

Kingdom of Saudi Arabia  
Ministry of Health  
Saudi Cancer Registry

**Cancer Incidence and Survival  
Report  
Saudi Arabia 2007**

**Special Edition**

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## Foreword

The 2007 cancer incidence report represent the 11<sup>th</sup> publication for the cancer registry since it's establishment in 1992. This is a special edition in that we report for the first time the 5 years survival data on a national level for the commonest cancer. Saudi Cancer Registry (SCR) is the 1<sup>st</sup> registry in the middle east area to report on national survival data. This work would not have been done if it wasn't for the hard work and dedication of the staff working at the SCR

It is clear from the report that the number and the incidence of cancer is on the rise. Despite our continued effort to ascertain comprehensive case finding which in part might be one of the reasons behind the increasing number of cancer cases reported, we do believe that there is a genuine rise in the cancer incidence in our country. Nevertheless, we believe there is considerable room for improvement. Our main obstacle is medical record availability in many hospitals. This leads to under-reporting of clinically diagnosed cases in our population.

We continue to struggle and face many challenges. Of most importance is the finding of well qualified tumor registrars. Cancer related mortality reporting remain a top priority for our registry. To date, we have not been able to get this data because of many logistical issues. We will continue to work hard to be able to publish cancer related mortality in Saudi Arabia in the near future.

We are working very hard on updating our website. Our biggest project presently is an interactive reporting system through our website. It allows users to obtain summary statistics about cancer incidence in Saudi Arabia in a variety of table and graph formats. The data that will include cancer incidence by type of cancer, age group, sex, year of diagnosis, region and many more.

Shouki Bazarbashi, MD  
**Chairman**

## Acknowledgment

The Saudi Cancer Registry is funded by The Ministry of health. The work of the Saudi Cancer Registry including the production of this report is the result of teamwork by our valuable cancer registrars, main office staff and members of the board of directors. Special warm thanks to our registrar who travel to every part of the kingdom to collect the cases that are included in this report

Special thanks to the support provided by the Ministry of Health represented by his Excellency the Minister of Health Dr. Abdullah Al Rabea and the deputy Minister of Health Dr. Mansour Al Hawasi. In addition we continue to be in debt for the support of King Faisal Specialist Hospital and Research Center (General Organization) leadership represented by H.E. Dr. Qasem Al Qasabi, the chief operating officers.

We also would like to record our thanks to the support from many of the pharmaceutical companies who have supported an unrestricted grants to the SCR.

Finally we would like to thank all our patients whom we present this work to and for.



# Introduction

This is the tenth incidence report published by the Saudi Cancer Registry. Previous publications include the 1994 Summary Report, 1994-1996 Incidence Report, 1997-1998 Incidence Report, 1999-2000 Incidence Report, 2001 Incidence Report, 2002, 2003, 2004, 2005 and 2006 Incidence Reports.

The structure of this report can be outlined as follows:

## Part I Materials and Methods

This part of the report contains information about the background of the Saudi Cancer Registry and methods used in collecting and analyzing the data. We present the basics of coding and classification of tumor topography, morphology and extent of disease at the time of diagnosis. Also we describe the software programs we have used to analyze the data.

## Part II Overview of Cancer Incidence

Part II contains figures and tables that show overall cancer incidence in Saudi Arabia for the year 2007. We present these figures and tables mainly by sex and in certain areas we have it analyzed by different age groups. There are bar charts representing the age distribution of cancer incidence for the year 2007 among Saudis by sex and age groups. We present incidence and morphology tables for the most common types of cancers among adults and children. In addition, tables list the total number of cases, the Age-Standardized Incidence Rate (ASR) per 100,000 population, Crude Incidence Rate (CIR) and Cumulative rates by primary site and sex. Separate bar charts depict the most common types of cancer, by sex, in each of the 13 administrative regions of Saudi Arabia.

## Part III Incidence of Selected-Sites

In this part the incidence of the most common cancers among Saudi males and females are outlined. A standardized layout presents data for all patients and for both sexes where applicable. For each selected site the number and the percentage of all newly diagnosed cases for the year 2007, the ASR for each sex and the specific cancer rank for both sexes is presented. In addition, ASR for the specified cancer among Saudis is compared with ASR among other populations from selected countries.

## Part IV 5-Years Survival for Specific Cancer Sites among Saudis, 1994-2004

In this part, the 5-Years survival for specific cancer sites among Saudis are presented.

## Part V Cancer Incidence among Non-Saudis

This part presents the incidence of cancer cases among Non-Saudis including the most common types of cancer. The analysis of the Non-Saudis is performed separately due to the nature of the expatriate population in Saudi Arabia in which a large part of the population, particularly among males, falls in the 25-44 age group.

## Part VI Incidence Tables

Part VI contains the following detailed tables for all newly diagnosed cancer types among Saudis and Non-Saudis for 2007:

- Distribution of cancer cases among Saudis by age group and sex
- Distribution of cancer cases among Non-Saudis by age group and sex
- Cancer Incidence (per 100,000 population) among Saudis by age group and sex
- Cancer Incidence (per 100,000 population) among Non-Saudis by age group and sex
- Age-standardized incidence rate and relative frequencies among Saudis by cancer site, sex and administrative regions

## Part VII Appendices

**Appendix A:** Regional listing of all health care facilities from which cancer cases have been reported. The objective is to receive feedback from facilities that have not been included in order to improve our case-finding and reporting processes.

**Appendix B:** Names of the members of the Board of Directors.

**Appendix C:** Copy of the cancer registration abstract form which is completed by cancer registrars for each cancer case.

**Appendix D:** Arabic summary of cancer statistics in Saudi Arabia for the year 2007.

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**PART I**  
**MATERIALS AND METHODS**

## Background on Saudi Arabia

Saudi Arabia is a vast country extending over four-fifths of the Arabian Peninsula. It stretches from the Arabian Gulf in the east to the Red Sea in the west. It is approximately 2,149,700\* square kilometers in area and is divided into 13 administrative regions (Figure 1.1).



Figure 1.1 Administrative Regions of Saudi Arabia

The estimated Saudi national population for year 2007 was 17,493,364\*\*. Of these, 8,821,281 were males and 8,672,083 were females. The Non-Saudi population in 2007 was 6,487,470\*\*; of these 4,479,888 were males and 2,007,582 females.

Figures 1.2 and 1.3 show the Saudi and Non-Saudi population pyramids by sex and age group respectively.

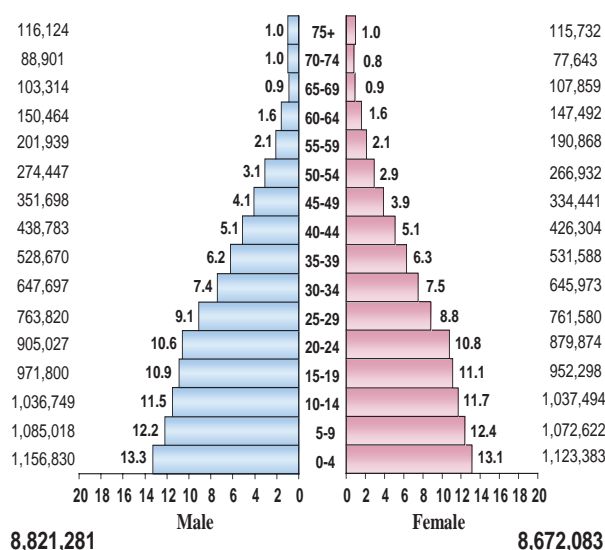


Figure 1.2 Population Pyramid of Saudis (%) by Sex and Age Group, 2007

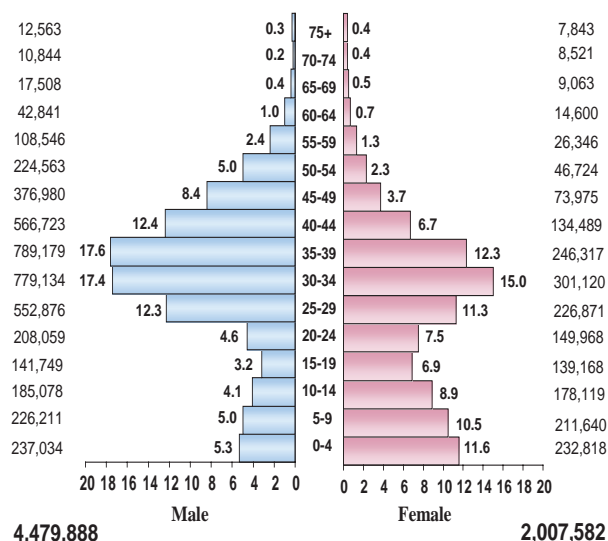


Figure 1.3 Population Pyramid of non-Saudis (%) by Sex and Age Group, 2007

## Saudi Cancer Registry

The Saudi Cancer Registry (SCR) of Saudi Arabia is a population-based registry established in 1992 under the jurisdiction of the Ministry of Health (MOH) by the order of His Excellency the Minister of Health. The SCR commenced reporting cancer cases from 01 January 1994.

### Objectives:

The primary goal of the SCR is to define the population-based incidence of cancer in Saudi Arabia. Additional objectives include programs for early detection and cancer screening, as well as cancer research projects.

### Organizational Structure:

A Board of Directors was appointed to include representatives from the MOH, King Faisal Specialist Hospital and Research Center (KFSH&RC), and the Medical Services Departments of the Ministry of Defense and Aviation, Ministry of Interior, the National Guard, King Saud University, King Faisal University, King Abdul-Aziz University and King Khalid University. The Board is charged with the responsibility of overseeing the SCR's establishment, defining demographic and cancer-related data to be collected, approving research requests, and reporting findings, as well as disseminating information collected while ensuring the confidentiality of all data reported to the SCR.

\* Source: Demographic and Health Indicators for Countries of the East Mediterranean, WHO, Regional Office for the EM, 1999

\*\* Source: 2007 Estimation, Central Department for Statistics (CDS) data, Ministry of Planning, (web site <http://www.planning.gov.sa>) with a 2.41% growth rate among Saudis and 2.5% from non-Saudis

The SCR Main Office, including administrative and technical staff, is located in the premises of the KFSH&RC in Riyadh. Additionally, five regional branches and four hospital-based offices were set up to ensure comprehensive data collection from all over the Kingdom (Figure 1.4).

**Regional Offices:**

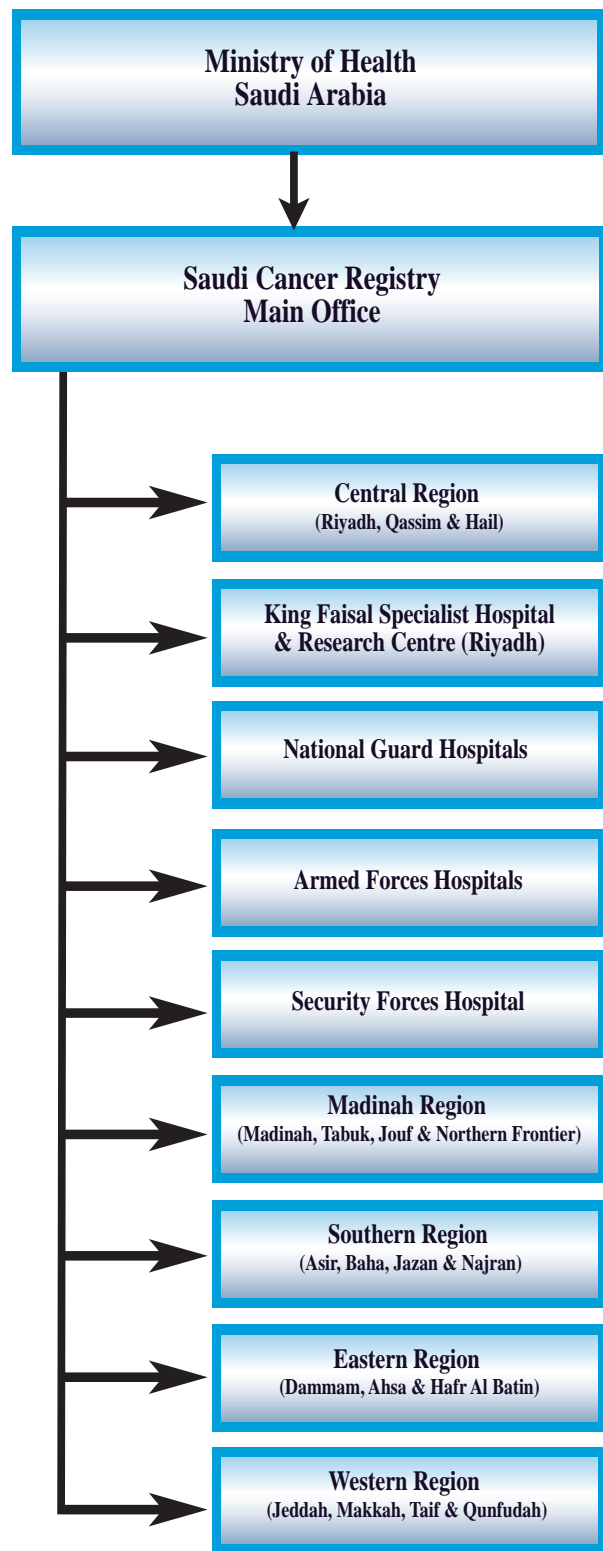
- 1 Central Region: King Fahad Medical City in Riyadh, covering Riyadh, Qassim, and Hail Health Regions.
- 2 Eastern Region: King Fahad Hospital of the University, Al Khobar, covering Dammam, Al Ahsa, and Hafr Al-Batin Health Regions.
- 3 Western Region: King Abdulaziz Hospital and Cancer Center, Jeddah, covering Jeddah, Makkah, Taif and Qunfudah Health Regions.
- 4 Southern Region: Asir Central Hospital, Abha, covering Asir, Baha, Najran, Jazan and Bisha Health Regions.
- 5 Madinah/Northern Region: Maternity and Children Hospital, Madinah, covering Madinah, Tabuk, Jouf and Northern Health Regions.

**Offices at the Medical Service Division or Oncology Department of the following establishments:**

- 1 Ministry of Defense and Aviation, Armed Forces Hospital, Riyadh
- 2 National Guard, Abdulaziz Medical City, Princess Nourah Oncology Center, Jeddah
- 3 Ministry of Interior, Security Forces Hospital, Riyadh.
- 4 King Faisal Specialist Hospital and Research Centre, Riyadh.
- 5 King Abdul Aziz University Hospital, Jeddah

Each of the SCR offices operates under the supervision of a member of the Board of Directors who is responsible for the daily management of that office. Staffing consists of tumor registrars and secretarial staff.

The SCR Main Office indirectly supervises the regional offices and is responsible for ensuring the accuracy and quality of data collected in all of the regions. Quality control processes include verification of site, morphology, and staging information as well as case linkage (tumor and patient), and consolidation of data. The Main Office also prepares periodic reports for dissemination of information to the medical community, government establishments, international organizations and the media.



**Figure 1.4 Organizational Chart of the Saudi Cancer Registry of Saudi Arabia**

**Format**

The format of the current report is similar to the previous reports.

## Data management

A ministerial decree has categorized cancer as a mandatory notifiable disease. This ensures the opportunity for comprehensive data collection. The SCR strives for full access to cancer data from all Ministry of Health, governmental and private hospitals, as well as clinics and laboratories throughout the Kingdom. Cancer data are abstracted from patients' medical records, based on clinical and/or histopathological diagnosis, by SCR-trained cancer registrars.

The data abstract (see appendix D) includes personal identification (name, ID Number, sex, age), demographic information (address, telephone number, nationality), and tumor details (diagnosis date, primary site, histology, behavior, grade, stage, basis of diagnosis). The primary site (topography) and histology (morphology) of the malignancies are identified and coded according to the *International Classification of Diseases for Oncology 3rd Edition (ICD-O-3)*, published by the World Health Organization (WHO), 2000.

Effective from year 2001, changes were made in coding of cancer types and behaviors as well as staging according to International guidelines. The new SEER Summary Stage 2000 guidelines should result in increased accuracy and consistency in the coding of stage. There are some differences in the timing rules for determining stage and some sites are coded differently using the new guidelines. However, the new criteria and guidelines should improve the usefulness of staging as a predictor of prognosis and survival as the changes reflect a new understanding of the natural history of cancer. The new guidelines, *SEER Summary Stage Manual 2000*, is available on the web at: <http://seer.cancer.gov/tools/ssm/>. Cases diagnosed on or after 01 January 2006 are classified according to the updated ICD-O-3. Improvements in the understanding of cancer pathology over the last decade are reflected in the changes to ICD-O-3. While there have not been any changes in the primary site codes, there are significant changes regarding histology (cell types). Leukemias and lymphomas, particularly are affected. Some cases that were previously considered benign are now

counted as malignant. Also small number of cancers that were previously coded as borderline tumors are now considered benign. Counts of ovarian cancers, lymphomas and leukemias as well as some hematopoietic diseases will change due to changes in either reportability or definition. However, as with the new staging guidelines, the ICD-O changes reflect advances in the understanding of the pathology and behavior of cancers.

It should be noted that ICD-O-3 codes are converted to ICD-10 for analysis purposes. Since the WHO has not yet converted the ICD-10 hematopoietic disease behavior changes, our software, CanReg 4.33, cannot include these cases for analysis and they have been excluded. Every effort is made to accurately code patient and tumor information, to ensure that all data can be reviewed, linked, and consolidated, as appropriate, so that each malignancy is counted only once for statistical analysis.

The computer software programs used for data entry and incidence tables output are *CanReg 4.33*, developed by the International Agency for Research on Cancer, (IARC) Lyon, France.

The second part of the report includes the overall cancer incidence in Saudi Arabia and the relevant epidemiological and clinicopathological details for the 14 most common cancers among Saudi nationals for the year 2007. For each cancer site, the number and percentage of all newly diagnosed cases for the year 2007, age-standardized incidence rate (ASR) per 100,000 population for each sex, and specific cancer rank in comparison to all cancers for both sexes are presented.

Useful international statistics for specified cancer include the ranking of cancer worldwide. The references for this information is summarized on page 64.

The relevant data incorporate details for all patients presented over the year 2007. For each cancer there are five figures:

1. An Arithmetic line graph represents the age-specific incidence rate (AIR) for all age groups at five-year intervals. The graph is plotted by sex, where applicable.
2. A Table lists the percentages of the most common histology sub-types for each specific cancer.
3. A Pie chart shows the distribution of the clinical stages of each cancer such as localized, regional, distant metastasis and unknown.
4. A Bar chart shows regional distribution of ASR for particular cancer across the administrative regions by males and females.
5. A Bar chart shows comparison of age-standardized incidence rate (ASR) for each cancer type in Saudi Arabia with ASR in selected countries.

In reviewing the data, its collection and analysis, two qualifying statements can be made:

- a. The number of patients presenting with malignant disease from Riyadh region exceeds the expected number per population. The reason for this is that Riyadh has many referral centers providing patients from outside the region with cancer-related care. Some of these patients don't provide their permanent address, but instead, provide a temporary Riyadh address. This situation is partially resolved through tumor and patient linkage of cases from all regions based on identifiers such as national ID.
- b. As previously noted, the software used in analyzing this report, CanReg 4.33, does not include in situ cases in the incidence tables. These cases were added to the total cancer cases in the overview.

## Notification

The data included in this report were abstracted up to June 2010. 2007 incident cases which are identified after this date (late reporting) will be noted in subsequent incidence reports. It is anticipated that the number of late-reported cases will decrease as case ascertainment processes are improved.

## Definitions of Statistical Terms

### Age-Specific Incidence Rate (AIR)

The number of cancer cases occurring during a specific period in a population of a specific age and sex group, divided by the number of midyear population of that age and sex group.

### Age-Standardized Rate (ASR)

The Age-standardized rate is a summary measure of a rate that a population would have if it had a standard age structure. Standardization is necessary when comparing several populations that differ with respect to age structure. The most frequently used standard population is the World Standard Population (see below). The calculated incidence is known as the World Standardized Incidence Rate. The rate is expressed per 100,000 populations.

Age Class	Population
0-4	12,000
5-9	10,000
10-14	9,000
15-19	9,000
20-24	8,000
25-29	8,000
30-34	6,000
35-39	6,000
40-44	6,000
45-49	6,000
50-54	5,000
55-59	4,000
60-64	4,000
65-69	3,000
70-74	2,000
75+	2,000
<b>Total</b>	<b>100,000</b>

\* Doll R, Payne P, Waterhouse J. Cancer incidence in Five Continents Vol. I. International Union Against Cancer. 1966

## **Crude Incidence Rate**

The crude incidence rate for a cancer site is the total number of cases registered as a proportion of the total population. It denotes the approximate number of cases occurring in each 100,000 individuals. All rates are thus, expressed as per 100,000 population.

Cancer rates vary greatly with age and the crude rate is strongly influenced by the demographic structure of the population. Hence, if the population structure changes over time the crude rate over that period may be artificially altered. It is not appropriate to compare crude rates across geographical areas of cancer registries with different population age structures. Therefore, in order to assess time trends in registration data or compare incidence across geographical areas or between registries it is necessary to first standardize the rates with respect to age.

## **Cumulative Incidence rate**

Cumulative incidence is the probability or risk of individuals developing the disease during a specified period. For cancer, it is expressed as the number of new born children (out of 100, or 1000) who would be expected to develop a particular cancer before the age of 65 (or 70, or 75) if they had the rates of cancers currently observed. Like the age standardized rate, it permits comparison between populations of different age structures. In this report the age ranges 0-64 and 0-74 years are used. The cumulative rate is the summation of the cancer age-specific rates; which are computed for five-year age intervals. The cumulative rate is five times the sum of the age-specific rates calculated over the five-year age groups.

## **ICD-10**

The World Health Organization's International Classification of Diseases, tenth edition.

## **ICD-O-3**

The World Health Organization's International Classification of Diseases for Oncology, 3rd Edition has been the standard coding system for neoplasms for over 25 years. The coding system includes a four character code for primary site, a four-digit numeric code for cell type, one-digit code for behavior and a one-digit code for tumor aggressiveness (grade).

## **Incidence Rate**

An incidence rate is defined as the rate at which a new event occurs in a population. It is calculated as the number of new cases of disease arising in a population over a defined time period, divided by the population at risk of developing that disease.

## **Mean**

The simple mathematical average of two or more numbers.

## **Median**

The midpoint of the range numbers that are arranged in order of value.

## **Metastasis**

Metastasis is the distant spread of cancer from its original site to other organs of the body, including lymph nodes, skeletal and or visceral organs.

## **Overall Survival (OS)**

Overall Survival is an indication of proportion of people within a group who are expected to be alive after a specified time. It takes into account death due to any cause; both related and unrelated to the cancer in question.

## **Range**

Is the difference between the maximum and minimum values in a set of observations.

## **Rank**

This measure reflects the importance of a specific cancer site relative to other sites, in terms of the number of registrations. Ranking illustrates the most and least frequent cancer sites in a population according to their frequency.

## **Ratio**

The relation between two quantities. The first quantity as numerator and the second as denominator

## **Relative Frequency**

This statistic is defined as the number of specific cancer cases registered relative to the total number of all cancer. It is expressed as a percentage.

## **Summary Stage**

Staging is the grouping of cancer cases into broad categories based on the extent of disease.

**PART II**  
**OVERVIEW OF CANCER INCIDENCE**  
**2007**

## Reported Cancer Incidence Cases in Saudi Arabia, 2007

Between January 01 and December 31, 2007, the total number of cancer incident cases reported to the SCR was 12,309. Overall cancer was slightly more among women than men. Cancers affected 5,982 (48.6%) males and 6,327 (51.4%) females with a male to female ratio of 95:100. 9,347 cases were reported among Saudis, 2,590 among Non-Saudis. The total number of cases excluded from analysis include 361 cases of unknown nationalities. Other exclusions were 260 in situ cases. The current software program CanReg-4 version 4.33, does not include in situ cases in the statistical analysis. Also, 37 were ICD-O-3 coded cases that failed to convert to ICD-10 codes as described in the Data Management (see page 12). This puts the total number of exclusions from the analysis as 658 cases. Table 2.1 illustrates the distribution of the cases by sex.

Diagnosis of malignancy was confirmed histologically in 86.2% of the cases, and haematological & cytologically in 8% of cases. Clinically confirmed cases were 0.3%; radiologically confirmed cases were 2%; cases confirmed by Death Certificate Only were 2.7% and the method of diagnosis was unknown for 0.8% of the cases.

As shown on Table 2.1, 11,651 cases were analyzed, of which 9,124 (78.3%) were Saudis and 2,527 (21.7%) were Non-Saudis. Among the Saudis 4,351 (47.7%) were male and 4,773 (52.3%) were female. The male to female ratio was 91:100. The crude incidence rate (CIR) of all cancers among Saudi Population was 52.3% 100,000 (49.4/100,000 among males and 55.1% 100,000 among females). The overall age-standardized incidence rate (ASR) for all Saudis with a world standard population reference was 82.1/100,000 (80/100,000 in males and 84.2/100,000 in females). For all sites, the age-specific incidence rate (AIR) increased with age for both males and females. After the age of 64 years, the increase was nearly one and one half fold for males compared to females. The median age at diagnosis is was 59 years for men and 50 years for women. The five geographic regions with the highest ASR were Riyadh Region at 108.5/100,000, Tabuk Region at 105.0/100,000, Eastern Region at 104.4/100,000, Makkah Region at 89.3/100,000 and Madinah Region at 73.8/100,000.

Behavior	Saudis			Non-Saudis			Unknown Nationality			All
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
<b>Total</b>	4461	4886	9347	1354	1236	2590	167	205	372	12309
<b>Invasive</b>	4368	4792	9160	1210	1210	2420	164	199	363	11943
<b>In Situ</b>	94	94	188	37	26	63	3	6	9	260
<b>ICD 10 *</b>	16	19	35	0	0	0	1	1	2	37
<b>Analyzed **</b>	4351	4773	9124	1317	1210	2527	163	198	361	11651

**Table 2.1 Distribution of Cancer Cases in Saudi Arabia by Nationality and Sex 2007**

\* ICD-10 conversion failure

\*\* Unknown nationalities, in situ cases and ICD-10 conversion failures are excluded from analysis



## Cancer among Saudis 2007

As explained earlier the total number of cancer cases analyzed among Saudis during the year 2007 were 9,124. Following are figures presenting the percentage distributions of cancer incidence and most frequent types of cancers among Saudis by sex and age-group.

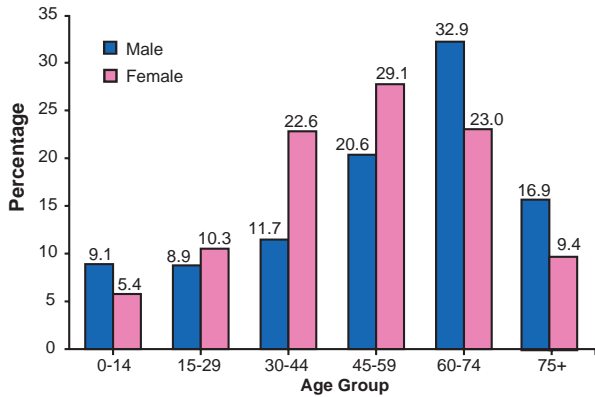


Figure 2.1 Percentage Distribution of Cancer Incidence among Saudis by Sex according to Age Group, 2007

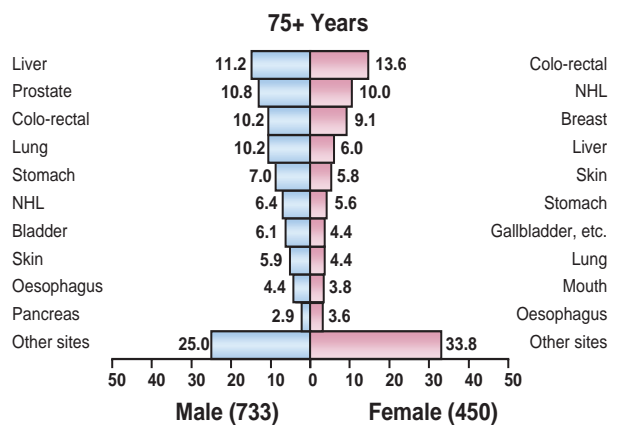
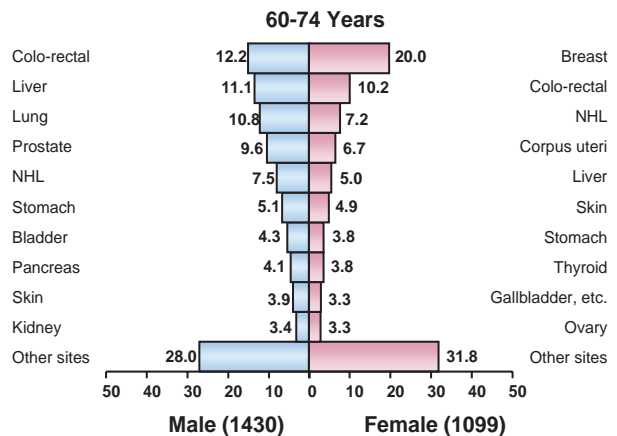
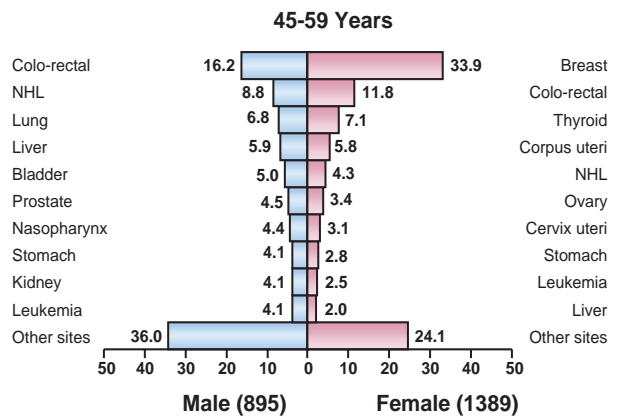
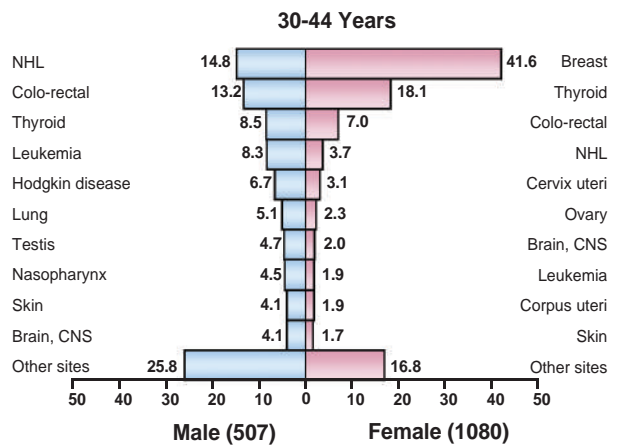
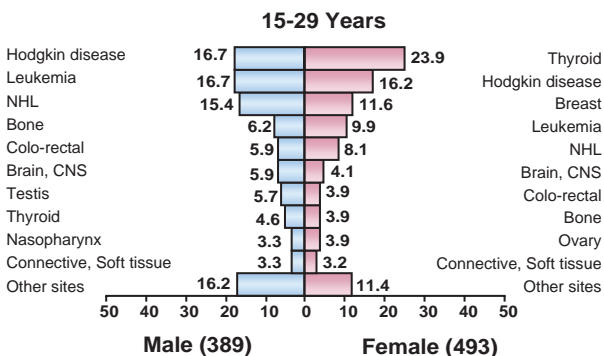
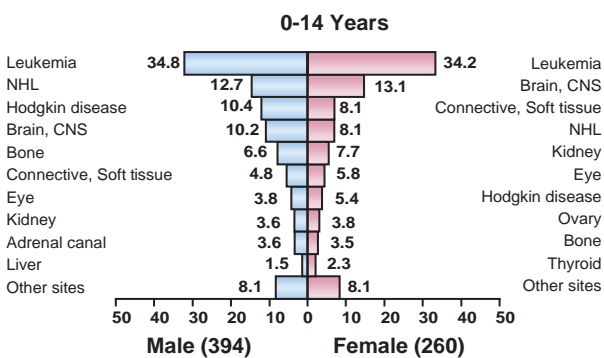
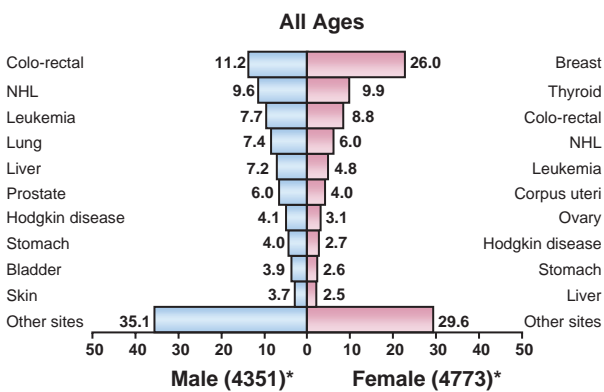
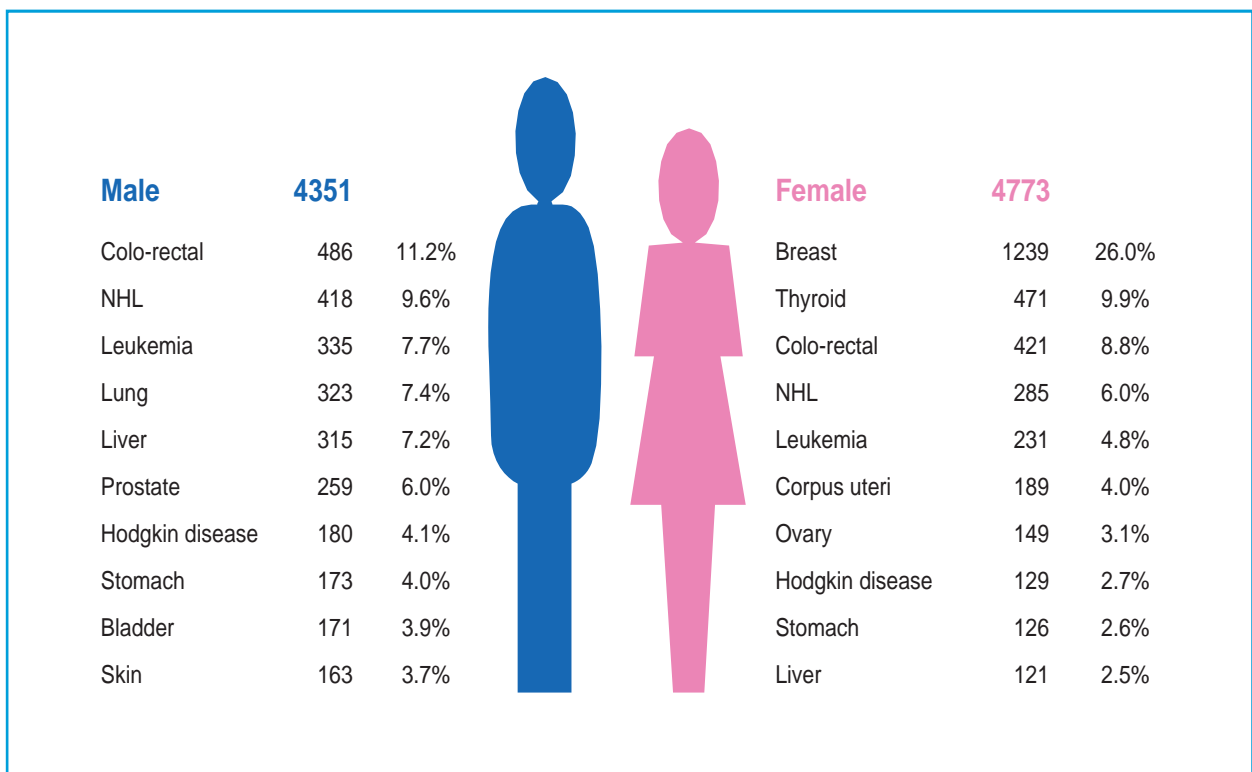


Figure 2.2 Percentage Distribution of Most Frequent Types of Cancer by Sex among Saudis, 2007

\* 3 male cases and 2 female of unknown age are included only in the total as they may not be added to any age group

Cancer	No.	%
Breast	1259	13.8
Colo-rectal	907	9.9
NHL	703	7.7
Thyroid	586	6.4
Leukemia	566	6.2
Liver	436	4.8
Lung	412	4.5
Hodgkin disease	309	3.4
Stomach	299	3.3
Skin	283	3.1

**Table 2.2 Ten Most Common Cancers among Saudis, 2007 (All Ages)**



**Figure 2.3 Ten Most Common Cancers among Saudis by Sex, 2007**

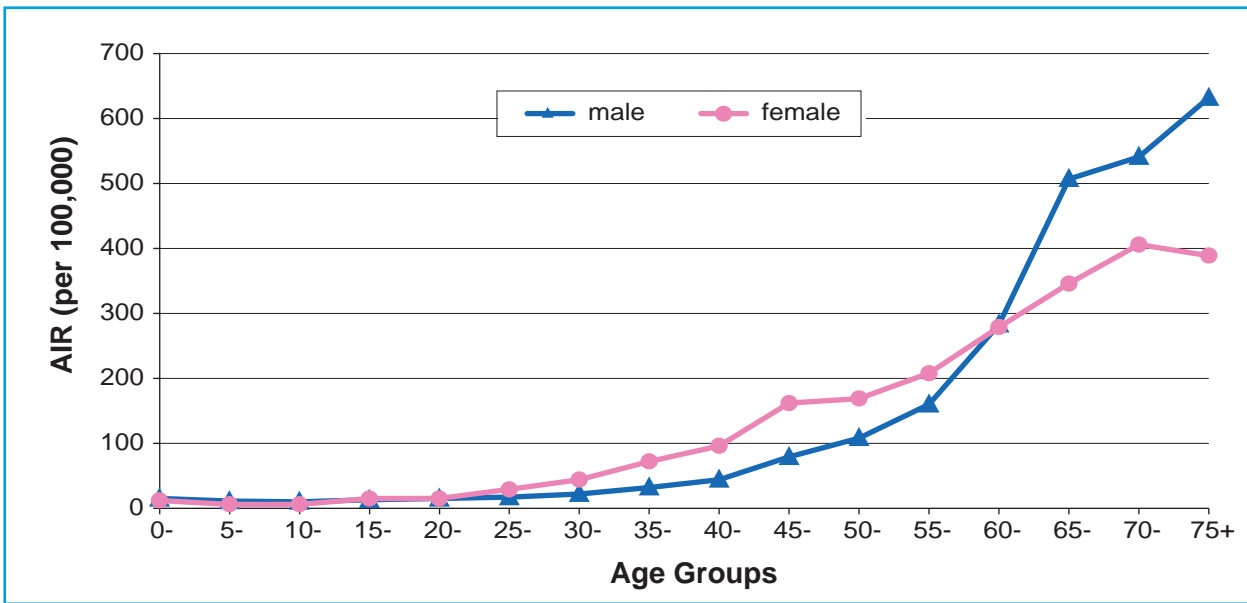


Figure 2.4 Age-Specific Incidence Rates (AIR) for All Cancers among Saudis, 2007

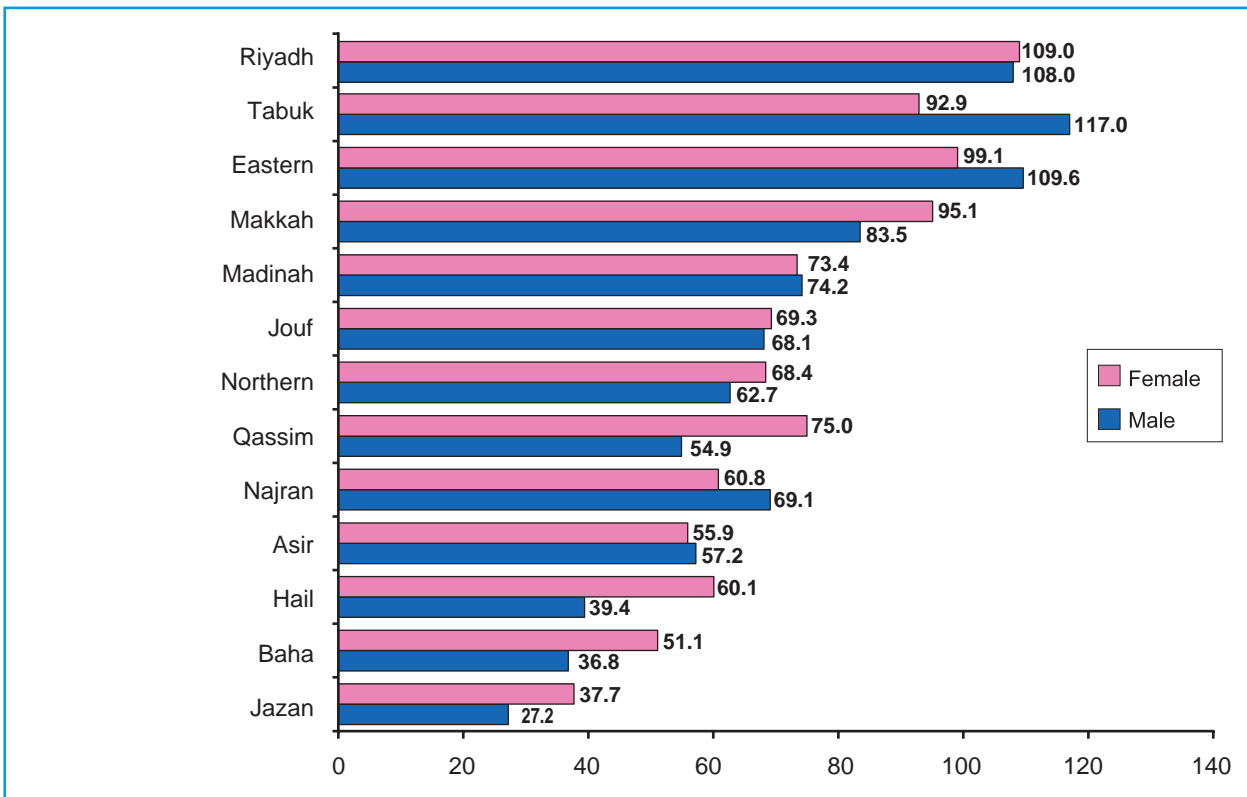


Figure 2.5 Age Standardized Rate (ASR) Regional Distribution (per 100,000) of All Sites of Cancer among Saudis, 2007

ICD-10	Site	Male						Female					
		No.	%	Crude	ASR	Cumulative Rate		No.	%	Crude	ASR	Cumulative Rate	
				Rate	World	0-64	0-74			Rate	World	0-64	0-74
All	All sites Total	4351	100.0%	49.4	80	40.5	92.9	4773	100.0%	55.1	84.2	55.7	93.3
Not C44	All sites but C44	4188	96.3%	47.5	76.8	39.3	89.3	4653	97.5%	53.7	81.7	54.6	90.1
C00	Lip	12	0.3%	0.1	0.2	0.1	0.2	6	0.1%	0.1	0.1	0.0	0.2
C01-C02	Tongue	39	0.9%	0.4	0.8	0.5	0.8	37	0.8%	0.4	0.8	0.5	1.0
C03-C06	Mouth	37	0.9%	0.4	0.8	0.4	1.1	53	1.1%	0.6	1	0.4	1.0
C07-C08	Salivary glands	19	0.4%	0.2	0.4	0.3	0.5	18	0.4%	0.2	0.3	0.2	0.4
C09	Tonsil	4	0.1%	0	0.1	0.1	0.1	3	0.1%	0	0.1	0.0	0.1
C10	Other Oropharynx	2	0.0%	0	0	0.0	0.1	1	0.0%	0	0	0.0	0.0
C11	Nasopharynx	94	2.2%	1.1	1.5	1.1	1.6	58	1.2%	0.7	0.9	0.7	0.8
C12-C13	Hypopharynx	15	0.3%	0.2	0.3	0.1	0.5	9	0.2%	0.1	0.2	0.1	0.2
C14	Pharynx unspecified	2	0.0%	0	0	0.0	0.1	3	0.1%	0	0	0.0	0.0
C15	Oesophagus	75	1.7%	0.9	1.5	0.6	1.5	57	1.2%	0.7	1.2	0.5	1.6
C16	Stomach	173	4.0%	2	3.6	1.5	4.4	126	2.6%	1.5	2.5	1.4	2.9
C17	Small intestine	27	0.6%	0.3	0.5	0.2	0.7	14	0.3%	0.2	0.3	0.2	0.4
C18	Colon	275	6.3%	3.1	5.5	3.2	6.6	252	5.3%	2.9	4.8	3.0	5.4
C19-C20	Rectum	211	4.8%	2.4	4.1	2.3	4.9	169	3.5%	2	3.3	2.3	3.6
C21	Anus	12	0.3%	0.1	0.2	0.1	0.4	12	0.3%	0.1	0.2	0.2	0.2
C22	Liver	315	7.2%	3.6	6.8	3.0	8.6	121	2.5%	1.4	2.6	1.2	3.4
C23-C24	Gallbladder etc.	52	1.2%	0.6	1.1	0.5	1.4	86	1.8%	1	1.9	0.9	2.3
C25	Pancreas	127	2.9%	1.4	2.7	1.5	3.5	51	1.1%	0.6	1.1	0.6	1.4
C30-C31	Nose, sinuses etc.	12	0.3%	0.1	0.2	0.1	0.2	14	0.3%	0.2	0.2	0.2	0.2
C32	Larynx	56	1.3%	0.6	1.2	0.8	1.6	10	0.2%	0.1	0.2	0.1	0.3
C33-C34	Trachea, Bronchus, Lung	323	7.4%	3.7	6.9	3.2	8.6	89	1.9%	1	1.9	0.8	2.2
C37-C38	Other Thoracic organs	21	0.5%	0.2	0.4	0.2	0.4	9	0.2%	0.1	0.1	0.1	0.1
C40-C41	Bone	64	1.5%	0.7	0.7	0.4	0.4	33	0.7%	0.4	0.3	0.2	0.2
C43	Melanoma of Skin	15	0.3%	0.2	0.3	0.1	0.4	18	0.4%	0.2	0.4	0.3	0.5
C44	Other Skin	163	3.7%	1.8	3.1	1.2	3.6	120	2.5%	1.4	2.5	1.1	3.1
C45	Mesothelioma	13	0.3%	0.1	0.3	0.0	0.3	2	0.0%	0	0	0.0	0.0
C46	Kaposi sarcoma	17	0.4%	0.2	0.3	0.1	0.4	6	0.1%	0.1	0.1	0.1	0.1
C47; C49	Connective, Soft tissue	75	1.7%	0.9	1.1	0.5	1.3	60	1.3%	0.7	0.7	0.4	0.5
C50	Breast	20	0.5%	0.2	0.4	0.3	0.5	1239	26.0%	14.3	21.6	17.2	23.6
C51	Vulva	-	-	-	-	-	-	4	0.1%	0	0.1	0.1	0.1
C52	Vagina	-	-	-	-	-	-	4	0.1%	0	0.1	0.0	0.0
C53	Cervix uteri	-	-	-	-	-	-	105	2.2%	1.2	1.9	1.5	1.9
C54	Corpus uteri	-	-	-	-	-	-	189	4.0%	2.2	4	2.8	5.4
C55	Uterus unspecified	-	-	-	-	-	-	24	0.5%	0.3	0.6	0.4	0.8
C56	Ovary	-	-	-	-	-	-	149	3.1%	1.7	2.6	1.9	2.9
C57	Other Female Genital	-	-	-	-	-	-	9	0.2%	0.1	0.2	0.1	0.2
C58	Placenta	-	-	-	-	-	-	11	0.2%	0.1	0.1	0.1	0.1
C60	Penis	0	0.0%	0	0	0.0	0.0	-	-	-	-	-	-
C61	Prostate	259	6.0%	2.9	5.7	1.8	7.5	-	-	-	-	-	-
C62	Testis	58	1.3%	0.7	0.7	0.5	0.5	-	-	-	-	-	-
C63	Other male genital	1	0.0%	0	0	0.0	0.0	-	-	-	-	-	-
C64	Kidney	143	3.3%	1.6	2.7	1.5	3.2	84	1.8%	1	1.4	0.8	1.5
C65	Renal Pelvis	4	0.1%	0	0.1	0.1	0.2	1	0.0%	0	0	0.0	0.0
C66	Ureter	2	0.0%	0	0	0.0	0.1	0	0.0%	0	0	0.0	0.0
C67	Bladder	171	3.9%	1.9	3.5	1.8	3.9	37	0.8%	0.4	0.8	0.5	1.0
C68	Other Urinary organs	1	0.0%	0	0	0.0	0.0	0	0.0%	0	0	0.0	0.0
C69	Eye	22	0.5%	0.2	0.3	0.1	0.3	20	0.4%	0.2	0.3	0.1	0.2
C70-C72	Brain, Nervous system	133	3.1%	1.5	1.9	1.2	1.9	120	2.5%	1.4	1.7	1.1	1.8
C73	Thyroid	115	2.6%	1.3	1.8	1.4	1.9	471	9.9%	5.4	6.6	5.3	6.3
C74	Adrenal gland	15	0.3%	0.2	0.2	0.1	0.1	8	0.2%	0.1	0.1	0.1	0.1
C75	Other Endocrine	3	0.1%	0	0	0.0	0.0	4	0.1%	0	0.1	0.0	0.0
C81	Hodgkin disease	180	4.1%	2	2.2	1.5	1.8	129	2.7%	1.5	1.5	1.0	1.2
C82-C85; C96	Non-Hodgkin lymphoma	418	9.6%	4.7	7	3.7	7.7	285	6.0%	3.3	5.1	2.7	5.8
C88	Immunoproliferative dis.	0	0.0%	0	0	0.0	0.0	0	0.0%	0	0	0.0	0.0
C90	Multiple Myeloma	43	1.0%	0.5	0.9	0.4	1.2	43	0.9%	0.5	0.9	0.7	1.0
C91	Lymphoid Leukemia	194	4.5%	2.2	2.4	1.2	2.1	111	2.3%	1.3	1.4	0.7	1.3
C92-C94	Myeloid Leukemia	113	2.6%	1.3	1.6	1.0	1.5	101	2.1%	1.2	1.5	1.0	1.6
C95	Leukemia unspecified	28	0.6%	0.3	0.4	0.2	0.4	19	0.4%	0.2	0.3	0.2	0.3
Other	Other & unspecified	178	4.1%	2	3.5	1.6	4.2	169	3.5%	2	3.4	1.6	4.1

**Table 2.3 Number, Percentage, ASR, CIR, and Cumulative Rates (per 1000) of New Cases by Primary Site and Sex among Saudis, 2007**

## Adult Cancers in Saudi Arabia, 2007 (>14 years)

Between January and December 2007, the total number of adult cancer incidence cases reported was 11,437. Overall cancer was slightly more in females than in males. Cancer affected 5,473 (47.9%) males and 5,964 (52.1%)

females with a male to female ratio of 92:100. Of all cases, there were 8,682 Saudis, 2,463 of Non-Saudis and 292 of unknown nationalities. As shown on table 2.4, the total number of analysed cases were 10,865.

