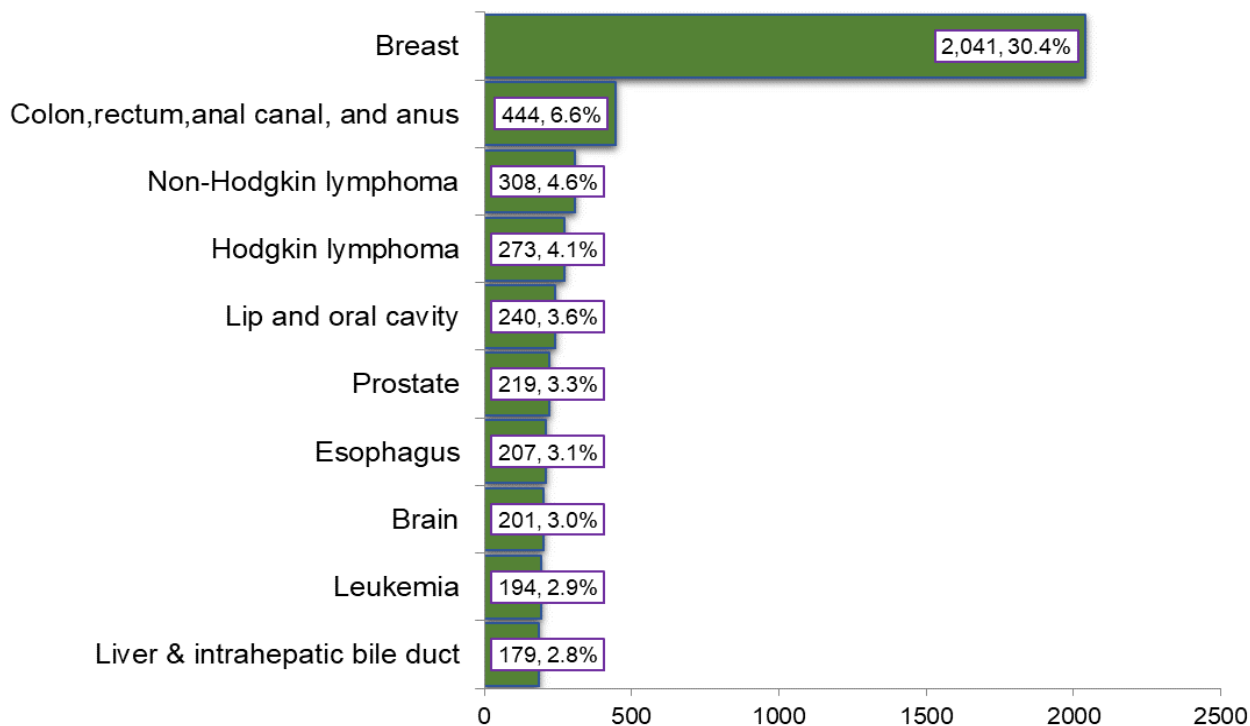
## Top ten cancers

Tables 4 to 8 show the list of the ten commonest malignancies seen at SKMCH&RC during the year 2020. Of a total of 6,708 malignancies, breast cancer was the leading one with 2,041 cases accessioned into the Registry. Cancers of the colon, rectum, anal canal, and anus, and non-Hodgkin lymphoma were the second and third most frequently seen cancers, respectively.

**Table 4. Top 10 malignancies among all age-groups, both sexes combined, Jan. 2020 to Dec. 2020.**

| Sr. No. | ICD-O-3 Category                  | Count | Percentage | ICD-O-3 Code           |
|---------|-----------------------------------|-------|------------|------------------------|
| 1       | Breast                            | 2,041 | 30.4       | C50.0 - C50.9          |
| 2       | Colon, rectum, anal canal, & anus | 444   | 6.6        | C18.0 - C21.8          |
| 3       | Non-Hodgkin lymphoma              | 308   | 4.6        | M9590 - 91, M967 - 972 |
| 4       | Hodgkin lymphoma                  | 273   | 4.1        | M9650 - M9667          |
| 5       | Lip & oral cavity                 | 240   | 3.6        | C00.0 - C08.9          |
| 6       | Prostate                          | 219   | 3.3        | C61.9                  |
| 7       | Esophagus                         | 207   | 3.1        | C15                    |
| 8       | Brain                             | 201   | 3.0        | C71.0 - C71.9          |
| 9       | Leukemia                          | 194   | 2.9        | M9800 - M9948          |
| 10      | Liver & intrahepatic bile duct    | 185   | 2.8        | C22                    |

**Figure 4. Top 10 malignancies among all age-groups, both sexes combined, Jan. 2020 to Dec. 2020.**



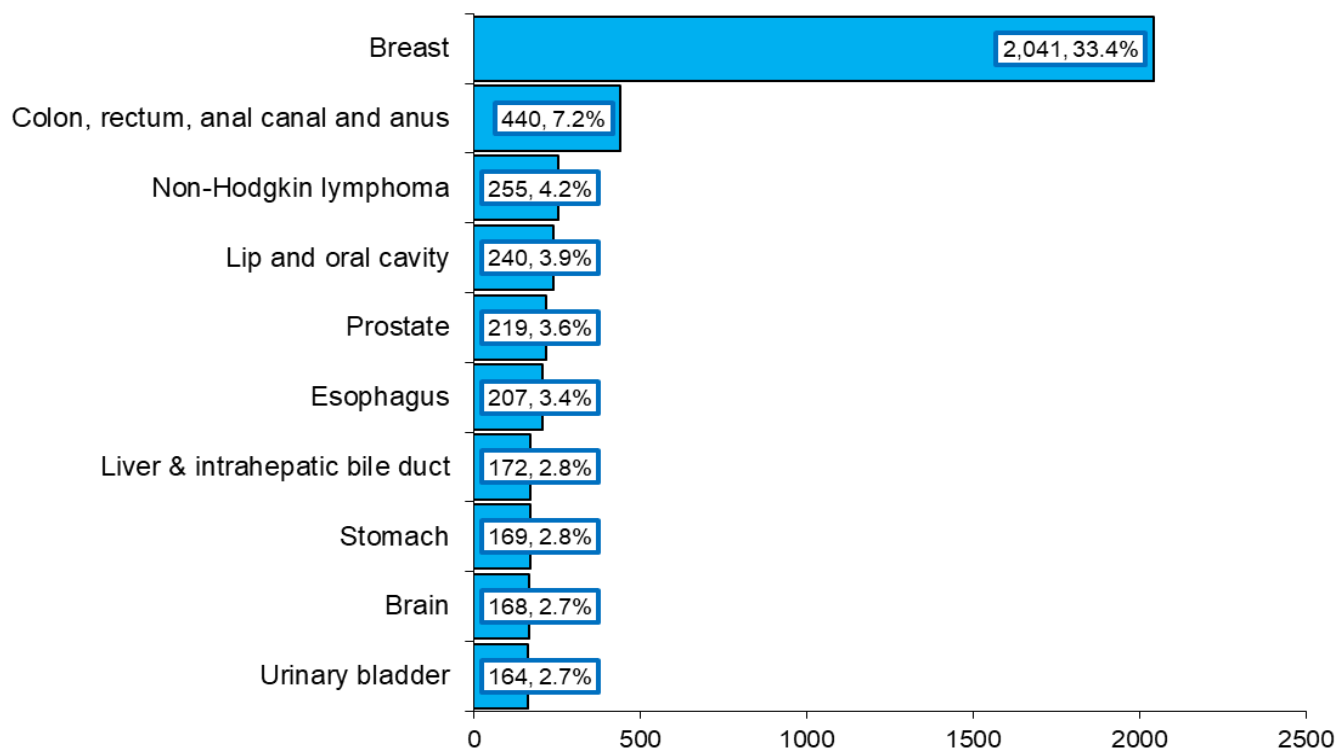
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

Among adults, during the year 2020, a total of 6,118 malignancies were diagnosed or treated at SKMCH&RC. Cancers of the breast, colon/rectum/anal canal/anus, and non-Hodgkin lymphoma were registered as the most frequently seen cancers.

**Table 5. Top 10 malignancies among adults (> 18 years), Jan. 2020 to Dec. 2020.**

| Sr. No. | ICD-O-3 Category                  | Count | Percentage | ICD-O-3 Code           |
|---------|-----------------------------------|-------|------------|------------------------|
| 1       | Breast                            | 2041  | 33.4       | C50.0 - C50.9          |
| 2       | Colon, rectum, anal canal, & anus | 440   | 7.2        | C18.0 - C21.8          |
| 3       | Non-Hodgkin lymphoma              | 255   | 4.2        | M9590 - 91, M967 - 972 |
| 4       | Lip & oral cavity                 | 240   | 3.9        | C00.0 - C08.9          |
| 5       | Prostate                          | 219   | 3.6        | C61.9                  |
| 6       | Esophagus                         | 207   | 3.4        | C15                    |
| 7       | Liver & intrahepatic bile duct    | 172   | 2.8        | C22                    |
| 8       | Stomach                           | 169   | 2.8        | C44.0 - C44.9          |
| 9       | Brain                             | 168   | 2.7        | C71.0 - C71.9          |
| 10      | Urinary bladder                   | 164   | 2.7        | C67                    |

**Figure 5. Top 10 malignancies among adults (> 18 years), Jan. 2020 to Dec. 2020.**



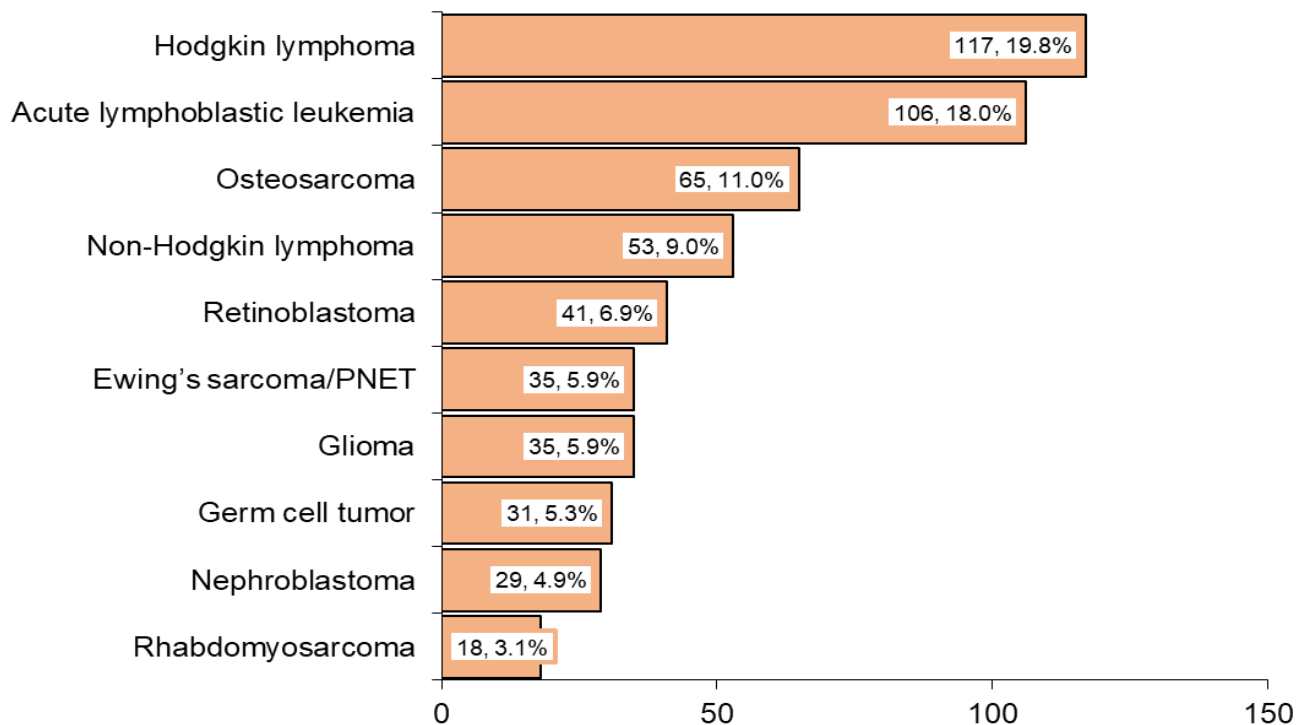
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