Behavior	Saudis			Non-Saudis			Unknown Nationality			All
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Total
<b>Total</b>	4059	4623	8682	1283	1180	2463	131	161	292	11437
<b>Invasive</b>	3966	4530	8496	1246	1154	2400	128	156	284	11180
<b>In-Situ</b>	93	93	186	37	26	63	3	5	8	257
<b>ICD 10 *</b>	12	19	31	0	0	0	1	1	2	33
<b>Analyzed **</b>	3954	4511	8465	1246	1154	2400	127	155	282	10865

Table 2.4 Distribution of Reported Adult Cancer Cases in Saudi Arabia by Nationality and Sex 2007

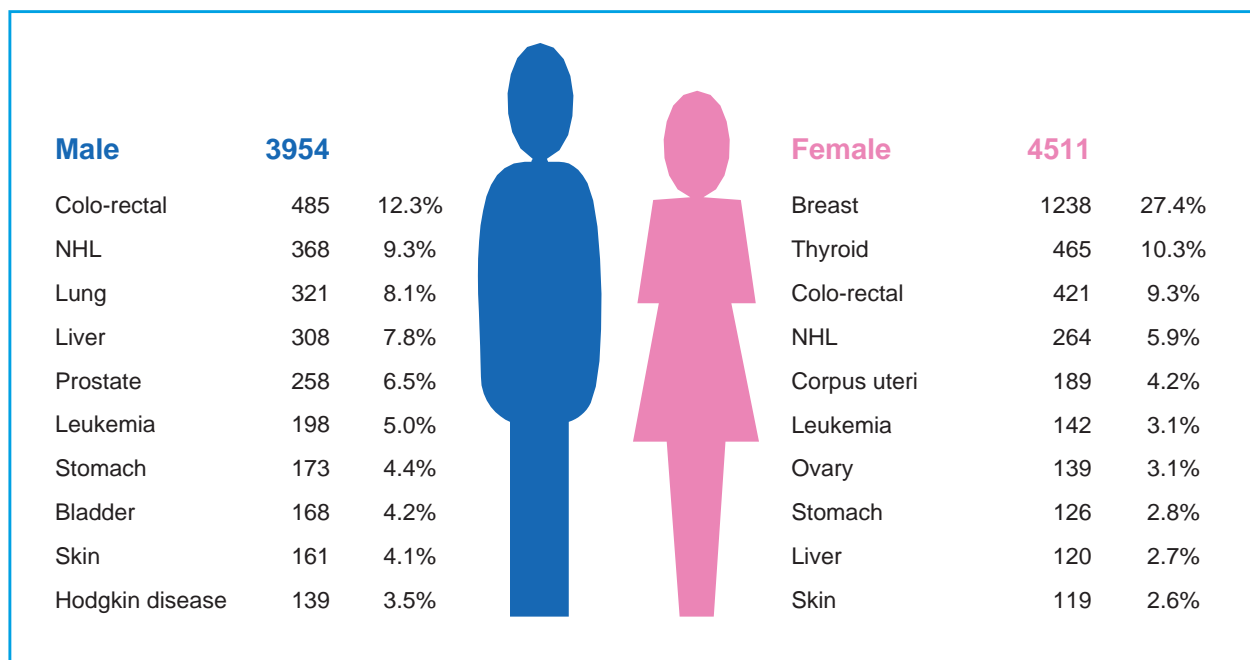


Figure 2.6 Ten Most Common Cancers among Saudi Adults, 2007

\* ICD-10 conversion failure

\*\* Unknown nationalities, in situ cases and ICD-10 conversion failures are excluded from analysis

Primary Site	Code	Morphology	Male	%	Female	%
Breast	8500	Infiltrating duct carcinoma, NOS	16	80.0	984	79.5
	8520	Lobular carcinoma, NOS	1	5.0	54	4.4
	8010	Carcinoma, NOS	1	5.0	44	3.6
	8000	Neoplasm, malignant	1	5.0	30	2.4
	8522	Infiltrating duct and lobular carcinoma	0	0.0	23	1.9
	8510	Medullary carcinoma, NOS	0	0.0	15	1.2
	8480	Mucinous adenocarcinoma	1	5.0	12	1.0
	8523	Infiltrating duct mixed with other types of carcinoma	0	0.0	12	1.0
		All Others	0	0.0	64	5.2
	Colo-rectal	8140	Adenocarcinoma, NOS	362	74.6	323
8480		Mucinous adenocarcinoma	46	9.5	35	8.3
8481		Mucin-producing adenocarcinoma	18	3.7	9	2.1
8000		Neoplasm, malignant	8	1.6	11	2.6
8010		Carcinoma, NOS	7	1.4	8	1.9
8490		Signet ring cell carcinoma	8	1.6	6	1.4
8263		Adenocarcinoma in tubulovillous adenoma	10	2.1	3	0.7
8261		Adenocarcinoma in villous adenoma	5	1.0	7	1.7
8144		Adenocarcinoma, intestinal type	6	1.2	5	1.2
8210		Adenocarcinoma in adenomatous polyp	6	1.2	5	1.2
	All Others	9	1.9	9	2.1	
NHL	9680	Malignant lymphoma, large B-cell, diffuse, NOS	194	52.7	125	47.3
	9590	Malignant lymphoma, NOS	28	7.6	20	7.6
	9591	Malignant lymphoma, non-Hodgkin, NOS	13	3.5	24	9.1
	9699	Marginal zone B-cell lymphoma, NOS	12	3.3	16	6.1
	9714	Anaplastic large cell lymphoma, T cell and Null cell type	17	4.6	11	4.2
	9690	Follicular lymphoma, NOS	11	3.0	11	4.2
	9687	Burkitt lymphoma, NOS	13	3.5	8	3.0
	9700	Mycosis fungoides	15	4.1	6	2.3
	9691	Follicular lymphoma, grade 2	11	3.0	6	2.3
	9670	Malignant lymphoma, small B lymphocytic, NOS	7	1.9	9	3.4
	9698	Follicular lymphoma, grade 3	6	1.6	9	3.4
	9702	Mature T-cell lymphoma, NOS	6	1.6	4	1.5
	9695	Follicular lymphoma, grade 1	6	1.6	2	0.8
		All Others	29	7.9	13	4.9
Thyroid	8260	Papillary adenocarcinoma, NOS	75	66.4	259	55.7
	8340	Papillary carcinoma, follicular variant	11	9.7	89	19.1
	8341	Papillary microcarcinoma	3	2.7	35	7.5
	8343	Papillary carcinoma, encapsulated	3	2.7	14	3.0
	8335	Follicular carcinoma, minimally invasive	4	3.5	11	2.4
	8510	Medullary carcinoma, NOS	6	5.3	7	1.5
	8290	Oxyphilic adenocarcinoma	2	1.8	9	1.9
	8330	Follicular adenocarcinoma, NOS	3	2.7	8	1.7
	8050	Papillary carcinoma, NOS	0	0.0	7	1.5
		All Others	6	5.3	26	5.6
Liver	8170	Hepatocellular carcinoma, NOS	253	82.1	83	69.2
	8000	Neoplasm, malignant	29	9.4	12	10.0
	8140	Adenocarcinoma, NOS	6	1.9	8	6.7
	8160	Cholangiocarcinoma	4	1.3	10	8.3
	All Others	16	5.2	7	5.8	
Lung	8140	Adenocarcinoma, NOS	84	0	25	28.1
	8070	Squamous cell carcinoma, NOS	56	0	14	15.7
	8046	Non-small cell carcinoma	45	0	12	13.5
	8041	Small cell carcinoma, NOS	28	0	7	7.9
	8000	Neoplasm, malignant	21	0	7	7.9
	8010	Carcinoma, NOS	13	0	3	3.4
	8250	Bronchiolo-alveolar adenocarcinoma, NOS	9	0	6	6.7
	8012	Large cell carcinoma, NOS	10	0	0	0.0
	8071	Squamous cell carcinoma, keratinizing, NOS	8	0	2	2.2
	8020	Carcinoma, undifferentiated, NOS	8	0	0	0.0
	8072	Squamous cell carcinoma, large cell, nonkeratinizing, NOS	7	0	1	1.1
	8240	Carcinoid tumor, NOS	2	0	4	4.5
	8560	Adenosquamous carcinoma	4	0	1	1.1
	8042	Oat cell carcinoma	4	0	0	0.0
8253	Bronchiolo-alveolar carcinoma, mucinous	1	0	3	3.4	
	All Others	21	0	4	4.5	
Leukemia	9863	Chronic myeloid leukemia, NOS	32	16.2	20	14.1
	9823	B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma	30	15.2	16	11.3
	9861	Acute myeloid leukemia, NOS	22	11.1	20	14.1
	9835	Precursor cell lymphoblastic leukemia, NOS	16	8.1	11	7.7
	9836	Precursor B-cell lymphoblastic leukemia	17	8.6	10	7.0
	9866	Acute promyelocytic leukemia, t(15;17) (q22;q11-12)	9	4.5	10	7.0
	9874	Acute myeloid leukemia with maturation	6	3.0	8	5.6
	9800	Leukemia, NOS	9	4.5	4	2.8
	9801	Acute leukemia, NOS	5	2.5	7	4.9
	9837	Precursor T-cell lymphoblastic leukemia	10	5.1	2	1.4
	9891	Acute monocytic leukemia	6	3.0	5	3.5
	9867	Acute myelomonocytic leukemia	5	2.5	5	3.5
	9826	Burkitt cell leukemia	3	1.5	3	2.1
	9873	Acute myeloid leukemia without maturation	3	1.5	3	2.1
	9805	Acute biphenotypic leukemia	3	1.5	2	1.4
	9860	Myeloid leukemia, NOS	1	0.5	4	2.8
	9940	Hairy cell leukemia	4	2.0	1	0.7
	9945	Chronic myelomonocytic leukemia, NOS	3	1.5	2	1.4
	All Others	14	7.1	9	6.3	

**Table 2.5 Number and Proportion of Morphological Types for the Most Common Types of Cancer among Saudi Adults, 2007**

Table 2.5 continued .....

Primary Site	Code	Morphology	Male	%	Female	%
Stomach	8140	Adenocarcinoma, NOS	88	50.9	47	37.3
	8490	Signet ring cell carcinoma	34	19.7	42	33.3
	8144	Adenocarcinoma, intestinal type	14	8.1	4	3.2
	8000	Neoplasm, malignant	8	4.6	6	4.8
	8010	Carcinoma, NOS	7	4.0	4	3.2
	8145	Carcinoma, diffuse type	4	2.3	4	3.2
	8480	Mucinous adenocarcinoma	7	4.0	0	0.0
	8936	Gastrointestinal stromal sarcoma	3	1.7	4	3.2
	8070	Squamous cell carcinoma, NOS	1	0.6	4	3.2
	8481	Mucin-producing adenocarcinoma	1	0.6	2	1.6
		All Others	6	3.5	9	7.1
Skin	8090	Basal cell carcinoma, NOS	70	43.5	62	52.1
	8070	Squamous cell carcinoma, NOS	37	23.0	18	15.1
	8071	Squamous cell carcinoma, keratinizing, NOS	9	5.6	6	5.0
	8832	Dermatofibrosarcoma, NOS	7	4.3	7	5.9
	8410	Sebaceous adenocarcinoma	6	3.7	7	5.9
	8094	Basosquamous carcinoma	6	3.7	5	4.2
	8097	Basal cell carcinoma, nodular	4	2.5	5	4.2
	8092	Infiltrating basal cell carcinoma, NOS	4	2.5	1	0.8
	8200	Adenoid cystic carcinoma	1	0.6	3	2.5
	8051	Verrucous carcinoma, NOS	2	1.2	1	0.8
	8091	Multifocal superficial basal cell carcinoma	3	1.9	0	0.0
	8247	Merkel cell carcinoma	3	1.9	0	0.0
	8833	Pigmented dermatofibrosarcoma protuberans	3	1.9	0	0.0
		All Others	6	3.7	4	3.4
	Prostate	8140	Adenocarcinoma, NOS	217	84.1	-
8000		Neoplasm, malignant	16	6.2	-	-
8010		Carcinoma, NOS	11	4.3	-	-
8550		Acinar cell carcinoma	7	2.7	-	-
		All Others	7	2.7	-	-
Hodgkin disease	9663	Hodgkin lymphoma, nodular sclerosis, NOS	50	36.0	65	56.5
	9652	Hodgkin lymphoma, mixed cellularity, NOS	36	25.9	18	15.7
	9650	Hodgkin lymphoma, NOS	17	12.2	13	11.3
	9659	Hodgkin lymphoma, nodular lymphocyte predominance	11	7.9	5	4.3
	9665	Hodgkin lymphoma, nodular sclerosis, grade 1	9	6.5	4	3.5
	9651	Hodgkin lymphoma, lymphocyte-rich	5	3.6	7	6.1
	9667	Hodgkin lymphoma, nodular sclerosis, grade 2	6	4.3	2	1.7
	9653	Hodgkin lymphoma, lymphocyte depletion, NOS	4	2.9	1	0.9
	9654	Hodgkin lymphoma, lymphocyte depletion, diffuse fibrosis	1	0.7	0	0.0
Bladder	8130	Papillary transitional cell carcinoma	75	44.6	15	40.5
	8120	Transitional cell carcinoma, NOS	58	34.5	9	24.3
	8000	Neoplasm, malignant	9	5.4	2	5.4
	8070	Squamous cell carcinoma, NOS	9	5.4	1	2.7
	8140	Adenocarcinoma, NOS	4	2.4	4	10.8
	8071	Squamous cell carcinoma, keratinizing, NOS	3	1.8	2	5.4
	8010	Carcinoma, NOS	2	1.2	1	2.7
	8122	Transitional cell carcinoma, spindle cell	3	1.8	0	0.0
	8020	Carcinoma, undifferentiated, NOS	2	1.2	0	0.0
		All Others	3	1.8	3	8.1
Corpus uteri	8380	Endometrioid adenocarcinoma, NOS	-	-	97	51.3
	8140	Adenocarcinoma, NOS	-	-	33	17.5
	8950	Mullerian mixed tumor	-	-	8	4.2
	8010	Carcinoma, NOS	-	-	6	3.2
	8441	Serous cystadenocarcinoma, NOS	-	-	6	3.2
	8980	Carcinosarcoma, NOS	-	-	5	2.6
	8930	Endometrial stromal sarcoma, NOS	-	-	4	2.1
	8310	Clear cell adenocarcinoma, NOS	-	-	3	1.6
	8560	Adenosquamous carcinoma	-	-	3	1.6
	8931	Endometrial stromal sarcoma, low grade	-	-	3	1.6
	8050	Papillary carcinoma, NOS	-	-	2	1.1
	8072	Squamous cell carcinoma, large cell, nonkeratinizing, NOS	-	-	2	1.1
	8480	Mucinous adenocarcinoma	-	-	2	1.1
	8933	Adenosarcoma	-	-	2	1.1
	All Others	-	-	13	6.9	
Ovary	8460	Papillary serous cystadenocarcinoma	-	-	33	23.7
	8441	Serous cystadenocarcinoma, NOS	-	-	22	15.8
	8140	Adenocarcinoma, NOS	-	-	18	12.9
	8000	Neoplasm, malignant	-	-	9	6.5
	8380	Endometrioid adenocarcinoma, NOS	-	-	8	5.8
	8461	Serous surface papillary carcinoma	-	-	8	5.8
	8010	Carcinoma, NOS	-	-	7	5.0
	8470	Mucinous cystadenocarcinoma, NOS	-	-	7	5.0
	9080	Teratoma, malignant, NOS	-	-	5	3.6
	8480	Mucinous adenocarcinoma	-	-	4	2.9
	9060	Dysgerminoma	-	-	4	2.9
	8620	Granulosa cell tumor, malignant	-	-	2	1.4
	9071	Yolk sac tumor	-	-	2	1.4
		All Others	-	-	10	7.2

## Childhood Cancers in Saudi Arabia, 2007 ( $\leq 14$ years)

The total incident cases reported among children (0-14 years) between January and December 2007 were 800. This represents 6.5% of the total number of cancers in Saudi Arabia. The reported incidents show that cancer was more common among boys than girls. 475 (59.4%) cases were reported among boys and 325 (40.6%) among girls, with a male to female ratio of 146:100.

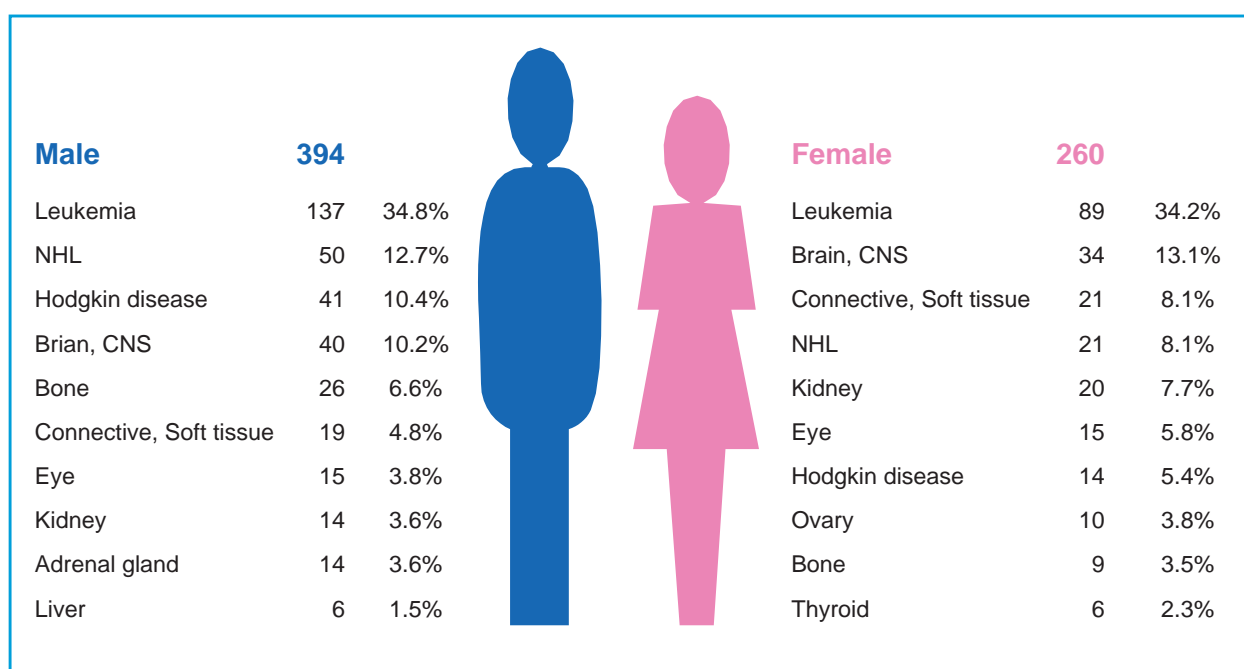
Of all the cases reported there were 658 Saudis, 126 non-Saudis and 16 of "unknown nationality". Based on table 2.6, the total number of cases analyzed was 780 including 654 (83.8%) Saudis and 126 (16.2%) non-Saudis. Among Saudis, 394 (60.2%) were male and 260 (39.8%) were female. The male to female ratio among Saudis was 151:100.

Behavior	Saudis			Non-Saudis			Unknown Nationality			All Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
<b>Total</b>	398	260	658	70	56	126	7	9	16	800
<b>Invasive</b>	399	260	659	70	56	126	7	9	16	801
<b>In-situ</b>	0	0	0	0	0	0	0	0	0	0
<b>ICD 10 *</b>	4	0	4	0	0	0	0	0	0	4
<b>Analyzed **</b>	394	260	654	70	56	126	7	9	16	780

**Table 2.6 Distribution of Reported Childhood Cancer Cases in Saudi Arabia by Nationality and Sex, 2007**

Childhood cancer is very important, not only because of the age of occurrence, but also because 37.2% of the Saudi population is under 15 years of age. In addition to this, recent years have shown a breakthrough for the cure of many childhood cancers. Childhood cancers accounted for 7% of all cancer among Saudis. The leading cancer

among Saudi children was leukemia, which accounted for 34.6%, followed by Brain (CNS) 11.3% then NHL 10.9% and Hodgkin disease 8.4%. Figure 2.7 shows the top ten sites by sex and frequency, and table 2.7 shows the number and proportion of the morphological types for the most common types of cancer.



**Figure 2.7 Ten Most Common Cancers among Saudi Children by Sex, 2007**

\* ICD-10 conversion failure

\*\* Unknown nationalities, in situ cases and ICD-10 conversion failures are excluded from analysis



Primary Site	Code	Morphology	Male	%	Female	%
Leukemia	9836	Precursor B-cell lymphoblastic leukemia	52	38.0	41	46.1
	9835	Precursor cell lymphoblastic leukemia, NOS	40	29.2	22	24.7
	9837	Precursor T-cell lymphoblastic leukemia	13	9.5	3	3.4
	9805	Acute biphenotypic leukemia	7	5.1	3	3.4
	9861	Acute myeloid leukemia, NOS	3	2.2	7	7.9
	9801	Acute leukemia, NOS	3	2.2	2	2.2
	9863	Chronic myeloid leukemia, NOS	3	2.2	1	1.1
	9910	Acute megakaryoblastic leukemia	1	0.7	3	3.4
	9867	Acute myelomonocytic leukemia	3	2.2	0	0.0
	9874	Acute myeloid leukemia with maturation	2	1.5	1	1.1
	9946	Juvenile myelomonocytic leukemia	3	2.2	0	0.0
	All Others	7	5.1	6	6.7	
NHL	9687	Burkitt lymphoma, NOS	26	52.0	8	38.1
	9729	Precursor T-cell lymphoblastic lymphoma	8	16.0	2	9.5
	9680	Malignant lymphoma, large B-cell, diffuse, NOS	4	8.0	3	14.3
	9590	Malignant lymphoma, NOS	2	4.0	1	4.8
	9700	Mycosis fungoides	0	0.0	3	14.3
	9714	Anaplastic large cell lymphoma, T cell and Null cell type	2	4.0	1	4.8
	9670	Malignant lymphoma, small B lymphocytic, NOS	2	4.0	0	0.0
	9754	Langerhans cell histiocytosis, disseminated	2	4.0	0	0.0
	All Others	4	8.0	3	14.3	
Brain, CNS	9470	Medulloblastoma, NOS	16	40.0	9	26.5
	9380	Glioma, malignant	4	10.0	6	17.6
	9391	Ependymoma, NOS	3	7.5	2	5.9
	9508	Atypical teratoid/rhabdoid tumor	2	5.0	3	8.8
	9400	Astrocytoma, NOS	3	7.5	1	2.9
	9500	Neuroblastoma, NOS	1	2.5	3	8.8
	9440	Glioblastoma, NOS	1	2.5	2	5.9
	9471	Desmoplastic nodular medulloblastoma	3	7.5	0	0.0
	9382	Mixed glioma	1	2.5	1	2.9
	9390	Choroid plexus carcinoma	0	0.0	2	5.9
	9392	Ependymoma, anaplastic	1	2.5	1	2.9
	All Others	5	12.5	4	11.8	
Bone	9260	Ewing sarcoma	14	53.8	5	55.6
	9180	Osteosarcoma, NOS	11	42.3	0	0.0
	9181	Chondroblastic osteosarcoma	0	0.0	1	11.1
	9185	Small cell osteosarcoma	1	3.8	0	0.0
	9230	Chondroblastoma, malignant	0	0.0	1	11.1
	9250	Giant cell tumor of bone, malignant	0	0.0	1	11.1
	9500	Neuroblastoma, NOS	0	0.0	1	11.1
Connective tissue	9500	Neuroblastoma, NOS	4	21.1	5	23.8
	9364	Peripheral neuroectodermal tumor	3	15.8	2	9.5
	9490	Ganglioneuroblastoma	1	5.3	4	19.0
	8910	Embryonal rhabdomyosarcoma, NOS	3	15.8	1	4.8
	9071	Yolk sac tumor	0	0.0	3	14.3
	8900	Rhabdomyosarcoma, NOS	2	10.5	0	0.0
	All Others	6	31.6	6	28.6	

**Table 2.7 Number and Proportion of Morphological Types for the Most Common Types of Cancer among Saudi Children, 2007**

Table 2.7 continued .....

Primary Site	Code	Morphology	Male	%	Female	%
Eye	9510	Retinoblastoma, NOS	12	80.0%	8	53.3%
	9512	Retinoblastoma, undifferentiated	3	20.0%	4	26.7%
	9071	Yolk sac tumor	0	0.0%	2	13.3%
	9511	Retinoblastoma, differentiated	0	0.0%	1	6.7%
Hodgkin disease	9663	Hodgkin lymphoma, nodular sclerosis, NOS	22	53.7%	11	78.6%
	9652	Hodgkin lymphoma, mixed cellularity, NOS	7	17.1%	1	7.1%
	9650	Hodgkin lymphoma, NOS	4	9.8%	0	0.0%
	9651	Hodgkin lymphoma, lymphocyte-rich	2	4.9%	1	7.1%
	9659	Hodgkin lymphoma, nodular lymphocyte predominance	3	7.3%	0	0.0%
	9664	Hodgkin lymphoma, nodular sclerosis, cellular phase	1	2.4%	1	7.1%
	9665	Hodgkin lymphoma, nodular sclerosis, grade 1	2	4.9%	0	0.0%
Kidney	8960	Nephroblastoma, NOS	12	85.7%	19	95.0%
	8312	Renal cell carcinoma, NOS	1	7.1%	0	0.0%
	8963	Malignant rhabdoid tumor	0	0.0%	1	5.0%
	9508	Atypical teratoid/rhabdoid tumor	1	7.1%	0	0.0%
Adrenal gland	9500	Neuroblastoma, NOS	13	92.9%	2	50.0%
	9490	Ganglioneuroblastoma	1	7.1%	1	25.0%
	8370	Adrenal cortical carcinoma	0	0.0%	1	25.0%
Ovary	9060	Dysgerminoma	-	-	6	60.0%
	8900	Rhabdomyosarcoma, NOS	-	-	1	10.0%
	9064	Germinoma	-	-	1	10.0%
	9080	Teratoma, malignant, NOS	-	-	1	10.0%
	9085	Mixed germ cell tumor	-	-	1	10.0%
Liver	8970	Hepatoblastoma	4	66.7%	1	100.0%
	8170	Hepatocellular carcinoma, NOS	2	33.3%	0	0.0%
Thyroid	8260	Papillary adenocarcinoma, NOS	2	100.0%	4	66.7%
	8340	Papillary carcinoma, follicular variant	0	0.0%	2	33.3%

## Cancer in the 13 Administrative Regions of the Kingdom, 2007

The following bar charts list the most common cancer sites in the 13 administrative regions of Saudi Arabia by sex. These sites are listed on the basis of the total number of cases for each site reported by permanent address (region) of the patient at the time of diagnosis. In most regions breast cancer was the leading cancer among women, while among men NHL, Colo-rectal and Lung interchange.

It is worth noting that the major regions such as Riyadh, Makkah and Eastern Province represent the majority of cases. This can be attributed to the increasing number of people living/seeking medical attention in these urbanized cities with modern hospital facilities where permanent addresses may not be documented in source records.

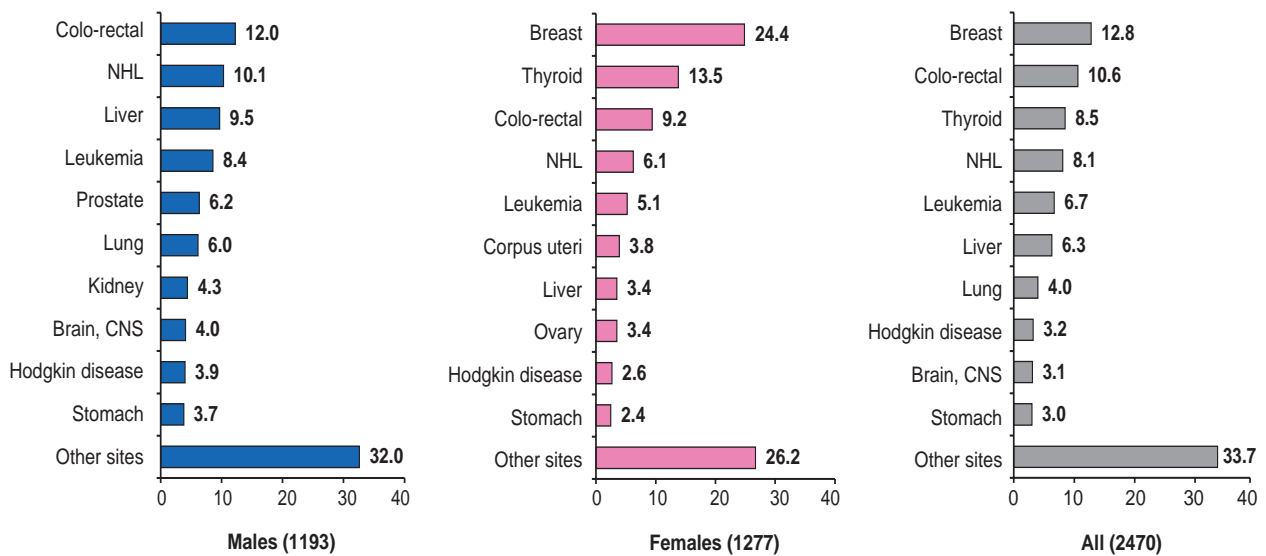


Figure 2.8.1 Riyadh Region, 2007 (Percentage Distribution)

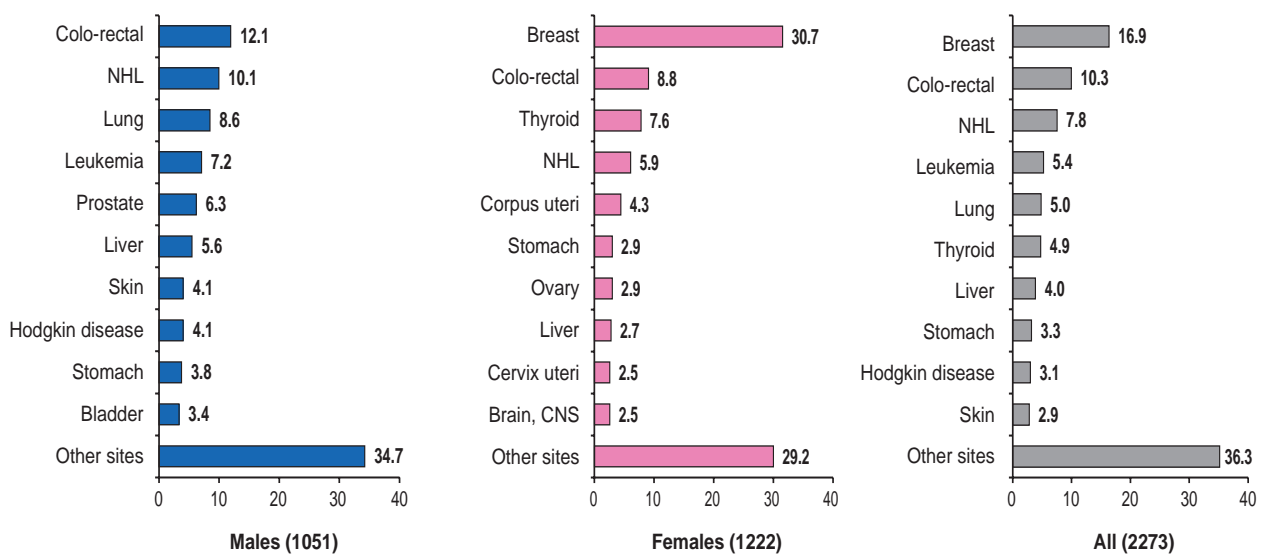


Figure 2.8.2 Makkah Region, 2007 (Percentage Distribution)

## Cancer in the 13 Administrative Regions of the Kingdom, 2007

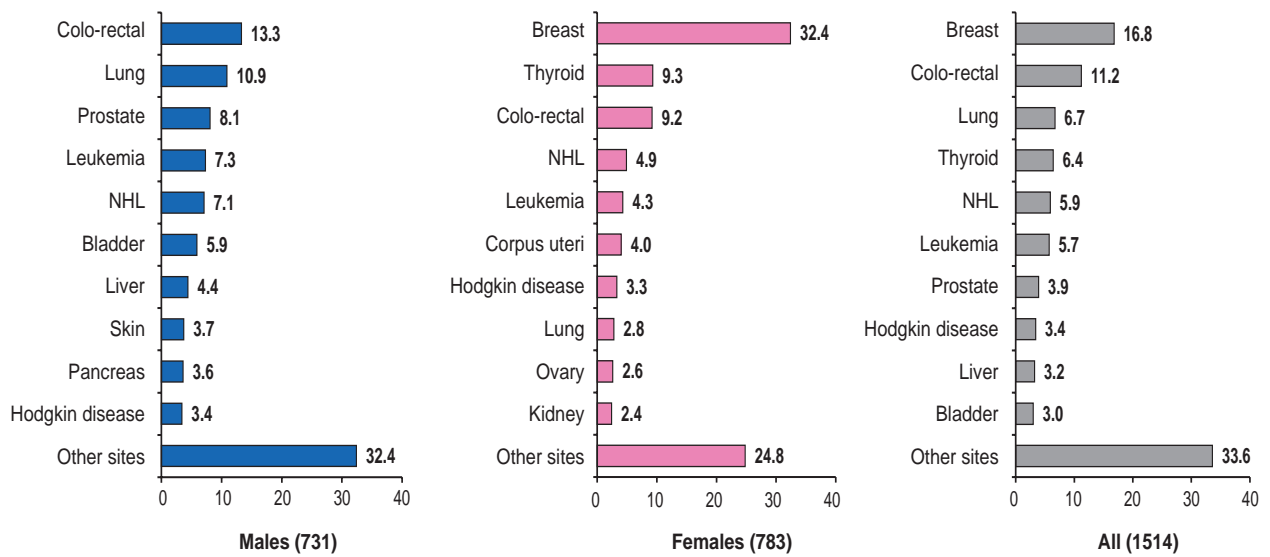


Figure 2.8.3 Eastern Region, 2007 (Percentage Distribution)

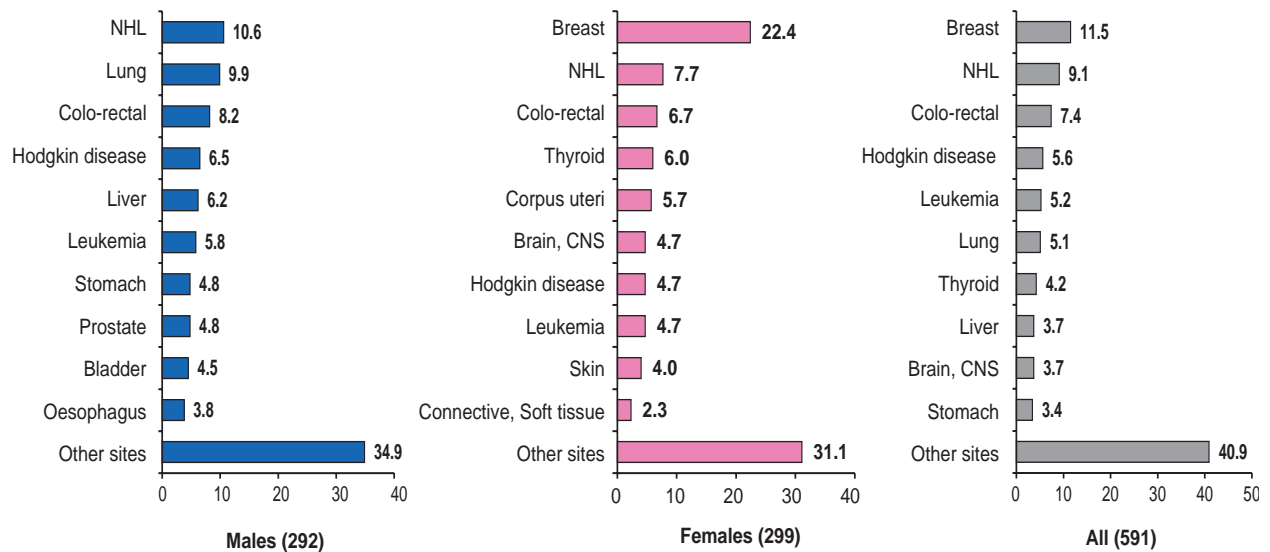


Figure 2.8.4 Madinah Region, 2007 (Percentage Distribution)

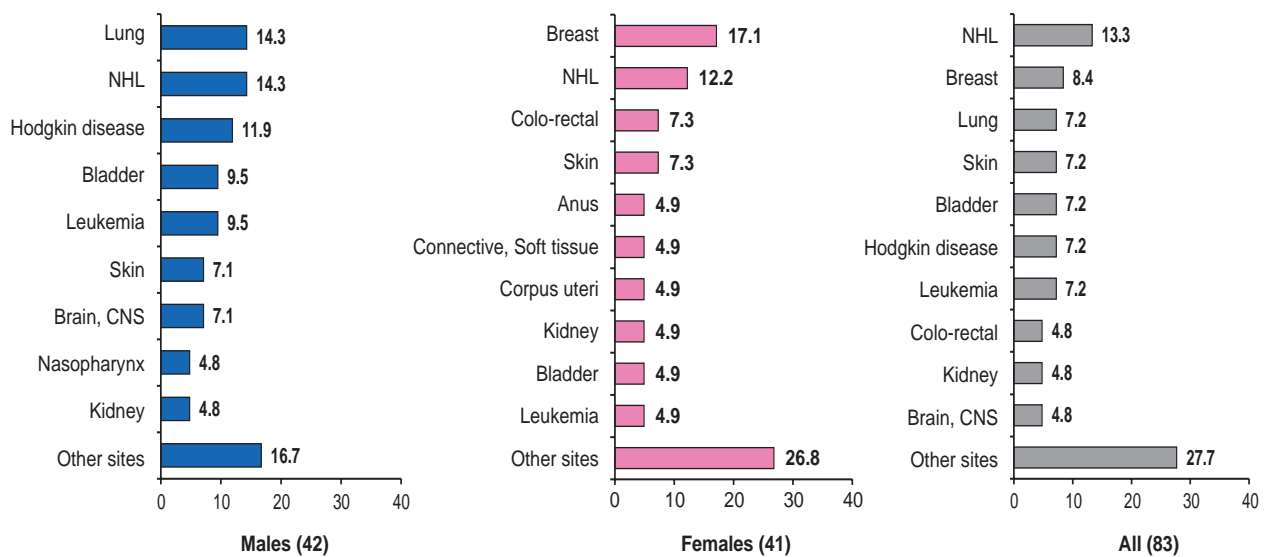


Figure 2.8.5 Northern Region, 2007 (Percentage Distribution)

## Cancer in the 13 Administrative Regions of the Kingdom, 2007

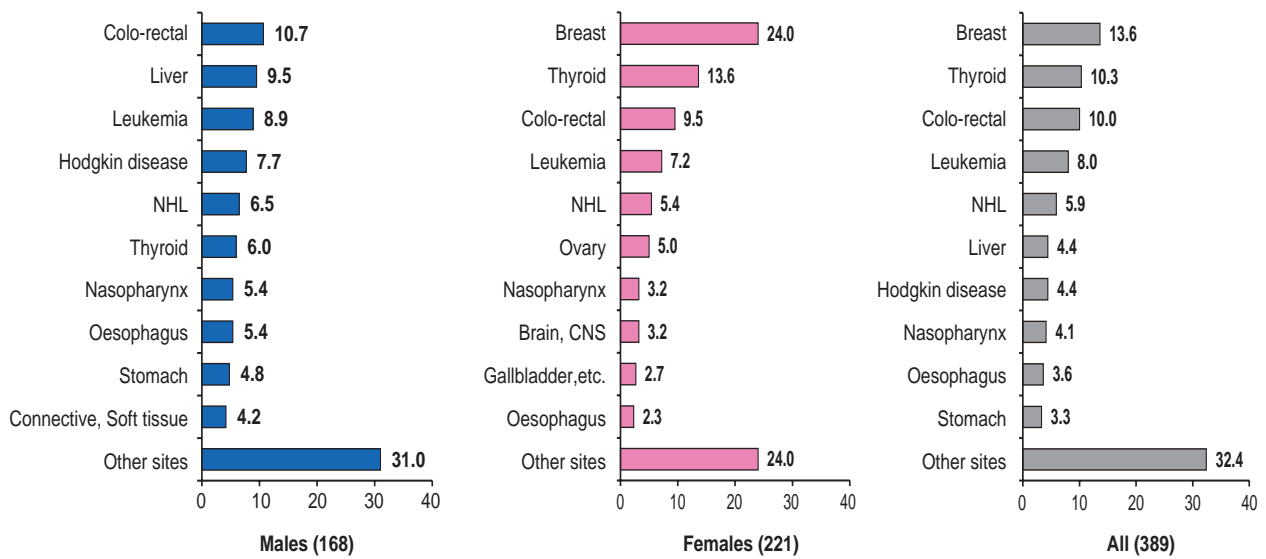


Figure 2.8.6 Qassim Region, 2007 (Percentage Distribution)

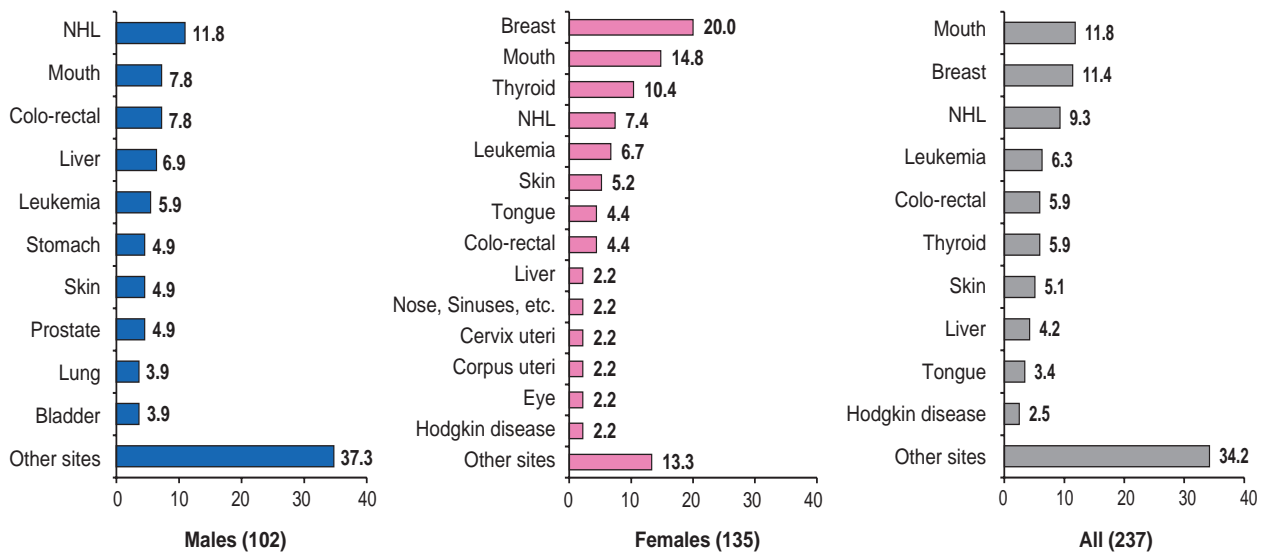


Figure 2.8.7 Jazan Region, 2007 (Percentage Distribution)

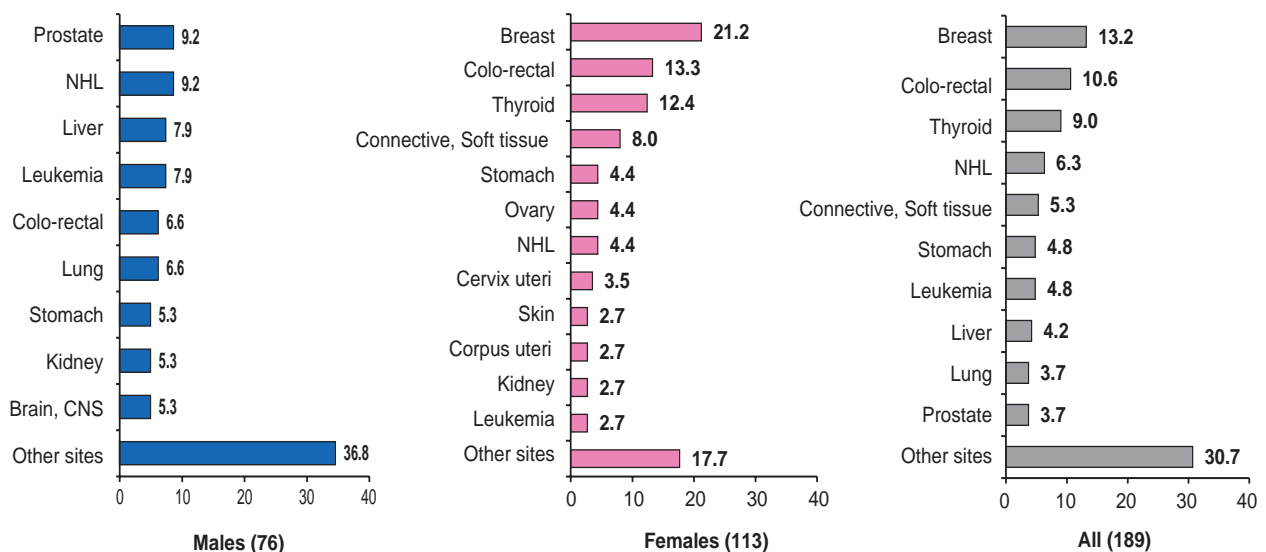


Figure 2.8.8 Hail Region, 2007 (Percentage Distribution)

## Cancer in the 13 Administrative Regions of the Kingdom, 2007

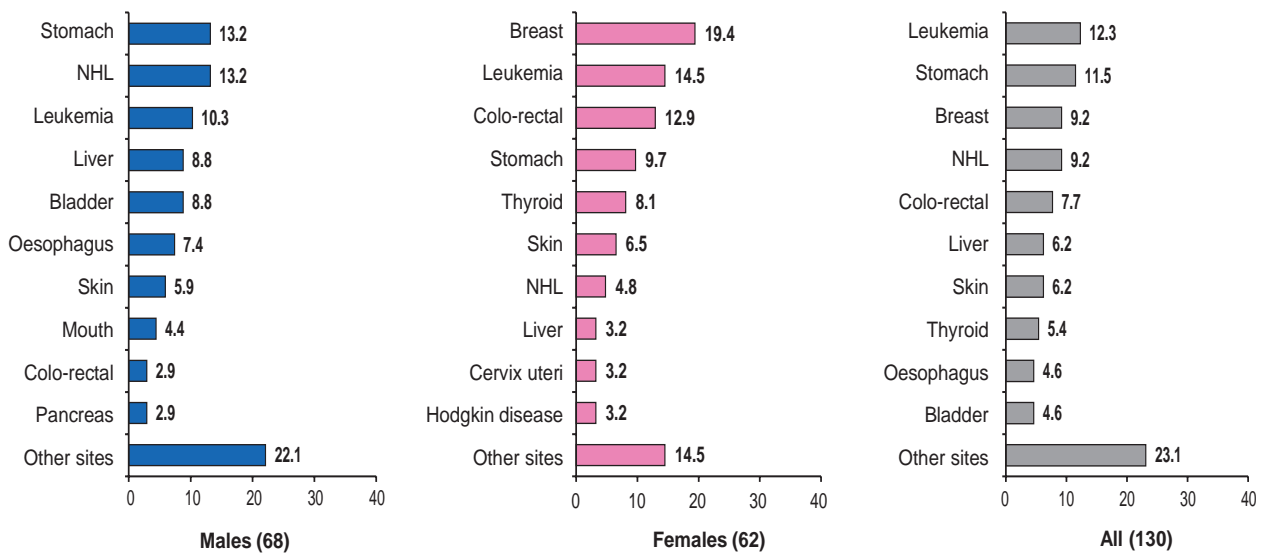


Figure 2.8.9 Najran Region, 2007 (Percentage Distribution)