In 590 childhood malignancies, using the classification based on tumor morphology, Hodgkin lymphoma, acute lymphoblastic leukemia, and osteosarcoma 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 in children (<= 18 years), Jan. 2020 to Dec. 2020.**

| Sr. No. | ICD-O-3 Category             | Count | Percentage | ICD-O-3 Morphology Code |
|---------|------------------------------|-------|------------|-------------------------|
| 1       | Hodgkin lymphoma             | 117   | 19.8       | M9650 - M9667           |
| 2       | Acute lymphoblastic leukemia | 106   | 18.0       | M982 - M983             |
| 3       | Osteosarcoma                 | 65    | 11.0       | M9180 - M9195           |
| 4       | Non-Hodgkin lymphoma         | 53    | 9.0        | M9590 - 91, M967 - 972  |
| 5       | Retinoblastoma               | 41    | 6.9        | M9510 - M9514           |
| 6       | Ewing's sarcoma/PNET         | 35    | 5.9        | M9260                   |
| 7       | Glioma                       | 35    | 5.9        | M938 - M948             |
| 8       | Germ cell tumor              | 31    | 5.3        | M906 - M909             |
| 9       | Nephroblastoma               | 29    | 4.9        | M8960 - M8960           |
| 10      | Rhabdomyosarcoma             | 18    | 3.1        | M8900 - M8921           |

**Figure 6. Top 10 malignancies in children (<= 18 years), Jan. 2020 to Dec. 2020.**



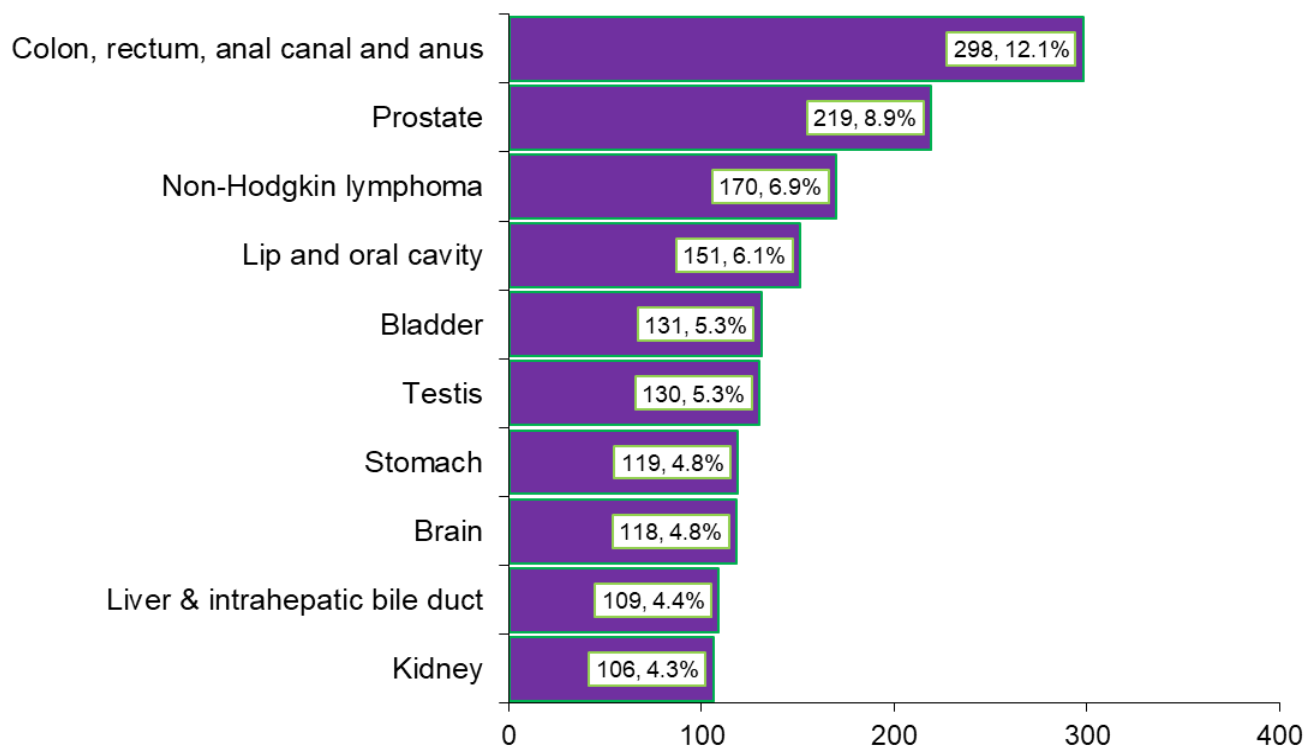
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

In adult males (2,466 malignancies), the commonest cancers were those of the colon, rectum, anal canal, and anus, prostate, and non-Hodgkin lymphoma (Table 7).

**Table 7. Top 10 malignancies among adult males (> 18 years), Jan. 2020 to Dec. 2020.**

| Sr. No. | ICD Category                      | Count | Percentage | ICD-O-3 Code           |
|---------|-----------------------------------|-------|------------|------------------------|
| 1       | Colon, rectum, anal canal, & anus | 298   | 12.1       | C18 - C21.8            |
| 2       | Prostate                          | 219   | 8.9        | C61.9                  |
| 3       | Non-Hodgkin lymphoma              | 170   | 6.9        | M9590 - 91, M967 - 972 |
| 4       | Lip & oral cavity                 | 151   | 6.1        | C00.0 - C08.9          |
| 5       | Bladder                           | 131   | 5.3        | C67                    |
| 6       | Testis                            | 130   | 5.3        | C62                    |
| 7       | Stomach                           | 119   | 4.8        | C16                    |
| 8       | Brain                             | 118   | 4.8        | C71.0 - C71.9          |
| 9       | Liver & intrahepatic bile duct    | 109   | 4.4        | C22                    |
| 10      | Kidney                            | 106   | 4.3        | C64.0 - C64.9          |

**Figure 7. Top 10 malignancies among adult males (> 18 years), Jan. 2020 to Dec. 2020.**



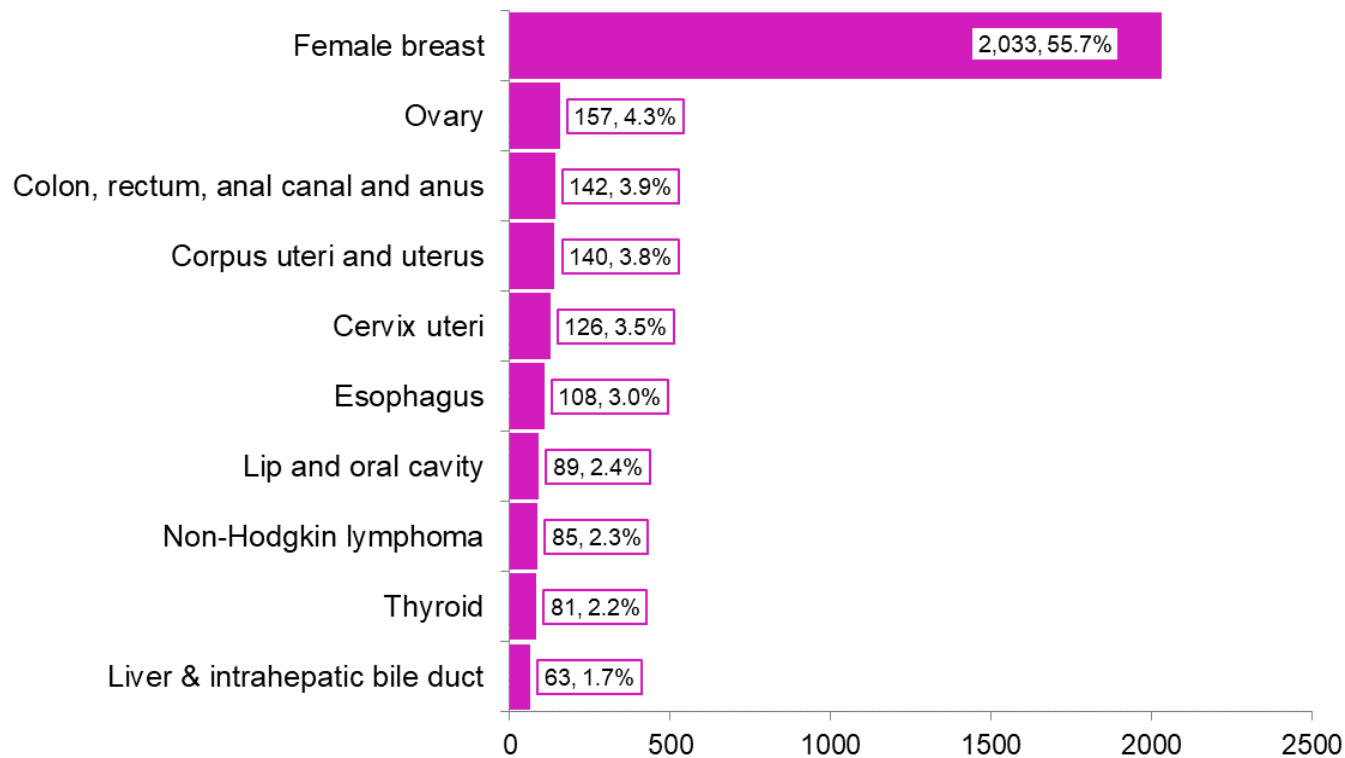
Data Source: Cancer Registry & Clinical Data Management, SKMCH&RC

The most frequent diagnosis in adult women (3,652) was breast cancer accounting for 55.7% of the cancers. Cancer of the ovary was ranked as the second-highest (4.3%) and those of the colon, rectum, anal canal, and anus as the third common malignancy with 3.9% of the total malignancies, in females.

**Table 8. Top 10 malignancies among adult females (> 18 years), Jan. 2020 to Dec. 2020.**

| Sr. No. | ICD Category                      | Count | Percentage | ICD-O 3 Code           |
|---------|-----------------------------------|-------|------------|------------------------|
| 1       | Female breast                     | 2,033 | 55.7       | C50.0 - C50.9          |
| 2       | Ovary                             | 157   | 4.3        | C56                    |
| 3       | Colon, rectum, anal canal, & anus | 142   | 3.9        | C18 - C21.8            |
| 4       | Corpus uteri and uterus           | 140   | 3.8        | C54.0 - C55.9          |
| 5       | Cervix uteri                      | 126   | 3.5        | C53.0 - C53.9          |
| 6       | Esophagus                         | 108   | 3.0        | C15 - C15.9            |
| 7       | Lip & oral cavity                 | 89    | 2.4        | C00.0 - C08.9          |
| 8       | Non-Hodgkin lymphoma              | 85    | 2.3        | M9590 - 91, M967 - 972 |
| 9       | Thyroid                           | 81    | 2.2        | C73.9                  |
| 10      | Liver & intrahepatic bile duct    | 63    | 1.7        | C22                    |

**Figure 8. Top 10 malignancies among adult females (> 18 years), Jan. 2020 to Dec. 2020.**



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



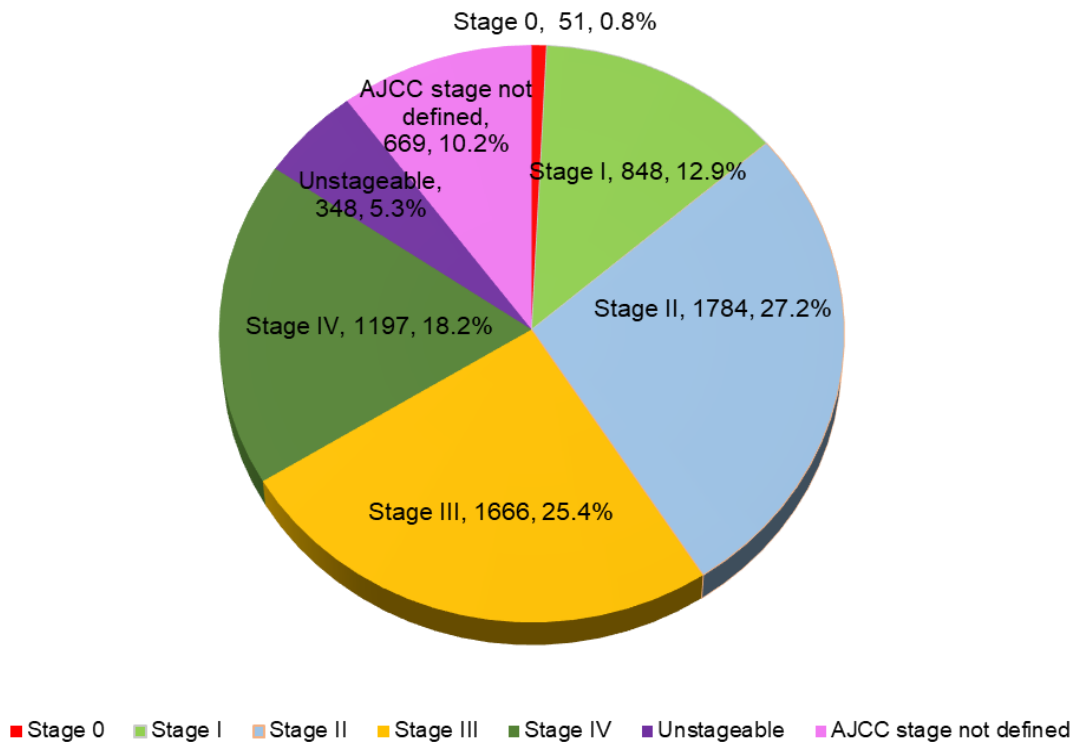
## Staging

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 2020, cancer staging for 6,563 analytical cases (Class of Case 0, 1, 2) showed that 51 (0.8%) cases fell into 0 or in-situ category, 848 (12.9%) in Stage I, 1,784 (27.2%) in Stage II, 1,666 (25.4%) cases in Stage III, and 1197 (18.2%) in Stage IV, (table 9); 348 (5.3%) cases were unstageable and 669 (10.2%) had no AJCC stage defined for that site.

**Table 9. TNM Stage of cancer patients at SKMCH&RC, Jan. 2020 to Dec. 2020.**

| <b>AJCC Stage</b>      | <b>Count</b> | <b>Percentage</b> |
|------------------------|--------------|-------------------|
| Stage 0                | 51           | 0.8               |
| Stage I                | 848          | 12.9              |
| Stage II               | 1,784        | 27.2              |
| Stage III              | 1,666        | 25.4              |
| Stage IV               | 1,197        | 18.2              |
| Unstageable            | 348          | 5.3               |
| AJCC stage not defined | 669          | 10.2              |
| <b>Total</b>           | <b>6,563</b> | <b>100.0</b>      |

**Figure 9. TNM stage of cancer patients at SKMCH&RC, Jan. 2020 to Dec. 2020.**



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

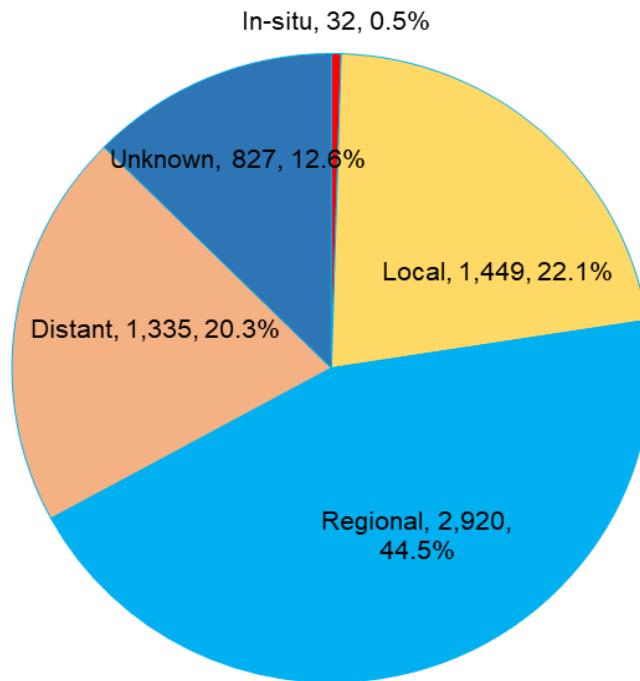
## Summary Stage

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 site. All analytical cases (Class of Case 0, 1, 2), were included to generate results. The cancer data for the year 2020 reflects that there were 0.5% in-situ cases, 22.1% localized cancers, 44.5% regional cases, 20.3% distant, and there were 12.6% cases in which the summary stage was unknown.

**Table 10. Classification of patients according to the SEER Summary Stage, Jan. 2020 to Dec. 2020.**

| <b>SEER Summary Stage</b> | <b>Count</b> | <b>Percentage</b> |
|---------------------------|--------------|-------------------|
| In-situ                   | 32           | 0.5               |
| Local                     | 1,449        | 22.1              |
| Regional                  | 2,920        | 44.5              |
| Distant                   | 1,335        | 20.3              |
| Unknown                   | 827          | 12.6              |
| <b>Total</b>              | <b>6,563</b> | <b>100.0</b>      |

**Figure 10. Classification according to the SEER Summary Stage, Jan. 2020 to Dec. 2020.**



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

## **Grade/Differentiation/Immunophenotype**

The International Classification of Diseases for Oncology, Third Edition (ICD-O-3), codes and guidelines have been used to categorize grade/differentiation/immunophenotype. All analytical cases (Class of Case 0, 1, 2), were included to generate results.

**Table 11. Grade/differentiation/immunophenotype of cancers, Jan. 2020 to Dec. 2020.**

| <b>Grade/differentiation/immunophenotype</b>  | <b>Count</b> | <b>Percentage</b> |
|---|--------------|-------------------|
| Grade I   | 458          | 6.8               |
| Grade II  | 2,136        | 31.8              |
| Grade III   | 1,737        | 25.9              |
| Grade IV  | 124          | 1.8               |
| T-cell  | 24           | 0.4               |
| B-cell  | 353          | 5.3               |
| Grade/differentiation/immunophenotype not determined, not stated, or not applicable | 1,876        | 28.0              |
| <b>Total</b>  | <b>6,708</b> | <b>100.0</b>      |

## **SUPPLEMENTAL INFORMATION**

Table 12 depicts the results stratified by primary site, age-group, and sex. According to this, cancers of the breast, colon/rectum/anal canal/anus, lymphoma, and lip/oral cavity are the commonest systems/site(s) for malignancies seen at SKMCH&RC. Table 13 shows the results stratified by sex, primary site, and morphology.

**Table 12. Distribution by sex, primary malignant site, and 5-year age-group, 2020**

**FEMALES**

| ICD-O-3-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   | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 5     |
| C01-C02           | Tongue                                   | 0  | 0  | 0   | 0   | 0   | 4   | 2   | 2   | 5   | 4   | 3   | 9   | 5   | 5   | 3   | 0   | 0   | 0   | 42    |
| C03               | Gum                                      | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 2   | 2   | 0   | 0   | 0   | 8     |
| C04-C06           | Floor & other parts of the mouth         | 0  | 0  | 0   | 0   | 1   | 1   | 0   | 1   | 1   | 3   | 3   | 3   | 1   | 3   | 2   | 0   | 0   | 1   | 20    |
| C07-C08           | Salivary gland                           | 0  | 0  | 0   | 0   | 2   | 1   | 1   | 1   | 2   | 2   | 1   | 1   | 1   | 2   | 0   | 0   | 0   | 0   | 14    |
| C09-C10           | Tonsil & oropharynx                      | 0  | 0  | 0   | 0   | 0   | 1   | 1   | 0   | 1   | 0   | 1   | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 5     |
| C11               | Nasopharynx                              | 0  | 0  | 1   | 0   | 1   | 0   | 1   | 2   | 1   | 2   | 0   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 10    |
| C12-C13           | Pyriiform sinus & hypopharynx            | 0  | 0  | 0   | 0   | 0   | 1   | 0   | 3   | 3   | 0   | 2   | 5   | 1   | 0   | 2   | 0   | 0   | 0   | 17    |
| C15               | Esophagus                                | 0  | 0  | 0   | 0   | 2   | 2   | 9   | 9   | 27  | 22  | 21  | 11  | 3   | 0   | 2   | 0   | 0   | 0   | 108   |
| C16               | Stomach                                  | 0  | 0  | 0   | 0   | 3   | 3   | 5   | 5   | 6   | 2   | 10  | 7   | 4   | 5   | 0   | 0   | 0   | 0   | 50    |
| C17               | Small intestine                          | 0  | 0  | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 5   | 1   | 2   | 0   | 1   | 1   | 0   | 0   | 11    |
| C18               | Colon                                    | 0  | 0  | 0   | 2   | 3   | 4   | 4   | 12  | 2   | 4   | 4   | 12  | 5   | 3   | 5   | 0   | 0   | 0   | 60    |
| C19-C21           | Rectosigmoid, rectum, anal canal & anus  | 0  | 0  | 0   | 4   | 5   | 8   | 5   | 13  | 13  | 8   | 11  | 10  | 4   | 7   | 2   | 1   | 0   | 0   | 91    |
| C22               | Liver & intrahepatic bile duct           | 4  | 0  | 0   | 0   | 0   | 0   | 2   | 2   | 1   | 10  | 8   | 20  | 6   | 8   | 3   | 2   | 0   | 1   | 67    |
| C23-C24           | Gall bladder & extrahepatic bile duct    | 0  | 0  | 0   | 0   | 0   | 0   | 6   | 2   | 7   | 4   | 4   | 7   | 6   | 7   | 8   | 1   | 0   | 0   | 52    |
| C25               | Pancreas                                 | 0  | 0  | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 5   | 3   | 4   | 6   | 5   | 4   | 1   | 2   | 1   | 34    |
| C26               | Other & ill-defined digestive organs     | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 2     |
| C30-C31           | Nasal cavity, middle ear, & acc. sinuses | 0  | 0  | 1   | 1   | 0   | 0   | 1   | 0   | 1   | 0   | 3   | 0   | 1   | 0   | 0   | 1   | 0   | 0   | 9     |
| C32               | Larynx                                   | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 1   | 2   | 0   | 0   | 3   | 1   | 1   | 0   | 0   | 0   | 0   | 8     |
| C33-C34           | Traches, bronchus, & lung                | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 3   | 2   | 4   | 9   | 4   | 6   | 3   | 2   | 2   | 0   | 0   | 35    |
| C37-C38           | Thymus, heart, mediastinum & pleura      | 0  | 0  | 0   | 0   | 1   | 1   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 3     |
| C40-C41           | Bone & articular cartilage               | 2  | 6  | 13  | 11  | 4   | 1   | 1   | 1   | 0   | 1   | 3   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 44    |
| C44               | Skin                                     | 0  | 0  | 0   | 0   | 0   | 0   | 2   | 3   | 7   | 4   | 3   | 11  | 8   | 5   | 2   | 1   | 0   | 0   | 46    |
| C47               | Peripheral & autoimmune nervous system   | 0  | 0  | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1     |
| C49               | Connective & soft tissue                 | 4  | 2  | 4   | 3   | 2   | 3   | 6   | 9   | 6   | 3   | 3   | 4   | 1   | 1   | 1   | 1   | 0   | 0   | 53    |
| C50               | Breast                                   | 0  | 0  | 0   | 0   | 14  | 65  | 186 | 280 | 390 | 330 | 329 | 225 | 103 | 56  | 34  | 13  | 7   | 1   | 2033  |
| C51-C52           | Vulva & vagina                           | 0  | 0  | 0   | 0   | 0   | 1   | 0   | 1   | 0   | 0   | 1   | 1   | 4   | 0   | 1   | 0   | 0   | 0   | 9     |
| C53               | Cervix uteri                             | 0  | 0  | 0   | 0   | 0   | 1   | 11  | 7   | 19  | 18  | 28  | 20  | 12  | 6   | 2   | 0   | 0   | 2   | 126   |
| C54               | Corpus uteri                             | 0  | 0  | 0   | 0   | 0   | 1   | 6   | 9   | 8   | 9   | 27  | 29  | 22  | 7   | 7   | 2   | 1   | 0   | 128   |
| C55               | Uterus                                   | 0  | 0  | 0   | 0   | 0   | 1   | 1   | 1   | 0   | 2   | 2   | 0   | 3   | 0   | 2   | 0   | 0   | 0   | 12    |
| C56-C57           | Ovary & other female genital organs      | 0  | 2  | 4   | 7   | 5   | 14  | 13  | 10  | 20  | 22  | 23  | 22  | 12  | 7   | 3   | 1   | 2   | 0   | 167   |
| C64-C66           | Kidney & other urinary organ             | 11 | 2  | 0   | 2   | 1   | 0   | 0   | 0   | 8   | 8   | 8   | 4   | 8   | 1   | 1   | 1   | 2   | 0   | 57    |
| C67               | Urinary bladder                          | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 6   | 4   | 3   | 11  | 6   | 2   | 0   | 0   | 0   | 1   | 33    |
| C69               | Eye                                      | 22 | 2  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 1   | 0   | 0   | 0   | 0   | 26    |
| C70-C71           | Brain                                    | 2  | 7  | 3   | 4   | 2   | 6   | 11  | 4   | 8   | 4   | 3   | 5   | 3   | 2   | 0   | 0   | 0   | 0   | 64    |
| C72               | Other parts of the nervous system        | 0  | 0  | 0   | 0   | 0   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 2     |
| C73               | Thyroid gland                            | 0  | 0  | 0   | 4   | 12  | 13  | 11  | 13  | 8   | 9   | 3   | 3   | 2   | 2   | 2   | 0   | 0   | 0   | 82    |
| C76               | Other & ill-defined sites                | 3  | 0  | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 5     |
| C80               | Unknown primary                          | 0  | 0  | 0   | 0   | 1   | 1   | 1   | 3   | 2   | 0   | 6   | 3   | 4   | 2   | 0   | 0   | 0   | 0   | 23    |
| M9650-M9667       | Hodgkin lymphoma                         | 1  | 12 | 5   | 10  | 9   | 15  | 13  | 7   | 0   | 2   | 1   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 77    |
| M9590-91, 967-972 | Non-Hodgkin lymphoma                     | 7  | 4  | 1   | 3   | 6   | 12  | 9   | 12  | 9   | 8   | 10  | 6   | 2   | 5   | 3   | 0   | 1   | 1   | 99    |
| M9731-M732        | Multiple myeloma & immuno. neoplasms     | 0  | 0  | 0   | 0   | 0   | 0   | 1   | 1   | 0   | 0   | 1   | 1   | 0   | 0   | 0   | 1   | 0   | 0   | 5     |
| M982-M983         | Lymphoid leukemia                        | 32 | 7  | 0   | 4   | 3   | 1   | 1   | 0   | 0   | 0   | 1   | 1   | 1   | 0   | 1   | 0   | 0   | 0   | 52    |
| M984-M993         | Myeloid leukemia                         | 1  | 0  | 0   | 2   | 3   | 1   | 2   | 2   | 1   | 0   | 1   | 0   | 0   | 1   | 0   | 0   | 0   | 1   | 15    |
| C42.0, C42.2-4    | Other lymphatic & hematopoietic tissue   | 1  | 0  | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 1   | 0   | 1   | 0   | 1   | 0   | 0   | 0   | 0   | 5     |
| ~                 | Other reportable CNS neoplasms           | 0  | 1  | 0   | 1   | 1   | 3   | 7   | 9   | 5   | 4   | 1   | 4   | 2   | 2   | 0   | 0   | 0   | 0   | 40    |
|                   | Total                                    | 90 | 45 | 32  | 58  | 83  | 167 | 322 | 429 | 574 | 501 | 548 | 456 | 249 | 153 | 95  | 29  | 15  | 9   | 3855  |