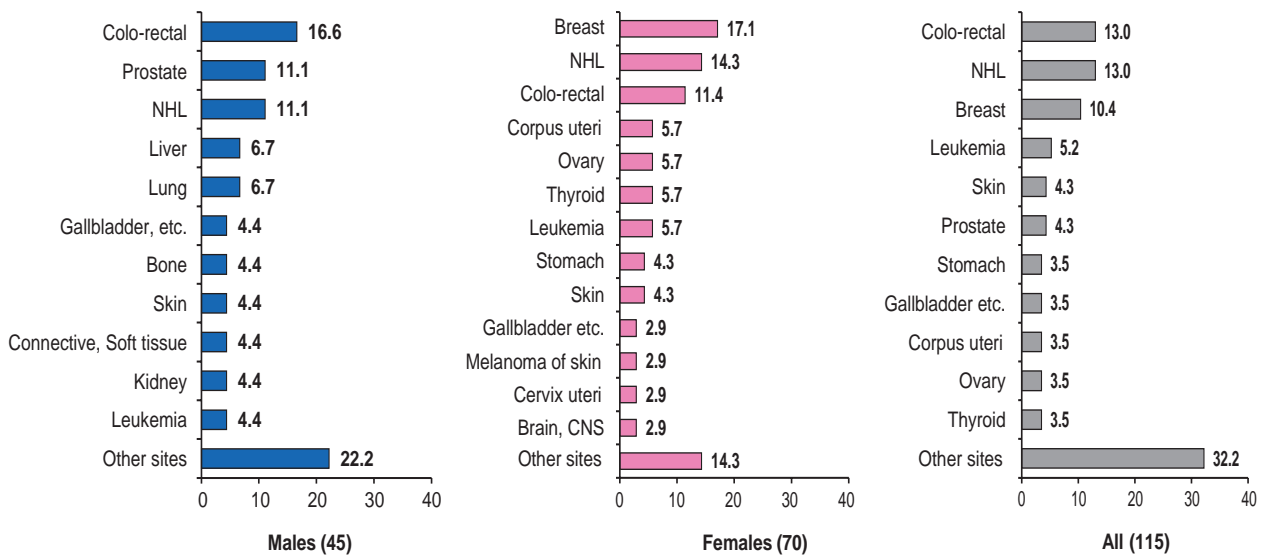


Figure 2.8.10 Baha Region, 2007 (Percentage Distribution)

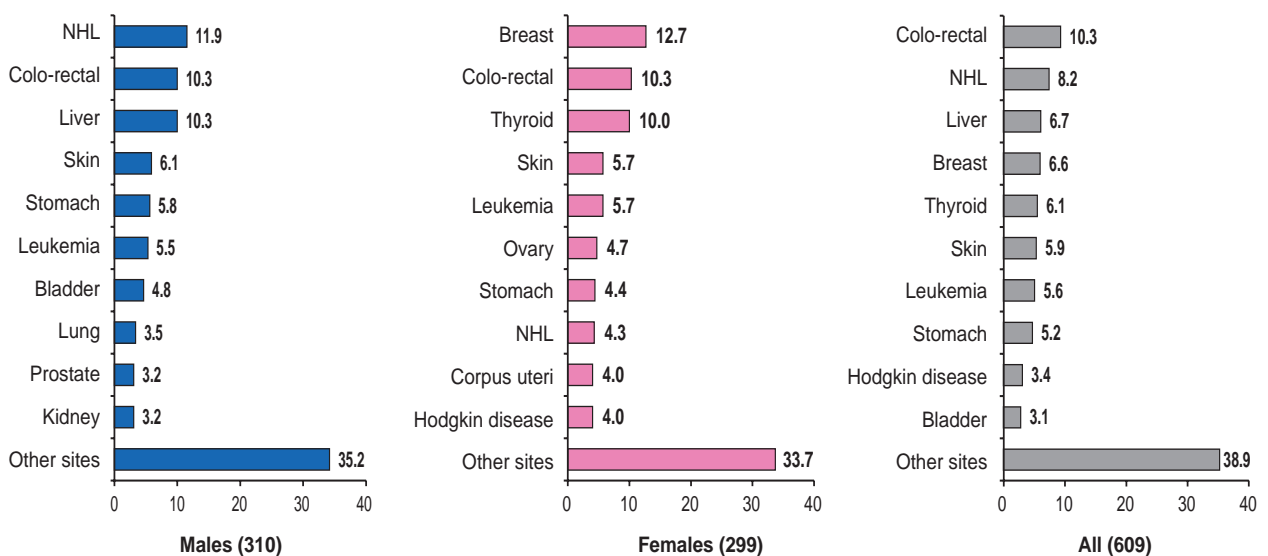


Figure 2.8.11 Asir Region, 2007 (Percentage Distribution)

## Cancer in the 13 Administrative Regions of the Kingdom, 2007

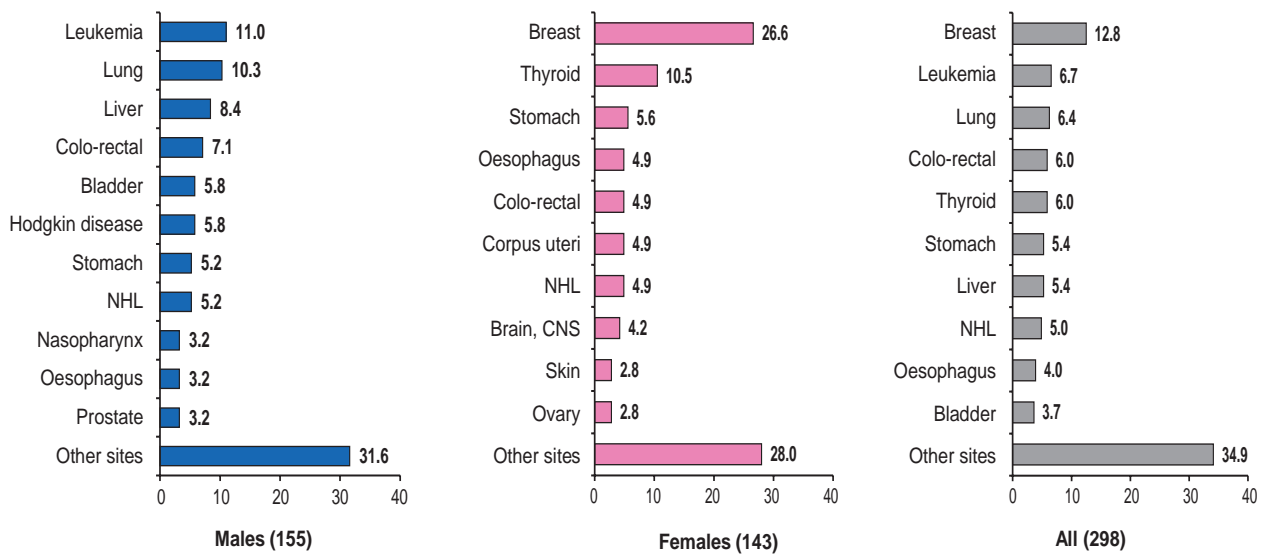


Figure 2.8.12 Tabuk Region, 2007 (Percentage Distribution)

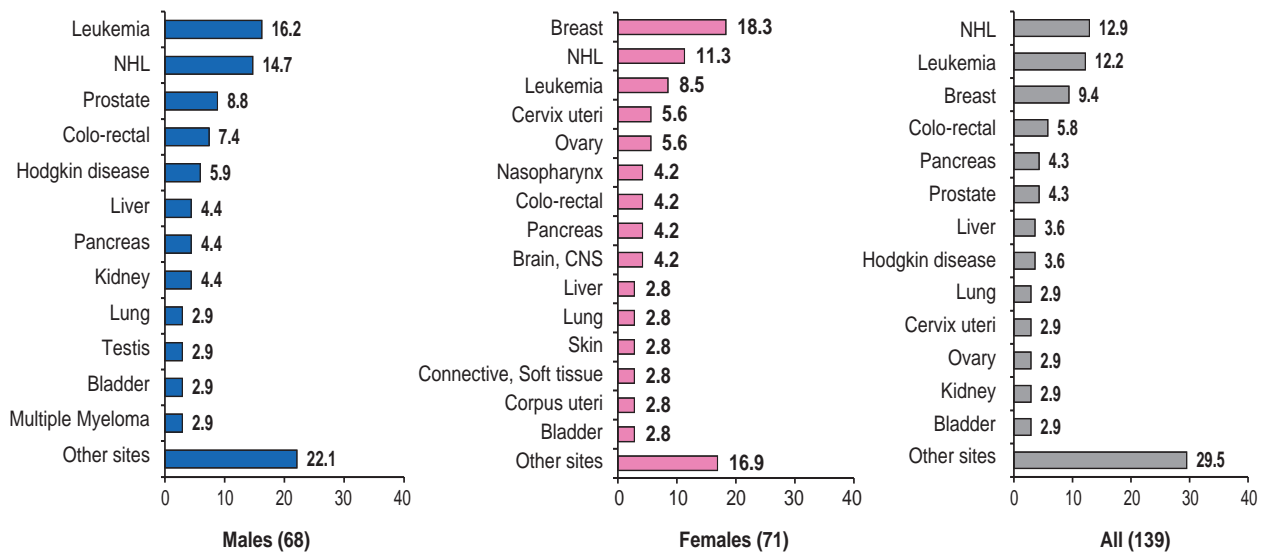


Figure 2.8.13 Jouf Region, 2007 (Percentage Distribution)

## International Comparison of Age-Standardized Incidence Rates

Worldwide, it is estimated that 12,662,554 people developed cancer in 2008. Of these, 56.1% were in developing countries and 43.9% were in developed countries. According to 2008 estimates, the most common cancer site worldwide among men was lung cancer, followed by prostate then colo-rectal then stomach. However; in developed countries prostate was the leading cancer in men followed by lung, colo-rectal, and bladder, while in developing countries, lung cancer was first

followed by stomach, liver, colo-rectal and oesophagus cancers. In women, the most common cancer site was breast followed by colo-rectal then cervix uteri then lung cancers. Among women, breast cancer was the most common followed by colo-rectal, lung and corpus uteri cancers in developed countries. While in the developing countries breast cancer was the leading cancer followed by cancers of the cervix, lung then stomach.

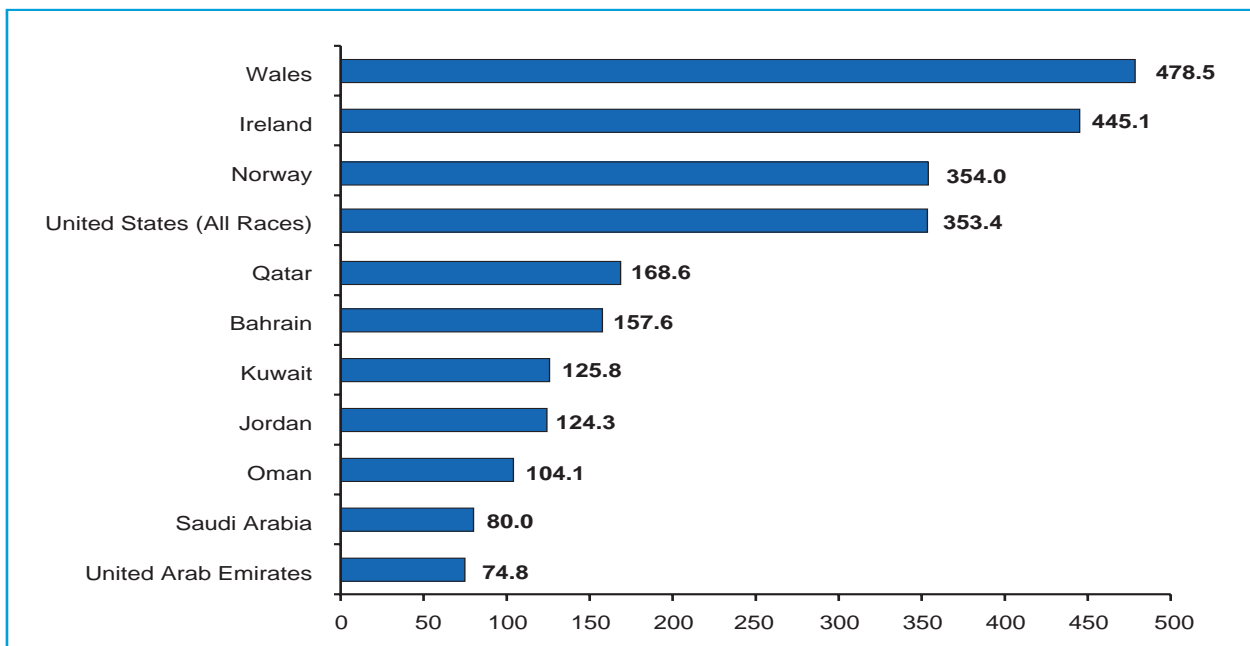


Figure 2.9.A Comparison of ASR\* for Saudi Males with Selected Countries\*\*

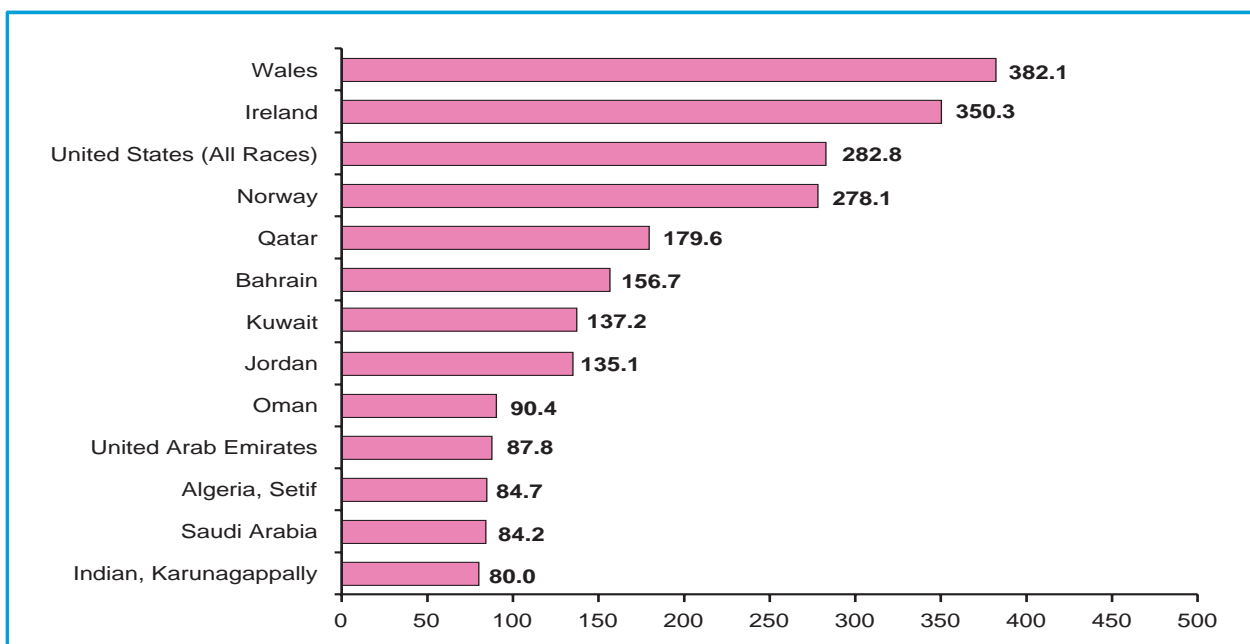


Figure 2.9.B Comparison of ASR\* for Saudi Females with Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64



# **PART III**

## **CANCER INCIDENCE FOR MOST COMMON SITES 2007**



## Cancer Incidence for Most Common Sites, 2007

In this section, the incidence of the most common cancers among Saudi males and females are outlined in accordance to their relative

frequencies. The relevant data incorporate details for all patients presented over the period of January through December 2007.

Cancer	Male	Female	All	%
Breast	20	1239	1259	13.8
Colo-rectal	486	421	907	9.9
NHL	418	285	703	7.7
Thyroid	115	471	586	6.4
Leukemia	335	231	566	6.2
Liver	315	121	436	4.8
Lung	323	89	412	4.5
Hodgkin disease	180	129	309	3.4
Stomach	173	126	299	3.3
Skin	163	120	283	3.1
Prostate	259	-	259	2.8
Bladder	171	37	208	2.3
Corpus uteri	-	189	189	2.1
Ovary	-	149	149	1.6

**Table 3.1 Most Common Cancers among Saudis, 2007**

## Female Breast (C 50)

There were 1239 female breast cancer cases for year 2007. Breast cancer ranked first among females accounting for 26% of all newly diagnosed female cancers (4,773) in year 2007. The ASR was 21.6/100,000 for female population. The five regions

with the highest ASR were Eastern region at 30.8/100,000, Makkah region at 28.8/100,000, Riyadh region at 25.7/100,000, Tabuk region at 22.7/100,000 and Qassim region at 16.7/100,000. The median age at diagnosis was 47 years (Range 13-95 years).

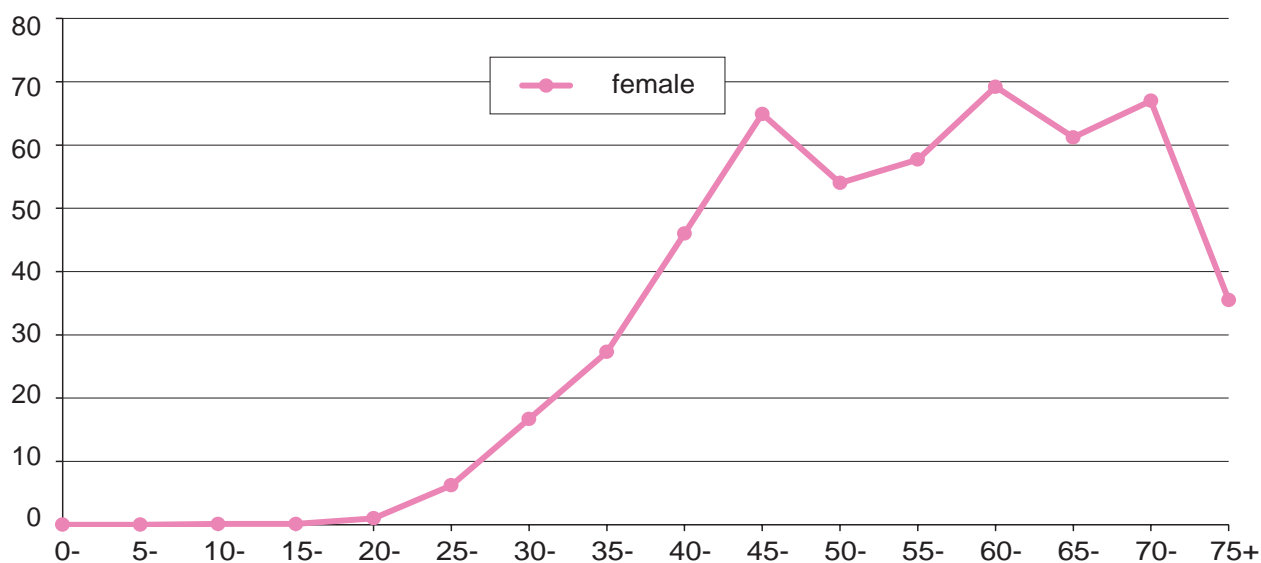


Figure 3.1.1 Age-Specific Incidence Rate (AIR) for Female Breast Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Female	%
8500	Infiltrating duct carcinoma, NOS	984	79.4
8520	Lobular carcinoma, NOS	54	4.4
8010	Carcinoma, NOS	44	3.6
8000	Neoplasm, malignant	30	2.4
8522	Infiltrating duct and lobular carcinoma	23	1.9
8510	Medullary carcinoma, NOS	15	1.2
8480	Mucinous adenocarcinoma	12	1.0
8523	Infiltrating duct mixed with other types of carcinoma	12	1.0
	Others	65	5.2

Table 3.1.1 Morphological Distribution of Female Breast Cancer in Saudi Arabia, 2007

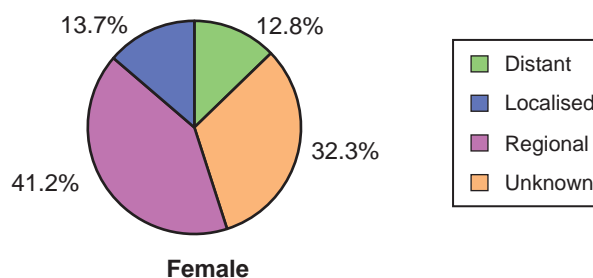
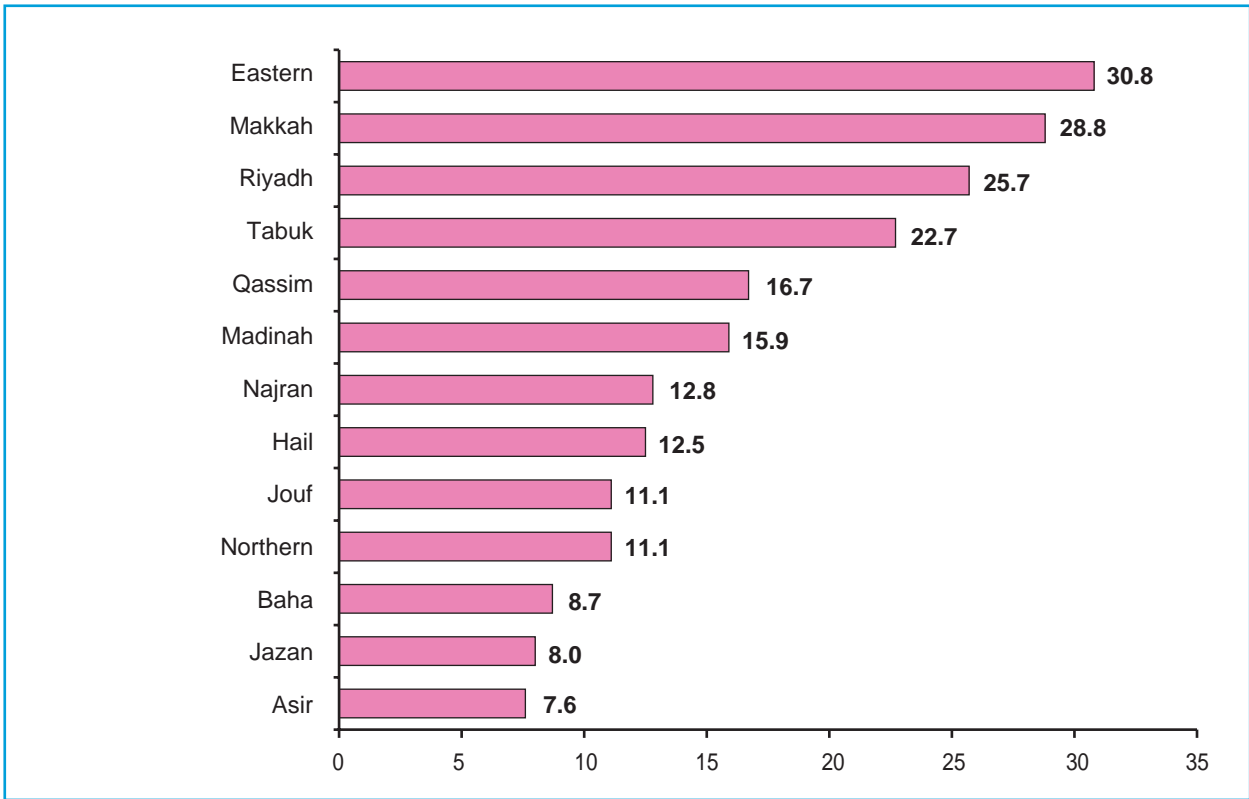
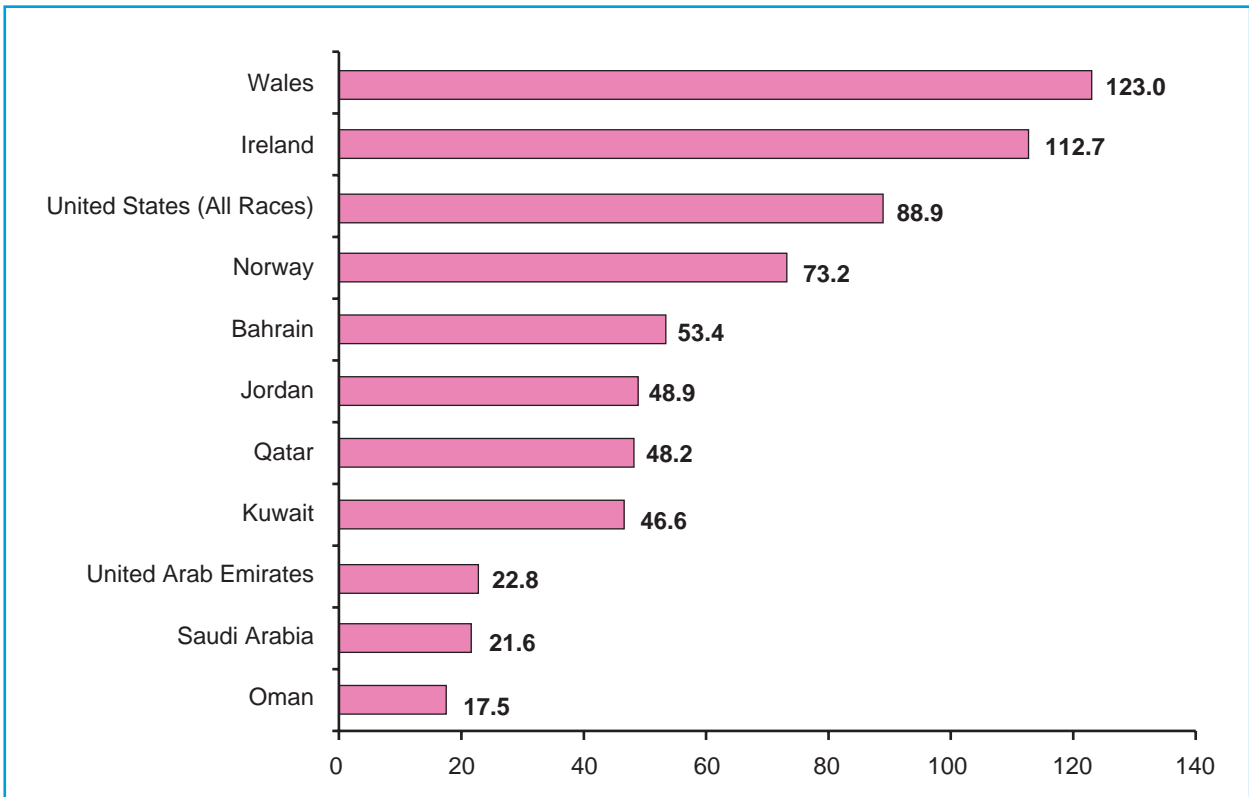


Figure 3.1.2 Stage Distribution of Female Breast Cancer, 2007



**Figure 3.1.3 ASR\* Regional Distribution of Female Breast Cancer in Saudi Arabia, 2007**



**Figure 3.1.4 Comparison of ASR\* for Female Breast Cancer among Saudi Females with ASR in Selected Countries\*\***

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Colo-rectal (C18-C20)

There were 907 cases of colo-rectal cancer accounting for 9.9% of all newly diagnosed cases in year 2007. This cancer ranked first among male population and third among female population. It affected 486 (53.6%) males and 421 (46.4%) females with a male to female ratio of 116:100. The overall ASR was 8.9/100,000. ASR for males was 9.6/100,000 and for females 8.1/100,000.

The five regions with the highest ASR were Riyadh region at 12.5/100,000, Eastern region at 12.5/100,000, Makkah region at 9.8/100,000, Qassim region at 8.2/100,000 and Tabuk region at 6.7/100,000. The median age at diagnosis was 60 years among males (range 18-102 years) and 55 years among females (range 16-102 years).

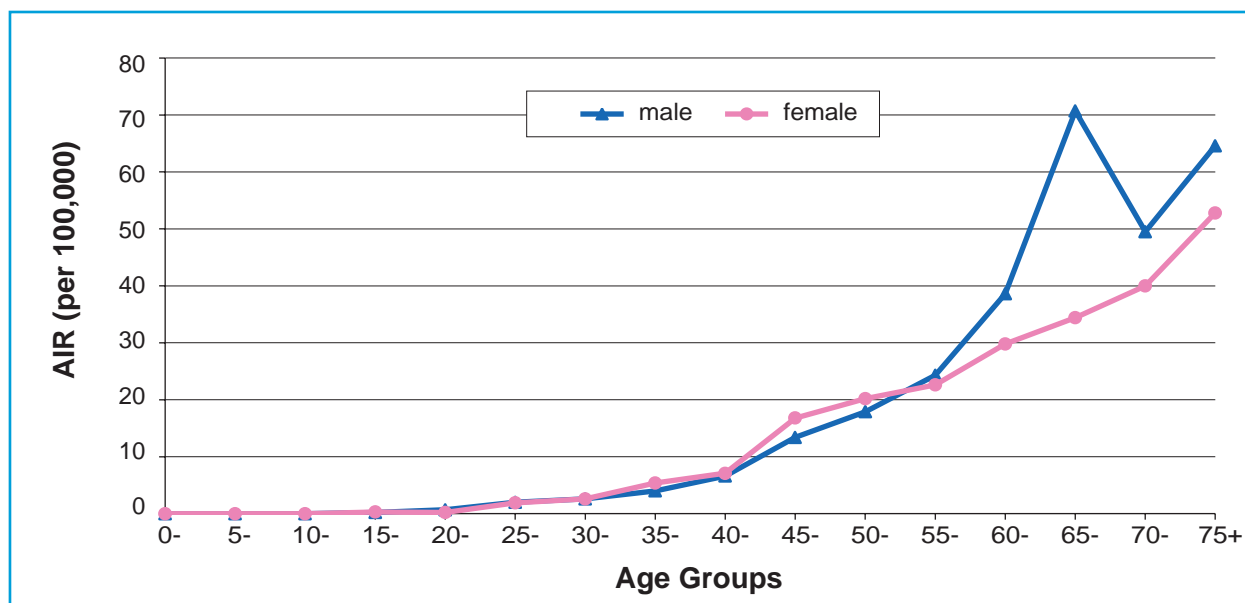


Figure 3.2.1 Age-Specific Incidence Rate (AIR) for Colo-rectal Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%	Female	%
8140	Adenocarcinoma, NOS	363	74.7	323	76.7
8480	Mucinous adenocarcinoma	46	9.5	35	8.3
8481	Mucin-producing adenocarcinoma	18	3.7	9	2.1
8000	Neoplasm, malignant	8	1.6	11	2.6
8010	Carcinoma, NOS	7	1.4	8	1.9
8490	Signet ring cell carcinoma	8	1.6	6	1.4
8263	Adenocarcinoma in tubulovillous adenoma	10	2.1	3	0.7
8261	Adenocarcinoma in villous adenoma	5	1.0	7	1.7
8144	Adenocarcinoma, intestinal type	6	1.2	5	1.2
8210	Adenocarcinoma in adenomatous polyp	6	1.2	5	1.2
	Others	9	1.9	9	2.1

Table 3.2.1 Morphological Distribution of Colo-rectal Cancer in Saudi Arabia, 2007

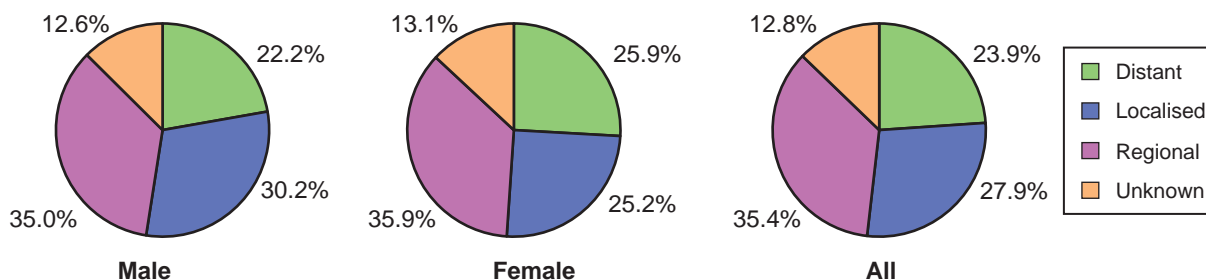
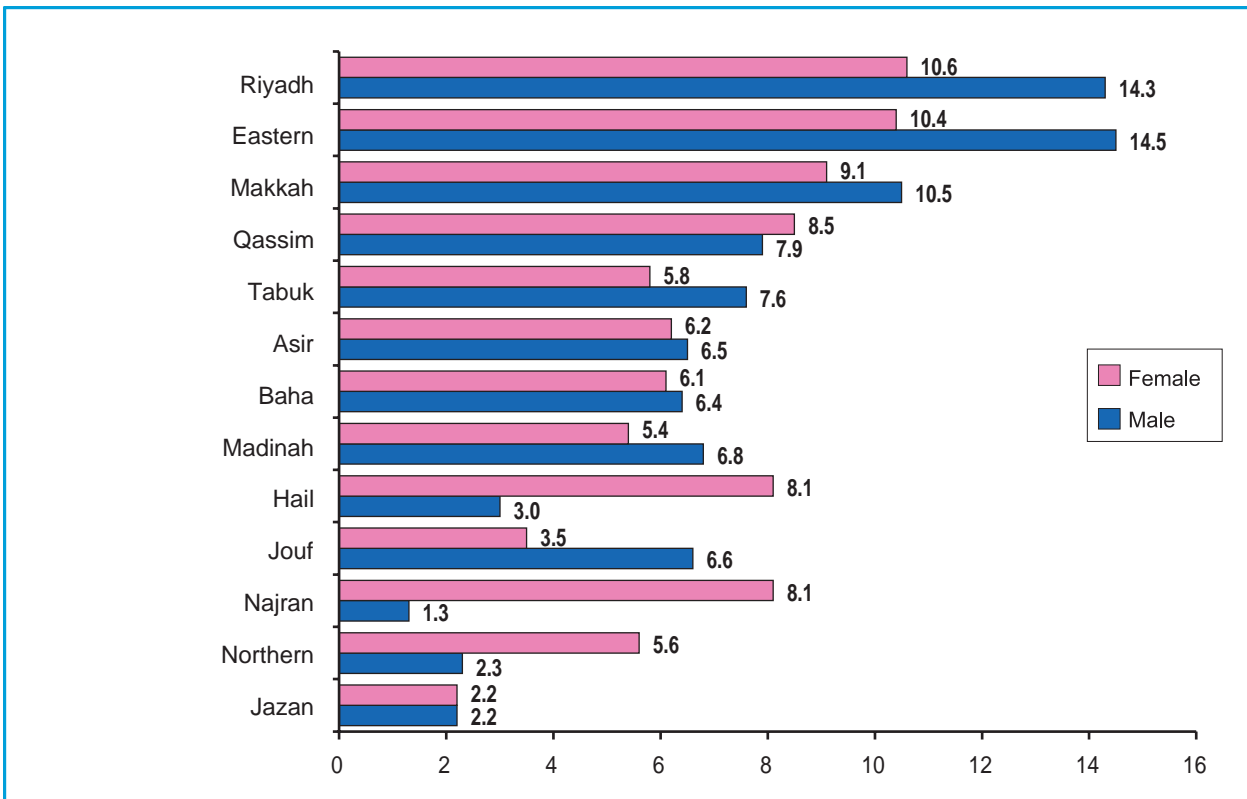
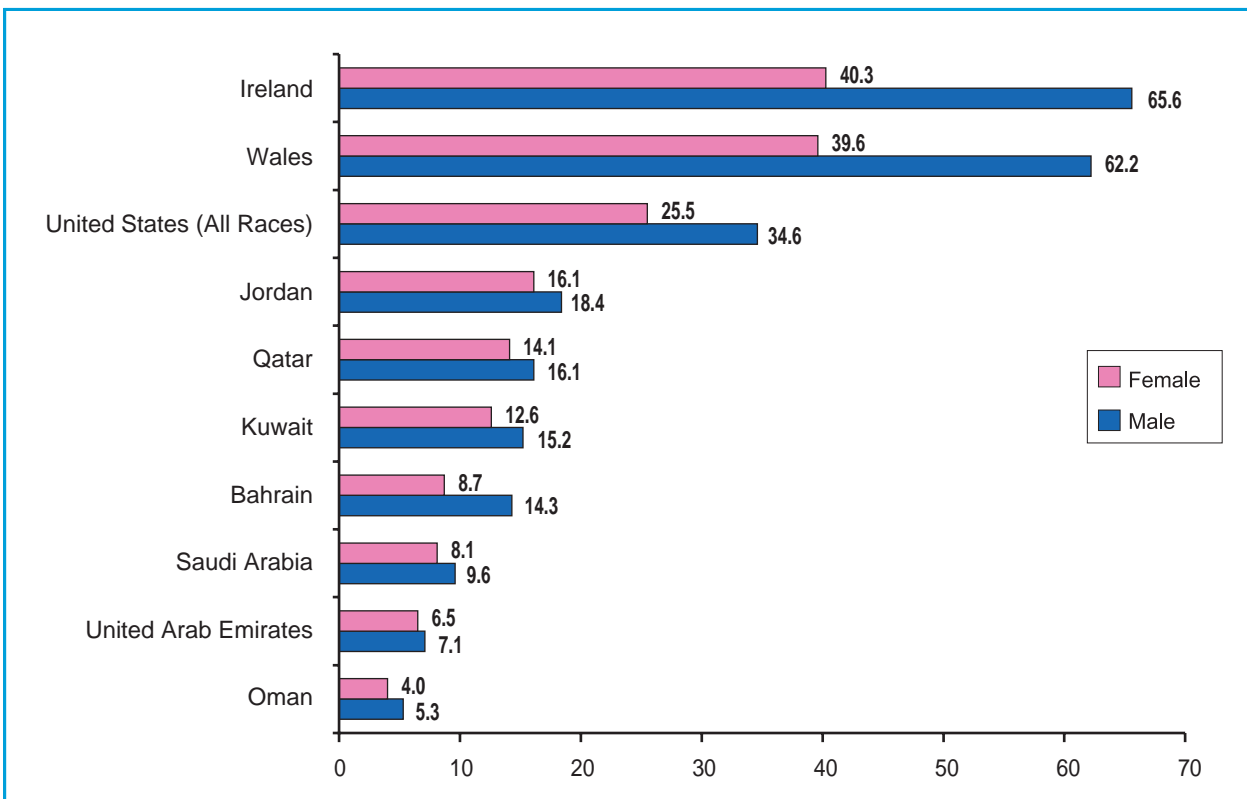


Figure 3.2.2 Stage Distribution of Colo-rectal Cancer, 2007



**Figure 3.2.3 ASR\* Regional Distribution of Colo-rectal Cancer in Saudi Arabia, 2007**



**Figure 3.2.4 Comparison of ASR\* for Colo-rectal Cancer among Saudis with ASR in Selected Countries\*\***

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Non-Hodgkin Lymphoma (C82-C85; C96)

There were 703 cases of Non-Hodgkin Lymphoma accounting for 7.7% of all newly diagnosed cancers in year 2007. This cancer ranked second among male population and fourth among female population. It affected 418 (59.5%) males and 285 (40.5%) females with a male to female ratio of 145:100. The overall ASR was 6.1/100,000. ASR for males was 7/100,000 and 5.1/100,000 for females.

The five regions with the highest ASR were Northern region at 8.9/100,000, Riyadh region at 8.3/100,000, Jof region at 7.8/100,000, Makkah region at 6.9/100,000 and Madinah regions at 6.7/100,000. The median age at diagnosis was 48 years among males (range 1-91 years) and 55 years among females (range 0-119 years).

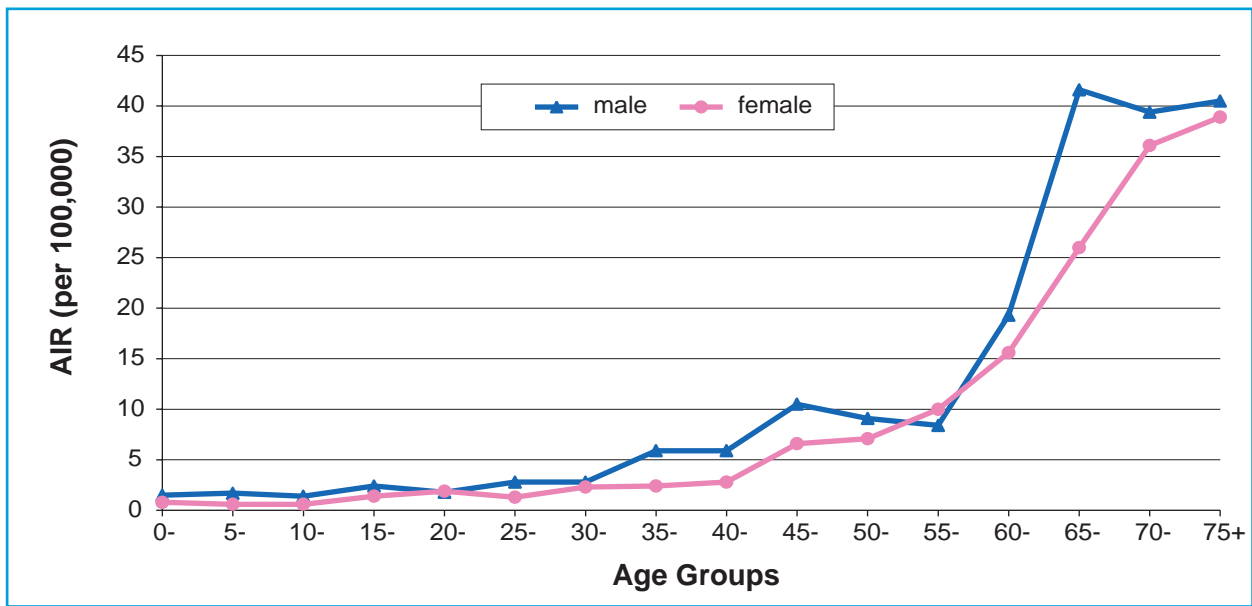


Figure 3.3.1 Age-Specific Incidence Rate (AIR) for NHL in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%	Female	%
9680	Malignant lymphoma, large B-cell, diffuse, NOS	198	47.4	128	44.9
9687	Burkitt lymphoma, NOS	39	9.3	16	5.6
9590	Malignant lymphoma, NOS	30	7.2	21	7.4
9591	Malignant lymphoma, non-Hodgkin, NOS	13	3.1	25	8.8
9714	Anaplastic large cell lymphoma, T cell and Null cell type	19	4.5	12	4.2
9699	Marginal zone B-cell lymphoma, NOS	13	3.1	16	5.6
9700	Mycosis fungoides	15	3.6	9	3.2
9690	Follicular lymphoma, NOS	11	2.6	12	4.2
9670	Malignant lymphoma, small B lymphocytic, NOS	9	2.2	9	3.2
9691	Follicular lymphoma, grade 2	11	2.6	6	2.1
9698	Follicular lymphoma, grade 3	6	1.4	9	3.2
9729	Precursor T-cell lymphoblastic lymphoma	12	2.9	3	1.1
9702	Mature T-cell lymphoma, NOS	7	1.7	4	1.4
9695	Follicular lymphoma, grade 1	6	1.4	2	0.7
	Others	29	6.9	13	4.6

Table 3.3.1 Morphological Distribution of NHL in Saudi Arabia, 2007

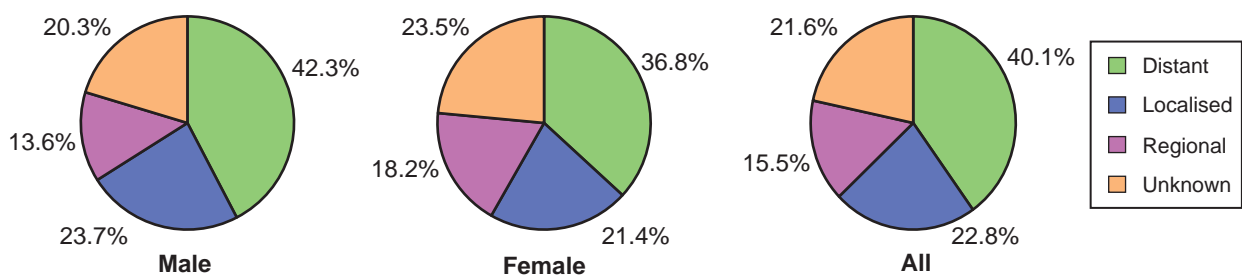


Figure 3.3.2 Stage Distribution of NHL Cancer, 2007



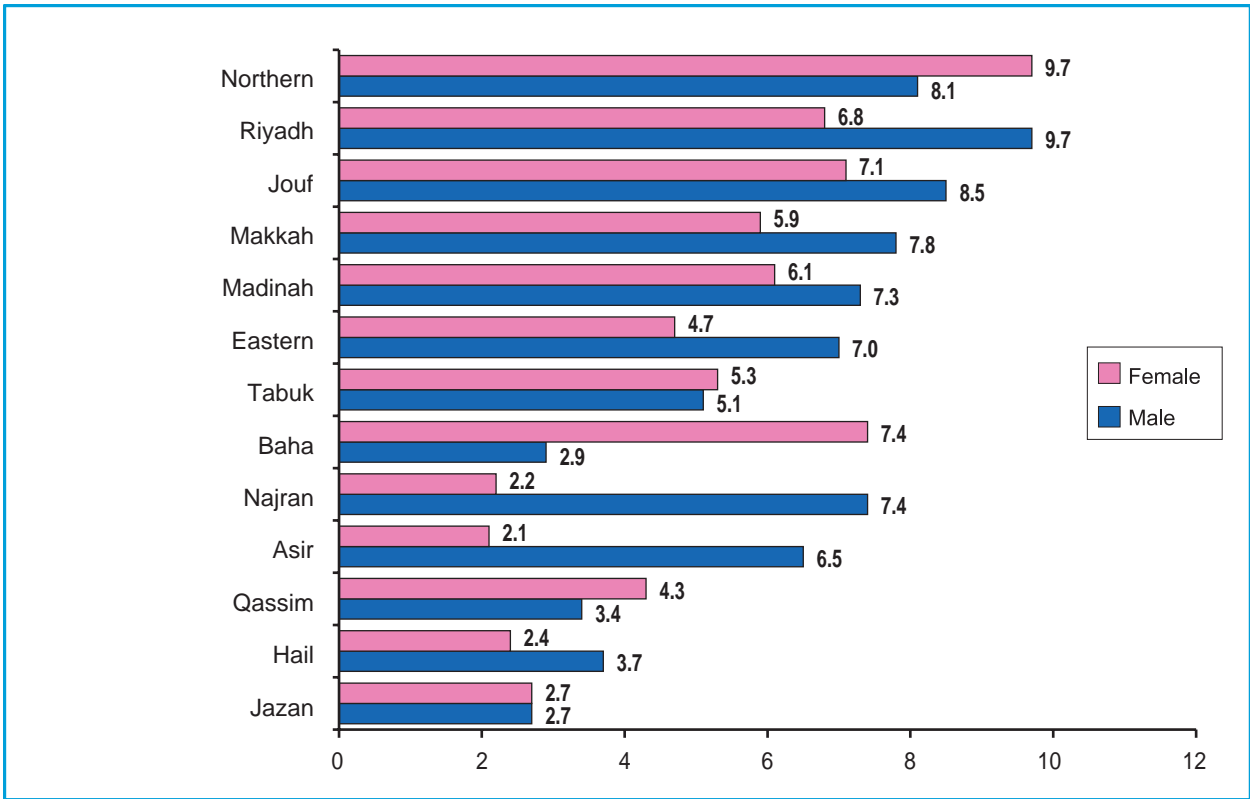


Figure 3.3.3 ASR\* Regional Distribution of NHL Cancer in Saudi Arabia, 2007

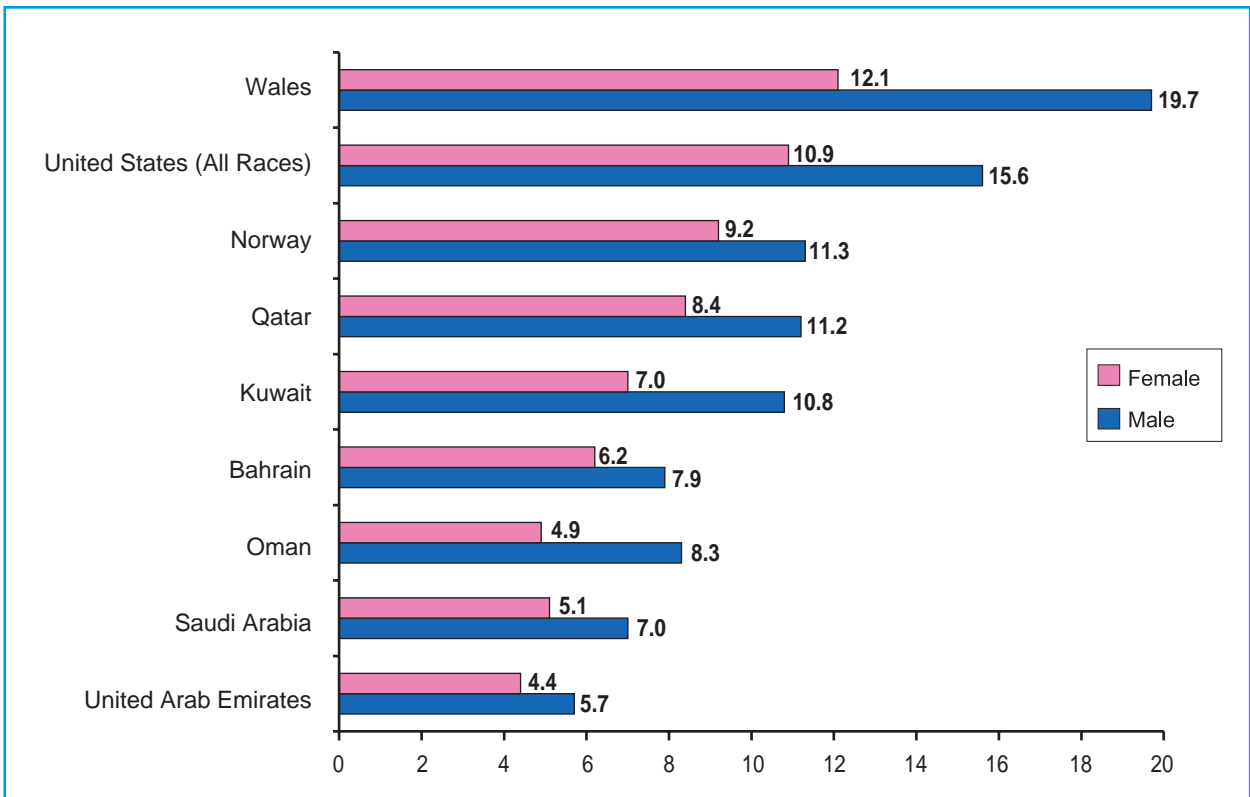


Figure 3.3.4 Comparison of ASR\* for NHL Cancer among Saudis with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Thyroid (C 73)

There were 586 cases of thyroid cancer accounting for 6.4% of all newly diagnosed cases for the year 2007. This cancer ranked second among female population and fourteenth among male population. It affected 115 (19.6%) males and 471 (80.4%) females with a male to female ratio of 24:100. The overall ASR was 4.2/100,000. ASR was 1.8/100,000 for

males and 6.6/100,000 for females. The five regions with the highest ASR were Riyadh region at 7.2/100,000, Qassim region at 5.9/100,000, Eastern region at 4.5/100,000, Tabuk region at 4.5 /100,000 and Hail region at 4.3/100,000. The median age at diagnosis was 43 years among males (range 12-83 years) and 37 years among females (range 11-95 years).

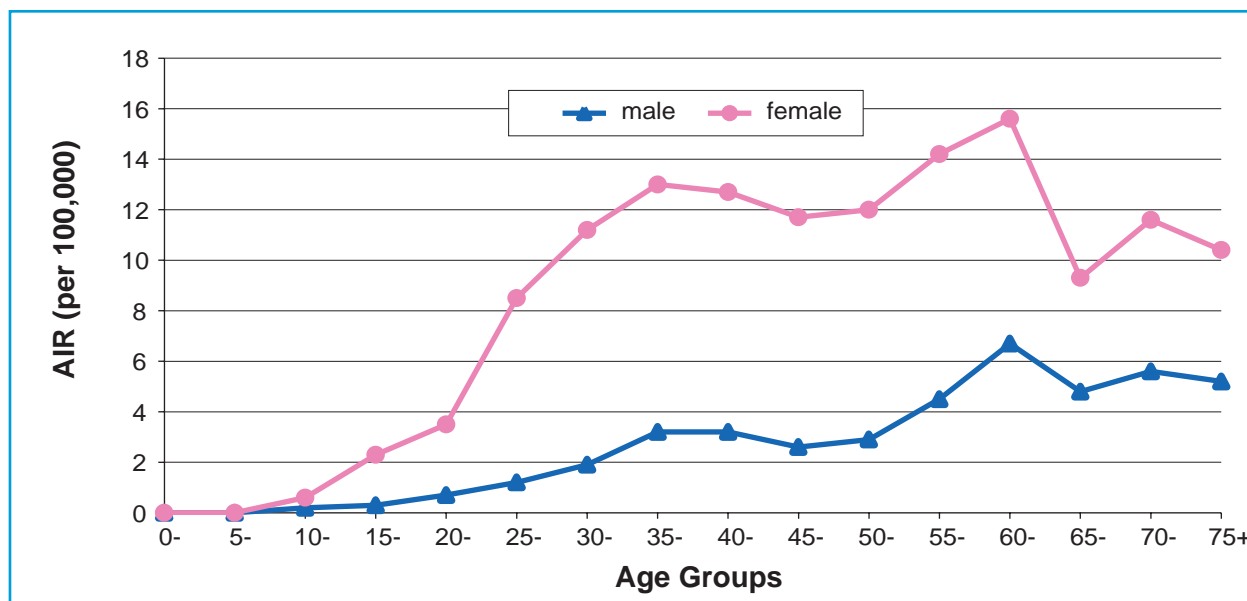


Figure 3.4.1 Age-Specific Incidence Rate (AIR) for Thyroid Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%	Female	%
8260	Papillary adenocarcinoma, NOS	77	67.0	263	55.8
8340	Papillary carcinoma, follicular variant	11	9.6	91	19.3
8341	Papillary microcarcinoma	3	2.6	35	7.4
8343	Papillary carcinoma, encapsulated	3	2.6	14	3.0
8335	Follicular carcinoma, minimally invasive	4	3.5	11	2.3
8510	Medullary carcinoma, NOS	6	5.2	7	1.5
8290	Oxyphilic adenocarcinoma	2	1.7	9	1.9
8330	Follicular adenocarcinoma, NOS	3	2.6	8	1.7
8050	Papillary carcinoma, NOS	0	0.0	7	1.5
	Others	6	5.2	26	5.5

Table 3.4.1 Morphological Distribution of Thyroid Cancer in Saudi Arabia, 2007

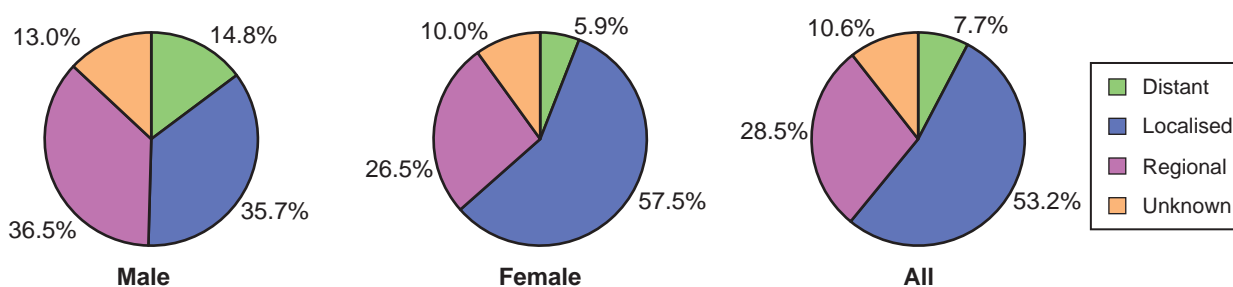


Figure 3.4.2 Stage Distribution of Thyroid Cancer, 2007

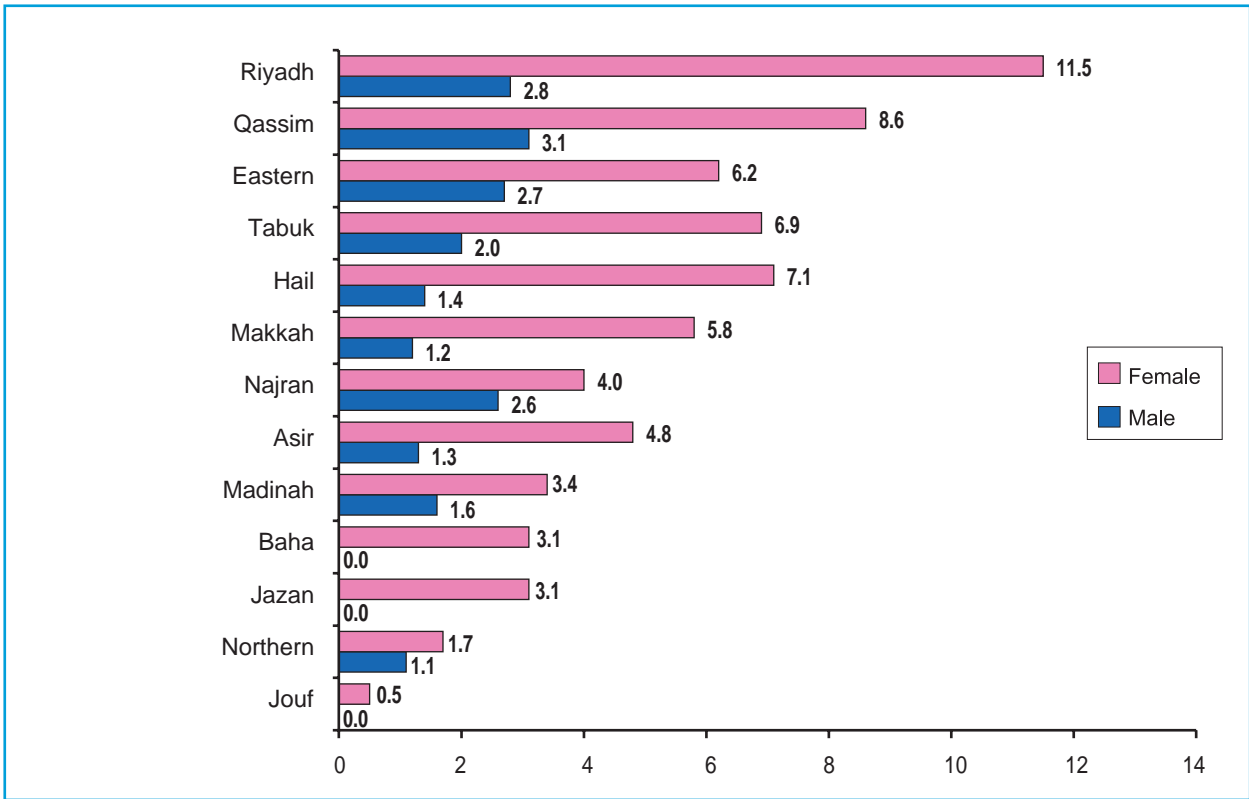


Figure 3.4.3 ASR\* Regional Distribution of Thyroid Cancer in Saudi Arabia, 2007

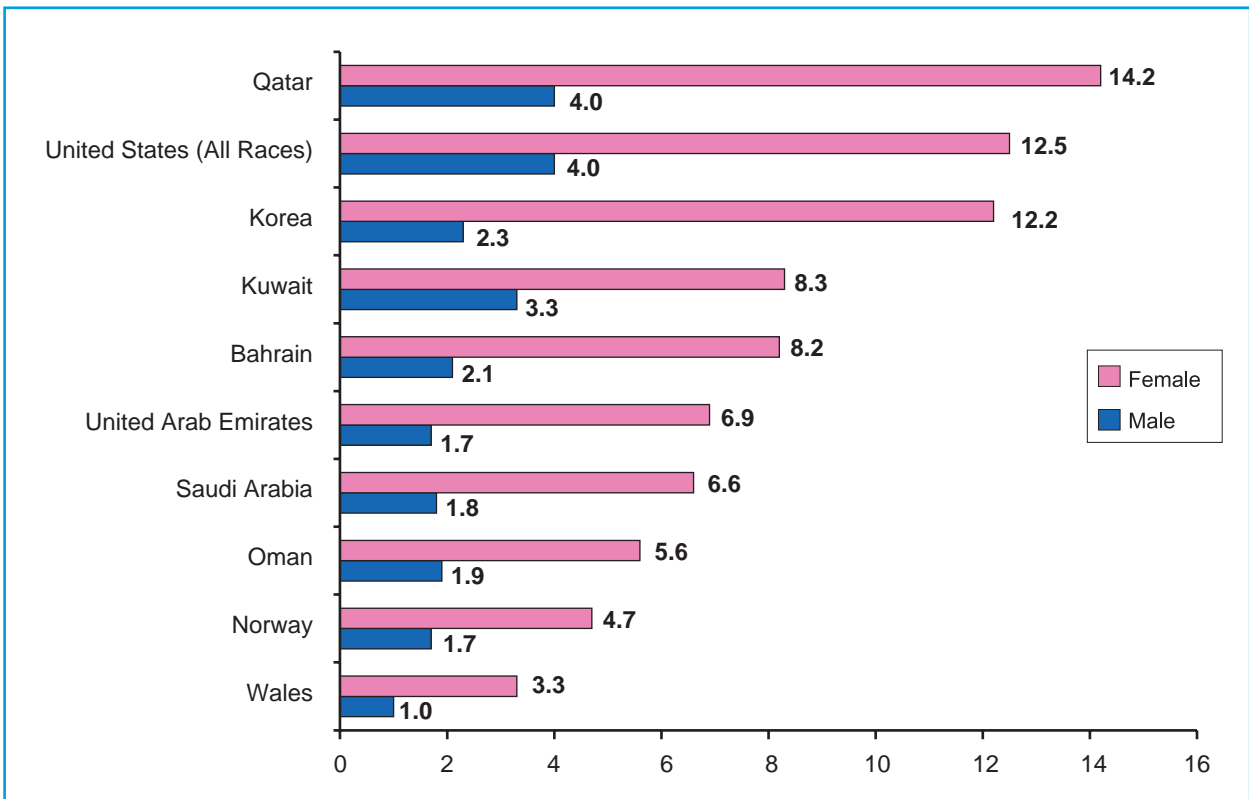


Figure 3.4.4 Comparison of ASR\* for Thyroid Cancer among Saudis with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Leukemia (C91-C95)

There were 566 cases of leukemia accounting for 6.2 % of all newly diagnosed cancers in year 2007. This cancer ranked third for males and fifth for females and affected 335 (59.2%) males and 231 (40.8%) females with a male to female ratio of 145:100. The overall ASR was 3.8/100,000. ASR for males was 4.4/100,000 and 3.2/100,000 for females.

The five regions with the highest ASR were Jouf region at 7.6/100,000, Najran region at 5.7/100,000, Riyadh region at 5.3/100,000, Tabuk region at 4.5/100,000 and Eastern region at 4.4/100,000. The median age at diagnosis is 20 years among males (range 0-100 years) and 22 years among females (range 0-85 years).

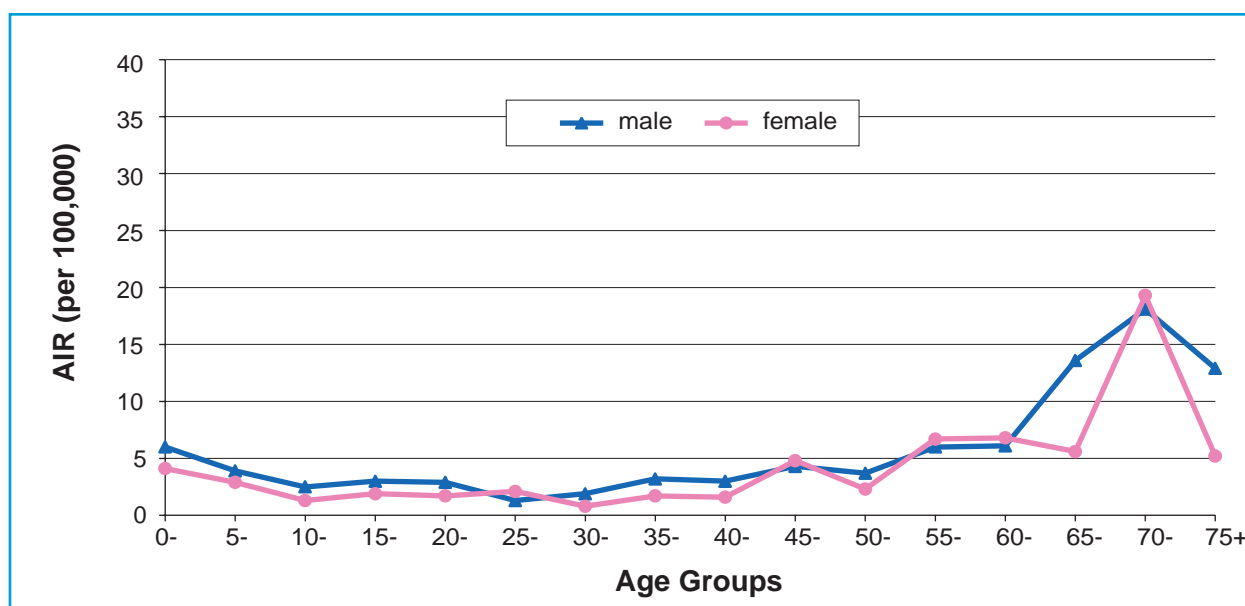


Figure 3.5.1 Age-Specific Incidence Rate (AIR) for Leukemia in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%	Female	%
9836	Precursor B-cell lymphoblastic leukemia	69	20.6	51	22.1
9835	Precursor cell lymphoblastic leukemia, NOS	56	16.7	33	14.3
9863	Chronic myeloid leukemia, NOS	35	10.4	21	9.1
9861	Acute myeloid leukemia, NOS	25	7.5	27	11.7
9823	B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma	31	9.3	16	6.9
9837	Precursor T-cell lymphoblastic leukemia	23	6.9	5	2.2
9866	Acute promyelocytic leukemia, t(15;17) (q22;q11-12)	10	3.0	11	4.8
9801	Acute leukemia, NOS	8	2.4	9	3.9
9874	Acute myeloid leukemia with maturation	8	2.4	9	3.9
9800	Leukemia, NOS	10	3.0	5	2.2
9805	Acute biphenotypic leukemia	10	3.0	5	2.2
9867	Acute myelomonocytic leukemia	8	2.4	5	2.2
9891	Acute monocytic leukemia	8	2.4	5	2.2
9826	Burkitt cell leukemia	5	1.5	3	1.3
9873	Acute myeloid leukemia without maturation	3	0.9	4	1.7
9910	Acute megakaryoblastic leukemia	2	0.6	5	2.2
9860	Myeloid leukemia, NOS	1	0.3	5	2.2
	Others	23	6.9	12	5.2

Table 3.5.1 Morphological Distribution of Leukemia in Saudi Arabia, 2007

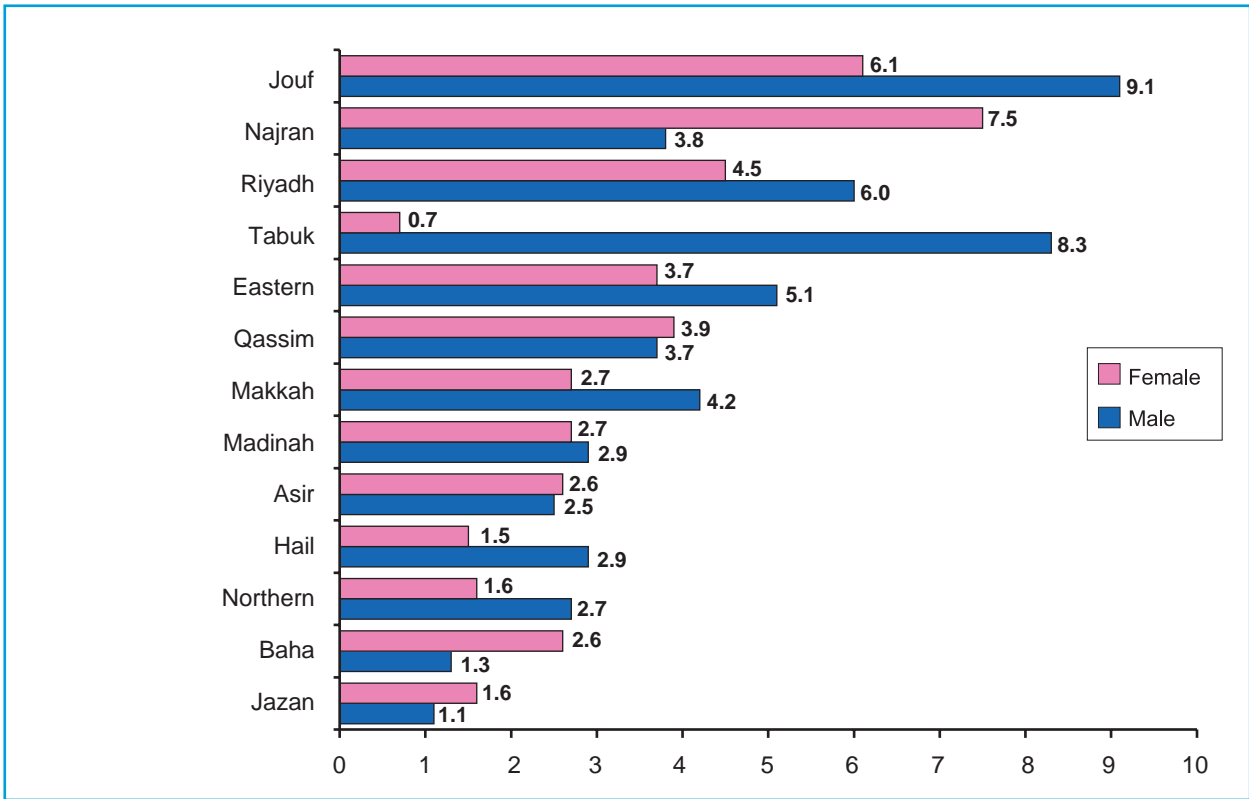


Figure 3.5.2 ASR\* Regional Distribution of Leukemia in Saudi Arabia, 2007

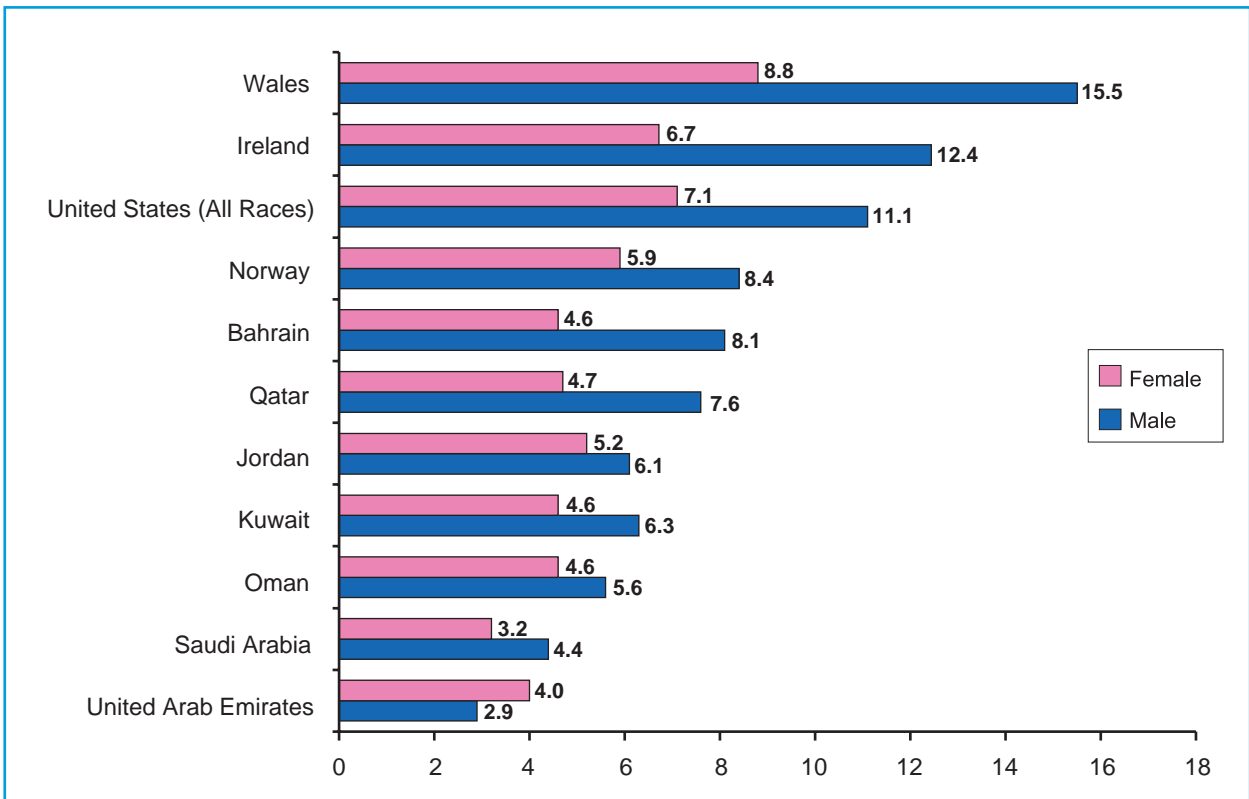


Figure 3.5.3 Comparison of ASR\* for Leukemia among Saudis with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Liver (C 22)

There were 436 cases of liver cancer accounting for 4.8% of all newly diagnosed cases in year 2007. This cancer ranked fifth in males, and tenth in females and affected 315 (72.2%) males and 121 (27.8%) females with a male to female ratio of 260:100. The overall ASR was 4.7/100,000. ASR was 6.8/100,000 for males and 2.6/100,000

for females. The five regions with the highest ASR were Riyadh region at 9/100,000, Tabuk region at 6.9/100,000, Najran region at 4.9/100,000, Makkah region at 4.3/100,000 and Eastern region at 4.2/100,000. The median age at diagnosis was 67 years in males (range 0-100 years) and 66 years in female (range 1-98 years).

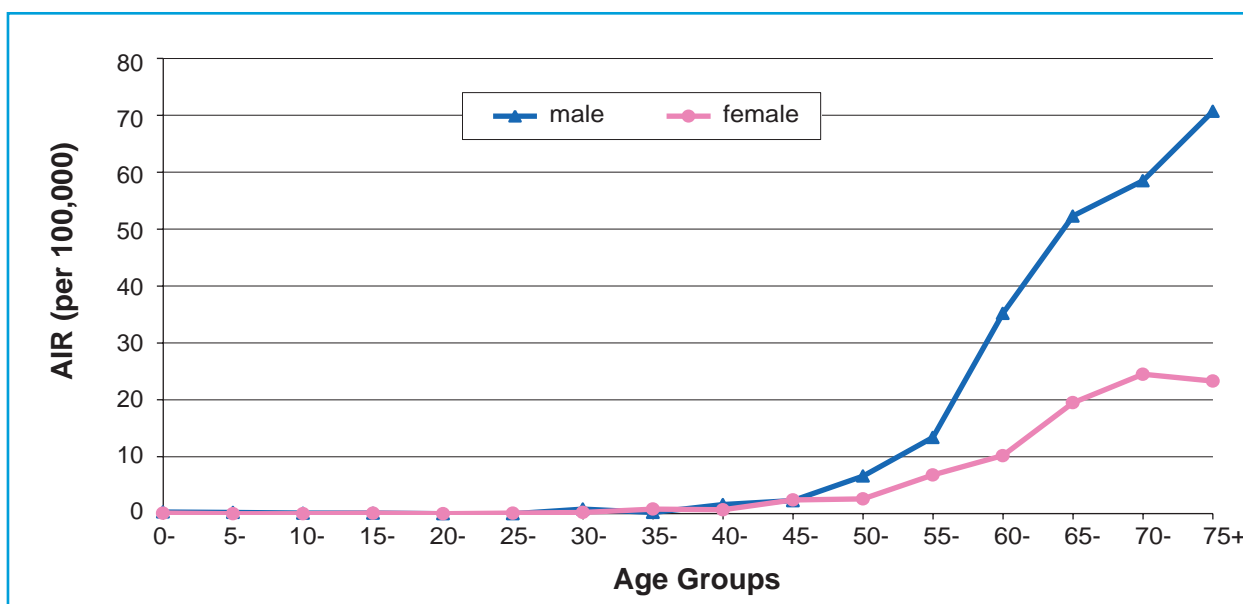


Figure 3.6.1 Age-Specific Incidence Rate (AIR) for Liver Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%	Female	%
8170	Hepatocellular carcinoma, NOS	256	81.3	83	68.6
8000	Neoplasm, malignant	29	9.2	12	9.9
8140	Adenocarcinoma, NOS	6	1.9	8	6.6
8160	Cholangiocarcinoma	4	1.3	10	8.3
8970	Hepatoblastoma	6	1.9	1	0.8
	Others	14	4.4	7	5.8

Table 3.6.1 Morphological Distribution of Liver Cancer in Saudi Arabia, 2007

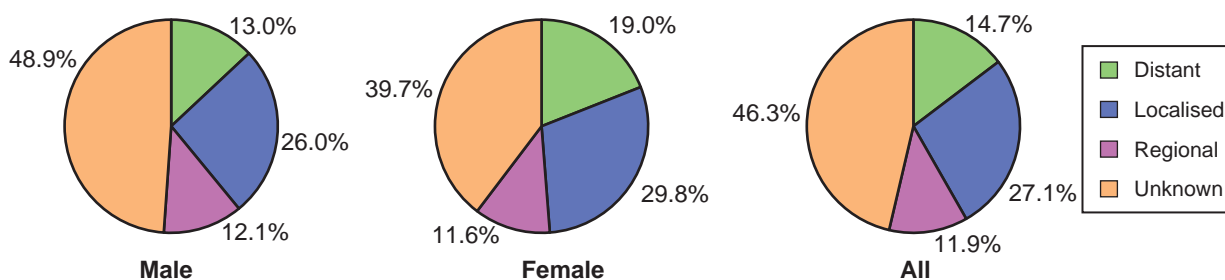


Figure 3.6.2 Stage Distribution of Liver Cancer, 2007

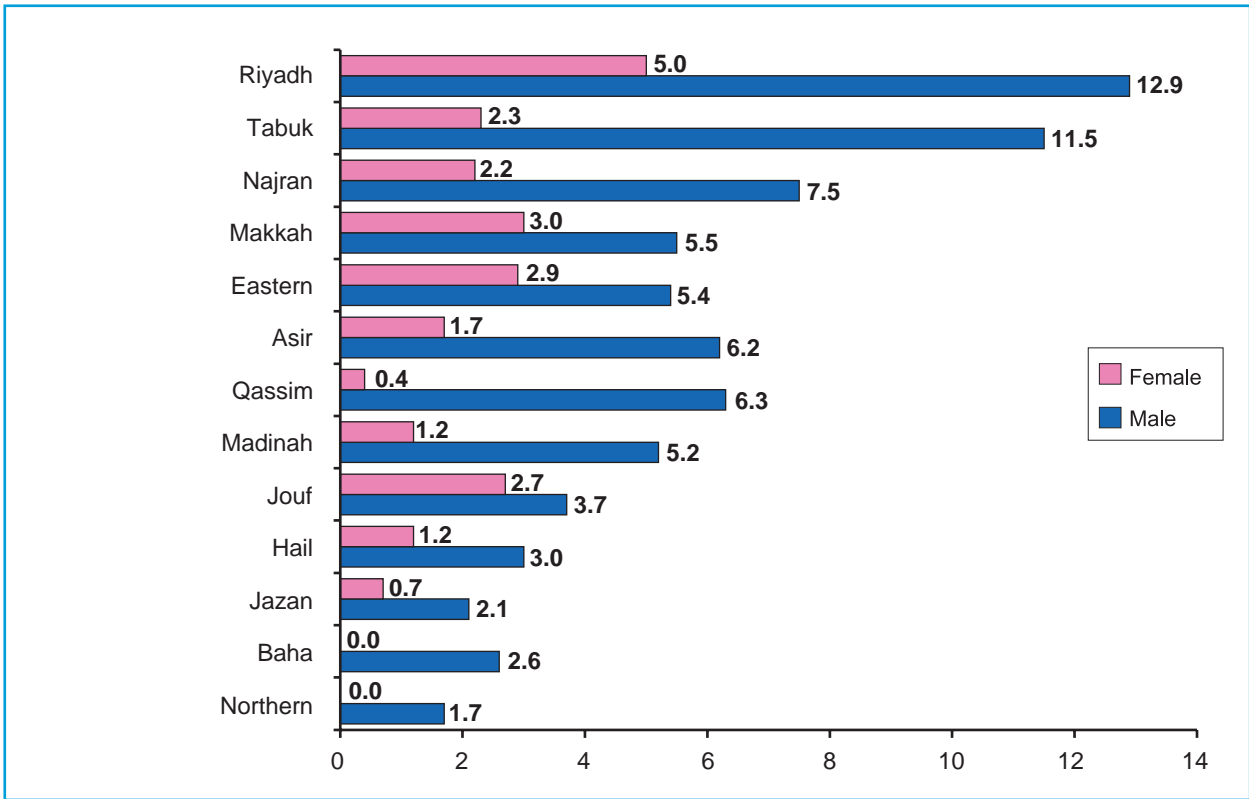


Figure 3.6.3 ASR\* Regional Distribution of Liver Cancer in Saudi Arabia, 2007

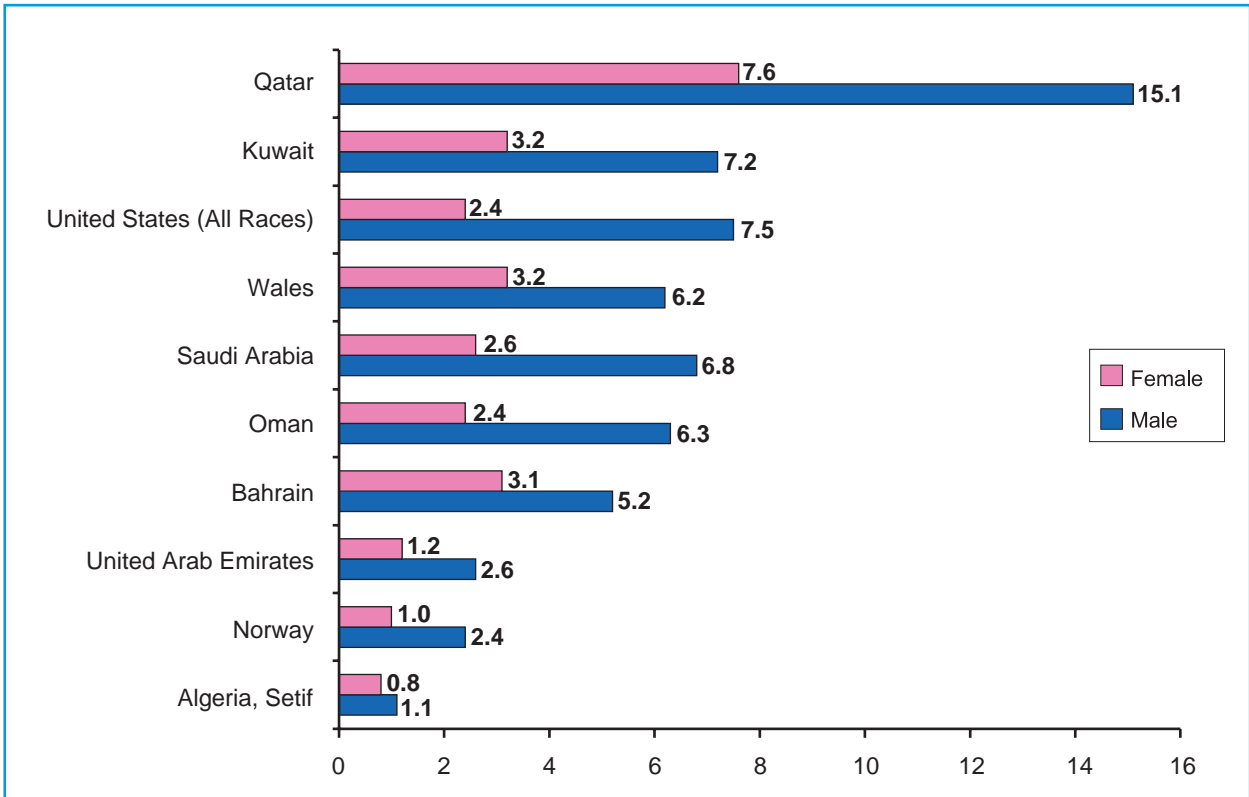


Figure 3.6.4 Comparison of ASR\* for Liver Cancer among Saudis with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Lung (C33-C34)

There were 412 cases of lung cancer accounting for 4.5% of all diagnosed cases in year 2007. Lung cancer ranked fourth among male population and fourteenth among female population. It affected 323 (78.4 %) males and 89 (21.6%) females with a male to female ratio of 263:100. The overall ASR was 4.4/100,000. ASR was 6.9/100,000 for males

and 1.9/100,000 for females. The five regions with the highest ASR were Eastern region at 9.8/100,000, Tabuk region at 8.8/100,000, Northern region at 6.1/100,000, Riyadh region at 5.1/100,000 and, Makkah region at 5/100,000. The median age at diagnosis was 66 years among males (range 2-99 years) and 65 years among females (range 25-103 years).

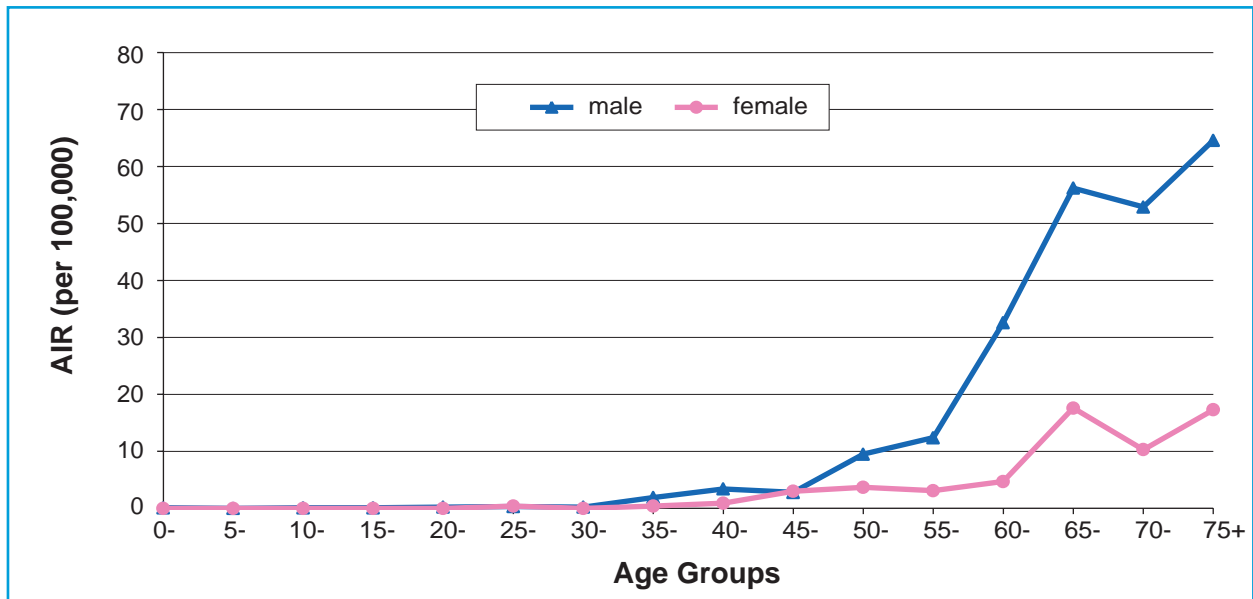


Figure 3.7.1 Age-Specific Incidence Rate (AIR) for Lung Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%	Female	%
8140	Adenocarcinoma, NOS	84	26.0	25	28.1
8070	Squamous cell carcinoma, NOS	56	17.3	14	15.7
8046	Non-small cell carcinoma	45	13.9	12	13.5
8041	Small cell carcinoma, NOS	28	8.7	7	7.9
8000	Neoplasm, malignant	21	6.5	7	7.9
8010	Carcinoma, NOS	13	4.0	3	3.4
8250	Bronchiolo-alveolar adenocarcinoma, NOS	9	2.8	6	6.7
8012	Large cell carcinoma, NOS	10	3.1	0	0.0
8071	Squamous cell carcinoma, keratinizing, NOS	8	2.5	2	2.2
8020	Carcinoma, undifferentiated, NOS	8	2.5	0	0.0
8072	Squamous cell carcinoma, large cell, nonkeratinizing, NOS	7	2.2	1	1.1
8240	Carcinoid tumor, NOS	3	0.9	4	4.5
8560	Adenosquamous carcinoma	4	1.2	1	1.1
8042	Oat cell carcinoma	4	1.2	0	0.0
8253	Bronchiolo-alveolar carcinoma, mucinous	1	0.3	3	3.4
	Others	22	6.8	4	4.5

Table 3.7.1 Morphological Distribution of Lung Cancer in Saudi Arabia, 2007

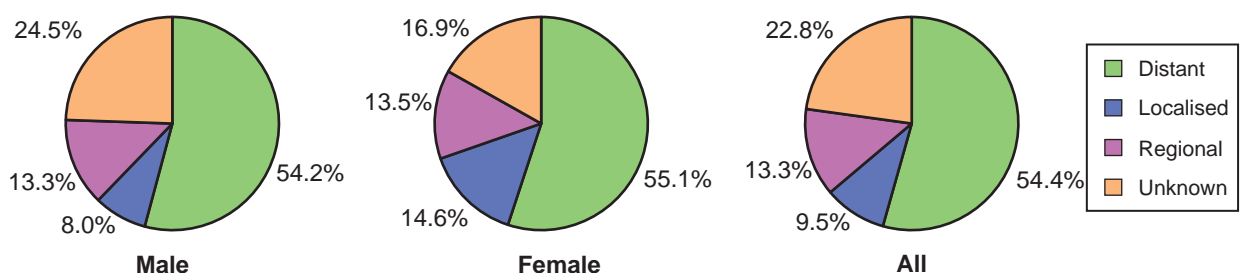


Figure 3.7.2 Stage Distribution of Lung Cancer, 2007



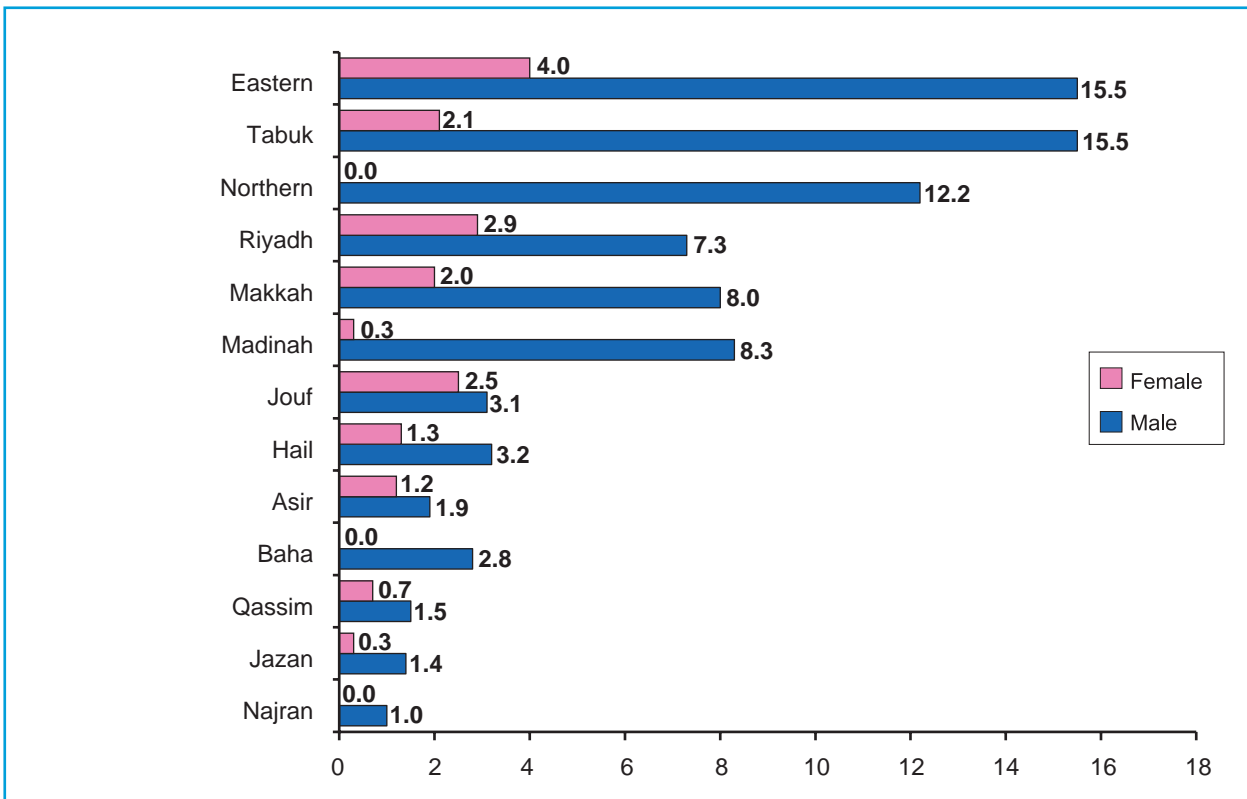


Figure 3.7.3 ASR\* Regional Distribution of Lung Cancer in Saudi Arabia, 2007

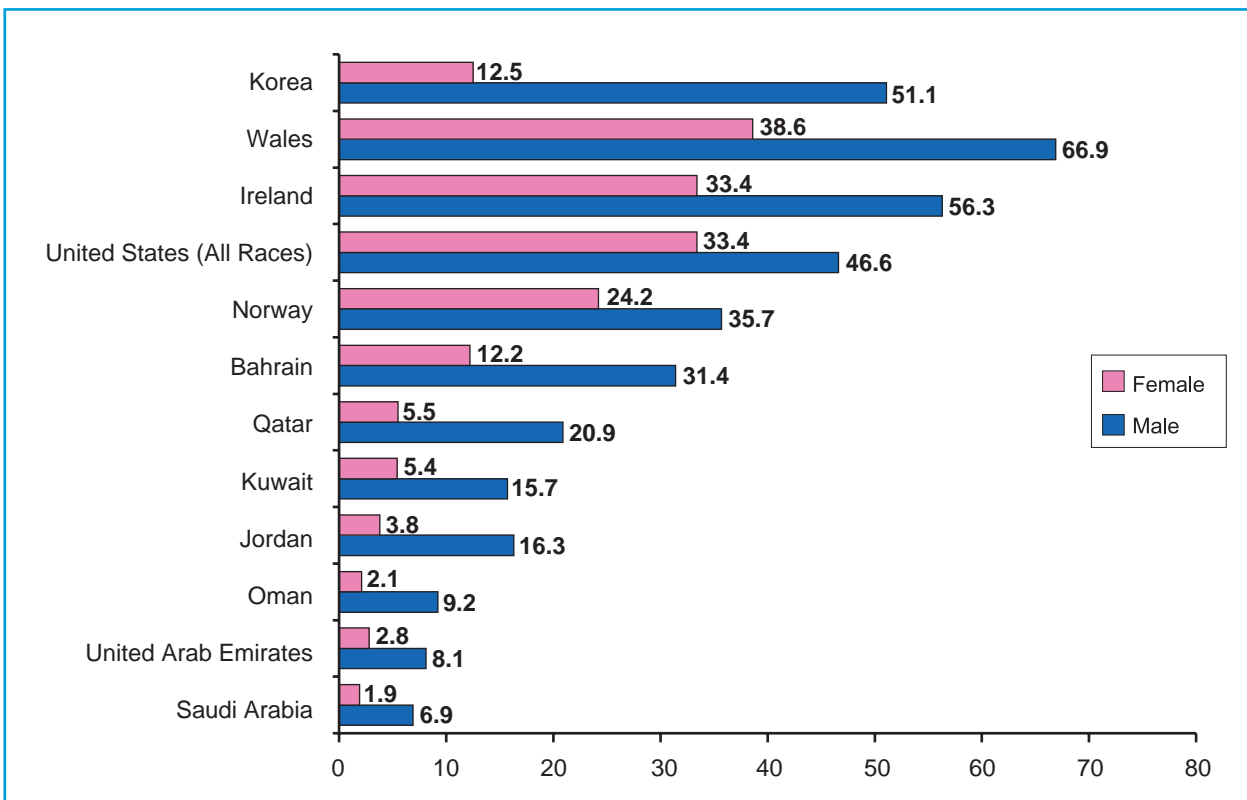


Figure 3.7.4 Comparison of ASR\* for Lung Cancer among Saudis with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Hodgkin disease (C 81)

There were 309 cases of Hodgkin disease cancer accounting for 3.4% of all newly diagnosed cases in year 2007. This cancer ranked seventh among male and eighth in female population. It affected 180 (58.3%) males and 129 (41.7%) females with a male to female ratio of 140:100. The overall ASR was 1.9/100,000. ASR was 2.2/100,000 for males

and 1.5/100,000 for females. The five regions with highest ASR were Northern region at 3.2/100,000, Madinah region at 3/100,000, Tabuk region at 2.4/100,000, Riyadh at 2.2/100,000 and Qassim region at 2/100,000 for each. The median age at diagnosis in males was 24 years (range 0-89 years) and 23 year in females (range 2-80).