**MALES**

| ICD-O-3-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         | 0          | 0          | 1          | 1          | 1          | 0          | 3          | 1          | 1          | 0          | 0          | 0         | 0         | 0        | 8           |
| C01-C02          | Tongue  | 0          | 0          | 0         | 0         | 0          | 1          | 1          | 3          | 4          | 9          | 11         | 11         | 8          | 7          | 1          | 0         | 1         | 1        | 58          |
| C03              | Gum   | 0          | 0          | 0         | 0         | 0          | 0          | 1          | 0          | 2          | 1          | 3          | 3          | 3          | 6          | 2          | 1         | 0         | 0        | 22          |
| C04-C06          | Floor & other parts of the mouth              | 0          | 0          | 0         | 0         | 0          | 1          | 3          | 7          | 5          | 4          | 5          | 6          | 7          | 3          | 2          | 1         | 0         | 0        | 44          |
| C07-C08          | Salivary gland                                | 0          | 0          | 0         | 0         | 1          | 0          | 1          | 1          | 5          | 4          | 4          | 1          | 2          | 1          | 0          | 0         | 0         | 0        | 20          |
| C09-C10          | Tonsil & oropharynx                           | 0          | 1          | 0         | 0         | 0          | 1          | 0          | 0          | 0          | 0          | 0          | 1          | 1          | 0          | 0          | 0         | 0         | 0        | 4           |
| C11              | Nasopharynx                                   | 0          | 0          | 3         | 3         | 3          | 0          | 3          | 3          | 5          | 5          | 8          | 3          | 7          | 2          | 1          | 0         | 0         | 0        | 46          |
| C12-C13          | Pyiform sinus & hypopharynx                   | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 2          | 4          | 1          | 1          | 0          | 1          | 1          | 0         | 0         | 0        | 10          |
| C14              | Other & ill-defined lip, oral cavity, pharynx | 0          | 0          | 0         | 0         | 0          | 0          | 1          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0        | 1           |
| C15              | Esophagus                                     | 0          | 0          | 0         | 0         | 4          | 3          | 9          | 10         | 11         | 18         | 18         | 18         | 6          | 0          | 1          | 1         | 0         | 1        | 100         |
| C16              | Stomach                                       | 0          | 0          | 0         | 0         | 4          | 1          | 4          | 12         | 13         | 19         | 26         | 19         | 8          | 9          | 2          | 1         | 0         | 0        | 118         |
| C17              | Small intestine                               | 0          | 0          | 0         | 0         | 0          | 2          | 2          | 1          | 2          | 2          | 1          | 1          | 1          | 0          | 1          | 1         | 0         | 0        | 14          |
| C18              | Colon   | 0          | 1          | 0         | 2         | 1          | 12         | 8          | 15         | 19         | 15         | 11         | 12         | 13         | 4          | 5          | 1         | 1         | 0        | 120         |
| C19-C21          | Rectosigmoid, rectum, anal canal, & anus      | 0          | 0          | 0         | 3         | 14         | 15         | 19         | 27         | 21         | 19         | 22         | 16         | 13         | 12         | 1          | 3         | 0         | 0        | 185         |
| C22              | Liver & intrahepatic bile duct                | 5          | 2          | 2         | 0         | 0          | 2          | 1          | 2          | 2          | 12         | 25         | 30         | 16         | 9          | 6          | 4         | 0         | 0        | 118         |
| C23-C24          | Gall bladder & extrahepatic bile duct         | 0          | 0          | 0         | 0         | 2          | 0          | 1          | 0          | 6          | 7          | 11         | 4          | 7          | 4          | 1          | 0         | 0         | 0        | 43          |
| C25              | Pancreas                                      | 0          | 0          | 0         | 1         | 1          | 1          | 3          | 1          | 4          | 4          | 6          | 7          | 8          | 6          | 5          | 3         | 2         | 0        | 52          |
| C30-C31          | Nasal cavity, middle ear, & acc. sinuses      | 0          | 0          | 0         | 0         | 1          | 3          | 1          | 0          | 0          | 0          | 1          | 1          | 0          | 0          | 0          | 0         | 0         | 0        | 7           |
| C32              | Larynx  | 0          | 0          | 0         | 0         | 0          | 1          | 1          | 1          | 8          | 3          | 7          | 10         | 10         | 10         | 7          | 2         | 1         | 0        | 61          |
| C33-C34          | Traches, bronchus, & lung                     | 0          | 0          | 0         | 1         | 0          | 1          | 5          | 2          | 3          | 6          | 5          | 11         | 21         | 13         | 3          | 8         | 9         | 1        | 89          |
| C37-C38          | Thymus, heart, mediastinum, & pleura          | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 1          | 1          | 1          | 0          | 1          | 0          | 1          | 1          | 0         | 0         | 0        | 6           |
| C40-C41          | Bone & articular cartilage                    | 5          | 4          | 32        | 29        | 16         | 6          | 8          | 2          | 0          | 0          | 1          | 0          | 4          | 0          | 0          | 0         | 0         | 0        | 107         |
| C44              | Skin  | 0          | 0          | 0         | 0         | 4          | 2          | 4          | 1          | 9          | 13         | 16         | 11         | 9          | 8          | 4          | 2         | 3         | 0        | 86          |
| C47              | Peripheral & autoimmune nervous system        | 3          | 0          | 0         | 0         | 1          | 0          | 1          | 0          | 0          | 1          | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0        | 6           |
| C49              | Connective & soft tissue                      | 2          | 2          | 3         | 4         | 3          | 8          | 10         | 1          | 4          | 1          | 11         | 4          | 4          | 2          | 3          | 1         | 0         | 0        | 63          |
| C50              | Breast  | 0          | 0          | 0         | 0         | 0          | 0          | 1          | 1          | 3          | 0          | 1          | 1          | 1          | 0          | 0          | 0         | 0         | 0        | 8           |
| C61              | Prostate                                      | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 1          | 7          | 9          | 27         | 52         | 62         | 38         | 14        | 6         | 3        | 219         |
| C62              | Testis  | 6          | 0          | 4         | 9         | 21         | 34         | 28         | 19         | 15         | 6          | 2          | 0          | 1          | 1          | 0          | 1         | 0         | 0        | 147         |
| C64-C66          | Kidney & other urinary organ                  | 16         | 1          | 1         | 0         | 1          | 4          | 7          | 8          | 9          | 12         | 21         | 12         | 20         | 6          | 3          | 3         | 2         | 0        | 126         |
| C67              | Urinary bladder                               | 0          | 0          | 0         | 0         | 1          | 4          | 5          | 10         | 11         | 14         | 19         | 26         | 13         | 7          | 10         | 9         | 1         | 1        | 131         |
| C69              | Eye   | 18         | 0          | 0         | 0         | 0          | 0          | 1          | 0          | 1          | 0          | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0        | 20          |
| C70-C71          | Brain   | 0          | 5          | 10        | 5         | 10         | 15         | 22         | 13         | 18         | 14         | 9          | 6          | 6          | 2          | 1          | 1         | 0         | 0        | 137         |
| C72              | Other parts of the nervous system             | 0          | 2          | 0         | 0         | 1          | 1          | 0          | 4          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0        | 8           |
| C73              | Thyroid gland                                 | 0          | 0          | 0         | 0         | 4          | 5          | 3          | 4          | 3          | 4          | 3          | 3          | 0          | 3          | 0          | 0         | 0         | 0        | 32          |
| C74-C75          | Endocrine gland & related structure           | 1          | 1          | 0         | 0         | 1          | 0          | 1          | 0          | 1          | 0          | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0        | 5           |
| C76              | Other & ill-defined sites                     | 2          | 0          | 0         | 1         | 0          | 0          | 1          | 0          | 2          | 0          | 0          | 0          | 0          | 0          | 0          | 0         | 0         | 0        | 6           |
| C80              | Unknown primary                               | 0          | 0          | 0         | 1         | 0          | 1          | 1          | 2          | 2          | 3          | 0          | 3          | 5          | 5          | 2          | 3         | 3         | 1        | 32          |
| M9650-M9667      | Hodgkin lymphoma                              | 15         | 51         | 19        | 17        | 25         | 26         | 25         | 14         | 2          | 0          | 2          | 0          | 0          | 0          | 0          | 0         | 0         | 0        | 196         |
| M9590-91,967-972 | Non-Hodgkin lymphoma                          | 12         | 27         | 0         | 7         | 13         | 21         | 21         | 28         | 15         | 17         | 16         | 11         | 9          | 10         | 3          | 1         | 0         | 0        | 211         |
| M9731-M732       | Multiple myeloma & immuno. neoplasms          | 0          | 0          | 0         | 0         | 0          | 0          | 1          | 1          | 1          | 0          | 1          | 3          | 0          | 3          | 1          | 0         | 1         | 0        | 12          |
| M982-M983        | Lymphoid leukemia                             | 49         | 9          | 1         | 7         | 15         | 5          | 3          | 1          | 1          | 3          | 3          | 3          | 1          | 2          | 0          | 0         | 0         | 0        | 103         |
| M984-M993        | Myeloid leukemia                              | 1          | 0          | 0         | 4         | 13         | 0          | 0          | 0          | 1          | 1          | 0          | 1          | 0          | 1          | 0          | 0         | 0         | 0        | 22          |
| M994             | Other leukemia                                | 0          | 0          | 0         | 0         | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 1          | 0          | 1          | 0          | 0         | 0         | 0        | 2           |
| C42.0, C42.2-4   | Other lymphatic & hematopoietic tissue        | 1          | 0          | 1         | 1         | 0          | 0          | 0          | 0          | 0          | 1          | 0          | 0          | 0          | 0          | 0          | 1         | 0         | 0        | 5           |
| ~                | Other reportable CNS neoplasms                | 1          | 4          | 3         | 2         | 7          | 7          | 3          | 3          | 1          | 7          | 3          | 1          | 0          | 1          | 0          | 0         | 0         | 0        | 43          |
|                  | <b>Total</b>                                  | <b>137</b> | <b>110</b> | <b>79</b> | <b>97</b> | <b>167</b> | <b>183</b> | <b>211</b> | <b>199</b> | <b>214</b> | <b>237</b> | <b>285</b> | <b>270</b> | <b>257</b> | <b>202</b> | <b>105</b> | <b>62</b> | <b>30</b> | <b>8</b> | <b>2853</b> |