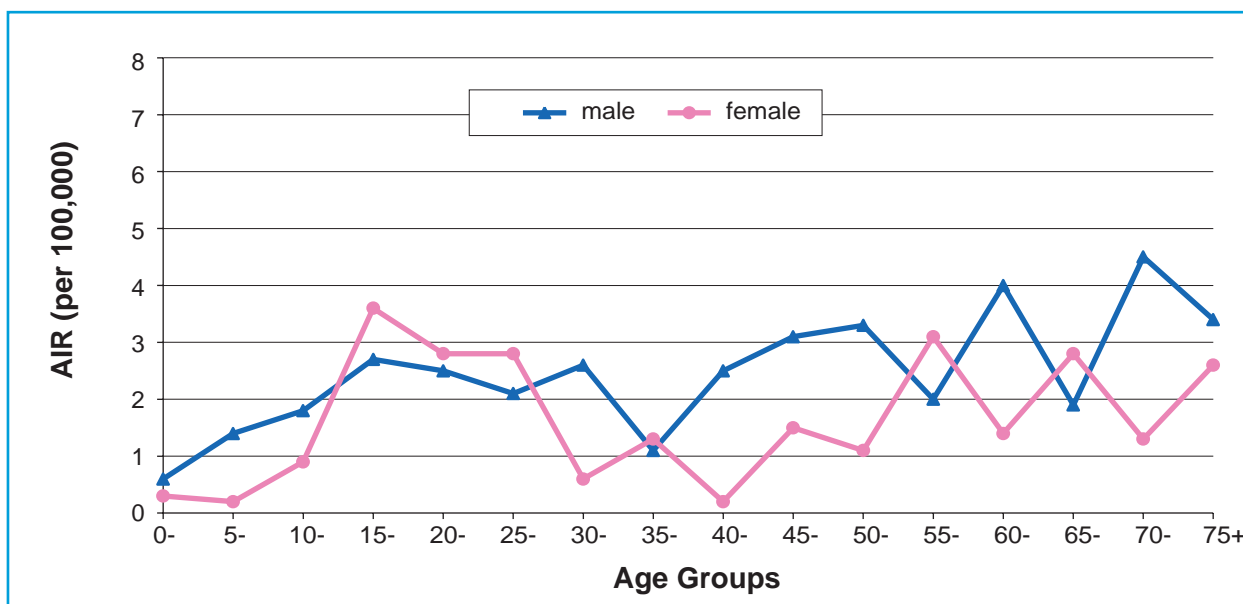


Figure 3.8.1 Age-Specific Incidence Rate (AIR) for Hodgkins disease in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%	Female	%
9663	Hodgkin lymphoma, nodular sclerosis, NOS	72	40.0	76	58.9
9652	Hodgkin lymphoma, mixed cellularity, NOS	43	23.9	19	14.7
9650	Hodgkin lymphoma, NOS	21	11.7	13	10.1
9659	Hodgkin lymphoma, nodular lymphocyte predominance	14	7.8	5	3.9
9651	Hodgkin lymphoma, lymphocyte-rich	7	3.9	8	6.2
9665	Hodgkin lymphoma, nodular sclerosis, grade 1	11	6.1	4	3.1
9667	Hodgkin lymphoma, nodular sclerosis, grade 2	6	3.3	2	1.6
9653	Hodgkin lymphoma, lymphocyte depletion, NOS	4	2.2	1	0.8
	Others	2	1.1	1	0.8

Table 3.8.1 Morphological Distribution of Hodgkins disease in Saudi Arabia, 2007

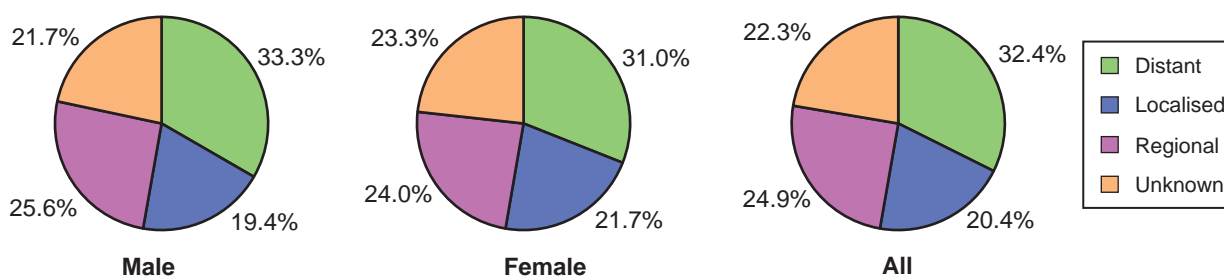
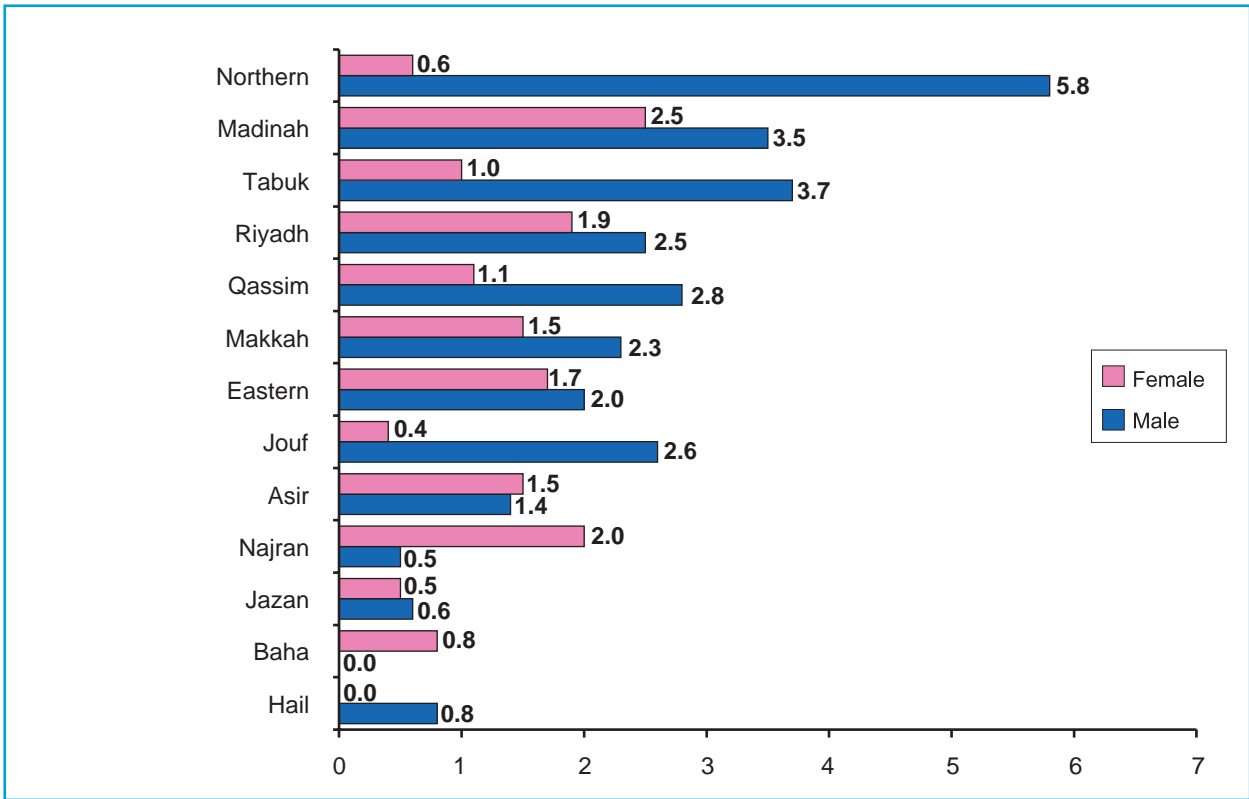
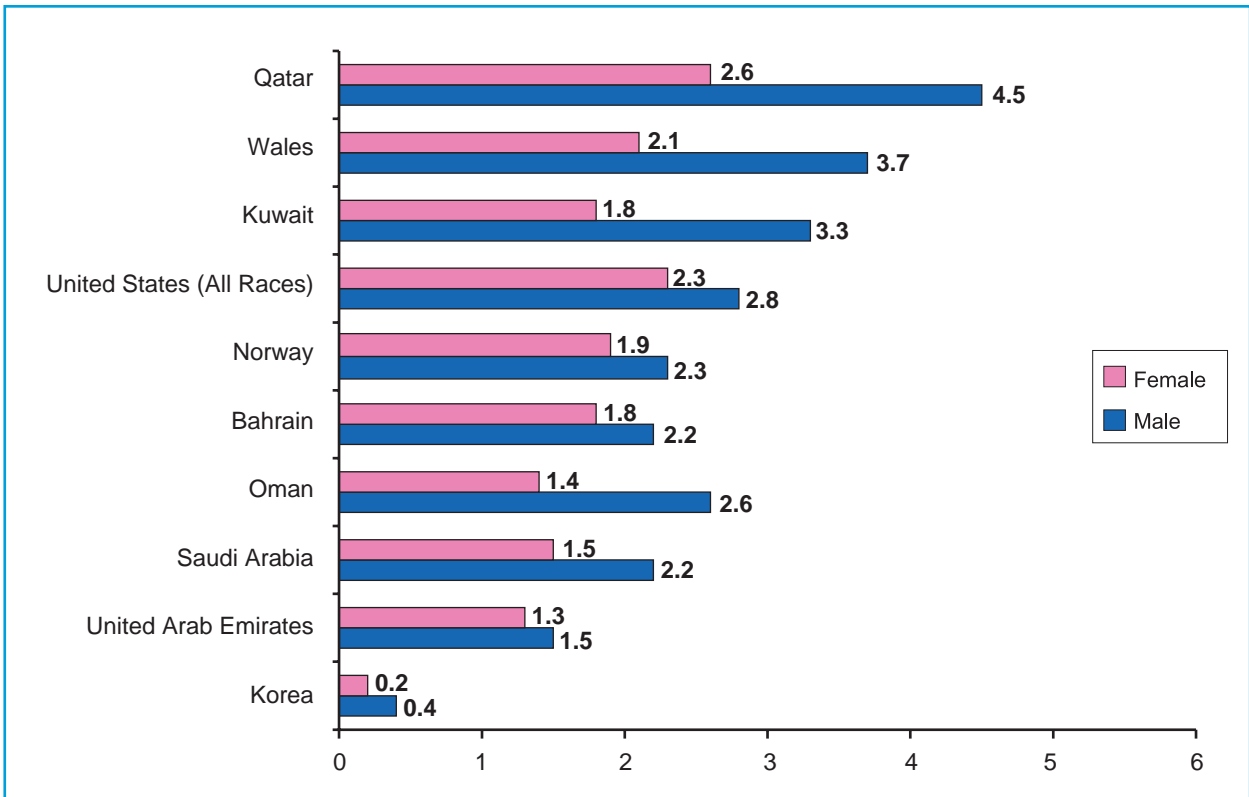


Figure 3.8.2 Stage Distribution of Hodgkins disease, 2007



**Figure 3.8.3 ASR\* Regional Distribution of Hodgkins disease in Saudi Arabia, 2007**



**Figure 3.8.4 Comparison of ASR\* for Hodgkins disease among Saudis with ASR in Selected Countries\*\***

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Stomach (C 16)

There were 299 cases of stomach cancer accounting for 3.3% of all newly diagnosed cases in year 2007. This cancer ranked eighth among male population and ninth among female population. It affected 173 (57.9%) males and 126 (42.1%) females with a male to female ratio of 138:100. The overall ASR was 3.1/100,000. ASR was 3.6/100,000 for males

and 2.5/100,000 for females. The five regions with the highest ASR were Najran region at 8.4/100,000, Tabuk region at 6.6/100,000, Riyadh region at 4.1/100,000, Makkah regions at 3.3/100,000 and Asir region at 3.3/100,000. The median age at diagnosis was 68 years among males (range 21-100 years) and 60 years among females (range 22-107 years).

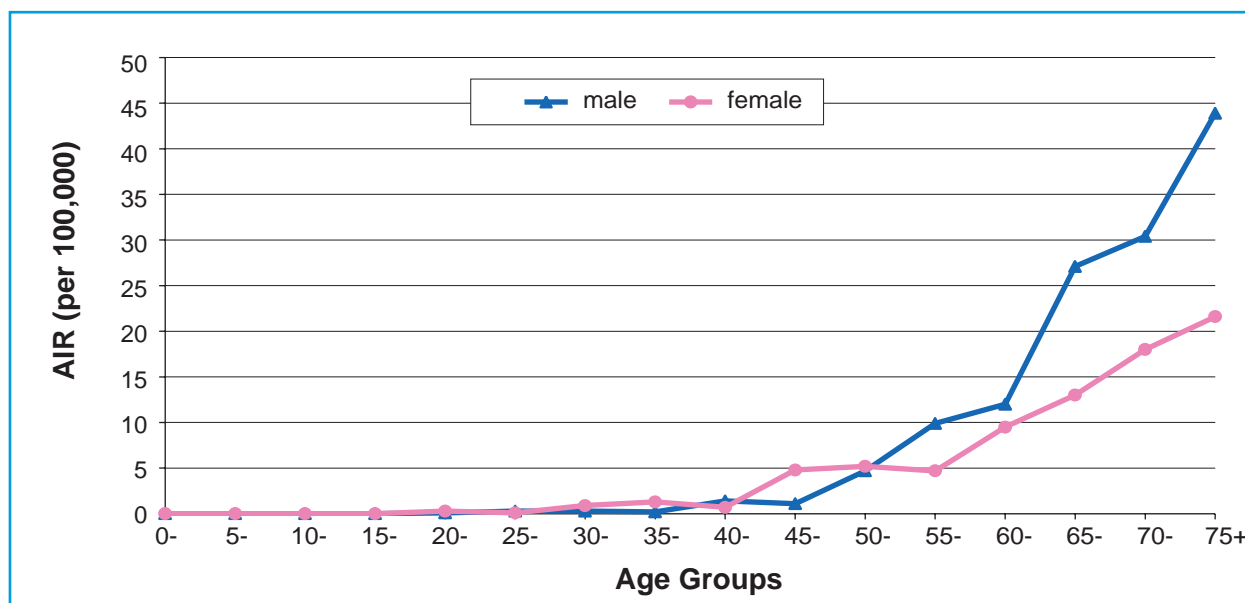


Figure 3.9.1 Age-Specific Incidence Rate (AIR) for Stomach Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%	Female	%
8140	Adenocarcinoma, NOS	88	50.9	47	37.3
8490	Signet ring cell carcinoma	34	19.7	42	33.3
8144	Adenocarcinoma, intestinal type	14	8.1	4	3.2
8000	Neoplasm, malignant	8	4.6	6	4.8
8010	Carcinoma, NOS	7	4.0	4	3.2
8145	Carcinoma, diffuse type	4	2.3	4	3.2
8480	Mucinous adenocarcinoma	7	4.0	0	0.0
8936	Gastrointestinal stromal sarcoma	3	1.7	4	3.2
8070	Squamous cell carcinoma, NOS	1	0.6	4	3.2
8481	Mucin-producing adenocarcinoma	1	0.6	2	1.6
	Others	6	3.5	9	7.1

Table 3.9.1 Morphological Distribution of Stomach Cancer in Saudi Arabia, 2007

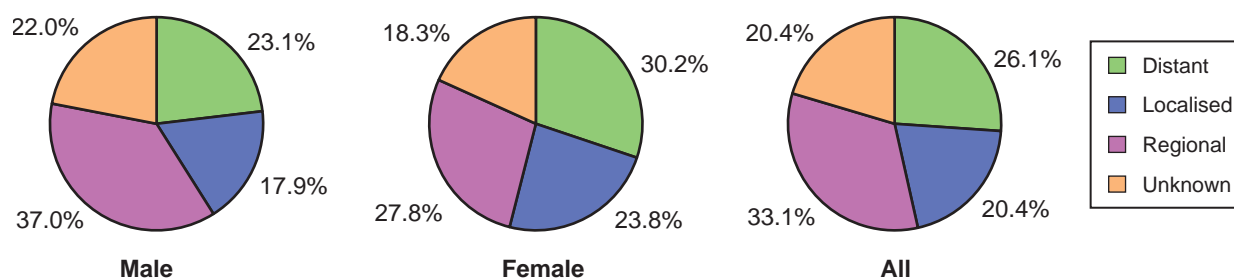


Figure 3.9.2 Stage Distribution of Stomach Cancer, 2007

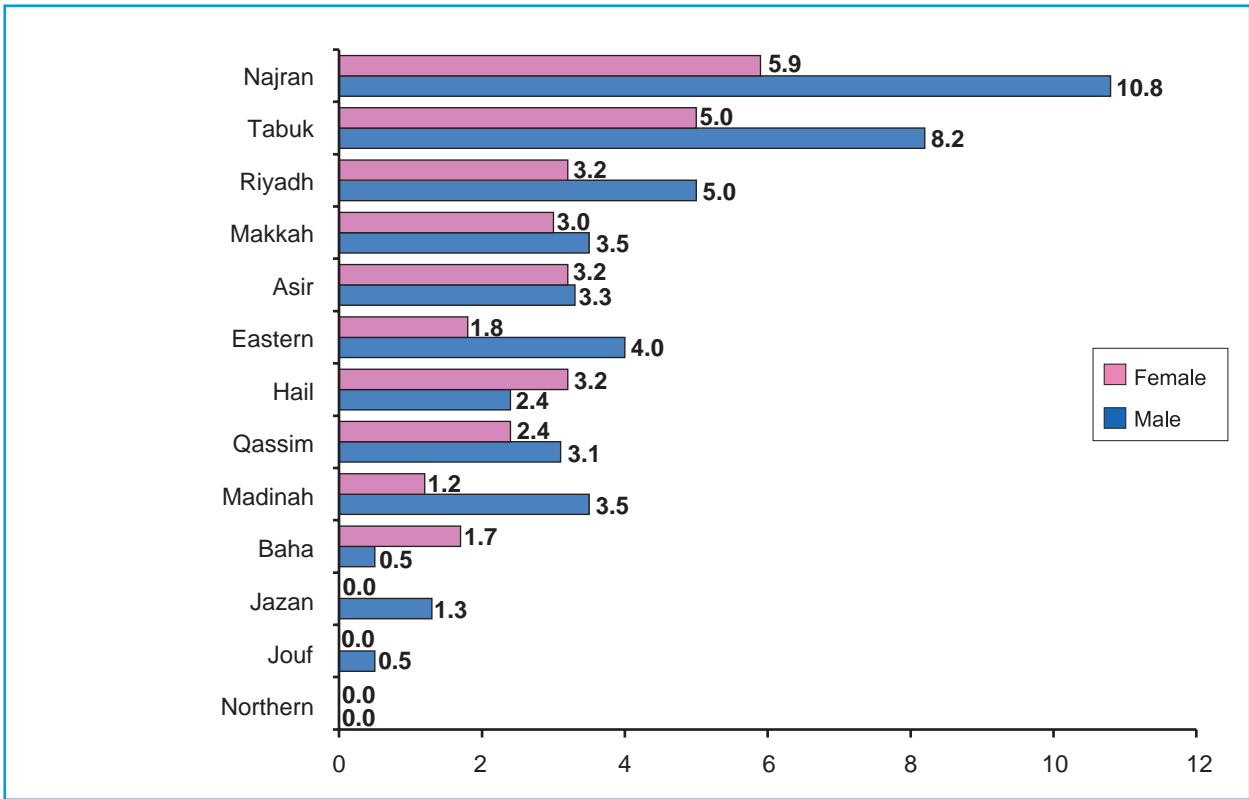


Figure 3.9.3 ASR\* Regional Distribution of Stomach Cancer in Saudi Arabia, 2007

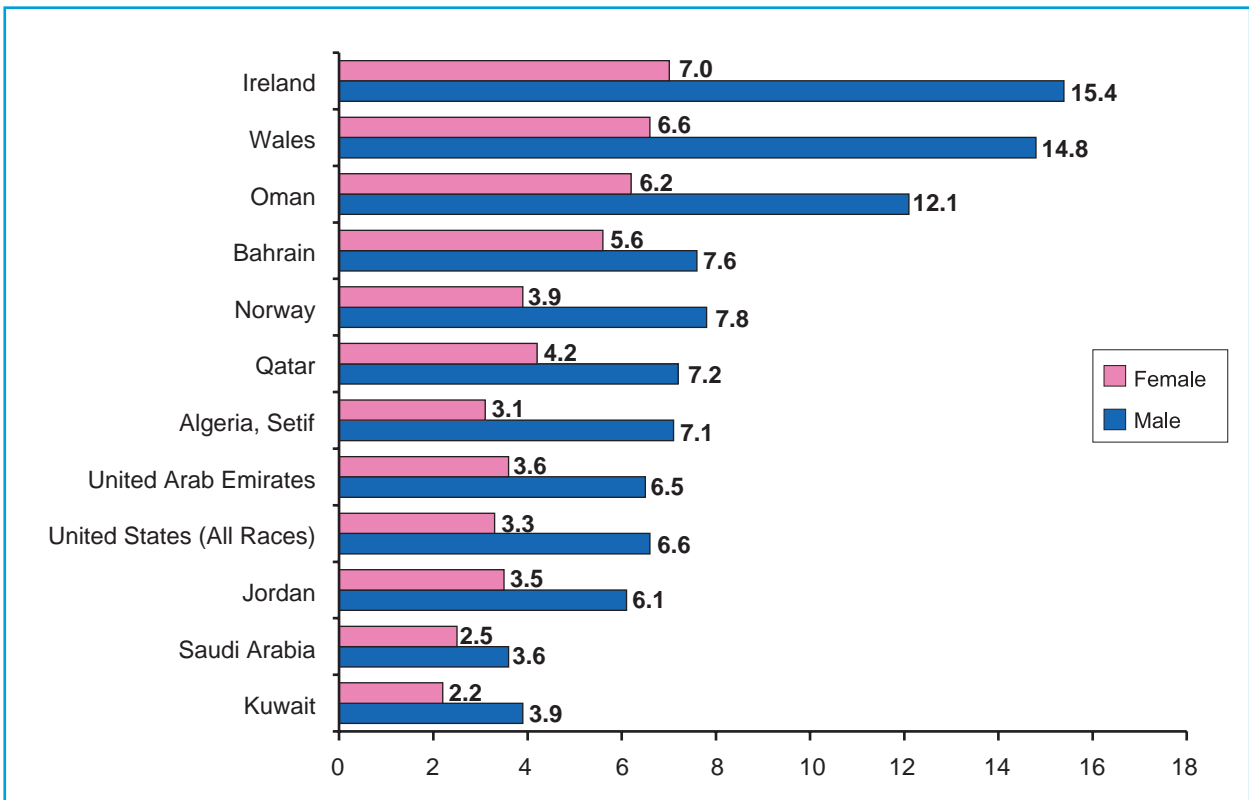


Figure 3.9.4 Comparison of ASR\* for Stomach Cancer among Saudis with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Skin (Non-Melanoma) (C 44)

There were 283 cases of skin cancer accounting for 3.1% of all newly diagnosed cases in year 2007. This cancer ranked tenth for males and eleventh for females. It affected 163 (57.6%) males and 120 (42.4%) females with a male to female ratio of 136:100. The overall ASR was 2.8/100,000. ASR was 3.1/100,000 for males and 2.5/100,000

for females. The five regions with the highest ASR were Northern region at 8.1/100,000, Najran region at 4.3/100,000, Asir region at 3.8/100,000, Eastern region at 3.5/100,000 and Madinah region at 2.9/100,000. The median age at diagnosis was 66 years among males (range 4-103 years) and 66 years among females (range 17-95 years).

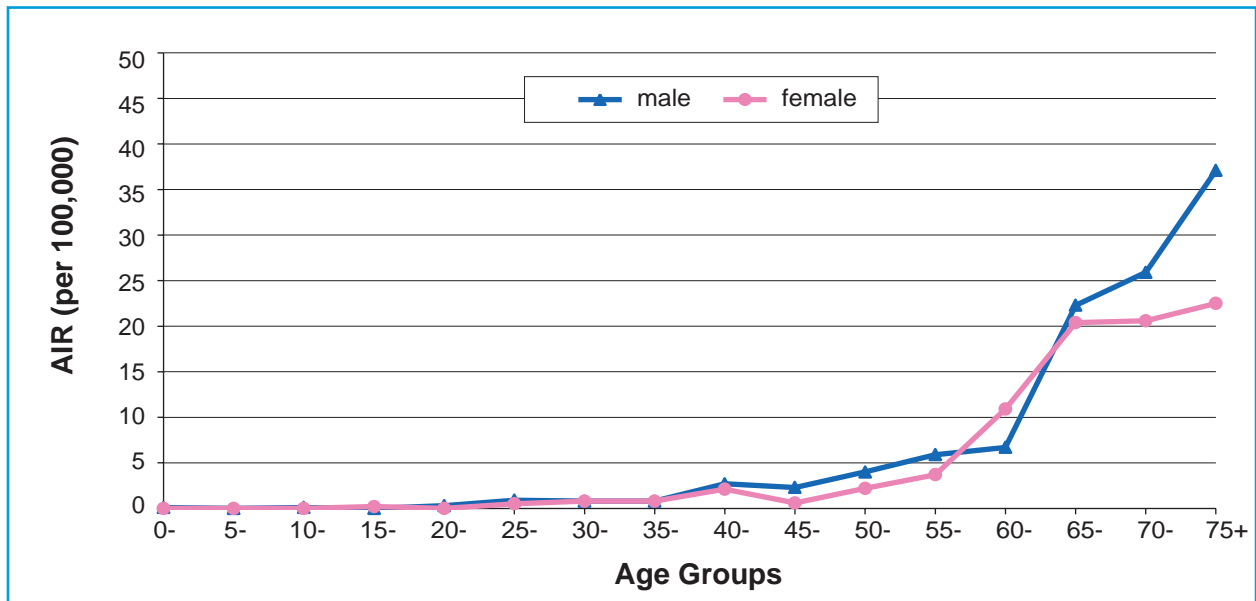


Figure 3.10.1 Age-Specific Incidence Rate (AIR) for Skin Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%	Female	%
8090	Basal cell carcinoma, NOS	70	42.9	62	51.7
8070	Squamous cell carcinoma, NOS	37	22.7	18	15.0
8071	Squamous cell carcinoma, keratinizing, NOS	9	5.5	6	5.0
8410	Sebaceous adenocarcinoma	6	3.7	8	6.7
8832	Dermatofibrosarcoma, NOS	7	4.3	7	5.8
8094	Basosquamous carcinoma	6	3.7	5	4.2
8097	Basal cell carcinoma, nodular	4	2.5	5	4.2
8092	Infiltrating basal cell carcinoma, NOS	4	2.5	1	0.8
8200	Adenoid cystic carcinoma	1	0.6	3	2.5
8833	Pigmented dermatofibrosarcoma protuberans	4	2.5	0	0.0
8051	Verrucous carcinoma, NOS	2	1.2	1	0.8
8091	Multifocal superficial basal cell carcinoma	3	1.8	0	0.0
8247	Merkel cell carcinoma	3	1.8	0	0.0
	Others	7	4.3	4	3.3

Table 3.10.1 Morphological Distribution of Skin Cancer in Saudi Arabia, 2007

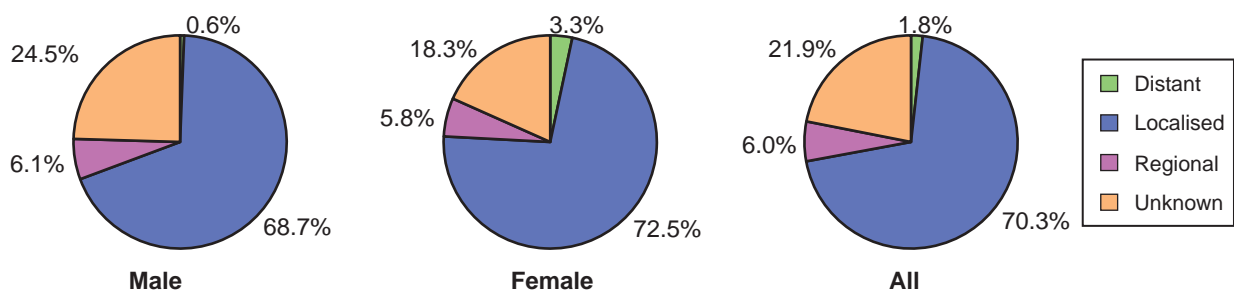


Figure 3.10.2 Stage Distribution of Skin Cancer in Saudi Arabia, 2007

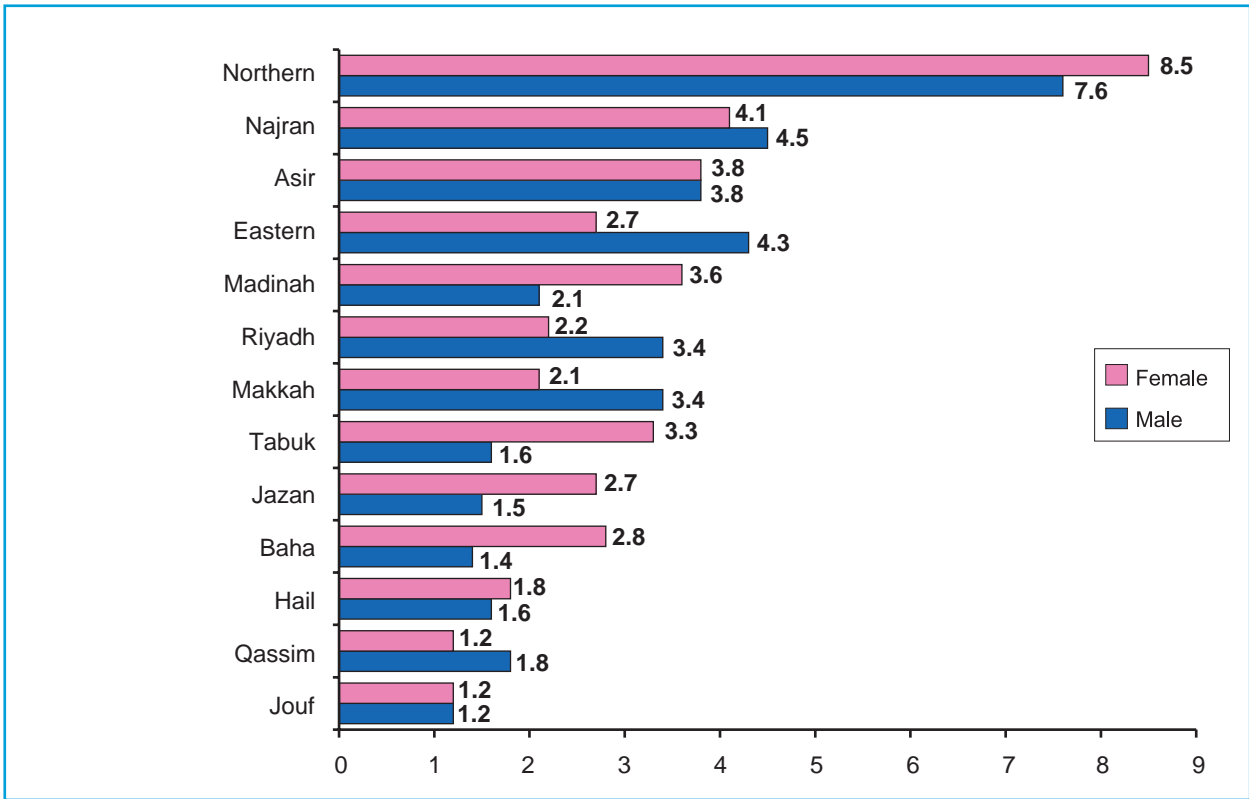


Figure 3.10.3 ASR\* Regional Distribution of Skin Cancer in Saudi Arabia, 2007

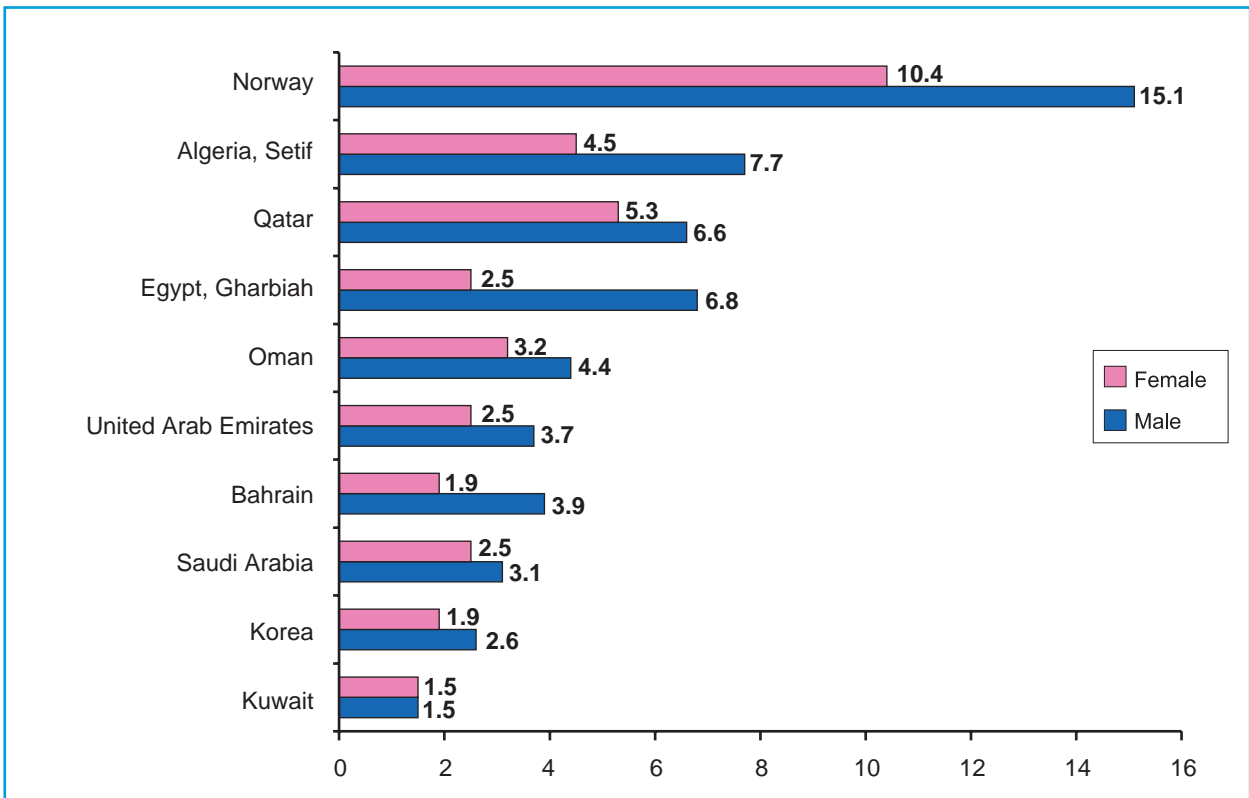


Figure 3.10.4 Comparison of ASR\* for Skin Cancer among Saudis with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Prostate (C 61)

There were 259 cases of prostate cancer accounting for 6% of all newly diagnosed cases among males in year 2007. The ASR was 5.7/100,000 among male population. This cancer ranked sixth among males. The five regions with the highest ASR were

Eastern region at 12.3/100,000, Riyadh region at 8.3/100,000, Jofu region at 7.8/100,000, Makkah region at 6.3/100,000 and Tabuk region at 4.5/100,000. The median age at diagnosis was 70 years (range 10-100 years).

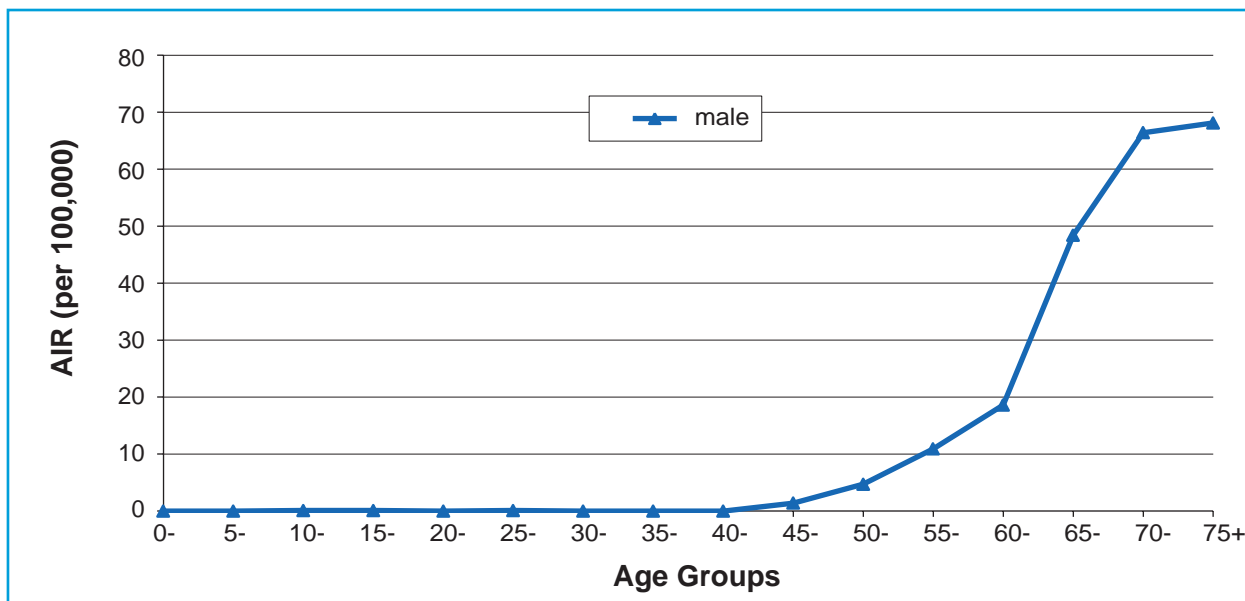


Figure 3.11.1 Age-Specific Incidence Rate (AIR) for Prostate Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%
8140	Adenocarcinoma, NOS	217	83.8
8000	Neoplasm, malignant	16	6.2
8010	Carcinoma, NOS	11	4.2
8550	Acinar cell carcinoma	7	2.7
8910	Embryonal rhabdomyosarcoma, NOS	3	1.2
	Others	5	1.9

Table 3.11.1 Morphological Distribution of Prostate Cancer in Saudi Arabia, 2007

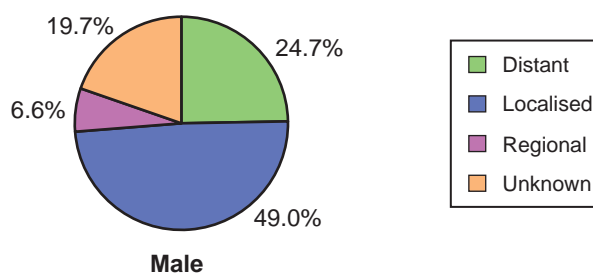


Figure 3.11.2 Stage Distribution of Prostate Cancer, 2007



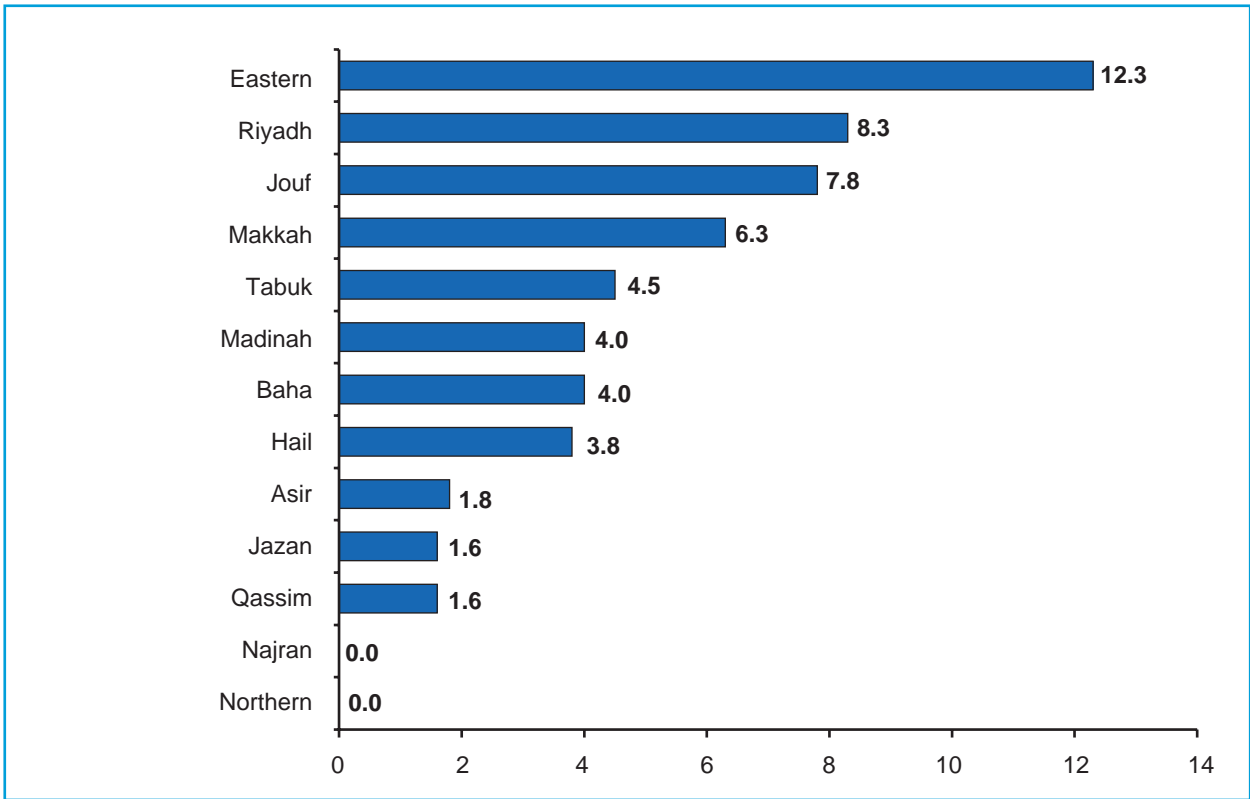


Figure 3.11.3 ASR\* Regional Distribution of Prostate Cancer in Saudi Arabia, 2007

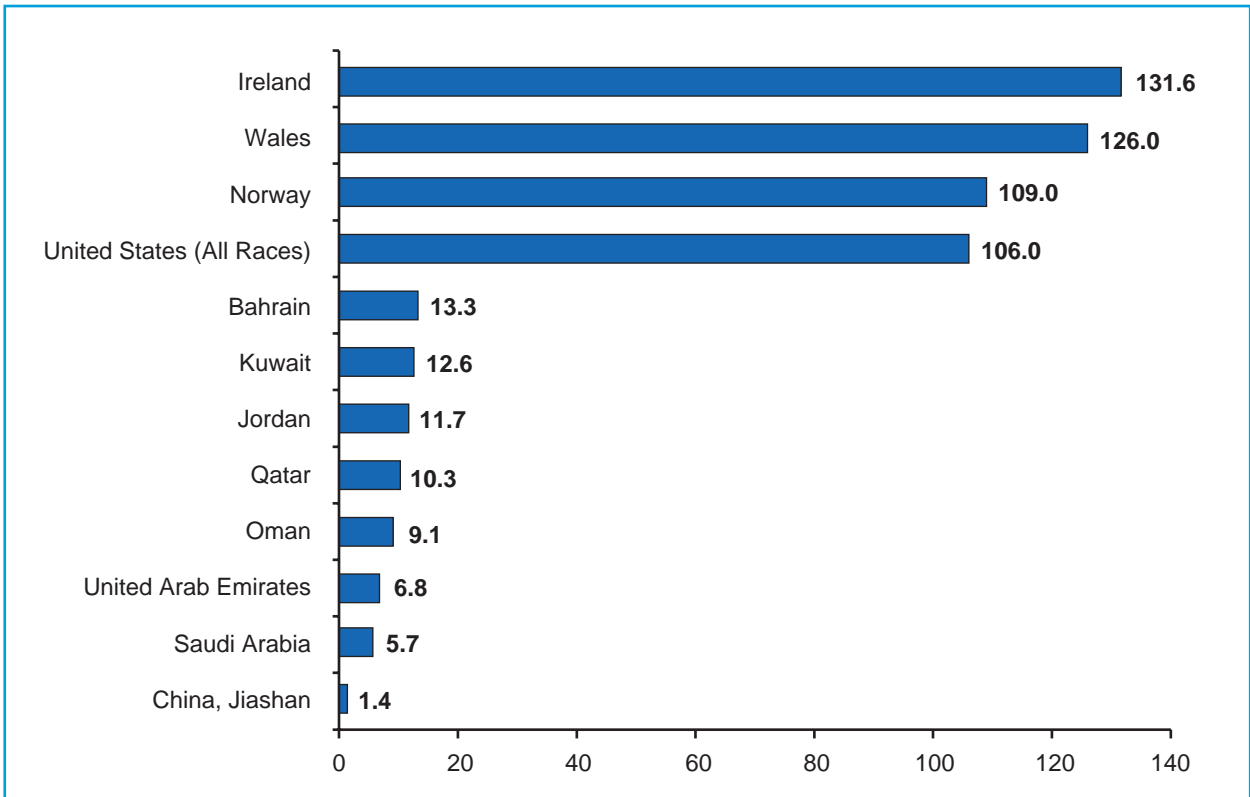


Figure 3.11.4 Comparison of ASR\* for Prostate Cancer among Saudi Males with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Bladder (C 67)

There were 208 cases of bladder cancer accounting for 2.3% of all newly diagnosed cases in year 2007. This cancer ranked ninth among male population and twenty fourth among female population. It affected 171 (82.2%) males and 37 (17.8%) females with a male to female ratio of 462:100. The overall ASR was 2.2/100,000. ASR was 3.5/100,000 for

males and 0.8/100,000 for females. The five regions with the highest ASR were Northern region at 6.2/100,000, Tabuk region at 5.2/100,000, Eastern region at 3.7/100,000, Najran region at 3.4/100,000 and Makkah region at 2.2 /100,000. The median age at diagnosis was 64 among males (range 1-101 years) and 59 among females (range 27-89 years).