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

~Non-malignant primary intracranial and CNS tumors are also included in the count.

**Table 13 - Morphology, site, and sex, 2020**

| <b>ICD-O-3 Code</b>  | <b>Morphology</b>                            | <b>Female</b> | <b>Male</b> | <b>Total</b> |
|--|--|---------------|-------------|--------------|
| C00 Lip  | Squamous Cell Carcinoma, NOS                 | 4             | 5           | 9            |
|  | Squamous Cell Carcinoma, Keratinizing, NOS   | 1             | 1           | 2            |
|  | Mucoepidermoid Carcinoma                     | 0             | 1           | 1            |
|  | Squamous Cell Carcinoma In-Situ, NOS         | 0             | 1           | 1            |
| C01-C02 Tongue   | Squamous Cell Carcinoma, NOS                 | 37            | 49          | 86           |
|  | Squamous Cell Carcinoma, Keratinizing, NOS   | 3             | 8           | 11           |
|  | Malignant Lymphoma, Large B-Cell Diffuse NOS | 0             | 1           | 1            |
|  | Mucoepidermoid Carcinoma                     | 1             | 0           | 1            |
|  | Squamous Cell Carcinoma In-Situ, NOS         | 0             | 1           | 1            |
|  | Squamous Cell Carcinoma, Spindle Cell        | 1             | 0           | 1            |
| C03-C06 Gum, FOM, palate, other & unspecified parts of the mouth | Squamous Cell Carcinoma, NOS                 | 22            | 49          | 71           |
|  | Squamous Cell Carcinoma, Keratinizing, NOS   | 1             | 12          | 13           |
|  | Adenoid Cystic Carcinoma                     | 3             | 1           | 4            |
|  | Mucoepidermoid Carcinoma                     | 1             | 2           | 3            |
|  | Adenocarcinoma, NOS                          | 1             | 1           | 2            |
|  | Clear Cell Adenocarcinoma, NOS               | 0             | 1           | 1            |
| C07-08 Parotid and other major Salivary glands                   | Carcinoma, NOS                               | 4             | 9           | 13           |
|  | Mucoepidermoid Carcinoma                     | 4             | 8           | 12           |
|  | Adenoid Cystic Carcinoma                     | 2             | 2           | 4            |
|  | Acinar Cell Carcinoma                        | 1             | 0           | 1            |
|  | Carcinoma In Pleomorphic Adenoma             | 1             | 0           | 1            |
|  | Clear Cell Adenocarcinoma, NOS               | 1             | 0           | 1            |
|  | Ewing Sarcoma                                | 1             | 0           | 1            |
|  | Malignant Lymphoma, Large B-Cell Diffuse NOS | 1             | 0           | 1            |
|  | Marginal Zone B-Cell Lymphoma, NOS           | 1             | 0           | 1            |
|  | Neoplasm, Malignant                          | 0             | 1           | 1            |
| C09-C10 Tonsil & oropharynx                                      | Malignant Lymphoma, Large B-Cell Diffuse NOS | 1             | 3           | 4            |
|  | Squamous Cell Carcinoma, NOS                 | 2             | 1           | 3            |
|  | Adenoid Cystic Carcinoma                     | 2             | 0           | 2            |
|  | Squamous Cell Carcinoma, Keratinizing, NOS   | 1             | 1           | 2            |
|  | Carcinoma, NOS                               | 0             | 1           | 1            |
|  | Embryonal Rhabdomyosarcoma, NOS              | 0             | 1           | 1            |
| C11 Nasopharynx  | Carcinoma, Undifferentiated, NOS             | 6             | 34          | 40           |
|  | Carcinoma, NOS                               | 3             | 9           | 12           |
|  | Squamous Cell Carcinoma, NOS                 | 1             | 3           | 4            |
|  | Malignant Lymphoma, Large B-Cell Diffuse NOS | 2             | 0           | 2            |
| C12-C13 Pyriform sinus & hypopharynx                             | Squamous Cell Carcinoma, NOS                 | 15            | 10          | 25           |
|  | Squamous Cell Carcinoma, Keratinizing, NOS   | 2             | 0           | 2            |
| C14 Other & ill-defined sites in                                 | Squamous Cell Carcinoma, NOS                 |               | 1           | 1            |

|  |   |  |    |     |
|--|---|--|----|-----|
| the lip, oral cavity, & pharynx              |   |  |    |     |
| C15 Esophagus                                | Adenocarcinoma, NOS                                       | 94   | 66 | 160 |
|  | Adenosquamous Carcinoma                                   | 2  | 13 | 15  |
|  | Basaloid Squamous Cell Carcinoma                          | 6  | 5  | 11  |
|  | Carcinoma, NOS  | 1  | 5  | 6   |
|  | Neoplasm, Malignant                                       | 0  | 4  | 4   |
|  | Neuroendocrine Carcinoma, NOS                             | 2  | 1  | 3   |
|  | Signet Ring Cell Carcinoma                                | 1  | 2  | 3   |
|  | Squamous Cell Carcinoma In-Situ, NOS                      | 1  | 1  | 2   |
|  | Squamous Cell Carcinoma, Keratinizing, NOS                | 1  | 1  | 2   |
|  | Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS | 0  | 1  | 1   |
|  | Squamous Cell Carcinoma, NOS                              | 0  | 1  | 1   |
|  | C16 Stomach   | Adenocarcinoma With Neuroendocrine Differentiation | 20 | 63  |
| Adenocarcinoma, NOS                          |   | 23   | 38 | 61  |
| Carcinoma, NOS                               |   | 3  | 7  | 10  |
| Gastrointestinal Stromal Sarcoma             |   | 3  | 7  | 10  |
| Malignant Lymphoma, Large B-Cell Diffuse NOS |   | 1  | 2  | 3   |
| Mantle Cell Lymphoma                         |   | 2  | 1  | 3   |
| Marginal Zone B-Cell Lymphoma, NOS           |   | 0  | 2  | 2   |
| Mucinous Adenocarcinoma                      |   | 0  | 2  | 2   |
| Neoplasm, Malignant                          |   | 0  | 2  | 2   |
| Neuroendocrine Carcinoma, NOS                |   | 1  | 0  | 1   |
| Signet Ring Cell Carcinoma                   |   | 0  | 1  | 1   |
| Squamous Cell Carcinoma, Keratinizing, NOS   |   | 0  | 1  | 1   |
| Squamous Cell Carcinoma, NOS                 |   | 1  | 0  | 1   |
| C17 Small intestine                          | Adenocarcinoma In Tubulovillous Adenoma                   | 5  | 5  | 10  |
|  | Adenocarcinoma, Intestinal Type                           | 1  | 7  | 8   |
|  | Adenocarcinoma, NOS                                       | 1  | 0  | 1   |
|  | Burkitt Lymphoma, NOS                                     | 0  | 1  | 1   |
|  | Carcinoid Tumor, NOS                                      | 0  | 1  | 1   |
|  | Hodgkin Lymphoma, Nodular Sclerosis, NOS                  | 1  | 0  | 1   |
|  | Malignant Lymphoma, Large B-Cell Diffuse NOS              | 1  | 0  | 1   |
|  | Malignant Lymphoma, Non-Hodgkin, NOS                      | 0  | 1  | 1   |
|  | Mucinous Adenocarcinoma                                   | 0  | 1  | 1   |
|  | Neuroendocrine Carcinoma, NOS                             | 1  | 0  | 1   |
|  | Signet Ring Cell Carcinoma                                | 1  | 0  | 1   |
|  | Squamous Cell Carcinoma, NOS                              | 1  | 0  | 1   |
|  | Tubular Adenocarcinoma                                    | 0  | 1  | 1   |
| C18 Colon                                    | Adenocarcinoma In Adenomatous Polyp                       | 35   | 78 | 113 |
|  | Adenocarcinoma In Tubulovillous Adenoma                   | 9  | 15 | 24  |
|  | Adenocarcinoma, NOS                                       | 6  | 13 | 19  |
|  | Burkitt Lymphoma, NOS                                     | 5  | 10 | 15  |
|  | Carcinoma-In-Situ, NOS                                    | 3  | 0  | 3   |

|  |   |    |     |     |
|--|---|----|-----|-----|
|  | Carcinoma, NOS                                  | 0  | 2   | 2   |
|  | Gastrointestinal Stromal Sarcoma                | 0  | 2   | 2   |
|  | Malignant Lymphoma, Large B-Cell Diffuse NOS    | 1  | 0   | 1   |
|  | Malignant Lymphoma, Non-Hodgkin, NOS            | 1  | 0   | 1   |
|  | Mucinous Adenocarcinoma                         | 0  | 1   | 1   |
|  | Neuroendocrine Carcinoma, NOS                   | 0  | 2   | 2   |
|  | Neoplasm, Malignant                             | 0  | 1   | 1   |
|  | Signet Ring Cell Carcinoma                      | 0  | 1   | 1   |
| C19-C21<br>Rectosigmoid<br>junction, rectum,<br>anal canal, & anus       | Adenocarcinoma In Adenomatous Polyp             | 53 | 92  | 145 |
|  | Adenocarcinoma In-Situ In Tubulovillous Adenoma | 13 | 46  | 59  |
|  | Adenocarcinoma In Tubulovillous Adenoma         | 12 | 20  | 32  |
|  | Adenocarcinoma, NOS                             | 6  | 8   | 14  |
|  | Adenosquamous Carcinoma                         | 3  | 10  | 13  |
|  | Burkitt Lymphoma, NOS                           | 1  | 4   | 5   |
|  | Gastrointestinal Stromal Sarcoma                | 1  | 2   | 3   |
|  | Malignant Melanoma, NOS                         | 0  | 2   | 2   |
|  | Mucinous Adenocarcinoma                         | 1  | 0   | 1   |
|  | Neoplasm, Malignant                             | 0  | 1   | 1   |
|  | Neuroendocrine Carcinoma, NOS                   | 0  | 1   | 1   |
|  | Signet Ring Cell Carcinoma                      | 1  | 0   | 1   |
|  | Squamous Cell Carcinoma, NOS                    | 0  | 1   | 1   |
| C22 Liver &<br>intrahepatic bile<br>ducts                                | Adenocarcinoma, NOS                             | 47 | 103 | 150 |
|  | Cholangiocarcinoma                              | 11 | 6   | 17  |
|  | Hepatoblastoma                                  | 4  | 7   | 11  |
|  | Hepatocellular Carcinoma, NOS                   | 2  | 2   | 4   |
|  | Hepatosplenic (Gamma-Delta) Cell Lymphoma       | 0  | 2   | 2   |
|  | Klatskin Tumor                                  | 1  | 0   | 1   |
|  | Liposarcoma, NOS                                | 1  | 0   | 1   |
|  | Malignant Lymphoma, Large B-Cell Diffuse NOS    | 1  | 0   | 1   |
|  | Neuroendocrine Carcinoma, NOS                   | 1  | 0   | 1   |
| C23-C24 Gall<br>bladder & other<br>unspecified parts<br>of biliary tract | Adenocarcinoma In Tubulovillous Adenoma         | 33 | 29  | 62  |
|  | Adenocarcinoma, NOS                             | 5  | 5   | 10  |
|  | Carcinoma, NOS                                  | 2  | 5   | 7   |
|  | Cholangiocarcinoma                              | 3  | 2   | 5   |
|  | Mucinous Adenocarcinoma                         | 3  | 1   | 4   |
|  | Neoplasm, Malignant                             | 3  | 0   | 3   |
|  | Neuroendocrine Carcinoma, NOS                   | 2  | 0   | 2   |
|  | Pancreatobiliary-Type Carcinoma                 | 0  | 1   | 1   |
|  | Signet Ring Cell Carcinoma                      | 1  | 0   | 1   |
| C25 Pancreas   | Adenocarcinoma, NOS                             | 20 | 32  | 52  |
|  | Carcinoma, NOS                                  | 8  | 10  | 18  |
|  | Gastrointestinal Stromal Sarcoma                | 5  | 5   | 10  |
|  | Mucinous Adenocarcinoma                         | 1  | 1   | 2   |
|  | Neoplasm, Malignant                             | 0  | 1   | 1   |
|  | Neuroendocrine Carcinoma, NOS                   | 0  | 1   | 1   |



|   |   |    |    |    |
|---|---|----|----|----|
|   | Signet Ring Cell Carcinoma                                | 0  | 1  | 1  |
|   | Spindle Cell Sarcoma                                      | 0  | 1  | 1  |
| C26 Other & ill-defined digestive organs              | Adenocarcinoma, NOS                                       | 2  |    | 2  |
| C30-C31 Nasal cavity, middle ear, & accessory sinuses | Adenoid Cystic Carcinoma                                  | 1  | 2  | 3  |
|   | Squamous Cell Carcinoma, NOS                              | 2  | 0  | 2  |
|   | Adenocarcinoma With Mixed Subtypes                        | 1  | 0  | 1  |
|   | Adenosquamous Carcinoma                                   | 0  | 1  | 1  |
|   | Carcinoma, NOS  | 0  | 1  | 1  |
|   | Chondrosarcoma, NOS                                       | 0  | 1  | 1  |
|   | Embryonal Rhabdomyosarcoma, NOS                           | 1  | 0  | 1  |
|   | Mucoepidermoid Carcinoma                                  | 0  | 1  | 1  |
|   | Neuroendocrine Carcinoma, NOS                             | 1  | 0  | 1  |
|   | Olfactory Neuroblastoma                                   | 0  | 1  | 1  |
|   | Plasmacytoma, NOS   | 0  | 1  | 1  |
|   | Pseudosarcomatous Carcinoma                               | 1  | 0  | 1  |
|   | Squamous Cell Carcinoma, Keratinizing, NOS                | 1  | 0  | 1  |
|   | Teratoma, Malignant, NOS                                  | 1  | 0  | 1  |
| C32 Larynx  | Squamous Cell Carcinoma, NOS                              | 5  | 49 | 54 |
|   | Squamous Cell Carcinoma, Keratinizing, NOS                | 1  | 7  | 8  |
|   | Adenoid Cystic Carcinoma                                  | 1  | 1  | 2  |
|   | Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS | 1  | 1  | 2  |
|   | Basaloid Squamous Cell Carcinoma                          | 0  | 1  | 1  |
|   | Carcinoma, NOS  | 0  | 1  | 1  |
|   | Squamous Cell Carcinoma, Spindle Cell                     | 0  | 1  | 1  |
| C33-C34 Trachea, bronchus, & lung                     | Adenocarcinoma, NOS                                       | 14 | 25 | 39 |
|   | Squamous Cell Carcinoma, NOS                              | 4  | 22 | 26 |
|   | Small Cell Carcinoma, NOS                                 | 3  | 13 | 16 |
|   | Acinar Cell Carcinoma                                     | 6  | 8  | 14 |
|   | Neoplasm, Malignant                                       | 1  | 8  | 9  |
|   | Neuroendocrine Carcinoma, NOS                             | 1  | 5  | 6  |
|   | Carcinoma, NOS  | 1  | 1  | 2  |
|   | Mucoepidermoid Carcinoma                                  | 0  | 2  | 2  |
|   | Non-Small Cell Carcinoma                                  | 0  | 2  | 2  |
|   | Adenoid Cystic Carcinoma                                  | 0  | 1  | 1  |
|   | Atypical Carcinoid Tumor                                  | 0  | 1  | 1  |
|   | Carcinoid Tumor, NOS                                      | 1  | 0  | 1  |
|   | Epithelioid Hemangioendothelioma, Malignant               | 0  | 1  | 1  |
|   | Malignant Melanoma, NOS                                   | 1  | 0  | 1  |
|   | Marginal Zone B-Cell Lymphoma, NOS                        | 1  | 0  | 1  |
|   | Mucinous Adenocarcinoma                                   | 1  | 0  | 1  |
|   | Papillary Adenocarcinoma, NOS                             | 1  | 0  | 1  |
| Pseudosarcomatous Carcinoma                           | 1   | 0  | 1  |    |
| C37-C38 Thymus,                                       | Thymoma, Malignant, NOS                                   | 0  | 2  | 2  |

|   |   |    |    |     |
|---|---|----|----|-----|
| heart,<br>mediastinum, &<br>pleura                      | Carcinoma, NOS  | 1  | 0  | 1   |
|   | Epithelioid Mesothelioma, Malignant                               | 1  | 0  | 1   |
|   | Malignant Lymphoma, Large B-Cell Diffuse NOS                      | 1  | 0  | 1   |
|   | Malignant Lymphoma, Non-Hodgkin, NOS                              | 0  | 1  | 1   |
|   | Mediastinal Large B-Cell, Lymphoma                                | 0  | 1  | 1   |
|   | Mesothelioma, Malignant   | 0  | 1  | 1   |
|   | Precursor T-Cell Lymphoblastic Lymphoma                           | 0  | 1  | 1   |
|   | Small Cell Carcinoma, NOS   | 0  | 1  | 1   |
|   | Thymoma, Type B1, Malignant                                       | 1  | 0  | 1   |
|   | Thymoma, Type B2, Malignant                                       | 0  | 1  | 1   |
|   | Thymoma, Type B3, Malignant                                       | 0  | 1  | 1   |
| C40-41 Bones,<br>joints, & articular<br>cartilage       | Osteosarcoma, NOS   | 17 | 67 | 84  |
|   | Ewing Sarcoma   | 19 | 24 | 43  |
|   | Chondroblastic Osteosarcoma                                       | 3  | 8  | 11  |
|   | Malignant Lymphoma, Large B-Cell Diffuse NOS                      | 1  | 10 | 11  |
|   | Chondrosarcoma, NOS   | 2  | 2  | 4   |
|   | Dedifferentiated Chondrosarcoma                                   | 1  | 2  | 3   |
|   | Telangiectatic Osteosarcoma                                       | 1  | 1  | 2   |
|   | Embryonal Rhabdomyosarcoma, NOS                                   | 0  | 1  | 1   |
|   | Hodgkin Lymphoma, Mixed Cellularity, NOS                          | 0  | 1  | 1   |
|   | Neuroblastoma, NOS  | 0  | 1  | 1   |
|   | Parosteal Osteosarcoma  | 1  | 0  | 1   |
|   | Plasmacytoma, NOS   | 1  | 0  | 1   |
|   | Precursor B-Cell Lymphoblastic Lymphoma                           | 0  | 1  | 1   |
| Small Cell Osteosarcoma                                 | 0   | 1  | 1  |     |
| C42<br>Hematopoietic &<br>reticuloendothelial<br>system | Precursor B-Cell Lymphoblastic Leukemia                           | 46 | 84 | 130 |
|   | Acute Myeloid Leukemia, NOS                                       | 8  | 15 | 23  |
|   | B-Cell Chronic Lymphocytic Leukemia/Small<br>Lymphocytic Lymphoma | 5  | 13 | 18  |
|   | Multiple Myeloma  | 4  | 11 | 15  |
|   | Precursor T-Cell Lymphoblastic Leukemia                           | 2  | 6  | 8   |
|   | Chronic Myeloid Leukemia, NOS                                     | 2  | 2  | 4   |
|   | Acute Promyelocytic Leukemia                                      | 3  | 0  | 3   |
|   | Myelodysplastic Syndrome, NOS                                     | 2  | 1  | 3   |
|   | Chronic Myelogenous Leukemia, BCR/ABL Positive                    | 0  | 2  | 2   |
|   | Essential Thrombocythemia   | 1  | 1  | 2   |
|   | Hairy Cell Leukemia   | 0  | 2  | 2   |
|   | Langerhans Cell Histiocytosis, Multifocal                         | 0  | 2  | 2   |
|   | Polycythemia Vera   | 1  | 1  | 2   |
|   | Acute Megakaryoblastic Leukemia                                   | 0  | 1  | 1   |
|   | Acute Myeloid Leukemia, M6 Type                                   | 0  | 1  | 1   |
|   | Chronic Myelomonocytic Leukemia, NOS                              | 1  | 0  | 1   |
|   | Langerhans Cell Histiocytosis, NOS                                | 1  | 0  | 1   |
|   | Malignant Lymphoma, Large B-Cell Diffuse NOS                      | 1  | 0  | 1   |
|   | Mixed Phenotype Acute Leukemia, B/Myeloid, NOS                    | 0  | 1  | 1   |