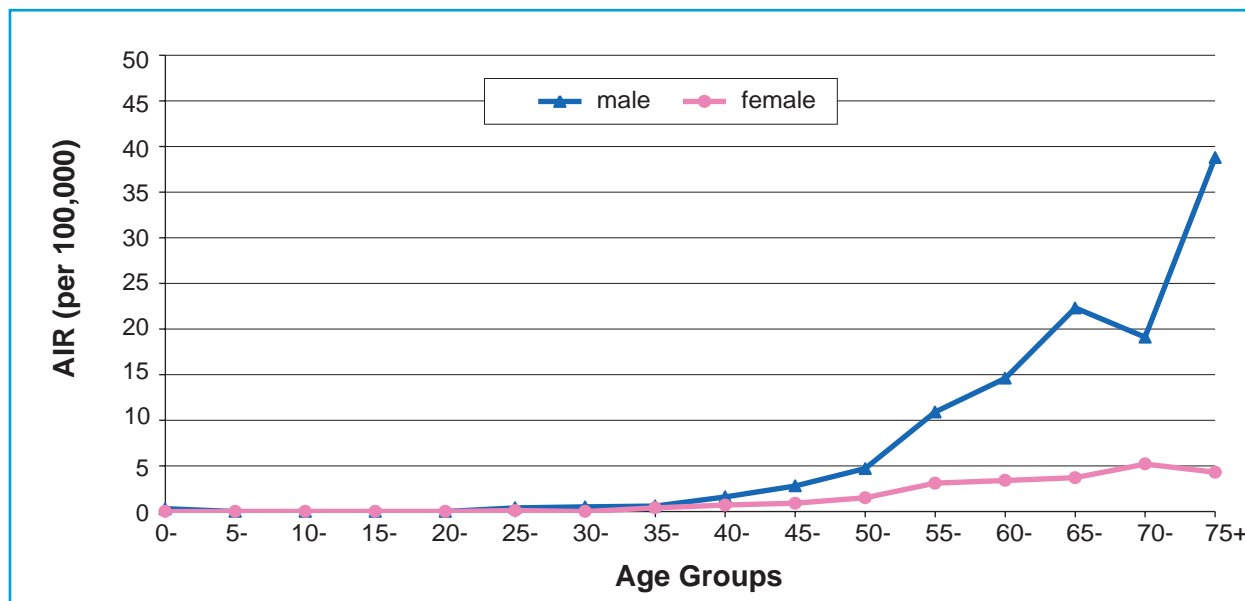


Figure 3.12.1 Age-Specific Incidence Rate (AIR) for Bladder Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Male	%	Female	%
8130	Papillary transitional cell carcinoma	75	43.9	15	40.5
8120	Transitional cell carcinoma, NOS	58	33.9	9	24.3
8000	Neoplasm, malignant	9	5.3	2	5.4
8070	Squamous cell carcinoma, NOS	9	5.3	1	2.7
8140	Adenocarcinoma, NOS	4	2.3	4	10.8
8071	Squamous cell carcinoma, keratinizing, NOS	3	1.8	2	5.4
8010	Carcinoma, NOS	2	1.2	1	2.7
8122	Transitional cell carcinoma, spindle cell	3	1.8	0	0.0
8910	Embryonal rhabdomyosarcoma, NOS	3	1.8	0	0.0
8020	Carcinoma, undifferentiated, NOS	2	1.2	0	0.0
	Others	3	1.8	3	8.1

Table 3.12.1 Morphological Distribution of Bladder Cancer in Saudi Arabia, 2007

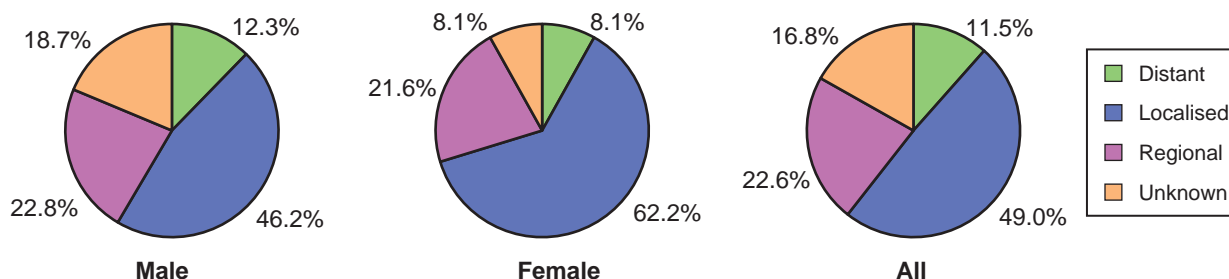


Figure 3.12.2 Stage Distribution of Bladder Cancer, 2007

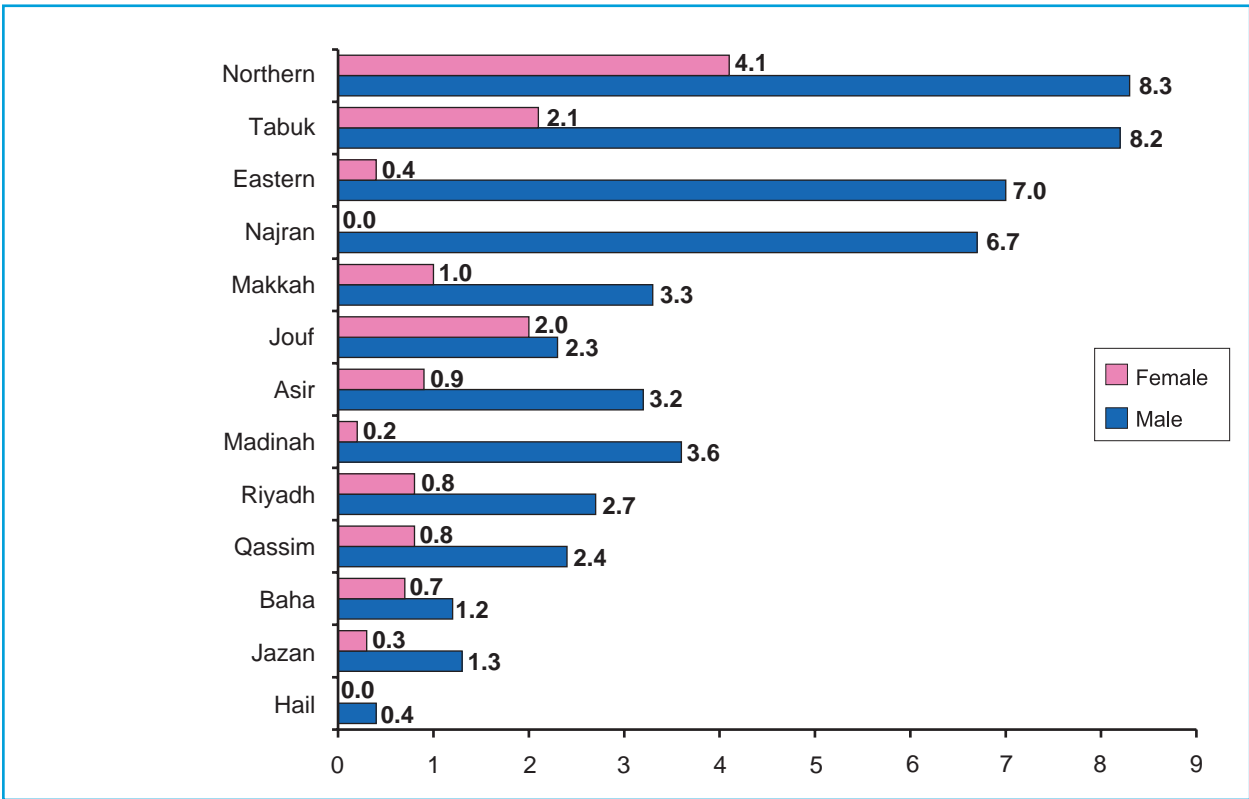


Figure 3.12.3 ASR\* Regional Distribution of Bladder Cancer in Saudi Arabia, 2007

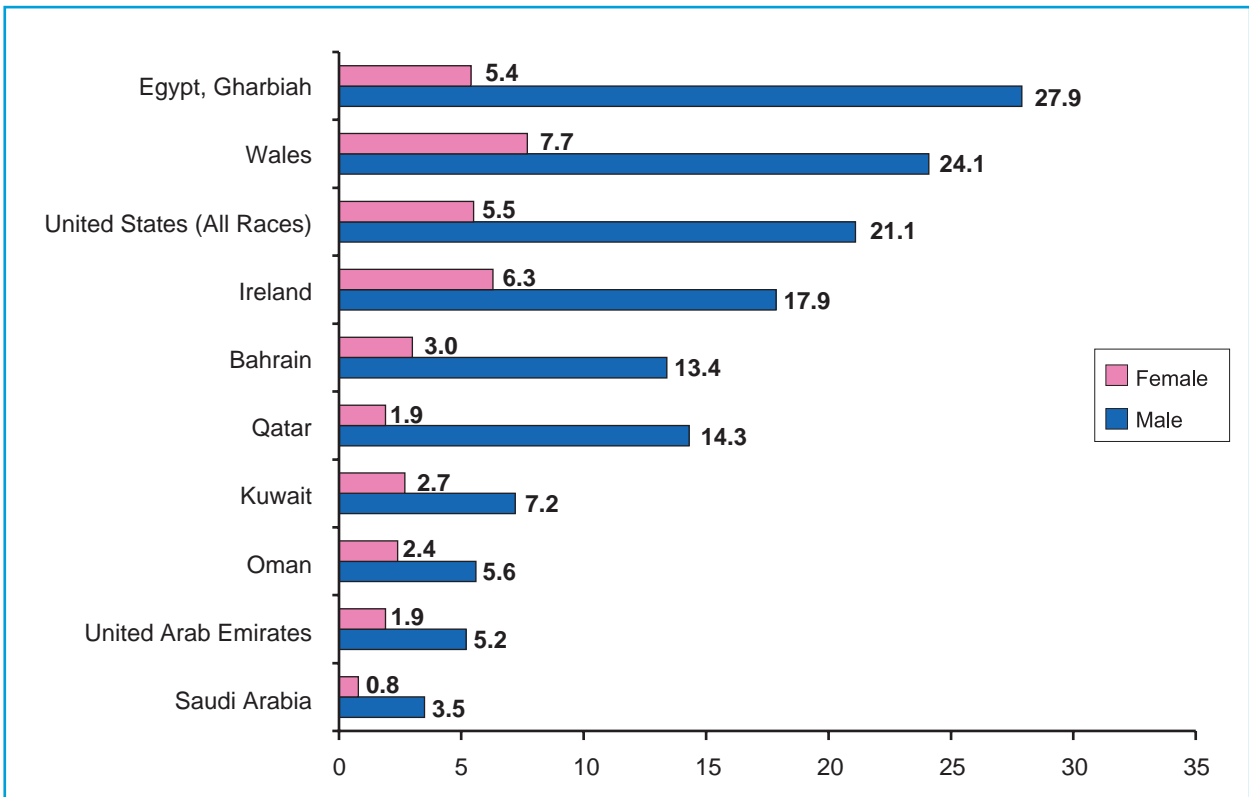


Figure 3.12.4 Comparison of ASR\* for Bladder Cancer among Saudis with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Corpus uteri (C 54)

There were 189 cases of corpus uteri cancer among females accounting for 4% of all newly diagnosed cases for females (4,773) in year 2007. This cancer ranked sixth among female population. The ASR was 4/100,000 for female population. The five regions

with the highest ASR were Tabuk region at 6/100,000, Madinah region at 5.5/100,000, Northern region at 5.3/100,000, Riyadh region at 5.2/100,000 and Makkah region at 4.8/100,000. The median age at diagnosis was 59 years (range 26-84 years).

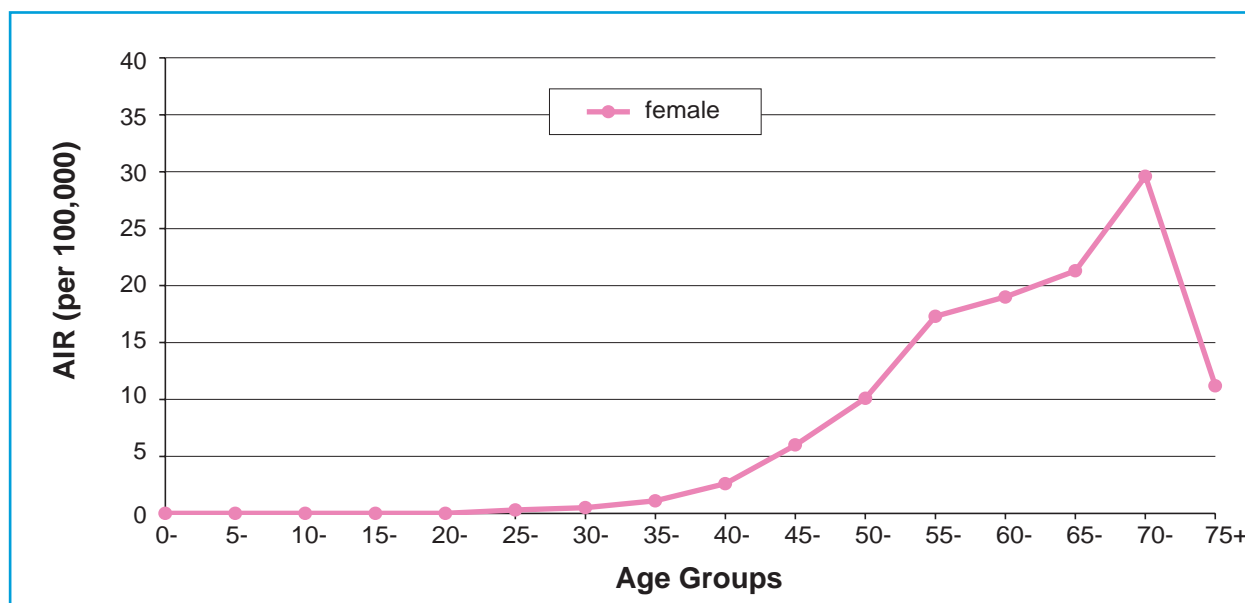


Figure 3.13.1 Age-Specific Incidence Rate (AIR) for Corpus uteri Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Female	%
8380	Endometrioid adenocarcinoma, NOS	97	51.3
8140	Adenocarcinoma, NOS	33	17.5
8950	Mullerian mixed tumor	8	4.2
8010	Carcinoma, NOS	6	3.2
8441	Serous cystadenocarcinoma, NOS	6	3.2
8980	Carcinosarcoma, NOS	5	2.6
8930	Endometrial stromal sarcoma, NOS	4	2.1
8310	Clear cell adenocarcinoma, NOS	3	1.6
8560	Adenosquamous carcinoma	3	1.6
8931	Endometrial stromal sarcoma, low grade	3	1.6
8050	Papillary carcinoma, NOS	2	1.1
8072	Squamous cell carcinoma, large cell, nonkeratinizing, NOS	2	1.1
8480	Mucinous adenocarcinoma	2	1.1
8933	Adenosarcoma	2	1.1
	Others	13	6.9

Table 3.13.1 Morphological Distribution of Corpus uteri Cancer in Saudi Arabia, 2007

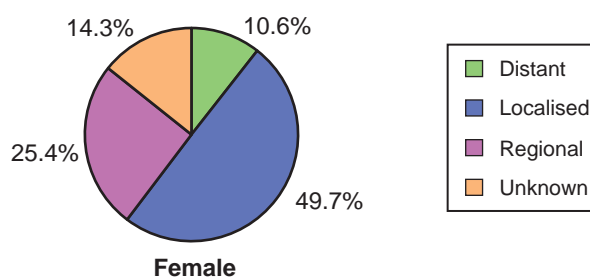


Figure 3.13.2 Stage Distribution of Corpus uteri Cancer, 2007

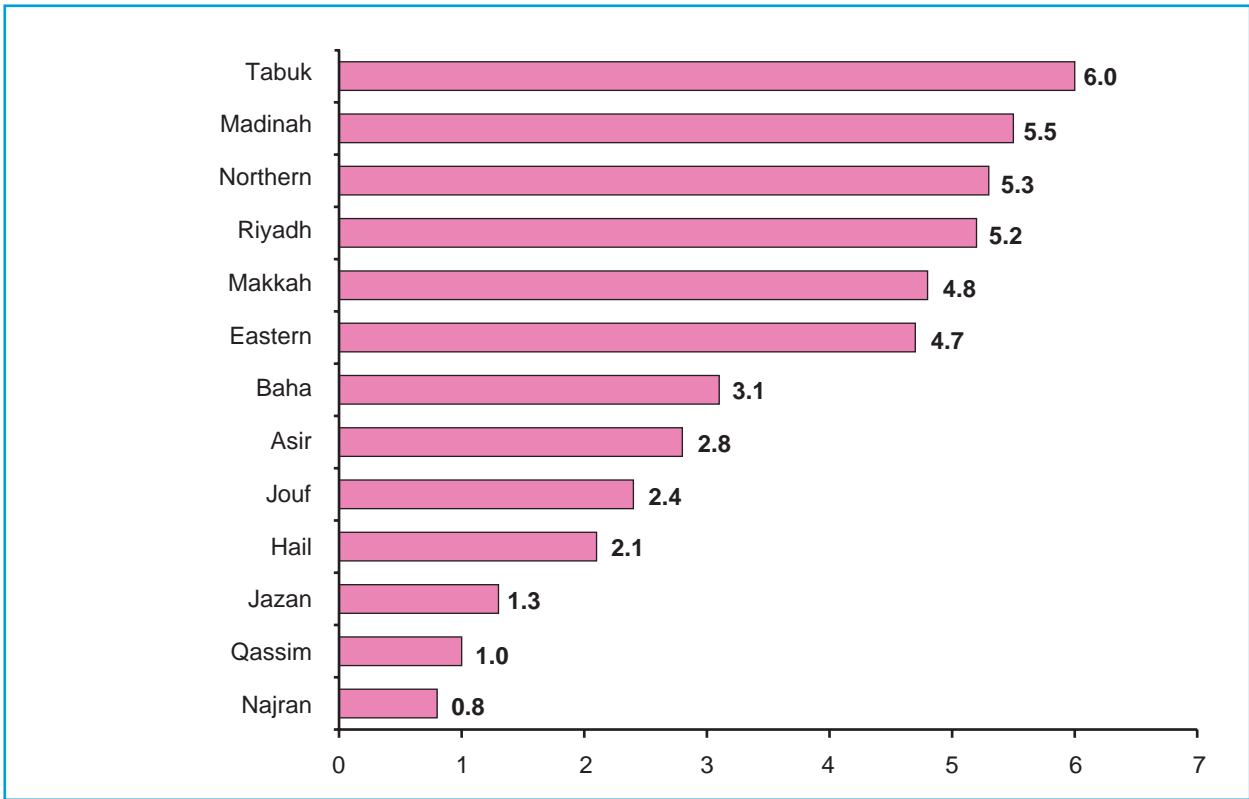


Figure 3.13.3 ASR\* Regional Distribution of Corpus uteri Cancer in Saudi Arabia, 2007

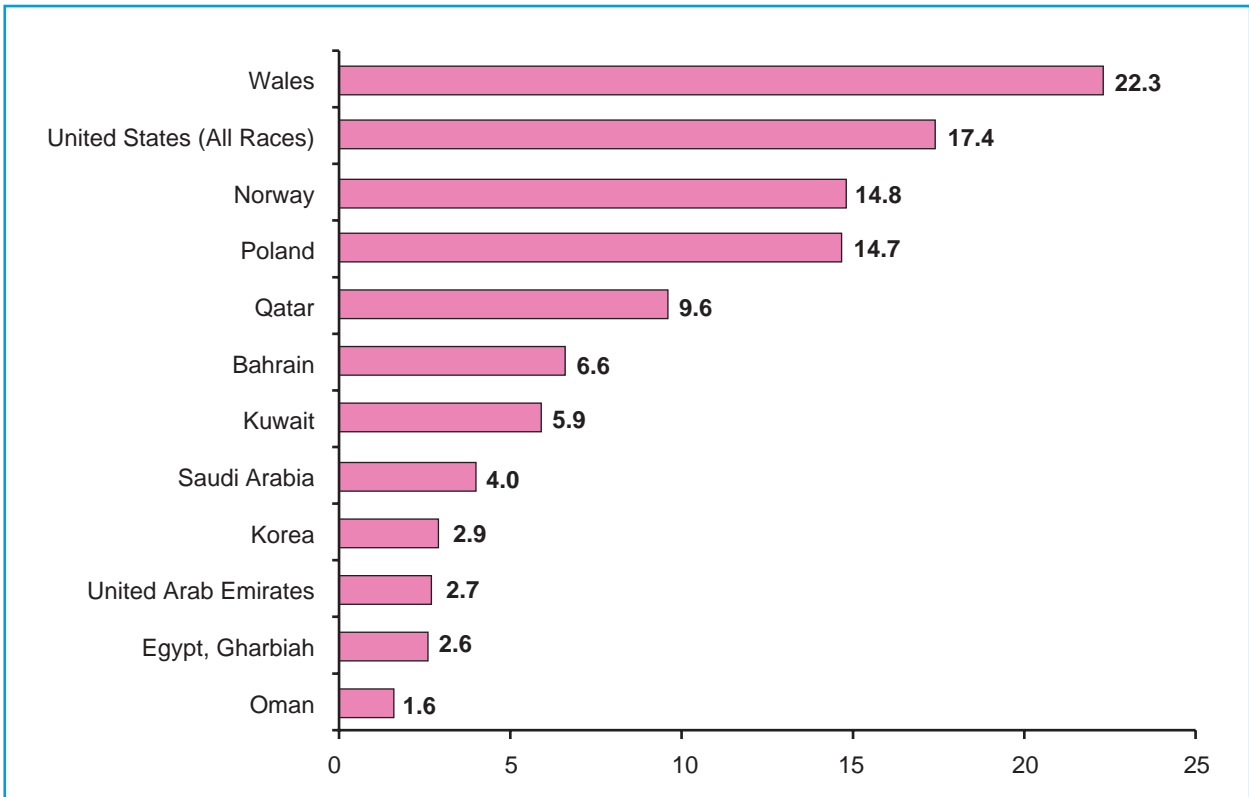


Figure 3.13.4 Comparison of ASR\* for Corpus uteri Cancer among Saudi Females with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

## Ovarian Cancer (C 56)

There were 149 cases of ovarian cancer among females accounting for 3.1% of all newly diagnosed cases among females (4,773) in year 2007. This cancer ranked seventh among female population. The ASR was 2.7/100,000 for females. The five

regions with the highest ASR were Jouf region at 4.8/100,000, Riyadh region at 3.7/100,000, Qassim region at 3.3/100,000, Tabuk region at 3.2/100,000, and Asir region at 3.1/100,000. The median age at diagnosis was 50 years (range 4-91 years).

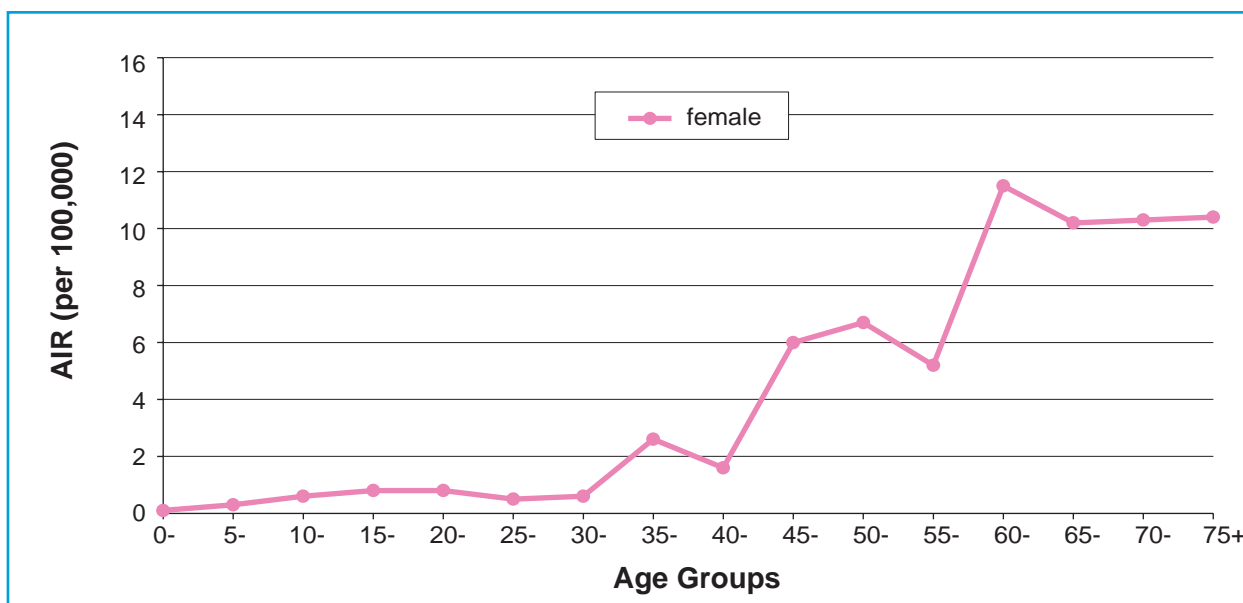


Figure 3.14.1 Age-Specific Incidence Rate (AIR) for Ovarian Cancer in Saudi Arabia, 2007

ICD-O-3 Code	Morphology	Female	%
8460	Papillary serous cystadenocarcinoma	33	22.0
8441	Serous cystadenocarcinoma, NOS	22	14.7
8140	Adenocarcinoma, NOS	18	12.0
9060	Dysgerminoma	10	6.7
8000	Neoplasm, malignant	9	6.0
8380	Endometrioid adenocarcinoma, NOS	8	5.3
8461	Serous surface papillary carcinoma	8	5.3
8010	Carcinoma, NOS	7	4.7
8470	Mucinous cystadenocarcinoma, NOS	7	4.7
9080	Teratoma, malignant, NOS	6	4.0
8480	Mucinous adenocarcinoma	4	2.7
8620	Granulosa cell tumor, malignant	2	1.3
9071	Yolk sac tumor	2	1.3
	Others	13	9.3

Table 3.14.1 Morphological Distribution of Ovarian Cancer in Saudi Arabia, 2007

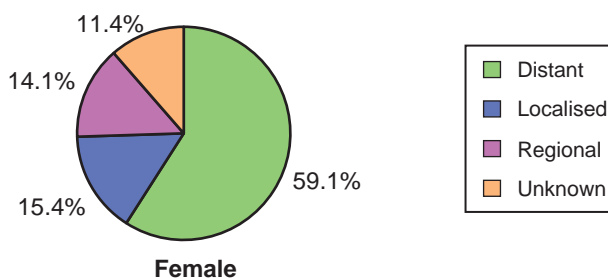


Figure 3.14.2 Stage Distribution of Ovarian Cancer, 2007

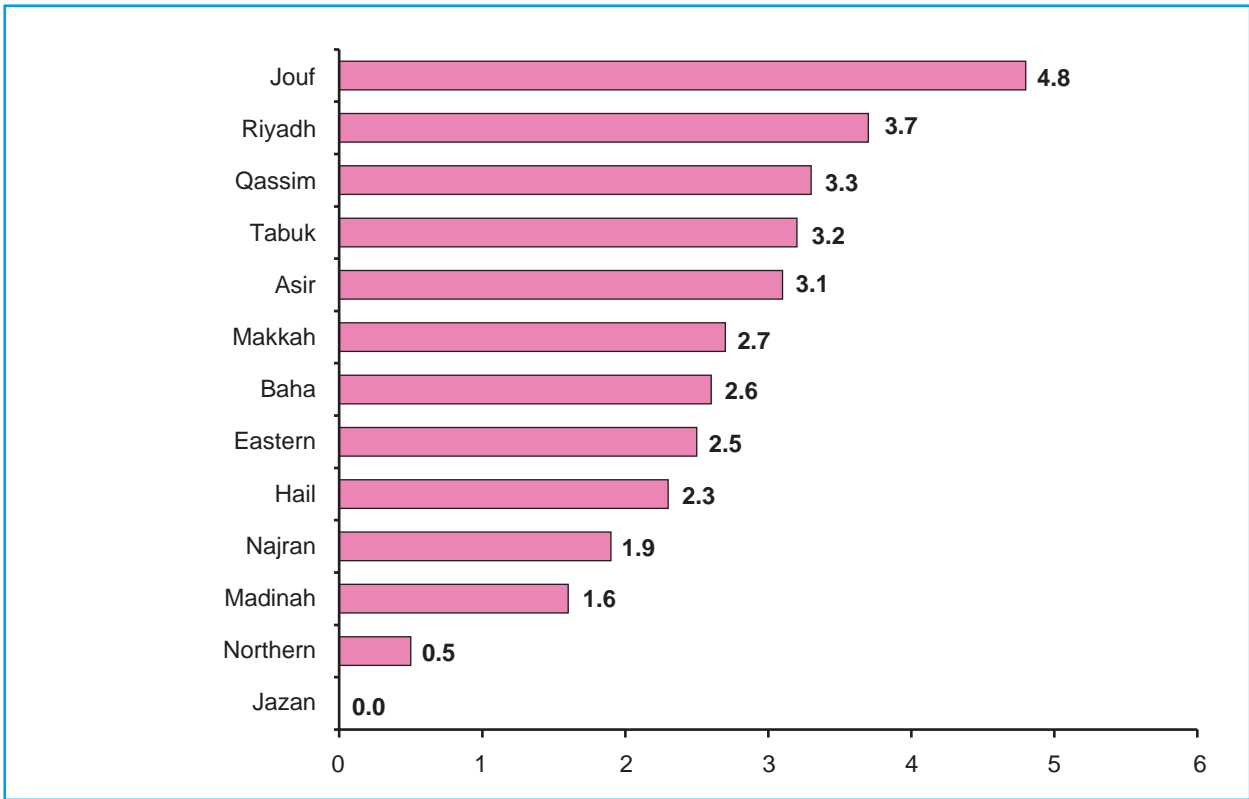


Figure 3.14.3 ASR\* Regional Distribution of Ovarian Cancer in Saudi Arabia, 2007

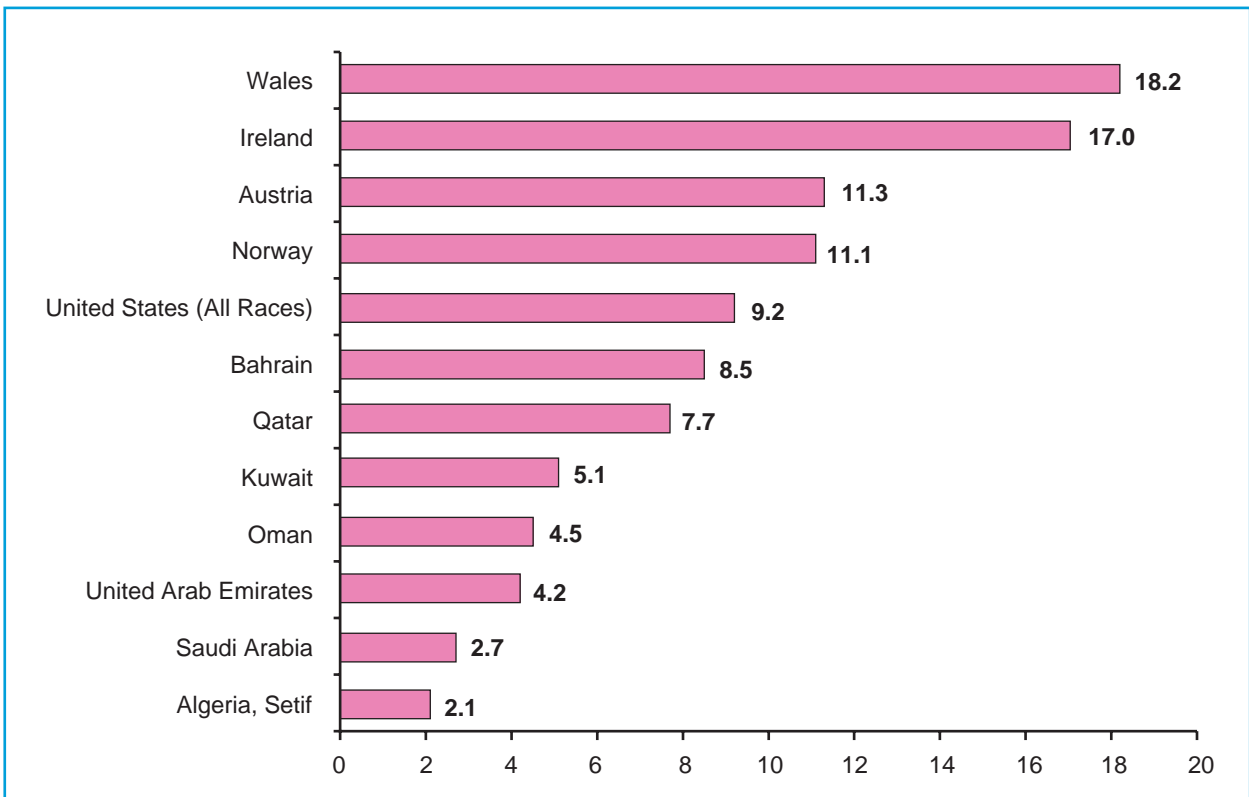


Figure 3.14.4 Comparison of ASR\* for Ovarian Cancer among Saudi Females with ASR in Selected Countries\*\*

\* ASR Per 100,000

\*\* Source for this information is summarized on page 64

**\*\* Sources:**

- 1 Surveillance Epidemiology and End Results (SEER Cancer Statistics Review 1975-2007) Available from:  
[http://seer.cancer.gov/csr/1975\\_2007/browse\\_csr.php?section=19&page=sect\\_19\\_table.07.html](http://seer.cancer.gov/csr/1975_2007/browse_csr.php?section=19&page=sect_19_table.07.html)
- 2 Cancer in Ireland 1994-2007, Annual Report of the National Cancer Registry  
[http://www.ncri.ie/pubs/pubfiles/summary\\_report\\_19942007.pdf](http://www.ncri.ie/pubs/pubfiles/summary_report_19942007.pdf)
- 3 Cancer Incidence in Jordan, 2007  
[http://www.moh.gov.jo/MOH/Files/Publication/MINISTRY%20OF%20HEALTH\\_1.pdf](http://www.moh.gov.jo/MOH/Files/Publication/MINISTRY%20OF%20HEALTH_1.pdf)
- 4 Descriptive Epidemiology Group, IARC. GLOBOCAN 2002. Available from:  
<http://www-dep.iarc.fr/>
- 5 Cancer Incidence, Mortality, Survival and Prevalence in Norway. Cancer in Norway, 2007.
- 6 Eight Year Cancer Incidence among Nationals of the GCC States 1998-2005..
- 7 Cancer Incidence in Five Continents Vol. VIII, IARC



# **PART IV**

**5-YEARS SURVIVAL FOR SPECIFIC CANCER SITES  
AMONG SAUDIS, 1994-2004**



# 5-Years Survival for Specific Cancer Sites among Saudis, 1994-2004.

## Background

Saudi Cancer Registry (SCR) is a population based registry collecting incidence data of cancer on a routine basis from all the 13 administrative regions in Saudi Arabia. Between 1994 and 2004, there were 88,574 cancer cases reported to the SCR. Cancers affected 46,464 males and 42,110 females. Of all cases, cancer affected 65,873 Saudis; 34,004 males and 31,869 females.

Meanwhile, SCR doesn't have a direct access to Saudi vital statistics. SCR have started collection of death certificates for cancer cases from 2005 onward. Data for the period 1994-2004 is less available.

The SCR database available from 1994-2004 were analyzed to describe patterns of survival for cancer-specific sites in Saudi males and females population for the fourteenth most common cancers;

Breast, Colo-rectal, Non Hodgkin Lymphoma (NHL), Thyroid, Leukemia, Liver, Lung, Hodgkin Disease, Stomach, Skin, Prostate, Urinary Bladder, Corpus Uteri, and Ovary.

## Study Populations and Data Sources:

Cancer-specific survival rate was analyzed for 5,141 eligible Saudi patients who are diagnosed between the years 1994 to 2004. We selected the 14 specific cancer sites according to the most common cancers among Saudi men and women in 2007 data.

## Method:

In order to calculate the 5-Years survival, SCR collaborated with the National Information Center (NIC), Ministry of Interior through Al-Elm Information Security Company, Al-Elm company benefits from the huge government databases throughout accessing the NIC. Al-Elm company service is to verify vital status of cancer patients according to the ten-digit Saudi National Identity Number.

A total of 15,484 patients list was submitted to Al-Elm company. Their selection was based on the availability of their 10-digit ID number.

Only patients where the 10-digit national ID number matched their complete four names in Arabic were analyzed by Al-Elm company. Based on the above, Al-Elm company provided SCR with patient's living vital status (a live or dead), and date of death (in Hijrah Calendar) if dead. Date of death was then converted to the Gregorian calendar.

Survival period was then calculated from date of diagnosis to date of death or last follow up. Since date of last follow up is not known, patients who are a live according to the national information centre were censored at the date of the Al-Elm company report.

Kaplan-Meier estimator was then used to calculate the 5-Years Overall Survival (OS), the 5-Years OS stratified by the sex, and by the periods: 1994-1999 vs 2000-2004 for each specific cancer site. Calculation adjusted upon batches received from Al-Elm company on 21/03/2010 and 24/06/2010.

## Results:

Out of 15,484 case, Al-Elm company were able to match 5,141 patients whose names in Arabic correlated exactly with the 10-digit national ID number; there were 2,566 males (49.9%) and 2,575 females (50.1%). Table 4.1 shows number of each specific cancer by sex, Table 4.2 illustrates patients' life status by sex. Table 4.3 lists 5-years stratification by sex and years' periods. Table 4.4 shows percentage distribution of the clinical stages of each specific cancer. Table 4.5 compares the Saudi Arabian 5-years OS with SEER data by the periods and sex.

Moreover, for each specific cancer, we presented three Kaplan-Meier Survival Curves; one the group as a whole, one by sex, and final one by time period 1994-1999 and 2000-2004.

Site	Male	%	Female	%	Total
Breast	16	2.0	792	98.0	808
Leukemia	388	64.1	217	35.9	605
NHL	395	66.9	195	33.1	590
Colo-rectal	363	66.1	186	33.9	549
Liver	267	80.7	64	19.3	331
Lung	40	14.0	245	86.0	285
Ovary	–	–	114	100.0	114
Thyroid	163	27.3	435	72.7	598
Stomach	155	79.5	40	20.5	195
Hodgkin Disease	252	64.9	136	35.1	388
Skin	126	70.0	54	30.0	180
Bladder	230	86.1	37	13.9	267
Corpus Uteri	–	–	60	100.0	60
Prostate	171	100.0	–	–	171
<b>Total</b>	<b>2566</b>	<b>49.9</b>	<b>2575</b>	<b>50.1</b>	<b>5141</b>

Table 4.1 Number of cases by sex, 1994-2004

Sites	All			Alive			Dead		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
All 14 Cancer Sites	2566	2575	5141	1091	1466	2557	1680	904	2584

Table 4.2 Patients Live Status by sex, 1994-2004

Site	5-Years OS 1994-2004	5-Years OS 1994-2004 by sex		5-Years OS stratification by years periods	
	All	Male	Female	1994-1999	2000-2004
Breast	64.9	56.3	64.4	66.4	63.1
Colo-retal	44.6	41	50.6	44.7	44.3
NHL	56.7	54.9	60.5	51.7	58.9
Thyroid	90	76	95.4	91.2	89
Leukemia	60	60.3	61.3	59.4	64
Liver	10	6.7	21.6	14.5	8.6
Lung	9	7.7	15.8	13.8	6.5
Hodgkin Disease	84.5	83.3	86.8	86.8	83.5
Stomach	20	17.4	30	22.8	18.8
Prostate	39.8	39.8	–	37	41
Bladder	44	42.2	54	44.7	43.4
Corpus Uteri	74.5	–	74.5	66.7	76.3
Ovary	49.5	–	49.5	46.7	47

Table 4.3 5-Years OS by sex

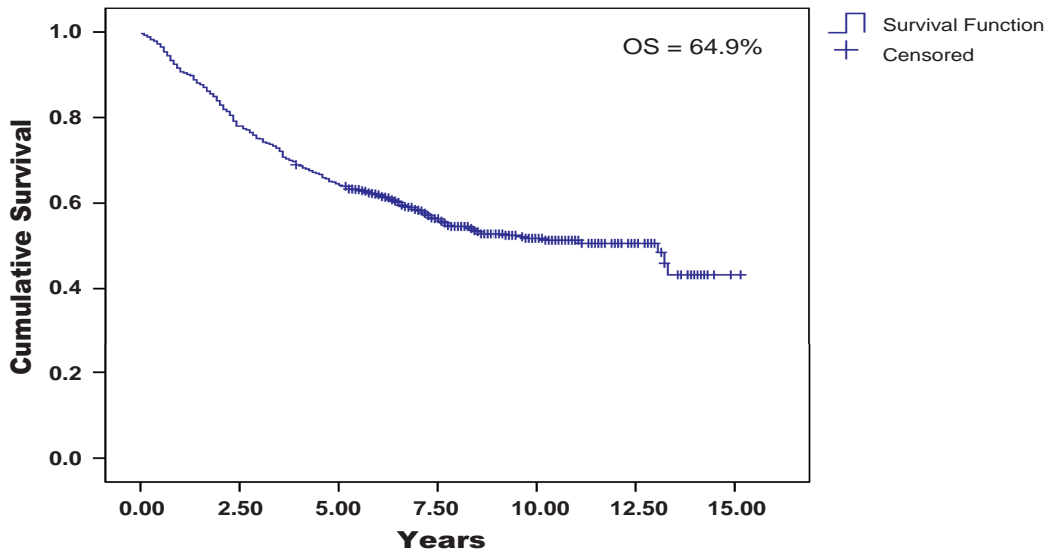
Site	In situ	%	Localized	%	Regional	%	Distant	%	Unknown	%	Total
Breast	1	0.1	175	21.7	449	55.6	119	14.7	64	7.9	808
Colo-rectal	0	0.0	122	22.2	260	47.4	142	25.9	25	4.6	549
NHL	0	0.0	122	20.7	140	23.7	249	42.2	79	13.4	590
Thyroid	0	0.0	246	41.1	246	41.1	56	9.4	50	8.4	598
Leukemia	0	0.0	0	0.0	0	0.0	604	99.8	1	0.2	605
Liver	0	0.0	85	25.7	44	13.3	105	31.7	97	29.3	331
Lung	0	0.0	31	10.9	70	24.6	149	52.3	35	12.3	285
Hodgkin Disease	0	0.0	75	19.3	126	32.5	163	42.0	24	6.2	388
Stomach	0	0.0	27	13.8	90	46.2	54	27.7	24	12.3	195
Prostate	0	0.0	61	35.7	20	11.7	61	35.7	29	17.0	171
Bladder	0	0.00	129	48.3	49	18.4	48	18.0	41	15.4	267
Corpus Uteri	0	0.0	38	63.3	19	31.7	2	3.3	1	1.7	60
Ovary	0	0.0	27	23.7	18	15.8	59	51.8	10	8.8	114
<b>Total</b>	<b>1</b>	<b>0.0</b>	<b>1249</b>	<b>24.3</b>	<b>1553</b>	<b>30.2</b>	<b>1822</b>	<b>35.4</b>	<b>516</b>	<b>10.0</b>	<b>5141</b>

Table 4.4 Stage Distribution by site, 1994-2004

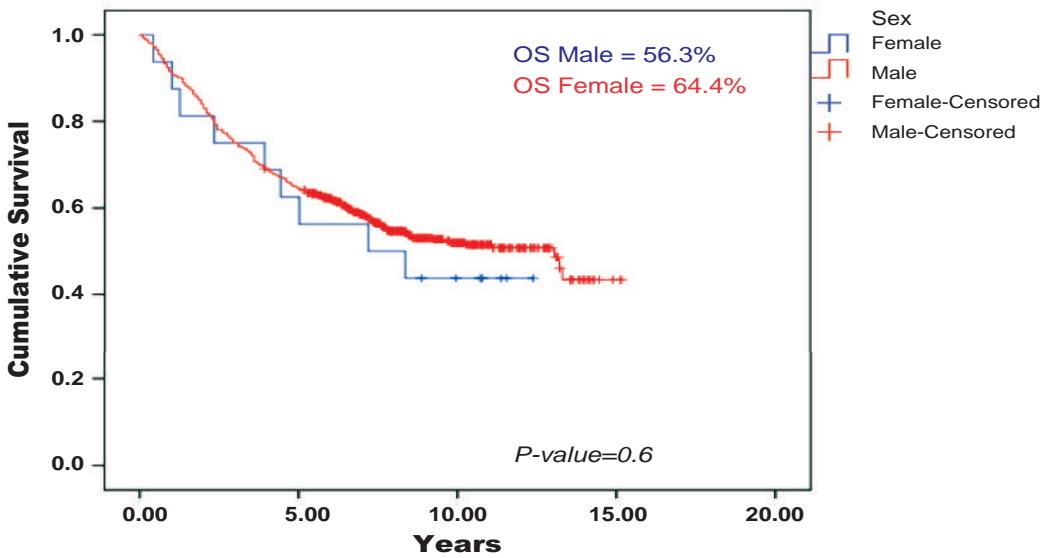
Site	KSA 5-Years OS 1994-2004	SEER 5-Years OS 1999-2006	5-Years OS 1994-2004 by sex		SEER 5-Years OS 1999-2006 by sex	
	All	All	Male	Female	Male	Female
Breast	64.9	89	56.3	64.4	86	89
Colo-rectal	44.6	65	41	50.6	65.1	64.9
NHL	56.7	67.4	54.9	60.5	65.4	69.6
Thyroid	90	97.3	76	95.4	94.4	98
Leukemia	60	54.1	60.3	61.3	54.3	53.8
Liver	10	14.6	6.7	21.6	14.3	15.5
Lung	9	15.8	7.7	15.8	13.5	18.3
Hodgkin Disease	84.5	84.7	83.3	86.8	83	86.6
Stomach	20	26	17.4	30	24.1	28.8
Prostate	39.8	99.1	39.8	–	98.7	–
Bladder	44	79.3	42.2	54	80.7	75.1
Corpus Uteri	74.5	83.8	–	74.5	83.8	–
Ovary	49.5	45.6	–	49.5	45.5	–

Table 4.5 KSA and SEER, 5-Years OS Comparison

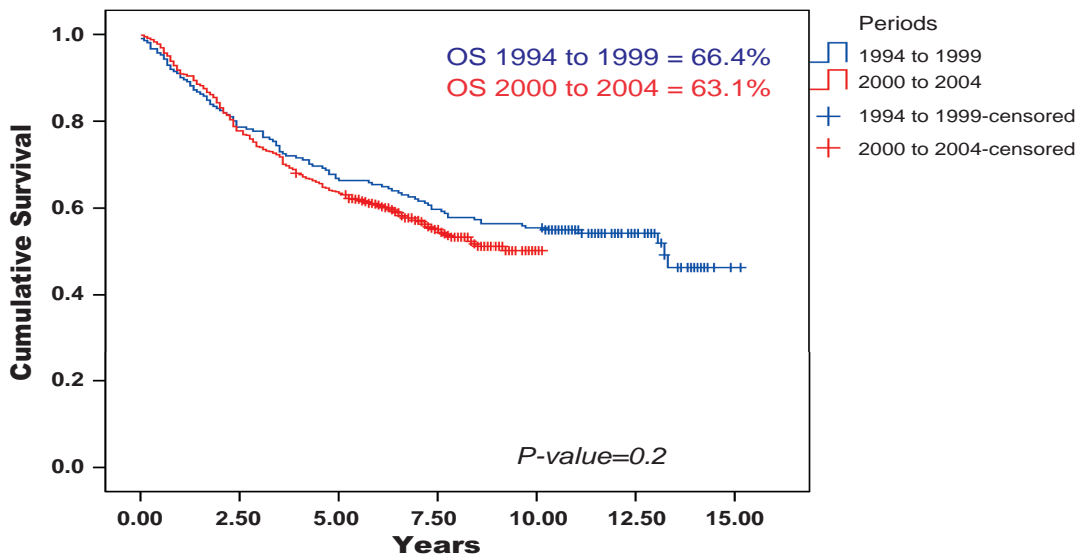
# Breast



5-Years OS for Breast Cancer

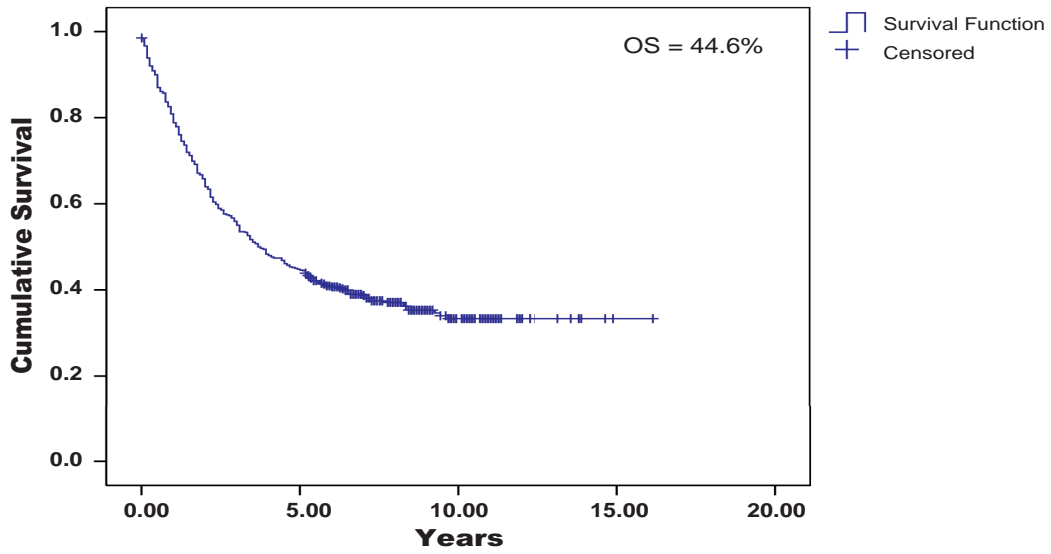


5-Years OS for Breast Cancer Stratified by Sex

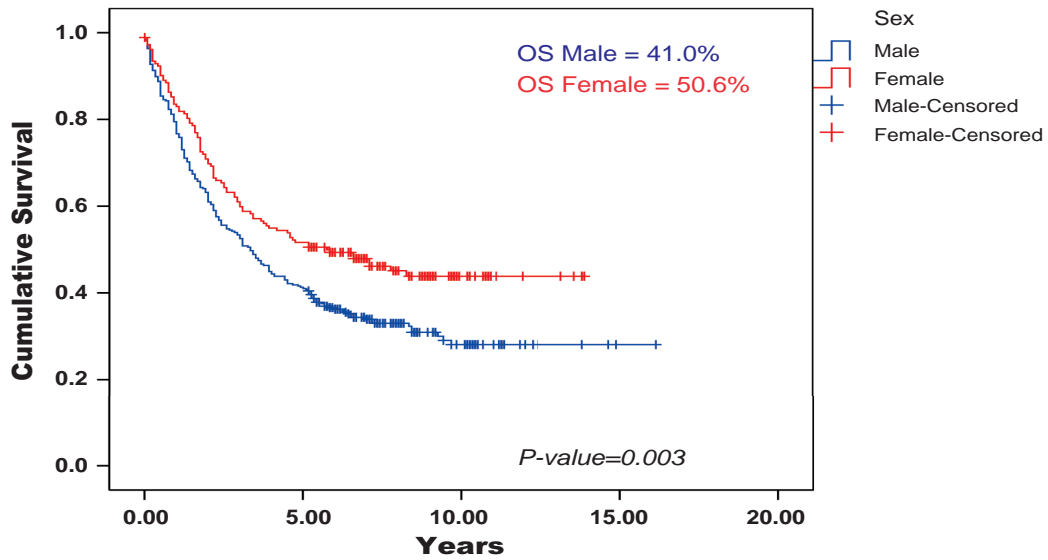


5-Years OS for Breast Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

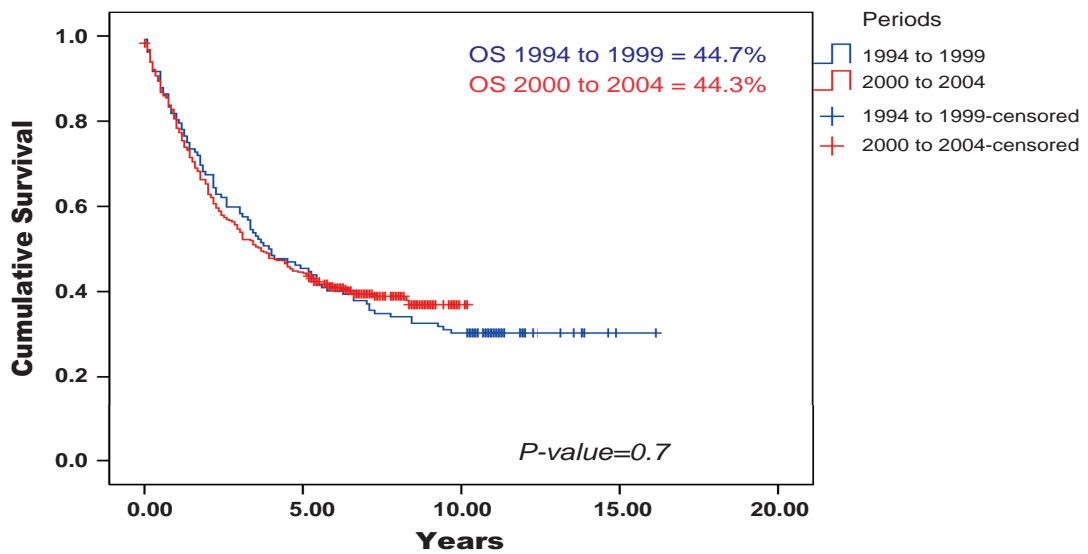
# Colo-rectal



5-Years OS for Colo-rectal Cancer

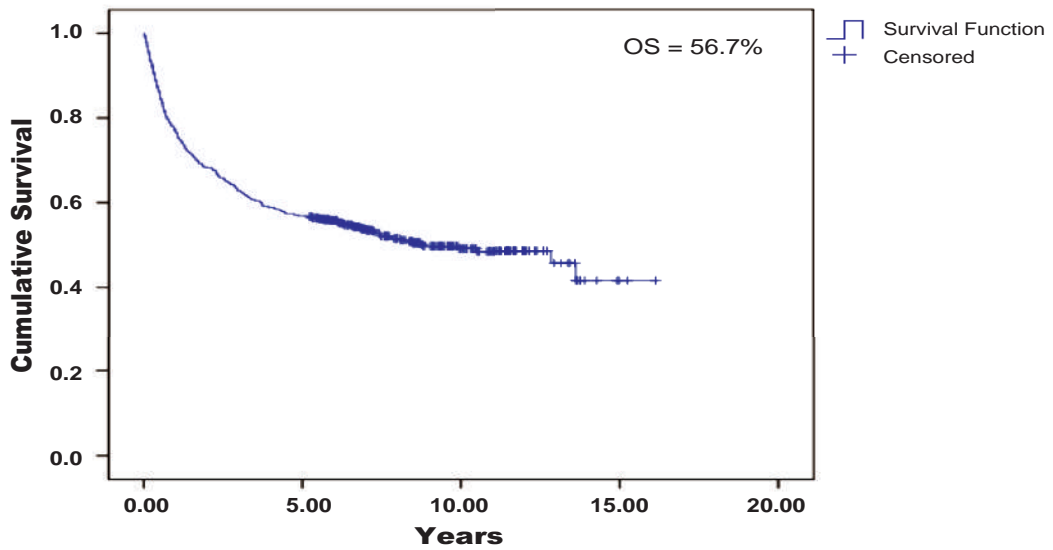


5-Years OS for Colo-rectal Cancer Stratified by Sex

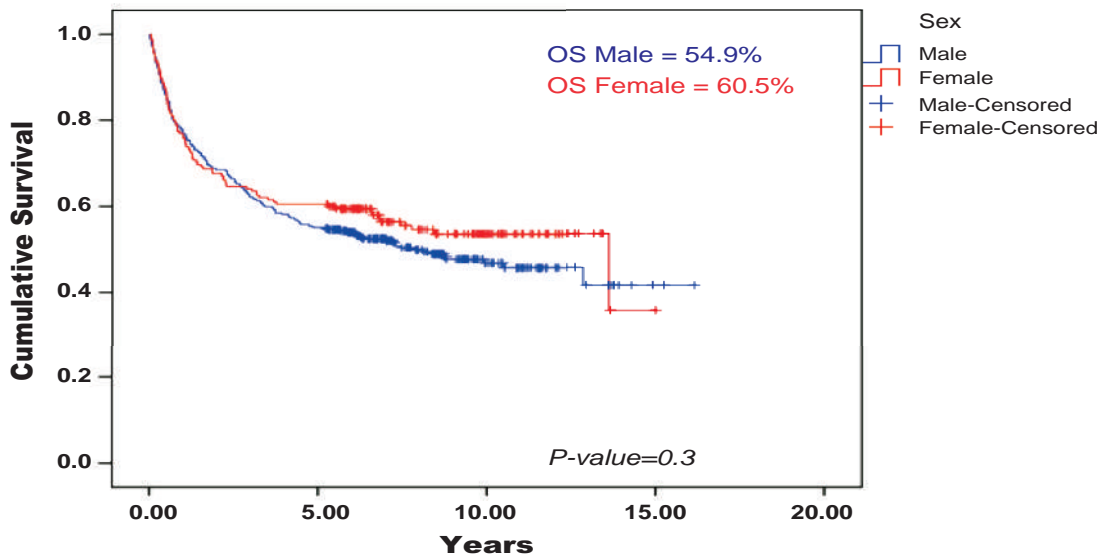


5-Years OS for Colo-rectal Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

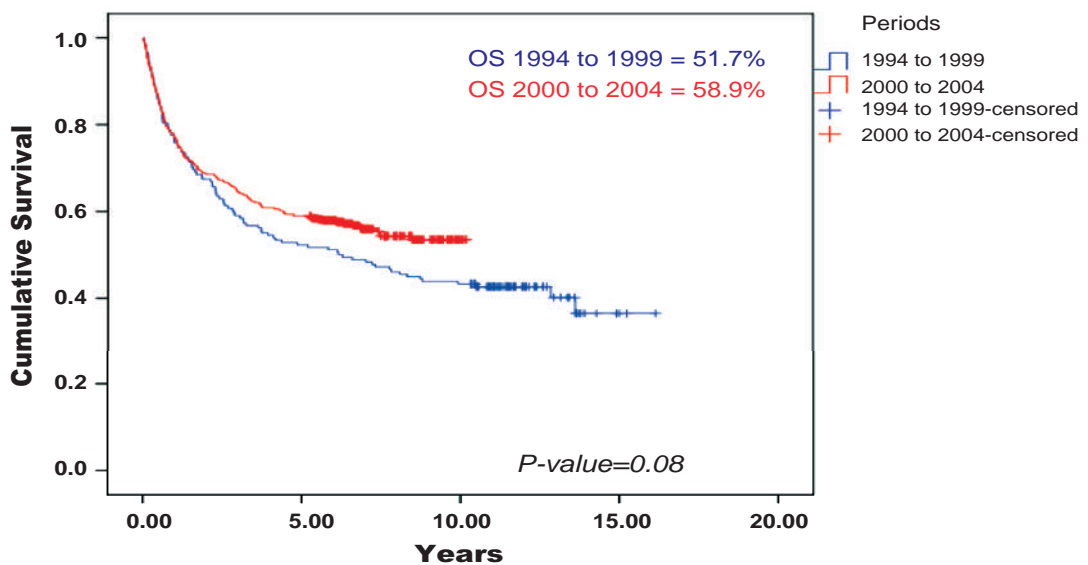
# Non Hodgkin Lymphoma



5-Years OS for NHL Cancer



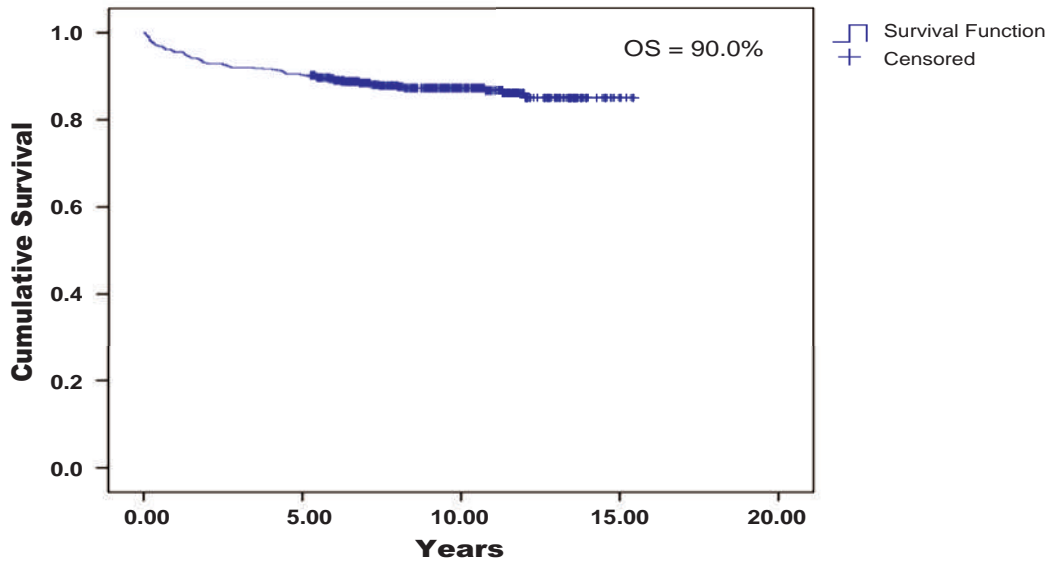
5-Years OS for NHL Cancer Stratified by Sex