|   |  |    |    |    |
|---|--|----|----|----|
| C44 Skin  | Squamous Cell Carcinoma, NOS                 | 9  | 37 | 46 |
|   | Basal Cell Carcinoma, Nodular                | 19 | 12 | 31 |
|   | Basal Cell Carcinoma, NOS                    | 4  | 15 | 19 |
|   | Dermatofibrosarcoma, NOS                     | 3  | 10 | 13 |
|   | Squamous Cell Carcinoma, Keratinizing, NOS   | 1  | 6  | 7  |
|   | Malignant Melanoma, NOS                      | 3  | 2  | 5  |
|   | Basaloid Squamous Cell Carcinoma             | 1  | 1  | 2  |
|   | Basosquamous Carcinoma                       | 1  | 1  | 2  |
|   | Malignant Lymphoma, Large B-Cell Diffuse NOS | 0  | 2  | 2  |
|   | Mycosis Fungoides                            | 1  | 1  | 2  |
|   | Sebaceous Adenocarcinoma                     | 1  | 1  | 2  |
|   | Acral Lentiginous Melanoma, Malignant        | 1  | 0  | 1  |
|   | Adenoid Cystic Carcinoma                     | 1  | 0  | 1  |
|   | Bowen Disease                                | 0  | 1  | 1  |
|   | Cutaneous T-Cell Lymphoma, NOS               | 0  | 1  | 1  |
|   | Fibrosarcoma, NOS                            | 1  | 0  | 1  |
| Squamous Cell Carcinoma-In-Situ, NOS              | 1  | 0  | 1  |    |
| C47 Peripheral nerves & auto-immune N.S           | Neuroblastoma, NOS                           | 0  | 4  | 4  |
|   | Malignant Peripheral Nerve Sheath Tumor      | 1  | 2  | 3  |
| C48 Retroperitoneum & peritoneum                  | Burkitt Lymphoma, NOS                        |    | 1  | 1  |
|   | Malignant Lymphoma, Large B-Cell Diffuse NOS |    | 1  | 1  |
| C49 Connective, subcutaneous & other soft tissues | Alveolar Rhabdomyosarcoma                    | 5  | 11 | 16 |
|   | Dedifferentiated Liposarcoma                 | 5  | 10 | 15 |
|   | Embryonal Rhabdomyosarcoma, NOS              | 9  | 4  | 13 |
|   | Ewing Sarcoma                                | 8  | 2  | 10 |
|   | Fibromyxosarcoma                             | 5  | 5  | 10 |
|   | Fibrosarcoma, NOS                            | 3  | 6  | 9  |
|   | Follicular Dendritic Cell Sarcoma            | 4  | 3  | 7  |
|   | Giant Cell Sarcoma                           | 2  | 3  | 5  |
|   | Histiocytic Sarcoma                          | 2  | 3  | 5  |
|   | Leiomyosarcoma NOS                           | 2  | 2  | 4  |
|   | Liposarcoma, NOS                             | 1  | 3  | 4  |
|   | Malignant Peripheral Nerve Sheath Tumor      | 2  | 0  | 2  |
|   | Malignant Rhabdoid Tumor                     | 0  | 2  | 2  |
|   | Mesenchymal Chondrosarcoma                   | 0  | 2  | 2  |
|   | Myxoid Chondrosarcoma                        | 2  | 0  | 2  |
|   | Myxoid Leiomyosarcoma                        | 0  | 1  | 1  |
|   | Myxoid Liposarcoma                           | 0  | 1  | 1  |
|   | Pleomorphic Liposarcoma                      | 0  | 1  | 1  |
|   | Pleomorphic Rhabdomyosarcoma, Adult Type     | 0  | 1  | 1  |
|   | Rhabdomyosarcoma, NOS                        | 0  | 1  | 1  |
|   | Sarcoma, NOS                                 | 1  | 0  | 1  |
| Spindle Cell Sarcoma                              | 1  | 0  | 1  |    |
| Synovial Sarcoma, NOS                             | 1  | 0  | 1  |    |

|                               |   |  |   |      |
|-------------------------------|---|--|---|------|
|                               | Synovial Sarcoma, Spindle Cell Undifferentiated Sarcoma   | 0  | 1 | 1    |
|                               |   | 0  | 1 | 1    |
| C50 Breast                    | Infiltrating Duct Carcinoma, NOS                          | 1756                                       | 6 | 1762 |
|                               | Lobular Carcinoma, NOS                                    | 115  | 0 | 115  |
|                               | Carcinoma, NOS  | 43   | 2 | 45   |
|                               | Infiltrating Duct Mixed With Other Types Of Carcinoma     | 19   | 0 | 19   |
|                               | Metaplastic Carcinoma, NOS                                | 15   | 0 | 15   |
|                               | Inflammatory Carcinoma                                    | 14   | 0 | 14   |
|                               | Mucinous Adenocarcinoma                                   | 11   | 0 | 11   |
|                               | Neoplasm, Malignant                                       | 11   | 0 | 11   |
|                               | Ductal Carcinoma In-Situ, Solid Type                      | 8  | 0 | 8    |
|                               | Phyllodes Tumor, Malignant                                | 8  | 0 | 8    |
|                               | Papillary Carcinoma, NOS                                  | 6  | 0 | 6    |
|                               | Infiltrating Duct And Lobular Carcinoma                   | 5  | 0 | 5    |
|                               | Comedocarcinoma, Noninfiltrating                          | 3  | 0 | 3    |
|                               | Neuroendocrine Carcinoma, NOS                             | 3  | 0 | 3    |
|                               | Paget Disease, Mammary                                    | 3  | 0 | 3    |
|                               | Intraductal Micropapillary Carcinoma                      | 2  | 0 | 2    |
|                               | Malignant Lymphoma, Large B-Cell Diffuse NOS              | 2  | 0 | 2    |
|                               | Noninfiltrating Intraductal Papillary Adenocarcinoma      | 2  | 0 | 2    |
|                               | Paget Disease And Infiltrating Duct Carcinoma Of Breast   | 2  | 0 | 2    |
|                               | Paget Disease And Intraductal Carcinoma Of Breast         | 2  | 0 | 2    |
|                               | Cribriform Carcinoma, NOS                                 | 1  | 0 | 1    |
|                               | Infiltrating Ductular Carcinoma                           | 1  | 0 | 1    |
|                               | Intraductal Carcinoma, Noninfiltrating, NOS               | 1  | 0 | 1    |
|                               | Medullary Carcinoma, NOS                                  | 1  | 0 | 1    |
|                               | Small Cell Carcinoma, NOS                                 | 1  | 0 | 1    |
|                               | C51-C52 Vulva & vagina                                    | Squamous Cell Carcinoma, Keratinizing, NOS | 4 |      |
| Squamous Cell Carcinoma, NOS  |   | 3  |   | 3    |
| Adenocarcinoma, NOS           |   | 1  |   | 1    |
| Neuroendocrine Carcinoma, NOS |   | 1  |   | 1    |
| C53 Cervix uteri              | Squamous Cell Carcinoma, NOS                              | 57   |   | 57   |
|                               | Squamous Cell Carcinoma, Keratinizing, NOS                | 26   |   | 26   |
|                               | Squamous Cell Carcinoma, Large Cell, Nonkeratinizing, NOS | 14   |   | 14   |
|                               | Adenocarcinoma, NOS                                       | 11   |   | 11   |
|                               | Adenosquamous Carcinoma                                   | 4  |   | 4    |
|                               | Endometrioid Adenocarcinoma, NOS                          | 4  |   | 4    |
|                               | Squamous Cell Carcinoma, Small Cell, Nonkeratinizing      | 4  |   | 4    |
|                               | Adenocarcinoma, Endocervical Type                         | 1  |   | 1    |
|                               | Carcinoma In-Situ, NOS                                    | 1  |   | 1    |
|                               | Carcinoma, Undifferentiated, NOS                          | 1  |   | 1    |
|                               | Clear Cell Adenocarcinoma, NOS                            | 1  |   | 1    |
|                               | Malignant Lymphoma, Large B-Cell Diffuse NOS              | 1  |   | 1    |
|                               | Serous Cystadenocarcinoma, NOS                            | 1  |   | 1    |

|  |  |                    |   |    |
|--|--|--------------------|---|----|
|  | Small Cell Carcinoma, NOS              | 1                  |   | 1  |
| C54 Corpus uteri                                 | Endometrioid Adenocarcinoma, NOS       | 86                 |   | 86 |
|  | Serous Cystadenocarcinoma, NOS         | 15                 |   | 15 |
|  | Endometrial Stromal Sarcoma, NOS       | 7                  |   | 7  |
|  | Carcinoma, NOS                         | 5                  |   | 5  |
|  | Carcinosarcoma, NOS                    | 4                  |   | 4  |
|  | Adenocarcinoma, NOS                    | 3                  |   | 3  |
|  | Papillary Serous Cystadenocarcinoma    | 3                  |   | 3  |
|  | Adenosarcoma                           | 1                  |   | 1  |
|  | Clear Cell Adenocarcinoma, NOS         | 1                  |   | 1  |
|  | Endometrial Stromal Sarcoma, Low Grade | 1                  |   | 1  |
|  | Neoplasm, Malignant                    | 1                  |   | 1  |
|  | Serous Surface Papillary Carcinoma     | 1                  |   | 1  |
|  | C55 Uterus                             | Leiomyosarcoma NOS | 3 |    |
| Adenocarcinoma, NOS                              |  | 2                  |   | 2  |
| Serous Cystadenocarcinoma, NOS                   |  | 2                  |   | 2  |
| Carcinoma, NOS                                   |  | 1                  |   | 1  |
| Carcinosarcoma, NOS                              |  | 1                  |   | 1  |
| Choriocarcinoma, NOS                             |  | 1                  |   | 1  |
| Clear Cell Adenocarcinoma, NOS                   |  | 1                  |   | 1  |
| Epithelioid Sarcoma                              |  | 1                  |   | 1  |
| C56 Ovary  | Serous Cystadenocarcinoma, NOS         | 83                 |   | 83 |
|  | Neoplasm, Malignant                    | 14                 |   | 14 |
|  | Endometrioid Adenocarcinoma, NOS       | 10                 |   | 10 |
|  | Mucinous Adenocarcinoma                | 8                  |   | 8  |
|  | Dysgerminoma                           | 7                  |   | 7  |
|  | Mixed Germ Cell Tumor                  | 5                  |   | 5  |
|  | Adenocarcinoma, NOS                    | 4                  |   | 4  |
|  | Carcinoma, NOS                         | 4                  |   | 4  |
|  | Clear Cell Adenocarcinoma, NOS         | 4                  |   | 4  |
|  | Granulosa Cell Tumor, Malignant        | 4                  |   | 4  |
|  | Mucinous Cystadenocarcinoma, NOS       | 4                  |   | 4  |
|  | Teratoma, Malignant, NOS               | 4                  |   | 4  |
|  | Yolk Sac Tumor                         | 4                  |   | 4  |
|  | Germinoma                              | 2                  |   | 2  |
|  | Serous Surface Papillary Carcinoma     | 2                  |   | 2  |
|  | Choriocarcinoma, NOS                   | 1                  |   | 1  |
|  | Embryonal Carcinoma, NOS               | 1                  |   | 1  |
|  | Granular Cell Tumor, Malignant         | 1                  |   | 1  |
|  | Mixed Cell Adenocarcinoma              | 1                  |   | 1  |
|  | Serous Cystadenoma, NOS                | 1                  |   | 1  |
| Sertoli-Leydig Cell Tumor, Poorly Differentiated | 1                                      |                    | 1 |    |
| C57 Other and unspecified female genital         | Adenocarcinoma, NOS                    | 1                  |   | 1  |
|  | Serous Cystadenocarcinoma, NOS         | 1                  |   | 1  |