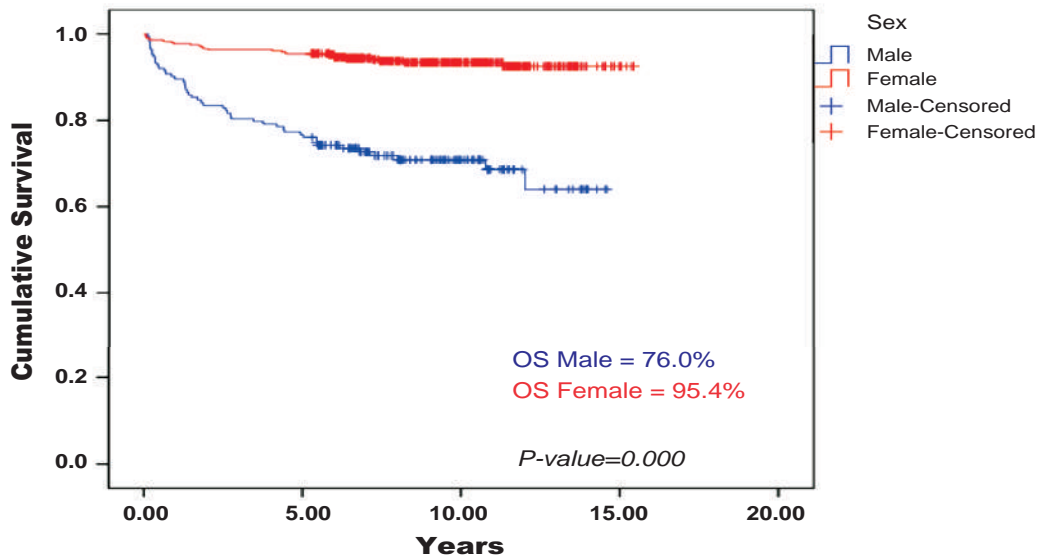
5-Years OS for NHL Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004



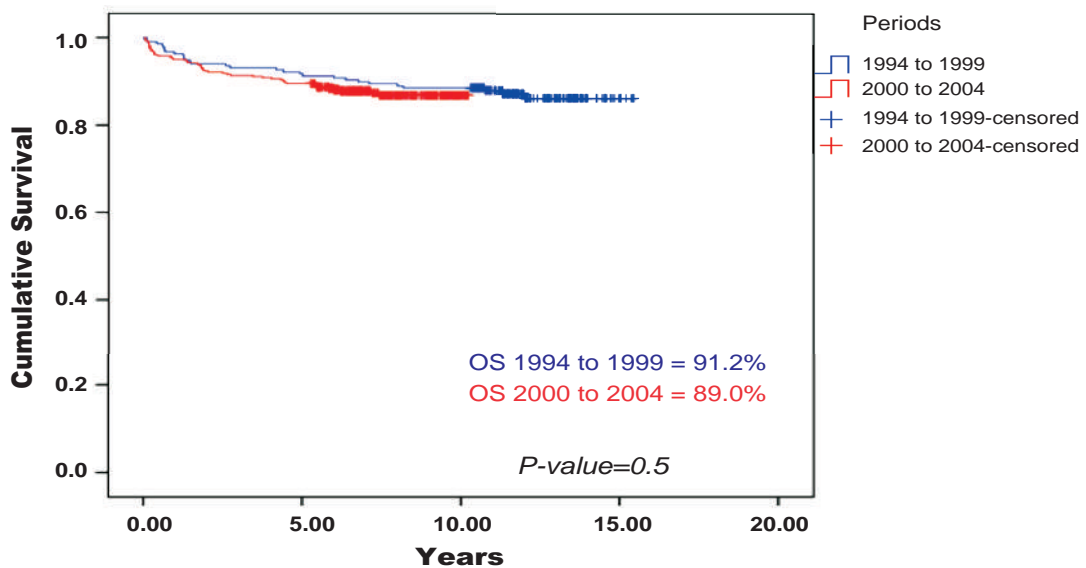
# Thyroid



5-Years OS for Thyroid Cancer

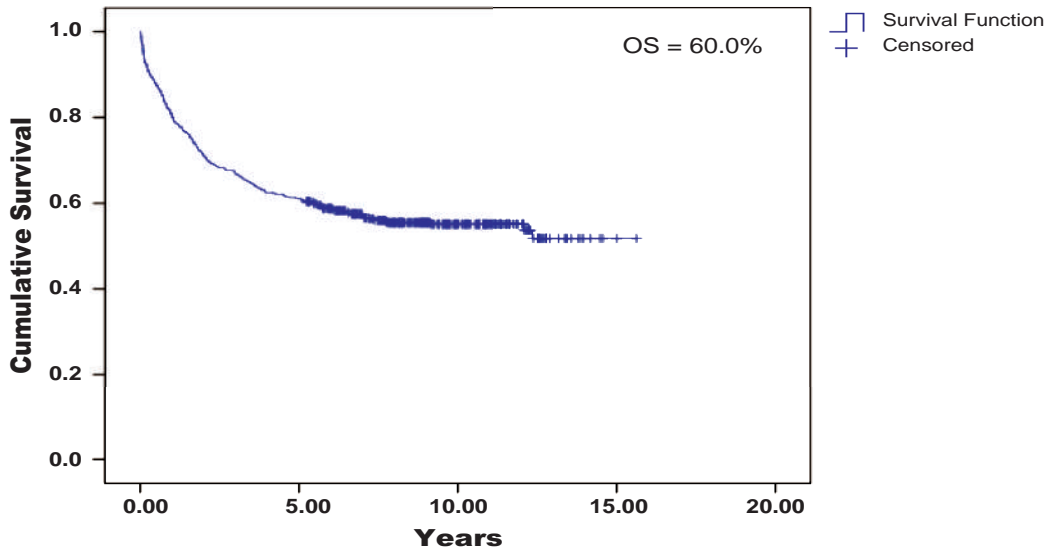


5-Years OS for Thyroid Cancer Stratified by Sex

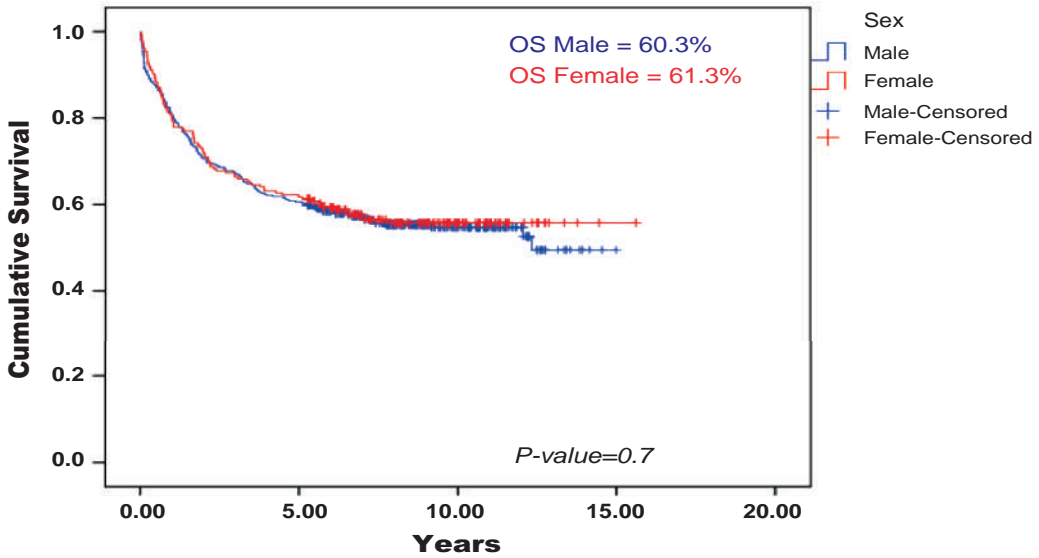


5-Years OS for Thyroid Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

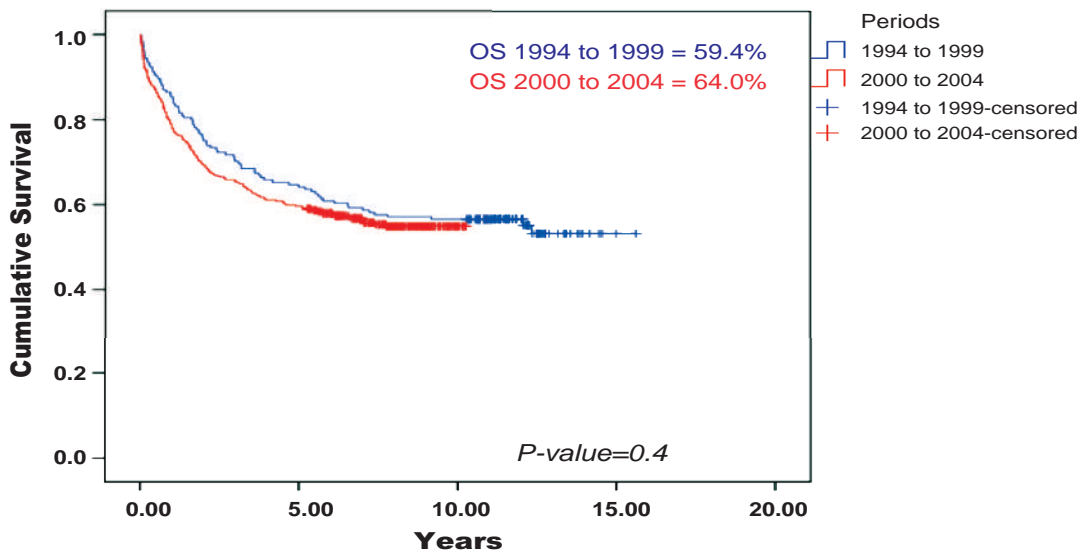
# Leukemia



5-Years OS for Leukemia Cancer

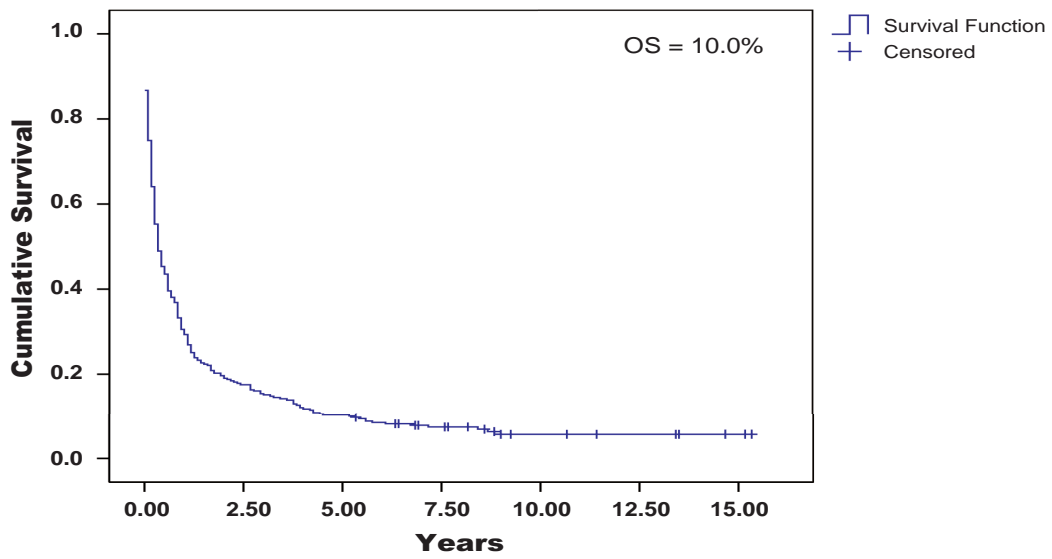


5-Years OS for Leukemia Cancer Stratified by Sex

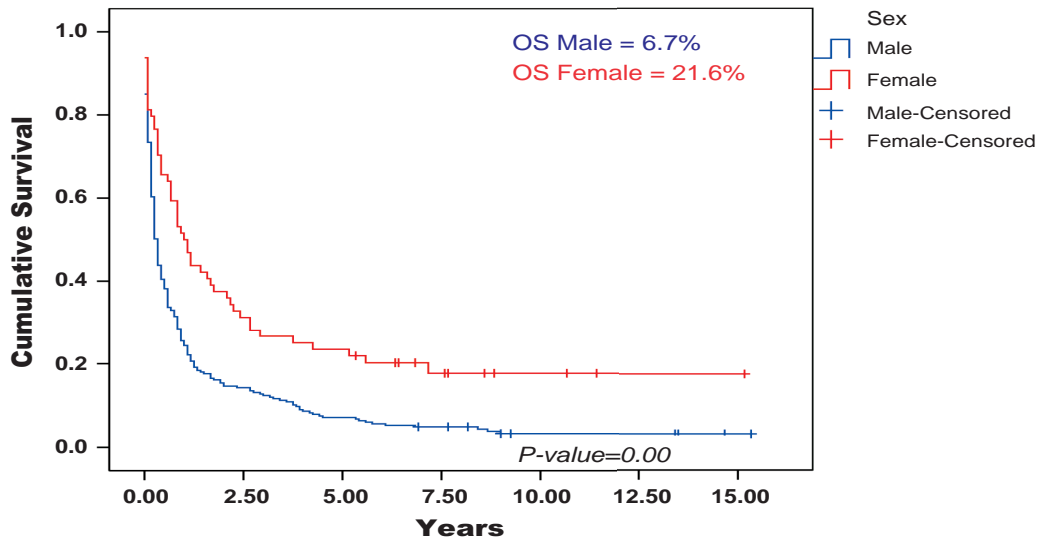


5-Years OS for Leukemia Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

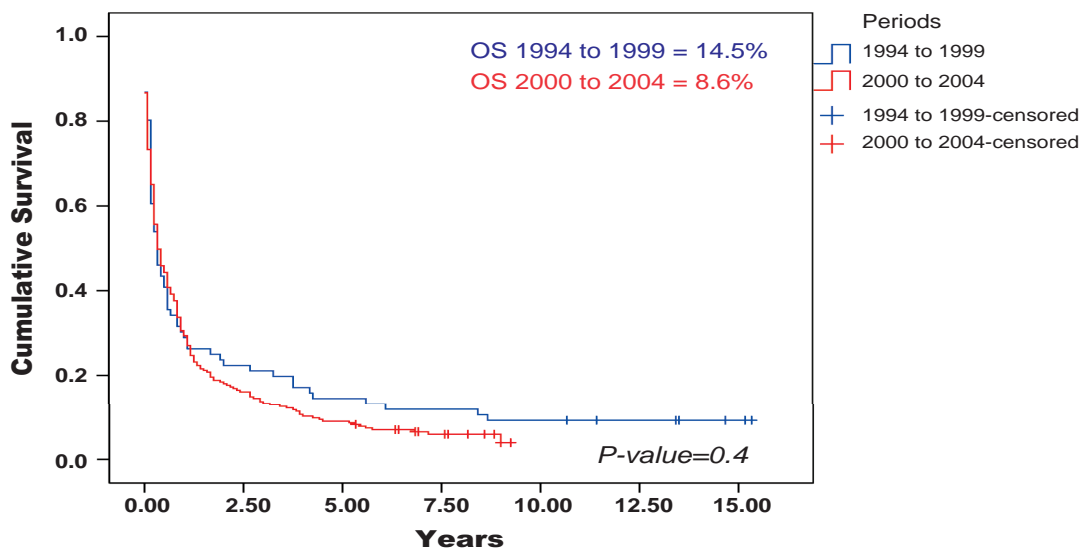
# Liver



5-Years OS for Liver Cancer

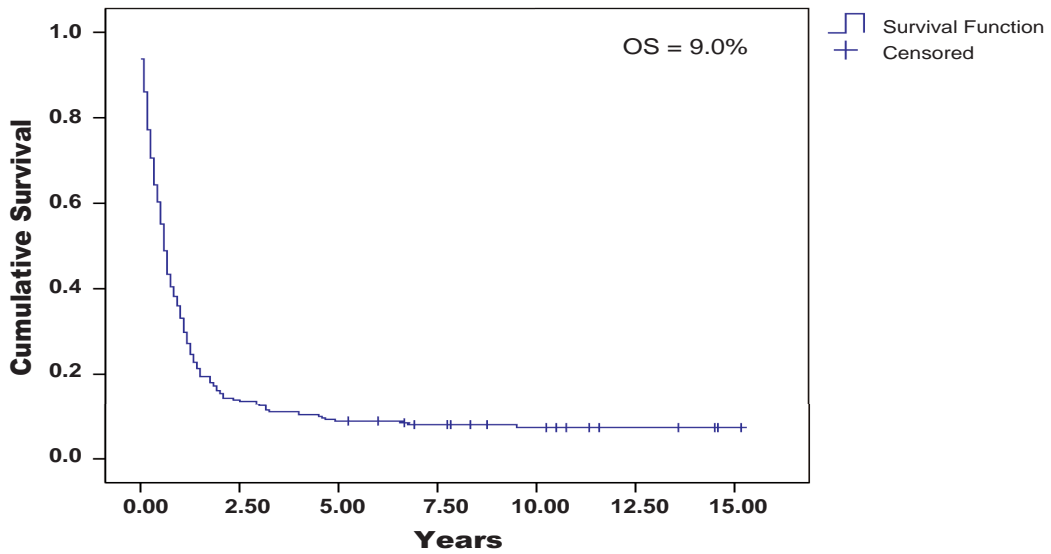


5-Years OS for Liver Cancer Stratified by Sex

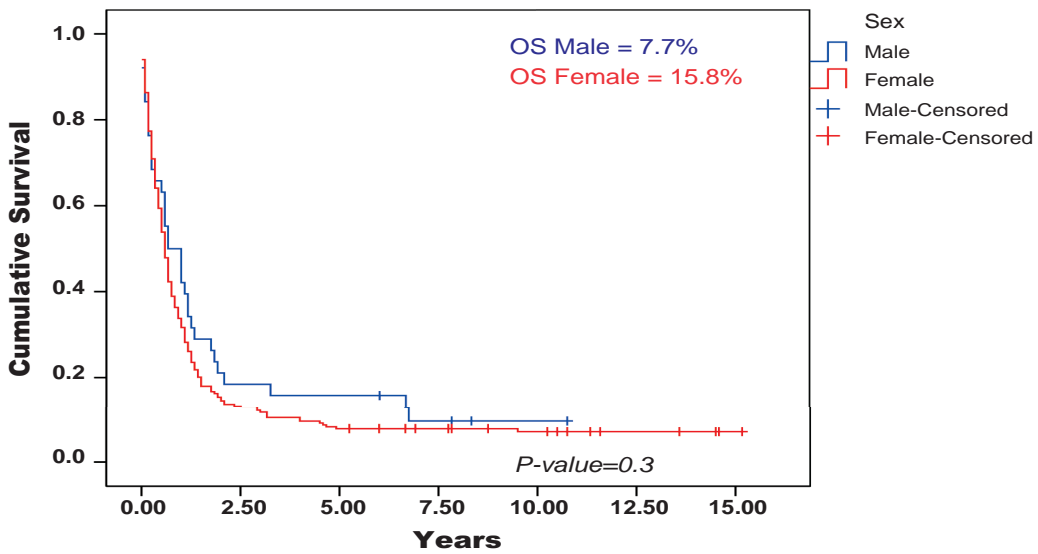


5-Years OS for Liver Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

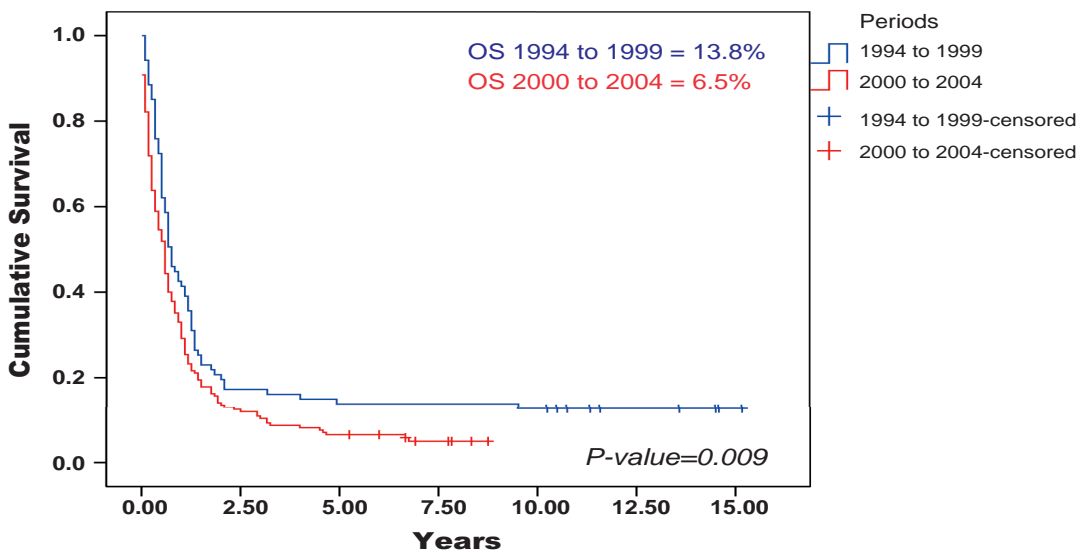
# Lung



5-Years OS for Lung Cancer

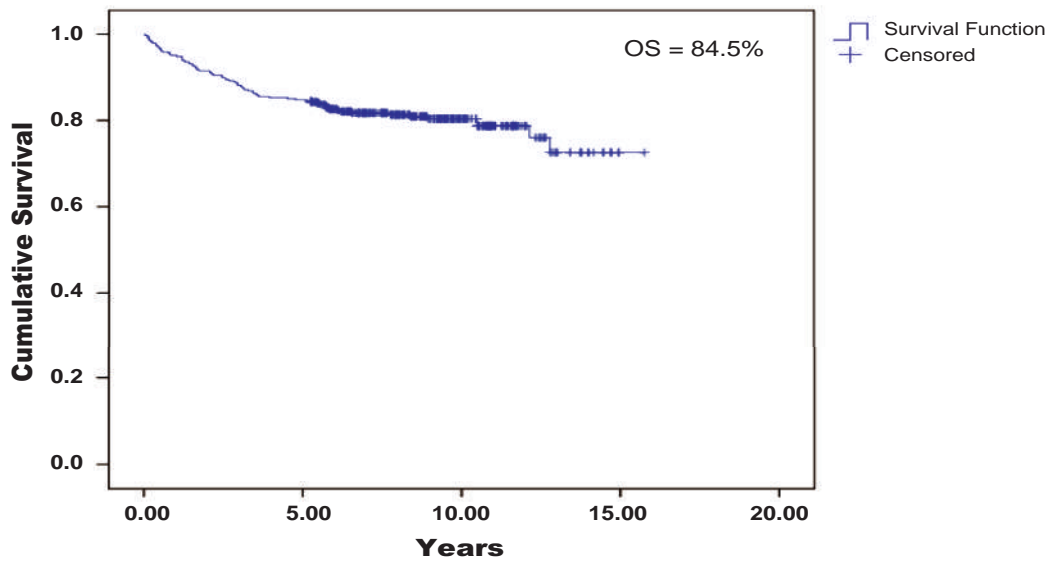


5-Years OS for Lung Cancer Stratified by Sex

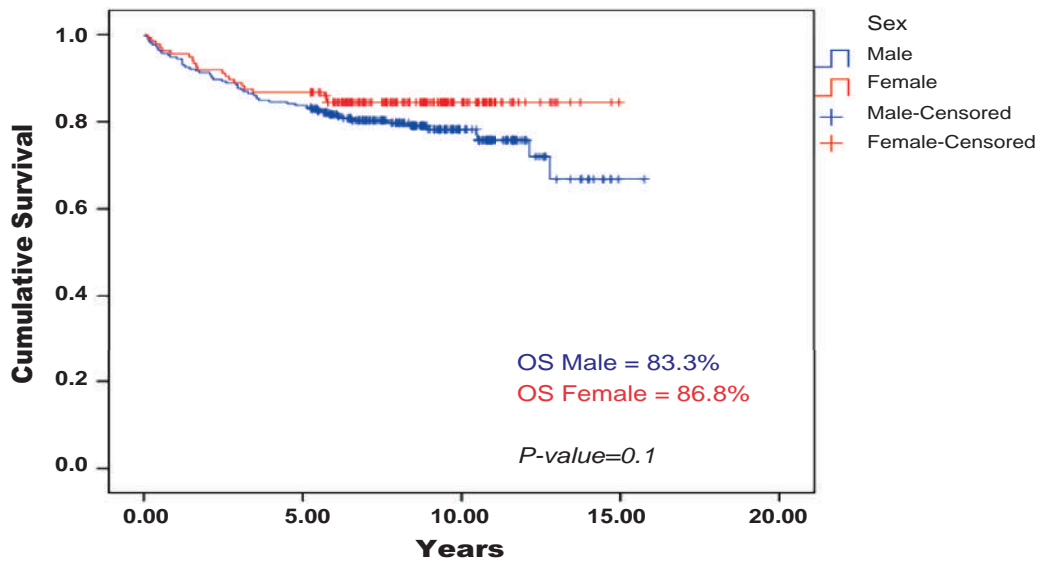


5-Years OS for Lung Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

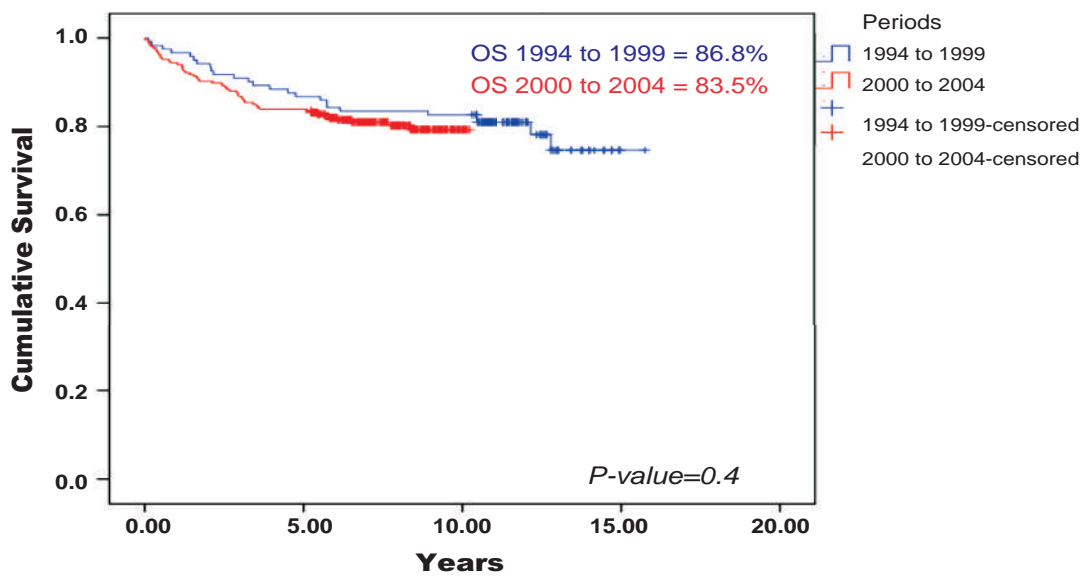
# Hodgkin disease



5-Years OS for Hodgkin disease Cancer

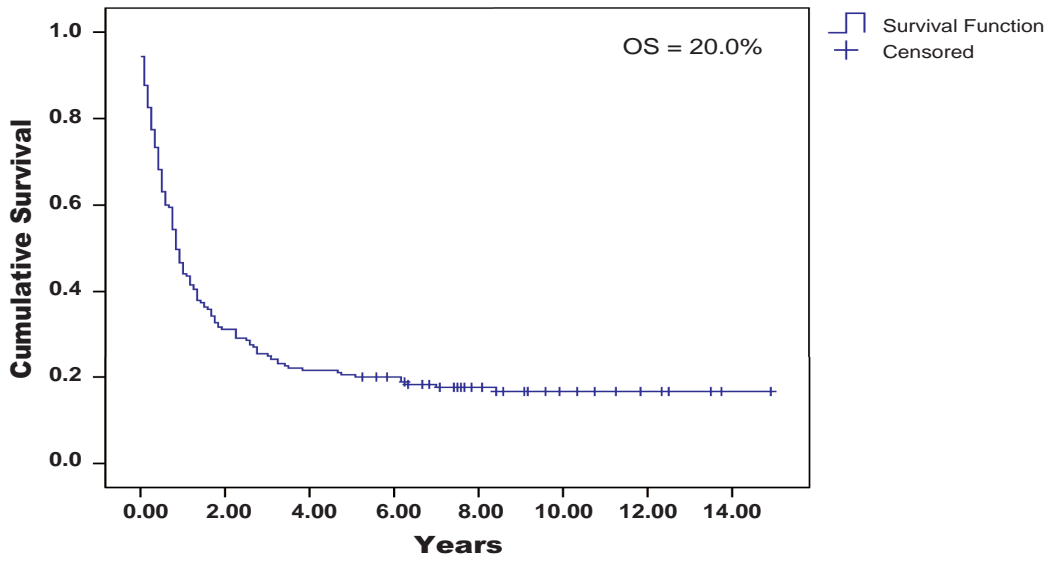


5-Years OS for Hodgkin disease Cancer Stratified by Sex

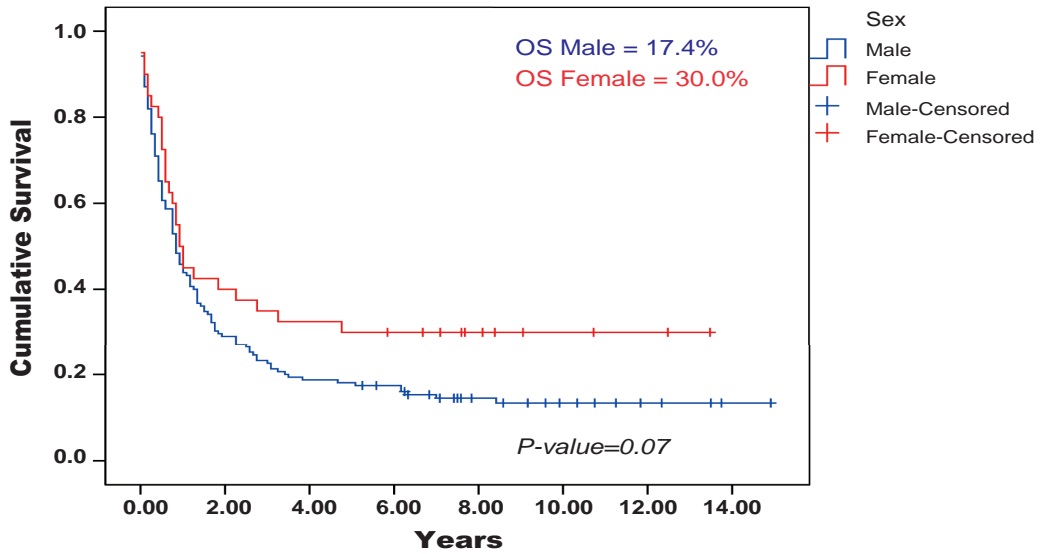


5-Years OS for Hodgkin disease Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

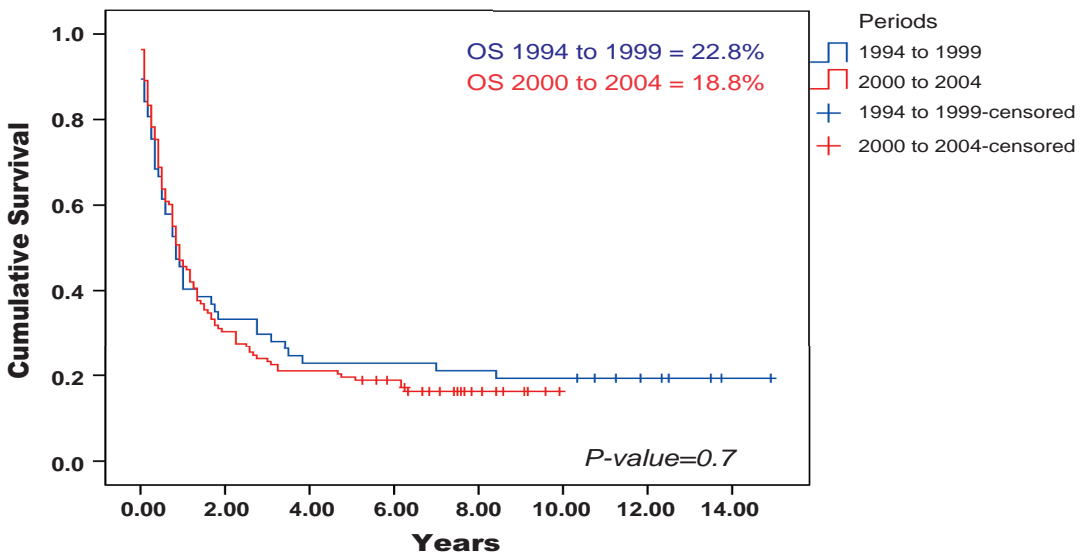
# Stomach



5-Years OS for Stomach Cancer

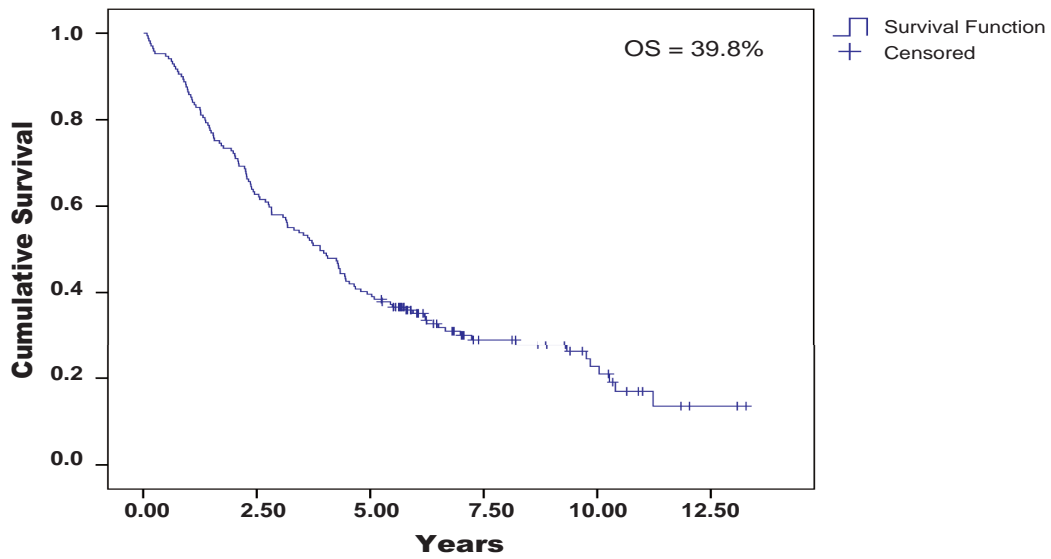


5-Years OS for Stomach Cancer Stratified by Sex

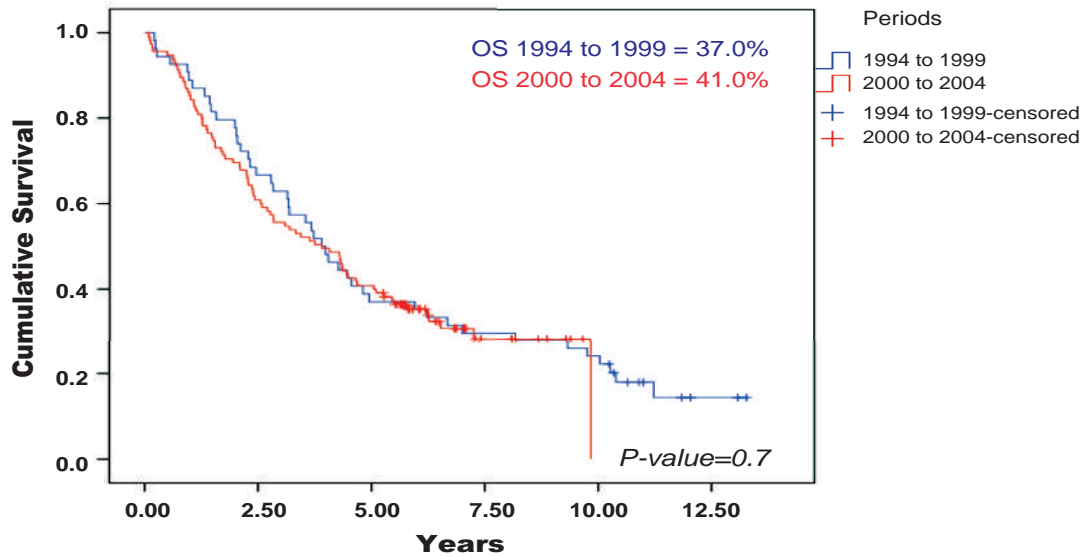


5-Years OS for Stomach Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

# Prostate

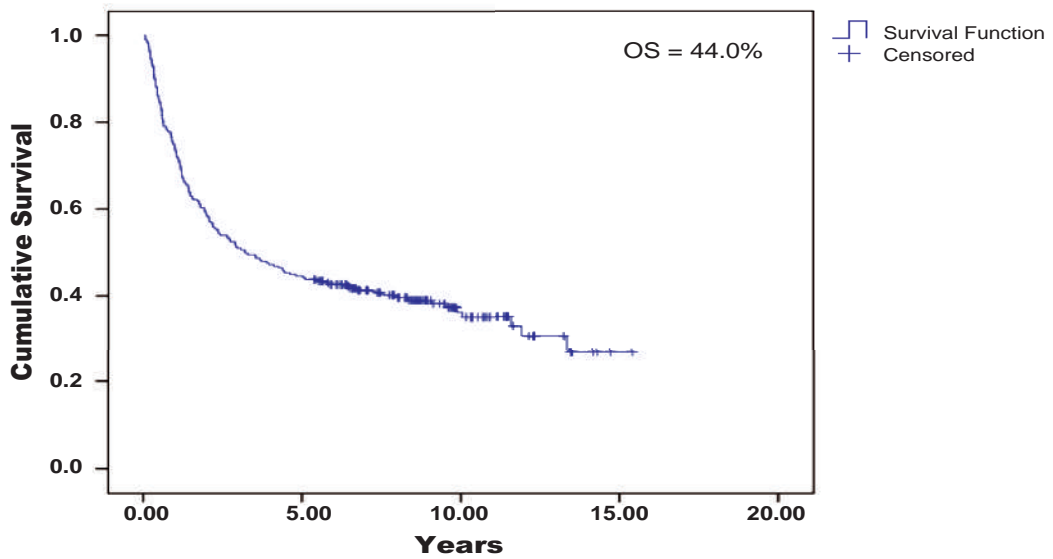


## 5-Years OS for Prostate Cancer

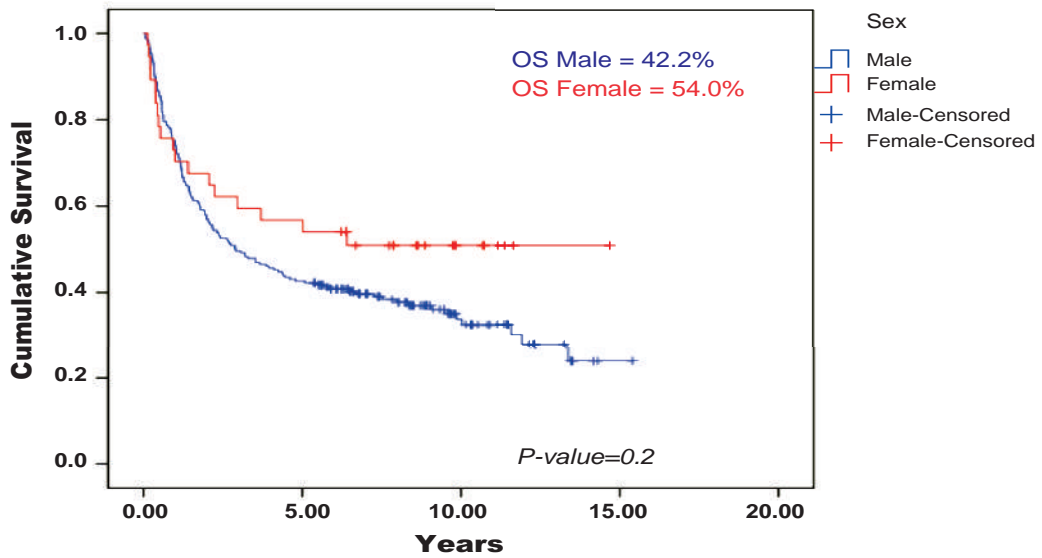


## 5-Years OS for Prostate Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

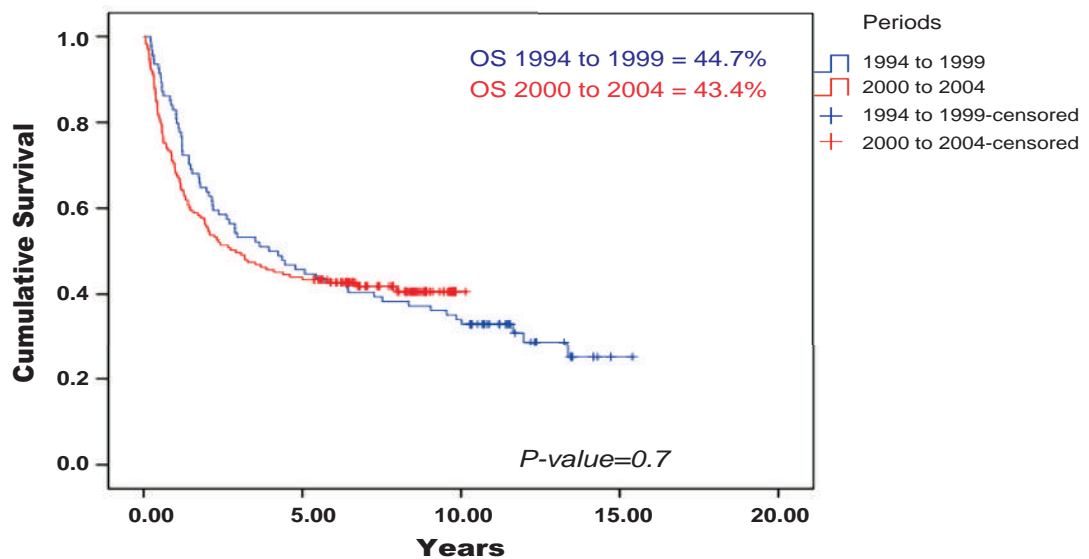
# Bladder



5-Years OS for Bladder Cancer



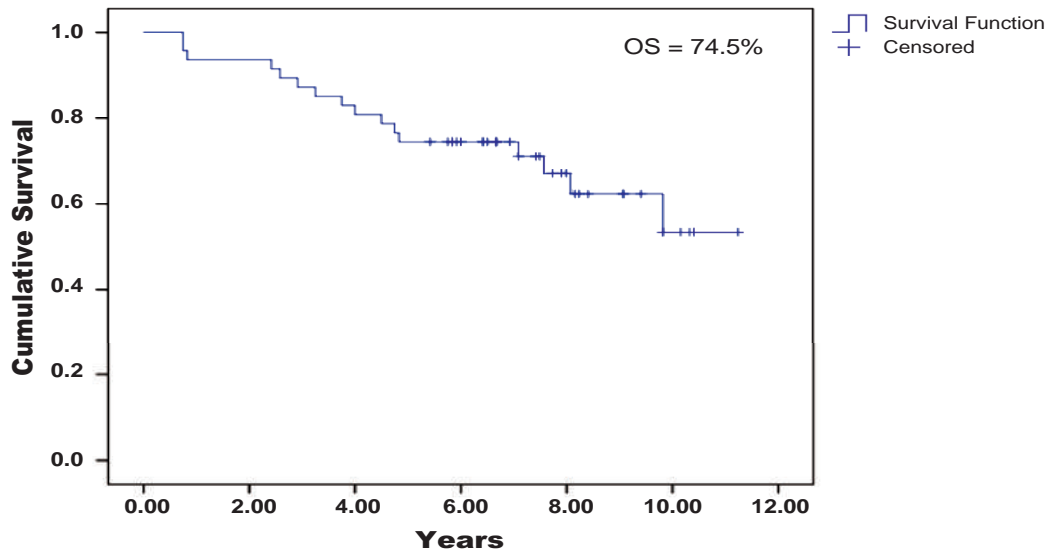
5-Years OS for Bladder Cancer Stratified by Sex