| organs                                    |   |    |     |     |
|---|---|----|-----|-----|
| C61 Prostate                              | Adenocarcinoma, NOS                                 |    | 196 | 196 |
|   | Acinar Cell Carcinoma                               |    | 10  | 10  |
|   | Carcinoma, NOS                                      |    | 6   | 6   |
|   | Neoplasm, Malignant                                 |    | 6   | 6   |
|   | Transitional Cell Carcinoma, NOS                    |    | 1   | 1   |
| C62-63 Testis & other male genital organs | Mixed Germ Cell Tumor                               |    | 60  | 60  |
|   | Seminoma, NOS                                       |    | 46  | 46  |
|   | Embryonal Carcinoma, NOS                            |    | 16  | 16  |
|   | Yolk Sac Tumor                                      |    | 7   | 7   |
|   | Neoplasm, Malignant                                 |    | 6   | 6   |
|   | Germinoma   |    | 5   | 5   |
|   | Embryonal Rhabdomyosarcoma, NOS                     |    | 2   | 2   |
|   | Teratoma, Malignant, NOS                            |    | 2   | 2   |
|   | Malignant Lymphoma, Large B-Cell Diffuse NOS        |    | 1   | 1   |
|   | Rhabdomyosarcoma, NOS                               |    | 1   | 1   |
|   | Squamous Cell Carcinoma, NOS                        |    | 1   | 1   |
|   | Teratocarcinoma                                     |    | 1   | 1   |
| C64-C66 Kidney, renal pelvis, & ureter    | Clear Cell Adenocarcinoma, NOS                      | 15 | 44  | 59  |
|   | Renal Cell Carcinoma, NOS                           | 14 | 43  | 57  |
|   | Nephroblastoma, NOS                                 | 13 | 16  | 29  |
|   | Transitional Cell Carcinoma, NOS                    | 2  | 8   | 10  |
|   | Papillary Adenocarcinoma, NOS                       | 2  | 5   | 7   |
|   | Neoplasm, Malignant                                 | 1  | 3   | 4   |
|   | Renal Cell Carcinoma, Sarcomatoid                   | 1  | 3   | 4   |
|   | Renal Cell Carcinoma, Chromophobe Type              | 3  | 0   | 3   |
|   | Ewing Sarcoma                                       | 2  | 0   | 2   |
|   | Papillary Transitional Cell Carcinoma               | 1  | 1   | 2   |
|   | Burkitt Lymphoma, NOS                               | 0  | 1   | 1   |
|   | Carcinoma, NOS                                      | 0  | 1   | 1   |
|   | Clear Cell Sarcoma, NOS                             | 0  | 1   | 1   |
|   | Collecting Duct Carcinoma                           | 1  | 0   | 1   |
|   | Papillary Carcinoma, NOS                            | 0  | 1   | 1   |
|   | Spindle Cell Carcinoma, NOS                         | 1  | 0   | 1   |
|   | Tubular Adenocarcinoma                              | 1  | 0   | 1   |
| C67 Bladder                               | Transitional Cell Carcinoma, NOS                    | 15 | 66  | 81  |
|   | Papillary Transitional Cell Carcinoma               | 16 | 59  | 75  |
|   | Carcinoma, NOS                                      | 0  | 2   | 2   |
|   | Papillary Transitional Cell Carcinoma, Non-Invasive | 0  | 2   | 2   |
|   | Adenocarcinoma, NOS                                 | 0  | 1   | 1   |
|   | Leiomyosarcoma NOS                                  | 1  | 0   | 1   |
|   | Neuroendocrine Carcinoma, NOS                       | 0  | 1   | 1   |
|   | Squamous Cell Carcinoma, NOS                        | 1  | 0   | 1   |
| C69 Eye and adnexa                        | Retinoblastoma, NOS (C69.2)                         | 24 | 17  | 41  |
|   | Adenoid Cystic Carcinoma                            | 2  | 0   | 2   |

|  |  |    |    |    |
|--|--|----|----|----|
|  | Marginal Zone B-Cell Lymphoma, NOS                           | 1  | 0  | 1  |
|  | Rhabdomyosarcoma, NOS  | 0  | 1  | 1  |
|  | Sebaceous Adenocarcinoma                                     | 0  | 1  | 1  |
|  | Squamous Cell Carcinoma, NOS                                 | 0  | 1  | 1  |
| C70-C71<br>Meninges & brain  | Glioma, Malignant  | 21 | 49 | 70 |
|  | Glioblastoma, NOS  | 13 | 31 | 44 |
|  | Astrocytoma, NOS   | 7  | 23 | 30 |
|  | Oligodendroglioma, NOS                                       | 8  | 11 | 19 |
|  | Meningioma, NOS  | 6  | 5  | 11 |
|  | Ependymoma, NOS  | 2  | 6  | 8  |
|  | Neoplasm, Uncertain Whether Benign Or Malignant              | 3  | 5  | 8  |
|  | Medulloblastoma, NOS   | 2  | 5  | 7  |
|  | Pilocytic Astrocytoma  | 4  | 2  | 6  |
|  | Malignant Lymphoma, Large B-Cell Diffuse NOS                 | 3  | 2  | 5  |
|  | Oligodendroglioma, Anaplastic                                | 2  | 3  | 5  |
|  | Astrocytoma, Anaplastic                                      | 2  | 2  | 4  |
|  | Hemangioblastoma   | 1  | 2  | 3  |
|  | Meningioma, Malignant  | 2  | 0  | 2  |
|  | Meningothelial Meningioma                                    | 1  | 1  | 2  |
|  | Angiomatous Meningioma                                       | 0  | 1  | 1  |
|  | Atypical Meningioma  | 0  | 1  | 1  |
|  | Atypical Teratoid/Rhabdoid Tumor                             | 0  | 1  | 1  |
|  | Cavernous Hemangioma   | 1  | 0  | 1  |
|  | Central Neurocytoma  | 1  | 0  | 1  |
|  | Germinoma  | 0  | 1  | 1  |
|  | Gliosarcoma  | 1  | 0  | 1  |
|  | Hemangiopericytoma, Malignant                                | 0  | 1  | 1  |
|  | Neoplasm, Malignant, Uncertain Whether Primary Or Metastatic | 0  | 1  | 1  |
|  | Neurilemoma, NOS   | 1  | 0  | 1  |
|  | Pilomyxoid Astrocytoma                                       | 0  | 1  | 1  |
|  | Subependymal Giant Cell Astrocytoma                          | 0  | 1  | 1  |
| C72 Spinal cord,<br>cranial nerves, &<br>other parts of the<br>CNS | Ependymoma, NOS  | 2  | 3  | 5  |
|  | Malignant Lymphoma, Large B-Cell Diffuse NOS                 | 3  | 1  | 4  |
|  | Neurilemoma, NOS   | 1  | 3  | 4  |
|  | Myxopapillary Ependymoma (C72.0)                             | 0  | 3  | 3  |
|  | Astrocytoma, NOS   | 0  | 2  | 2  |
|  | Glioma, Malignant  | 0  | 2  | 2  |
|  | Malignant Melanoma, NOS                                      | 0  | 1  | 1  |
| C73 Thyroid  | Papillary Carcinoma, NOS                                     | 53 | 21 | 74 |
|  | Medullary Carcinoma, NOS                                     | 7  | 4  | 11 |
|  | Follicular Adenocarcinoma, NOS                               | 4  | 2  | 6  |
|  | Papillary Adenocarcinoma, NOS                                | 5  | 1  | 6  |
|  | Follicular Carcinoma, Minimally Invasive                     | 5  | 0  | 5  |
|  | Papillary Carcinoma, Follicular Variant                      | 4  | 1  | 5  |

|   |  |    |     |     |
|---|--|----|-----|-----|
|   | Carcinoma, NOS   | 2  | 1   | 3   |
|   | Malignant Lymphoma, Large B-Cell Diffuse NOS                   | 2  | 0   | 2   |
|   | Adenocarcinoma, NOS  | 0  | 1   | 1   |
|   | Neoplasm, Malignant  | 1  | 0   | 1   |
|   | Oxyphilic Adenocarcinoma                                       | 0  | 1   | 1   |
|   | Papillary Carcinoma, Columnar Cell                             | 1  | 0   | 1   |
| C74 Adrenal gland                               | Neoplasm, Malignant  |    | 1   | 1   |
|   | Neuroblastoma, NOS   |    | 1   | 1   |
| C75 Other endocrine glands & related structures | Pituitary Adenoma, NOS   | 19 | 15  | 34  |
|   | Craniopharyngioma  | 3  | 5   | 8   |
|   | Craniopharyngioma Adamantinomatous                             | 1  | 2   | 3   |
|   | Pineocytoma  | 1  | 1   | 2   |
|   | Pineoblastoma  | 0  | 1   | 1   |
|   | Prolactinoma   | 1  | 0   | 1   |
| C76 Other & ill-defined sites                   | Burkitt Lymphoma, NOS  | 3  | 3   | 6   |
|   | Malignant Lymphoma, Large B-Cell Diffuse NOS                   | 0  | 6   | 6   |
|   | Yolk Sac Tumor   | 3  | 3   | 6   |
|   | Neuroendocrine Carcinoma, NOS                                  | 1  | 1   | 2   |
|   | Adenocarcinoma, NOS  | 0  | 1   | 1   |
|   | Dysgerminoma   | 1  | 0   | 1   |
|   | Mixed Germ Cell Tumor  | 0  | 1   | 1   |
| C77 Lymph nodes (NHL, HL)                       | Hodgkin Lymphoma, Mixed Cellularity, NOS                       | 39 | 108 | 147 |
|   | Malignant Lymphoma, Large B-Cell Diffuse NOS                   | 50 | 92  | 142 |
|   | Hodgkin Lymphoma, Nodular Sclerosis, NOS                       | 19 | 40  | 59  |
|   | Burkitt Lymphoma, NOS  | 6  | 27  | 33  |
|   | Hodgkin Lymphoma, NOS  | 7  | 22  | 29  |
|   | Hodgkin Lymphoma, Nodular Lymphocyte Predominance              | 7  | 20  | 27  |
|   | Hodgkin Lymphoma, Lymphocyte-Rich                              | 4  | 5   | 9   |
|   | T-Cell/Histiocyte Rich Large B-Cell Lymphoma                   | 1  | 7   | 8   |
|   | Follicular Lymphoma, Grade 3                                   | 1  | 6   | 7   |
|   | Malignant Lymphoma, Non-Hodgkin, NOS                           | 4  | 1   | 5   |
|   | Precursor T-Cell Lymphoblastic Lymphoma                        | 1  | 4   | 5   |
|   | Anaplastic Large Cell Lymphoma, T Cell And Null Cell Type      | 1  | 2   | 3   |
|   | Angioimmunoblastic T-Cell Lymphoma                             | 2  | 1   | 3   |
|   | Composite Hodgkin And Non-Hodgkin Lymphoma                     | 0  | 3   | 3   |
|   | Malignant Lymphoma, Large B-Cell, Diffuse, Immunoblastic, NOS  | 2  | 1   | 3   |
|   | Mantle Cell Lymphoma   | 0  | 3   | 3   |
|   | Follicular Lymphoma, Grade 1                                   | 0  | 2   | 2   |
|   | B-Cell Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma | 0  | 1   | 1   |
|   | Follicular Lymphoma, NOS                                       | 0  | 1   | 1   |
|   | Malignant Lymphoma, Lymphoplasmacytic                          | 0  | 1   | 1   |
|   | Mature T-Cell Lymphoma, NOS                                    | 0  | 1   | 1   |
| C80 Unknown                                     | Adenocarcinoma, NOS  | 10 | 9   | 19  |



|                    |  |             |             |             |
|--------------------|--|-------------|-------------|-------------|
| primary site       | Neoplasm, Malignant                        | 6           | 9           | 15          |
|                    | Carcinoma, NOS                             | 4           | 5           | 9           |
|                    | Squamous Cell Carcinoma, NOS               | 0           | 4           | 4           |
|                    | Neuroendocrine Carcinoma, NOS              | 1           | 2           | 3           |
|                    | Malignant Lymphoma, Non-Hodgkin, NOS       | 1           | 0           | 1           |
|                    | Mucinous Adenocarcinoma                    | 1           | 0           | 1           |
|                    | Osteosarcoma, NOS                          | 0           | 1           | 1           |
|                    | Signet Ring Cell Carcinoma                 | 0           | 1           | 1           |
|                    | Squamous Cell Carcinoma, Keratinizing, NOS | 1           | 0           | 1           |
|                    | Yolk Sac Tumor                             | 0           | 1           | 1           |
| <b>Grand Total</b> |  | <b>3855</b> | <b>2853</b> | <b>6708</b> |