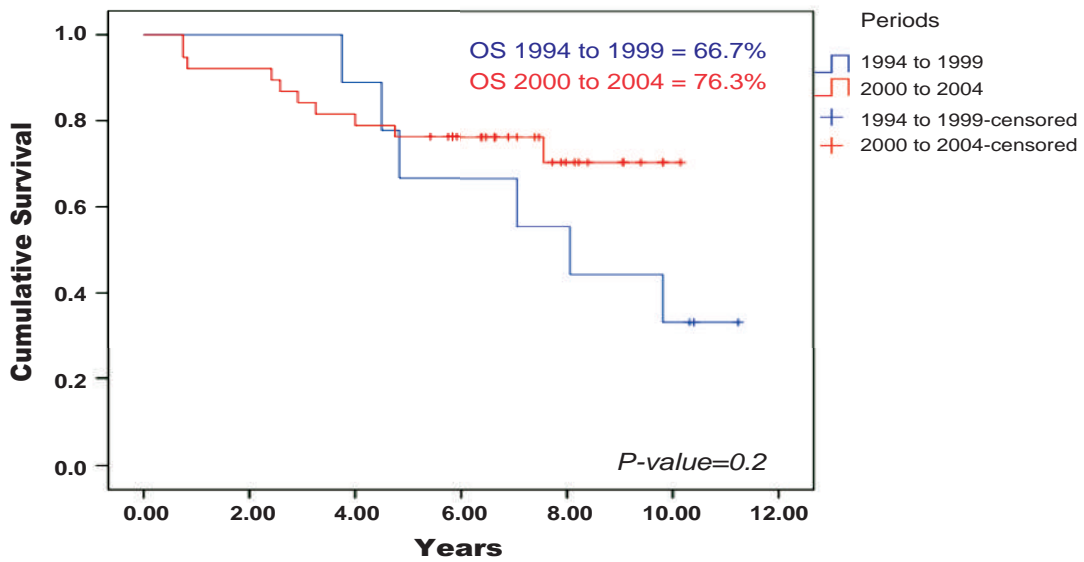
5-Years OS for Bladder Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004



## Corpus uteri

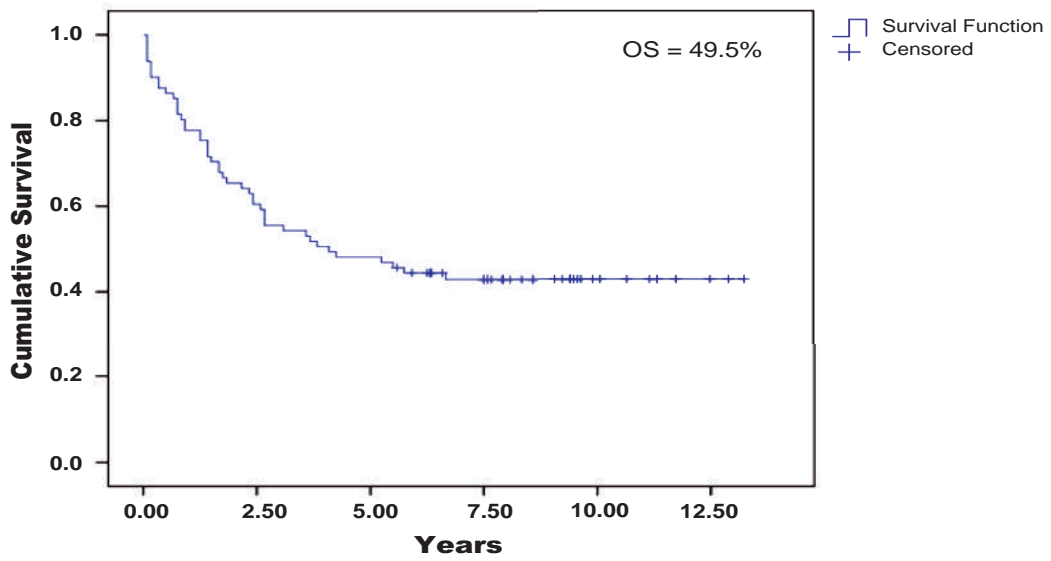


### 5-Years OS for Corpus uteri Cancer

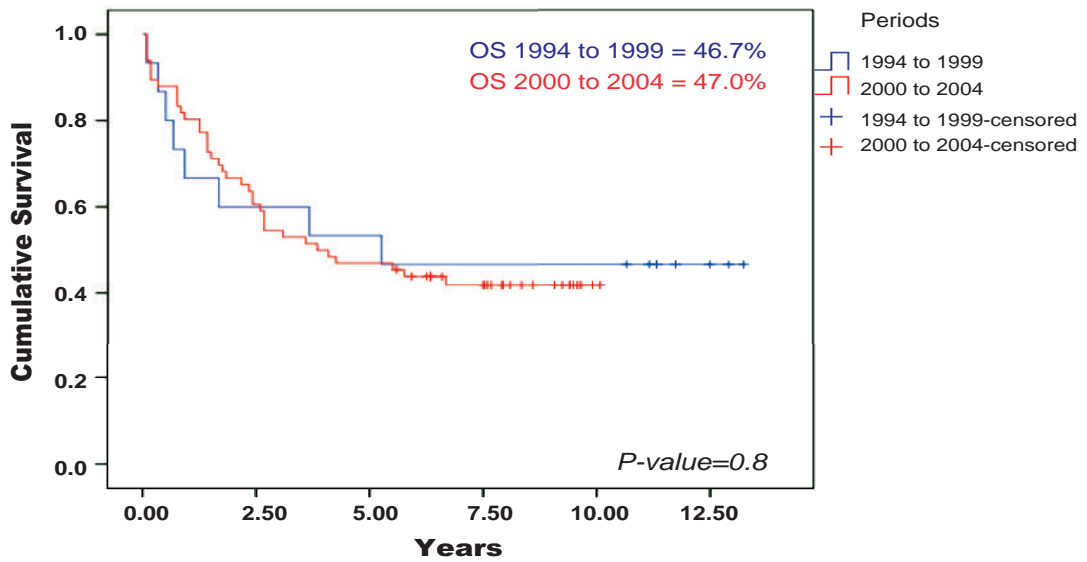


### 5-Years OS for Corpus uteri Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

# Ovary



## 5-Years OS for Ovary Cancer



## 5-Years OS for Ovary Cancer Stratified by Periods: 1994 to 1999 vs 2000 to 2004

**PART V**  
**CANCER AMONG NON-SAUDIS**  
**2007**



## Cancer Among Non- Saudi Population 2007

Between January and December 2007, a total of 2,590 cancer cases were reported among the Non-Saudi population. Sixty three in situ cases were excluded from the analysis. As a result, the total number of cases analyzed were 2,527 out of this 1,317 (52.1%) were males and 1,210 (47.9%) were females. The male to female ratio was 109:100. Taking into consideration the population structure of non-Saudis and the fact that cancer is primarily a disease of the elderly, the pattern of

cancer had some significant differences. Those over 60 years represented 20% and the 20 to 54 age-group represented 60% of non-Saudi population. During 2007, approximately 5% of all cancers occurred before the age of 15, 23.2% occurred between the ages 15 to 39 years, 57.6% were between the ages 40-64, and 14.2% occurred after the age of 64. The median age at diagnosis was 51 years in males (range 0-90 years) and 46 years in females (range 0-95 years).

Cancer	No.	%
Breast	434	17.2
Colo-rectal	267	10.6
NHL	134	5.3
Leukemia	126	5.0
Lung	122	4.8
Thyroid	116	4.6
Skin	98	3.9
Prostate	77	3.0
Stomach	75	3.0
Bladder	75	3.0
Other sites	1003	39.7

Table 5.1 Ten Most common Cancers among non-Saudis, 2007

Nationality	Male	%	Female	%	All	%
Yemen	251	19.1	172	14.2	423	16.7
Sudan	159	12.1	103	8.5	262	10.4
Egypt	122	9.3	124	10.2	246	9.7
Philippines	90	6.8	130	10.7	220	8.7
Pakistan	107	8.1	84	6.9	191	7.6
Syrian Arab Republic	74	5.6	55	4.5	129	5.1
India	69	5.2	51	4.2	120	4.7
Palestine	54	4.1	54	4.5	100	4.0
Bangladesh	69	5.2	13	1.1	82	3.2
Jordan	36	2.7	46	3.8	82	3.2
Indonesia	13	1.0	59	4.9	72	2.8
Bahrain	20	1.5	41	3.4	61	2.4
Nigeria	22	1.7	24	2.0	46	1.8
Somalia	20	1.5	22	1.8	42	1.7
Eritrea	12	0.9	25	2.1	37	1.5
Afghanistan	19	1.4	15	1.2	34	1.3
United Kingdom	24	1.8	9	0.7	33	1.3
Chad	9	0.7	22	1.8	31	1.2
Lebanon	15	1.1	15	1.2	30	1.2
Ethiopia	11	0.8	17	1.4	28	1.1
Myanmar	15	1.1	11	0.9	26	1.0
United States of America	17	1.3	8	0.7	25	1.0
Other Nationalities	89	6.8	110	9.1	199	7.9

Table 5.2 Distribution of Cancer Cases among Different Nationalities in Order of Relative Frequency

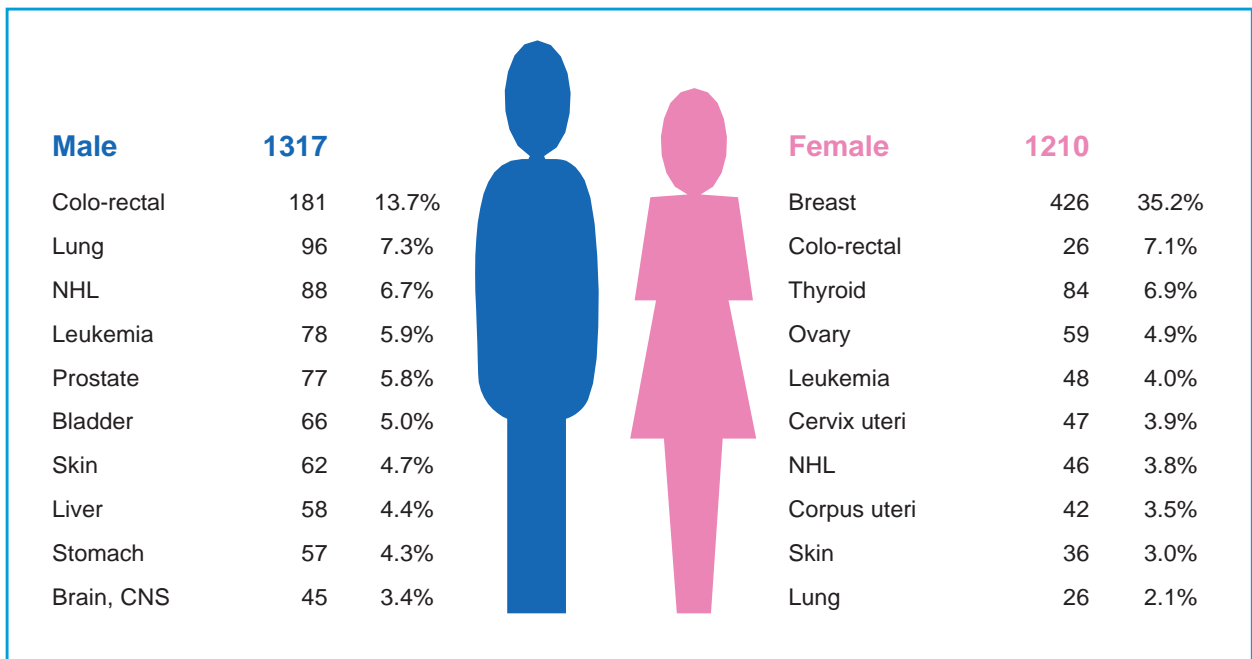


Figure 5.1 Ten Most Common Cancer among non-Saudis, 2007

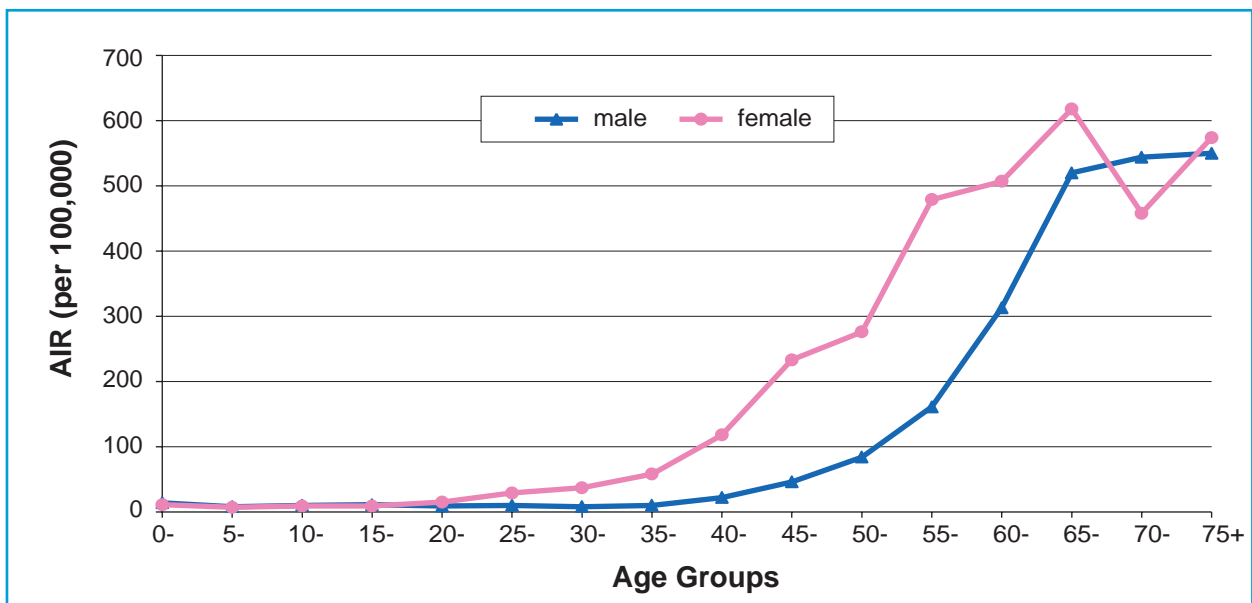


Figure 5.2 Age-Specific Incidence Rate (AIR) for All Cancers among non-Saudis in Saudi Arabia, 2007

# **PART VI**

# **TABLES**

Table 6.1.1 Age Distribution of Cancer Cases among Saudi Males, 2007

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	% of Total
C00	Lip	12	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	2	5	0.3%
C01-C02	Tongue	39	0	1	0	0	0	1	1	0	2	4	1	5	4	6	4	3	8	0.9%
C03-C06	Mouth	37	0	0	0	0	0	1	1	1	1	1	0	3	1	4	5	8	6	0.9%
C07-C08	Salivary glands	19	0	0	0	0	0	0	0	0	3	2	0	3	1	5	2	2	1	0.4%
C09	Tonsil	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0.1%
C10	Other Oropharynx	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0.0%
C11	Nasopharynx	94	0	0	2	7	3	3	3	8	5	10	22	9	8	5	8	9	32	1.7%
C12-C13	Hypopharynx	15	0	0	0	0	0	0	0	0	0	2	0	4	4	0	3	3	2	0.3%
C14	Pharynx unspec.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.0%
C15	Oesophagus	75	0	0	0	0	0	0	0	3	1	6	5	4	5	8	9	8	32	1.7%
C16	Stomach	173	0	0	0	0	1	2	2	2	2	1	4	13	20	18	28	27	51	4.0%
C17	Small intestine	27	0	0	0	0	1	3	1	3	2	2	1	3	2	1	6	3	2	0.6%
C18	Colon	275	0	0	0	0	1	5	5	7	13	13	28	20	32	38	39	27	47	6.3%
C19-C20	Rectum	211	1	0	0	1	1	1	10	10	8	16	19	29	17	20	34	17	28	4.8%
C21	Anus	12	0	0	0	0	0	0	0	1	1	0	2	0	1	1	3	2	1	0.3%
C22	Liver	315	1	3	2	1	1	0	0	5	1	7	8	18	27	53	54	52	82	7.2%
C23-C24	Gallbladder etc.	52	0	1	0	0	0	0	0	0	1	1	1	4	6	5	11	6	10	1.2%
C25	Pancreas	127	0	0	1	1	1	1	1	2	3	4	6	12	14	21	16	22	21	2.9%
C30-C31	Nose, sinuses etc.	12	0	0	0	1	1	0	1	0	0	1	1	1	2	0	1	1	2	0.3%
C32	Larynx	56	0	0	0	0	0	0	0	0	0	1	3	8	9	4	10	9	7	1.3%
C33-C34	Trachea, Bronchus, Lung	323	0	1	0	1	2	2	2	1	10	15	10	26	25	49	58	47	75	7.4%
C37-C38	Other Thoracic organs	21	0	4	0	0	0	1	3	1	0	0	1	1	2	2	2	2	2	0.5%
C40-C41	Bone	64	0	3	9	14	13	8	3	2	3	1	0	1	2	0	1	0	4	1.5%
C43	Melanoma of Skin	15	0	0	0	0	0	0	1	0	0	0	2	0	0	3	5	1	3	0.3%
C44	Other Skin	163	0	1	0	1	0	3	7	5	4	12	8	11	12	10	23	23	43	3.7%
C45	Mesothelioma	13	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3	2	0.3%
C46	Kaposi sarcoma	17	0	0	0	0	0	1	0	0	2	0	0	1	2	1	1	3	6	0.4%
C47;C49	Connective,Soft tissue	75	0	10	7	2	5	5	3	5	6	3	7	1	4	1	1	12	3	1.7%
C50	Breast	20	0	0	0	0	0	0	0	0	0	0	5	1	4	2	1	3	4	0.5%
C60	Penis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C61	Prostate	259	0	0	0	1	1	1	0	1	0	0	5	13	22	28	50	59	79	6.0%
C62	Testis	58	0	3	0	0	2	12	8	10	13	1	5	0	0	1	0	0	3	1.3%
C63	Other male genital	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.0%
C64	Kidney	143	0	9	2	3	1	4	5	3	4	6	9	15	13	16	19	13	21	3.3%
C65	Renal Pelvis	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0.1%
C66	Ureter	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.0%
C67	Bladder	171	0	3	0	0	0	0	3	3	3	7	10	13	22	22	23	17	45	3.9%
C68	Other Urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0%
C69	Eye	22	0	15	0	0	0	0	0	0	0	0	1	1	0	1	0	2	2	0.5%
C70-C72	Brain, Nervous system	133	0	13	17	10	6	9	8	5	9	7	9	7	4	9	5	9	6	3.1%
C73	Thyroid	115	0	0	0	2	3	6	9	12	17	14	9	8	9	10	5	5	6	2.6%
C74	Adrenal gland	15	0	14	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.3%
C75	Other Endocrine	3	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0.1%
C81	Hodgkin disease	180	0	7	15	19	26	23	16	17	6	11	11	9	4	6	2	4	4	4.1%
C82-C85;C96	Non-Hodgkin lymphoma	418	0	17	18	15	23	16	21	18	31	26	37	25	17	29	43	35	47	9.6%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C90	Multiple Myeloma	43	0	0	0	0	0	0	0	1	0	0	3	3	1	7	6	10	12	1.0%
C91	Lymphoid Leukemia	194	0	55	29	24	19	10	5	3	6	3	3	1	8	4	9	8	7	4.5%
C92-C94	Myeloid Leukemia	113	0	10	6	2	8	15	4	8	10	9	11	8	2	4	4	6	6	2.6%
C95	Leukemia unspecified	28	0	4	7	0	2	1	1	1	1	1	1	2	1	2	1	1	2	0.6%
Other	Other & unspecified	178	1	5	1	2	3	3	3	4	2	8	11	19	12	19	23	26	38	4.1%
All	All sites Total	4351	3	179	114	101	124	133	132	143	170	194	277	296	322	426	523	481	733	100.0%
Not C44	All sites but C44	4188	3	178	114	100	124	130	125	138	166	182	269	285	310	416	500	458	690	96.3%



Table 6.1.2.Age Distribution of Cancer Cases among Saudi Females, 2007

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	% of Total
C00	Lip	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	3	0.1%
C01-C02	Tongue	37	0	0	0	0	0	0	0	0	1	0	2	1	8	3	6	3	4	0.8%
C03-C06	Mouth	53	1	1	0	0	0	1	2	1	3	2	4	3	3	4	8	3	17	1.1%
C07-C08	Salivary glands	18	0	0	0	0	0	1	2	3	0	2	2	1	1	1	2	1	1	0.4%
C09	Tonsil	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0.1%
C10	Other Oropharynx	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.0%
C11	Nasopharynx	58	0	0	2	4	2	9	1	8	7	7	7	6	2	4	3	0	3	1.2%
C12-C13	Hypopharynx	9	0	0	0	0	0	0	0	0	1	2	1	2	1	0	1	0	1	0.2%
C14	Pharynx unspecified	3	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0.1%
C15	Oesophagus	57	0	0	0	0	0	0	0	1	3	0	2	5	7	4	6	13	16	1.2%
C16	Stomach	126	0	0	0	0	3	1	6	7	6	7	16	14	9	14	14	14	25	2.6%
C17	Small intestine	14	0	0	0	0	0	0	0	0	0	3	2	3	2	1	3	2	1	0.3%
C18	Colon	252	0	0	0	2	1	9	13	22	22	16	33	31	24	22	24	20	35	5.3%
C19-C20	Rectum	169	0	0	0	1	1	5	4	7	7	14	23	23	19	22	13	11	26	3.5%
C21	Anus	12	0	0	0	0	1	1	0	1	1	0	0	0	2	3	1	0	3	0.3%
C22	Liver	121	0	0	0	0	0	0	1	4	1	2	7	8	10	11	13	12	20	2.5%
C23-C24	Gallbladder etc.	86	0	0	0	0	0	0	0	1	2	2	3	7	3	10	8	6	11	1.1%
C25	Pancreas	51	0	0	0	0	0	0	0	0	0	1	2	2	0	3	0	0	3	0.3%
C30-C31	Nose, sinuses etc.	14	0	0	0	0	0	0	0	0	4	2	2	0	2	0	3	0	0	0.3%
C32	Larynx	10	0	0	0	0	0	0	0	1	1	0	1	3	1	0	2	1	0	0.2%
C33-C34	Trachea, Bronchus, Lung	89	0	0	0	0	0	0	3	0	2	4	10	10	6	7	19	8	20	1.9%
C37-C38	Other Thoracic organs	9	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0.2%
C40-C41	Bone	33	0	2	0	7	10	5	4	2	1	1	0	0	0	0	1	0	0	0.7%
C43	Melanoma of Skin	18	0	0	0	0	0	0	0	1	0	1	2	3	2	3	0	3	2	0.4%
C44	Other Skin	120	1	0	0	0	2	0	4	5	4	9	2	6	7	16	22	16	26	2.5%
C45	Mesothelioma	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.0%
C46	Kaposi sarcoma	6	0	0	0	0	0	0	1	1	0	1	0	1	0	1	0	0	1	0.1%
C47:C49	Connective,Soft tissue	60	0	15	2	4	8	5	3	6	2	6	2	2	1	0	1	1	4	1.3%
C50	Breast	1239	0	0	0	1	1	9	47	108	145	196	217	144	110	102	66	52	41	26.0%
C51	Vulva	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0.1%
C52	Vagina	4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0.1%
C53	Cervix Uteri	105	0	0	0	0	0	0	0	1	5	13	15	18	17	8	12	4	9	2.2%
C54	Corpus Uteri	189	0	0	0	0	0	0	2	3	6	11	20	27	33	28	23	23	13	4.0%
C55	Uterus unspecified	24	0	0	0	0	0	0	0	0	0	0	0	2	0	8	5	3	4	0.5%
C56	Ovary	149	0	1	3	6	8	7	4	4	14	7	19	18	10	17	11	8	12	3.1%
C57	Other Female Genital	9	0	0	0	0	0	0	0	0	1	2	1	2	1	1	0	1	0	0.2%
C58	Placenta	11	0	0	0	0	0	1	0	2	3	1	3	1	0	0	0	0	0	0.2%
C64	Kidney	84	0	17	3	0	1	2	1	2	2	7	12	6	6	5	7	5	8	1.8%
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.0%
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C67	Bladder	37	0	0	0	0	0	0	1	0	2	3	3	4	6	5	4	4	5	0.8%
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C69	Eye	20	0	15	0	0	0	0	0	0	0	2	0	0	0	1	0	1	1	0.4%
C70-C72	Brain, Nervous system	120	0	17	11	6	10	4	6	9	9	4	11	4	7	6	6	6	4	2.5%
C73	Thyroid	471	0	0	6	22	31	65	72	69	54	39	32	27	23	10	9	12	12	9.9%
C74	Adrenal gland	8	0	1	2	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0.2%
C75	Other Endocrine	4	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0.1%
C81	Hodgkin disease	129	0	3	2	9	34	25	21	4	7	1	5	3	6	2	3	1	3	2.7%
C82-C85:C96	Non-Hodgkin lymphoma	285	0	9	6	6	13	17	10	15	13	12	22	19	19	23	28	28	45	6.0%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C90	Multiple Myeloma	43	0	0	0	0	0	0	1	4	1	4	1	9	6	6	2	3	4	0.9%
C91	Lymphoid Leukemia	111	0	36	21	9	11	2	4	0	3	1	3	1	6	2	3	6	3	2.3%
C92-C94	Myeloid Leukemia	101	0	8	6	3	5	12	12	4	6	6	11	5	6	4	2	9	2	2.1%
C95	Leukemia unspecified	19	0	2	3	1	2	1	0	1	4	1	4	1	4	1	4	1	1	0.4%
Other	Other & unspecified	169	0	5	1	0	3	2	3	5	7	8	14	10	15	17	30	17	32	3.5%
All	All sites Total	4773	2	135	63	62	139	133	221	285	384	411	541	452	396	411	373	315	450	100.0%
Not C44	All sites but C44	4653	1	135	63	62	137	133	217	280	380	402	539	446	389	395	351	299	424	97.5%

Table 6.1.3 Cancer Incidence Cases among Saudi Males by Age Group (per 100,000), 2007

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World
C00	Lip	12	0	0	0	0	0	0	0.2	0.2	0	0	0	0.5	0.7	1	2.3	4.3	0.1	0.2
C01-C02	Tongue	39	0	0.1	0	0	0	0	0	0.4	0.9	0.3	1.8	2	4	3.9	3.4	6.9	0.4	0.8
C03-C06	Mouth	37	0	0	0	0	0	0	0.2	0.2	0	0.9	0.4	2	4	4.8	9	5.2	0.4	0.8
C07-C08	Salivary glands	19	0	0	0	0	0	0	0	0.6	0.5	0	1.1	0.5	3.3	1.9	2.3	0.9	0.2	0.4
C09	Tonsil	4	0	0	0	0	0	0	0	0	0	0	0.4	0.5	0.7	1	0	0	0	0.1
C10	Other Oropharynx	2	0	0	0	0	0	0	0	0	0	0	0	0	0.7	0	1.1	0	0	0
C11	Nasopharynx	94	0	0	0.2	0.7	0.3	0.4	1.2	0.9	2.3	6.3	3.3	4	3.3	7.7	1.1	2.6	1.1	1.5
C12-C13	Hypopharynx	15	0	0	0	0	0	0	0	0	0.5	0	0.4	2	0	2.9	3.4	1.7	0.2	0.3
C14	Pharynx unspecified	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.9	0	0
C15	Oesophagus	75	0	0	0	0	0	0	0.5	0.2	0	1.4	1.5	2.5	5.3	8.7	9	27.6	0.9	1.5
C16	Stomach	173	0	0	0	0	0.1	0.3	0.3	0.2	1.4	1.1	4.7	9.9	12	27.1	30.4	43.9	2	3.6
C17	Small intestine	27	0	0	0	0	0.1	0.4	0.3	0.4	0.2	0.9	0.4	1	0.7	5.8	3.4	1.7	0.3	0.5
C18	Colon	275	0	0	0	0.1	0.6	0.7	1.1	2.5	3	8	7.3	15.9	25.3	37.8	30.4	40.5	3.1	5.5
C19-C20	Rectum	211	1	0	0	0.1	0.1	1.3	1.5	1.5	3.6	5.4	10.6	8.4	13.3	32.9	19.1	24.1	2.4	4.1
C21	Anus	12	0	0	0	0	0	0	0.1	0.2	0	0.6	0	0.5	0.7	2.9	2.3	0.9	0.1	0.2
C22	Liver	315	1	0.3	0.2	0.1	0	0	0.8	0.2	1.6	2.3	6.6	13.4	35.2	52.3	58.5	70.7	3.6	6.8
C23-C24	Gallbladder etc.	52	0	0.1	0	0	0	0	0.2	0.2	0.2	1.7	1.5	3	3.3	10.7	6.8	8.6	0.6	1.1
C25	Pancreas	127	0	0	0.1	0.1	0.1	0.1	0.3	0.6	0.9	2.3	4.4	6.9	14	15.5	24.8	18.1	1.4	2.7
C30-C31	Nose, sinuses etc.	12	0	0	0.1	0.1	0	0	0	0	0.2	0.3	0.4	1	0	1	1.1	1.7	0.1	0.2
C32	Larynx	56	0	0	0	0	0	0	0	0.2	0.7	2.3	3.3	2	6.7	8.7	7.9	4.3	0.6	1.2
C33-C34	Trachea, Bronchus, Lung	323	0	0.1	0.1	0.1	0.2	0.3	0.2	1.9	3.4	2.8	9.5	12.4	56.2	52.9	64.6	3.7	6.9	6.9
C37-C38	Other Thoracic organs	21	0	0.3	0	0	0.1	0.4	0.2	0	0	0.3	0.4	1	1.3	1.9	2.3	1.7	0.2	0.4
C40-C41	Bone	64	0	0.3	0.8	1.4	1.3	0.9	0.4	0.3	0.6	0.2	0	1	0	1	1	3.4	0.7	0.7
C43	Melanoma of Skin	15	0	0	0	0	0	0	0	0	0	0.6	0	0	2	4.8	1.1	2.6	0.2	0.3
C44	Other Skin	163	0	0.1	0	0.1	0	0.3	0.9	0.8	2.7	2.3	4	5.9	6.7	22.3	25.9	37.1	1.8	3.1
C45	Mesothelioma	13	0	0	0	0	0	0	0	0.2	0	0	0	0	0.5	2.9	2.3	5.2	0.1	0.3
C46	Kaposi sarcoma	17	0	0	0	0	0	0	0	0.4	0	0	0.4	1	0.7	1	3.4	5.2	0.2	0.3
C47;C49	Connective,Soft tissue	75	0	0.9	0.6	0.2	0.5	0.6	0.4	0.8	1.1	0.7	2	0.4	2	0.7	1	13.5	2.6	1.1
C50	Breast	20	0	0	0	0	0	0	0	0	0	1.4	0.4	2	1.3	1	3.4	3.4	0.2	0.4
C60	Penis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C61	Prostate	259	0	0	0	0.1	0	0.1	0	0	0	1.4	4.7	10.9	18.6	48.4	66.4	68.1	2.9	5.7
C62	Testis	58	0	0.3	0	0	0.2	1.3	1	1.5	2.5	0.2	1.4	0	0	0.7	0	2.6	0.7	0.7
C63	Other male genital	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C64	Kidney	143	0	0.8	0.2	0.3	0.1	0.4	0.7	0.5	0.8	1.4	2.6	5.5	6.4	10.6	18.4	18.1	1.6	2.7
C65	Renal Pelvis	4	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.7	1.9	0	0	0.1
C66	Ureter	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
C67	Bladder	171	0	0.3	0	0	0	0.4	0.5	0.6	1.6	2.8	4.7	10.9	14.6	22.3	19.1	38.8	1.9	3.5
C68	Other Urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	0	0
C69	Eye	22	0	1.3	0	0	0	0	0	0	0	0	0.3	0.4	0	0.7	0	2.3	1.7	0.3
C70-C72	Brain, Nervous system	133	0	1.1	1.6	1	0.6	1	0.8	1.7	1.6	2.6	2.6	2	6	4.8	10.1	5.2	1.5	1.9
C73	Thyroid	115	0	0	0.2	0.3	0.7	1.2	1.9	3.2	3.2	2.6	2.9	4.5	6.7	4.8	5.6	5.2	1.3	1.8
C74	Adrenal gland	15	0	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2
C75	Other Endocrine	3	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C81	Hodgkin disease	180	0	0.6	1.4	1.8	2.7	2.5	2.1	2.6	1.1	3.3	2	4	1.9	4.5	3.4	3.4	2	2.2
C82-C85;C96	Non-Hodgkin lymphoma	418	0	1.5	1.7	1.4	2.4	1.8	2.8	5.9	5.9	10.5	9.1	8.4	19.3	41.6	39.4	40.5	4.7	7
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C90	Multiple Myeloma	43	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	10.3	0.5	0.9
C91	Lymphoid Leukemia	194	0	4.8	2.7	2.3	2	1.1	0.7	0.5	1.1	0.7	0.9	0.4	4	2.7	8.7	9	2.2	2.4
C92-C94	Myeloid Leukemia	113	0	0.9	0.6	0.2	0.8	1.7	0.5	1.2	1.9	2.1	2.9	1	2.7	3.9	6.8	5.2	1.3	1.6
C95	Leukemia unspecified	28	0	0.3	0.6	0	0.2	0.1	0.2	0.2	0.2	0.3	0.4	1	0.7	1	2.3	1.7	0.3	0.4
Other	Other & unspecified	178	1	0.4	0.1	0.1	0.2	0.3	0.4	0.6	0.4	1.8	3.1	6.9	5.9	12.6	22.3	32.7	2	3.5
All sites Total		4351	3	15	11	10	13	15	22	32	44	79	108	160	283	507	541	632	49.4	80
Not C44		4188	3	15	11	10	13	14	21	31	42	77	104	154	277	484	516	595	47.5	76.8



**Table 6.2.1 Number, Relative Frequencies, Age Standardized and Crude Rates for All Cancer Cases Among Saudi Males by Site and Administrative Region, 2007**

ICD (10th)	Site	Asir			Baha			Jazan					
		All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World
		C00	4	1.3%	0.5	0.7	0	0.0%	0	0	3	2.9%	0.6
C01-C02	6	1.9%	0.8	1.1	0	0.0%	0	0	2	2.0%	0.4	0.5	
C03-C06	3	1.0%	0.4	0.7	0	0.0%	0	0	8	7.8%	1.6	2.2	
C07-C08	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C09	0	0.0%	0	0	0	0.0%	0	0	1	1.0%	0.2	0.3	
C10	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C11	5	1.6%	0.7	1	0	0.0%	0	0	3	2.9%	0.6	0.6	
C12-C13	0	0.0%	0	0	0	0.0%	0	0	3	2.9%	0.6	0.9	
C14	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C15	3	1.0%	0.4	0.6	0	0.0%	0	0	1	1.0%	0.2	0.2	
C16	18	5.8%	2.4	3.3	3	2.2%	0.6	0.5	5	4.9%	1	1.3	
C17	6	1.9%	0.8	1.3	1	0.0%	0	0	1	1.0%	0.2	0.4	
C18	17	5.5%	2.3	3.3	3	2.2%	0.6	0.8	4	3.9%	0.8	1.1	
C19-C20	15	4.8%	2	3.2	6	13.3%	3.8	5.6	4	3.9%	0.8	1.1	
C21	1	0.3%	0.1	0.2	0	0.0%	0	0	1	1.0%	0.2	0.4	
C22	32	10.3%	4.3	6.2	3	6.7%	1.9	2.6	7	6.9%	1.4	2.1	
C23-C24	8	2.6%	1.1	1.7	2	4.4%	1.3	1.7	0	0.0%	0	0	
C25	5	1.6%	0.7	0.9	0	0.0%	0	0	1	1.0%	0.2	0.4	
C30-C31	0	0.0%	0	0	0	0.0%	0	0	1	1.0%	0.2	0.2	
C32	3	1.0%	0.4	0.7	0	0.0%	0	0	0	0.0%	0	0	
C33-C34	11	3.5%	1.5	1.9	3	6.7%	1.9	2.8	4	3.9%	0.8	1.4	
C37-C38	0	0.0%	0	0	1	2.2%	0.6	1.2	0	0.0%	0	0	
C40-C41	6	1.9%	0.8	0.8	2	4.4%	1.3	1.5	3	2.9%	0.6	0.4	
C43	0	0.0%	0	0	0	0.0%	0	0	1	1.0%	0.2	0.3	
C44	19	6.1%	2.6	3.8	2	4.4%	1.3	1.4	5	4.9%	1	1.5	
C45	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C46	2	0.6%	0.3	0.5	1	2.2%	0.6	0.9	1	1.0%	0.2	0.3	
C47,C49	5	1.6%	0.7	0.7	2	4.4%	1.3	2.1	3	2.9%	0.6	0.7	
C50	2	0.6%	0.3	0.4	0	0.0%	0	0	0	0.0%	0	0	
C60	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C61	10	3.2%	1.4	1.8	5	11.1%	3.1	4	5	4.9%	1	1.6	
C62	8	2.6%	1.1	1.2	0	0.0%	0	0	0	0.0%	0	0	
C63	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C64	10	3.2%	1.4	1.8	2	4.4%	1.3	1.8	2	2.0%	0.4	0.7	
C65	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C66	1	0.3%	0.1	0.1	0	0.0%	0	0	0	0.0%	0	0	
C67	15	4.8%	2	3.2	1	2.2%	0.6	1.2	4	3.9%	0.8	1.3	
C68	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C69	4	1.3%	0.5	0.6	0	0.0%	0	0	2	2.0%	0.4	0.5	
C70-C72	5	1.6%	0.7	0.7	1	2.2%	0.6	0.7	2	2.0%	0.4	0.6	
C73	7	2.3%	0.9	1.3	0	0.0%	0	0	0	0.0%	0	0	
C74	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C75	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C81	9	2.9%	1.2	1.4	0	0.0%	0	0	3	2.9%	0.6	0.6	
C82-C85;C96	37	11.9%	5	6.5	5	11.1%	3.1	2.9	12	11.8%	2.4	2.7	
C88	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C90	4	1.3%	0.5	0.8	0	0.0%	0	0	0	0.0%	0	0	
C91	10	3.2%	1.4	1.5	1	2.2%	0.6	0.5	4	3.9%	0.8	0.7	
C92-C94	5	1.6%	0.7	0.8	0	0.0%	0	0	2	2.0%	0.4	0.4	
C95	2	0.6%	0.3	0.2	1	2.2%	0.6	0.8	0	0.0%	0	0	
Other	12	3.9%	1.6	2.3	5	11.1%	3.1	4	4	3.9%	0.8	1.2	
All sites Total	310	100.0%	42	57.2	45	100.0%	28.3	36.8	102	100.0%	20	27.2	
Not C44	291	93.9%	39.4	53.5	43	95.6%	27.1	35.4	97	95.1%	19	25.7	

Table 6.2.2 Number, Relative Frequencies, Age Standardized and Crude Rates for All Cancer Cases among Saudi Males by Site and Administrative Region, 2007

ICD (10th)	Site	Madinah			Hail			Qassim				
		All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate
C00	Lip	0	0.0%	0	0	0.0%	0	0	0	0.0%	0	0
C01-C02	Tongue	2	0.7%	0.3	0.5	0.0%	0	0	0	0.6%	0.2	0.3
C03-C06	Mouth	6	2.1%	1	2.1	0.0%	0	0	0	0.0%	0	0
C07-C08	Salivary glands	2	0.7%	0.3	0.5	1.3%	0.4	0.6	0	0.0%	0	0
C09	Tonsil	0	0.0%	0	0	0.0%	0	0	0	0.0%	0	0
C10	Other Oropharynx	0	0.0%	0	0	0.0%	0	0	0	0.0%	0	0
C11	Nasopharynx	7	2.4%	1.1	1.6	2.6%	0.9	1	1	5.4%	2.1	2.8
C12-C13	Hypopharynx	1	0.3%	0.2	0.3	1.3%	0.4	0.4	0	0.6%	0.2	0.4
C14	Pharynx unspecified	1	0.3%	0.2	0.3	0.0%	0	0	0	0.0%	0	0
C15	Oesophagus	11	3.8%	1.8	2.9	1.3%	0.4	0.4	9	5.4%	2.1	3.2
C16	Stomach	14	4.8%	2.3	3.5	5.3%	1.7	2.4	8	4.8%	1.8	3.1
C17	Small intestine	2	0.7%	0.3	0.6	0.0%	0	0	0	0.0%	0	0
C18	Colon	22	7.5%	3.6	6.2	1.3%	0.4	0.6	10	6.0%	2.3	4.1
C19-C20	Rectum	2	0.7%	0.3	0.6	5.3%	1.7	2.4	8	4.8%	1.8	3.8
C21	Anus	2	0.7%	0.3	0.6	0.0%	0	0	0	0.0%	0	0
C22	Liver	18	6.2%	2.9	5.2	7.9%	2.6	3	16	9.5%	3.7	6.3
C23-C24	Gallbladder etc.	3	1.0%	0.5	0.7	2.6%	0.9	0.8	0	0.0%	0	0
C25	Pancreas	4	1.4%	0.6	1.1	1.3%	0.4	0.4	3	1.8%	0.7	0.9
C30-C31	Nose, sinuses etc.	2	0.7%	0.3	0.5	0.0%	0	0	0	0.0%	0	0
C32	Larynx	3	1.0%	0.5	0.9	1.3%	0.4	0.4	3	1.8%	0.7	0.9
C33-C34	Trachea, Bronchus, Lung	29	9.9%	4.7	8.3	6.6%	2.2	3.2	4	2.4%	0.9	1.5
C37-C38	Other Thoracic organs	1	0.3%	0	0.2	1.3%	0.4	0.7	1	0.6%	0.2	0.2
C40-C41	Bone	4	1.4%	0.6	0.5	2.6%	0.9	0.7	1	0.6%	0.2	0.2
C43	Melanoma of Skin	4	1.4%	0.6	1.3	0.0%	0	0	1	0.6%	0.2	0.5
C44	Other Skin	8	2.7%	1.3	2.1	3.9%	1.3	1.6	5	3.0%	1.1	1.8
C45	Mesothelioma	1	0.3%	0.2	0.2	0.0%	0	0	0	0.0%	0	0
C46	Kaposi sarcoma	0	0.0%	0	0	0.0%	0	0	0	0.6%	0.2	0.3
C47,C49	Connective,Soft tissue	3	1.0%	0.5	0.4	1.3%	0.4	0.6	1	4.2%	1.6	2
C50	Breast	1	0.3%	0.2	0.2	1.3%	0.4	0.7	0	0.0%	0	0
C60	Penis	0	0.0%	0	0	0.0%	0	0	0	0.0%	0	0
C61	Prostate	14	4.8%	2.3	4	9.2%	3	3.8	4	2.4%	0.9	1.6
C62	Testis	1	0.3%	0.2	0.2	0.0%	0	0	5	3.0%	1.1	1.2
C63	Other male genital	0	0.0%	0	0	0.0%	0	0	0	0.0%	0	0
C64	Kidney	8	2.7%	1.3	2.4	5.3%	1.7	2.2	3	1.8%	0.7	1.2
C65	Renal Pelvis	0	0.0%	0	0	1.3%	0.4	0.6	0	0.0%	0	0
C66	Ureter	0	0.0%	0	0	0.0%	0	0	0	0.0%	0	0
C67	Bladder	13	4.5%	2.1	3.6	1.3%	0.4	0.4	6	3.6%	1.4	2.4
C68	Other Urinary organs	0	0.0%	0	0	0.0%	0	0	0	0.0%	0	0
C69	Eye	1	0.3%	0.2	0.1	2.6%	0.9	0.8	1	0.6%	0.2	0.2
C70-C72	Brain, Nervous system	8	2.7%	1.3	1.6	5.3%	1.7	1.8	5	3.0%	1.1	1.1
C73	Thyroid	7	2.4%	1.1	1.6	3.9%	1.3	1.4	10	6.0%	2.3	3.1
C74	Adrenal gland	1	0.3%	0.2	0.1	0.0%	0	0	0	0.0%	0	0
C75	Other Endocrine	0	0.0%	0	0	0.0%	0	0	0	0.0%	0	0
C81	Hodgkin disease	19	6.5%	3.1	3.5	2.6%	0.9	0.8	13	7.7%	3	2.8
C82-C85:C96	Non-Hodgkin lymphoma	31	10.6%	5	7.3	9.2%	3	3.7	11	6.5%	2.5	3.4
C88	Immunoproliferative dis.	0	0.0%	0	0	0.0%	0	0	0	0.0%	0	0
C90	Multiple Myeloma	4	1.4%	0.6	1.3	1.3%	0.4	0.6	3	1.8%	0.7	0.7
C91	Lymphoid Leukemia	9	3.1%	1.5	1.4	5.3%	1.7	1.8	10	6.0%	2.3	2.6
C92-C94	Myeloid Leukemia	4	1.4%	0.6	0.7	2.6%	0.9	1.1	5	3.0%	1.1	1.1
C95	Leukemia unspecified	4	1.4%	0.6	0.8	0.0%	0	0	0	0.0%	0	0
Other	Other & unspecified	16	5.5%	2.6	4.3	1.3%	0.4	0.6	5	3.0%	1.1	1.3
All sites Total		292	100.0%	47.4	74.2	100.0%	32.8	39.4	168	100.0%	38.4	54.9
Not C44	All sites but C44	284	97.3%	46.1	72.2	96.1%	31.5	37.8	163	97.0%	37.3	53.2

Table 6.2.3 Number, Relative Frequencies, Age Standardized and Crude Rates for All Cancer Cases among Saudi Males by Site and Administrative Region, 2007

ICD (10th)	Site	Najran				Jouf				Tabuk				Northern Region			
		All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World
C00	Lip	1	1.5%	0.5	1.1	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C01-C02	Tongue	1	1.5%	0.5	1.2	1	1.5%	0.6	1.6	3	1.9%	0.9	2.7	3	1.9%	0	0
C03-C06	Mouth	3	4.4%	1.6	3.6	1	1.5%	0.6	1.7	3	1.9%	0.9	2.8	0	0.0%	0	0
C07-C08	Salivary glands	0	0.0%	0	0	0	0.0%	0	0	1	0.6%	0.3	1.1	0	0.0%	0	0
C09	Tonsil	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C10	Other Oropharynx	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C11	Nasopharynx	1	1.5%	0.5	0.8	0	0.0%	0	0	5	3.2%	1.5	3.1	2	4.8%	1.6	1.7
C12-C13	Hypopharynx	0	0.0%	0	0	0	0.0%	0	0	2	1.3%	0.6	2.1	0	0.0%	0	0
C14	Pharynx unspecified	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C15	Oesophagus	5	7.4%	2.7	5.5	1	1.5%	0.6	1.1	5	3.2%	1.5	4.3	0	0.0%	0	0
C16	Stomach	9	13.2%	4.8	10.8	1	1.5%	0.6	0.5	8	5.2%	2.5	8.2	0	0.0%	0	0
C17	Small intestine	1	1.5%	0.5	1.3	0	0.0%	0	0	1	0.6%	0.3	0.8	1	2.4%	0.8	0.8
C18	Colon	1	1.5%	0.5	0.5	3	4.4%	1.8	3.5	5	3.2%	1.5	3.7	0	0.0%	0	0
C19-C20	Rectum	1	1.5%	0.5	0.8	2	2.9%	1.2	3.1	6	3.9%	1.8	3.9	1	2.4%	0.8	2.3
C21	Anus	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C22	Liver	6	8.8%	3.2	7.5	3	4.4%	1.8	3.7	13	8.4%	4	11.5	1	2.4%	0.8	1.7
C23-C24	Gallbladder etc.	1	1.5%	0.5	1.3	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C25	Pancreas	2	2.9%	1.1	2.2	3	4.4%	1.8	3.1	4	2.6%	1.2	2.7	0	0.0%	0	0
C30-C31	Pancreas, sinuses etc.	0	0.0%	0	0	0	0.0%	0	0	1	0.6%	0.3	0.7	0	0.0%	0	0
C32	Larynx	0	0.0%	0	0	1	1.5%	0.6	1.4	0	0.0%	0	0	0	0.0%	0	0
C33-C34	Trachea, Bronchus, Lung	1	1.5%	0.5	1	2	2.9%	1.2	3.1	16	10.3%	4.9	15.5	6	14.3%	4.7	12.2
C37-C38	Other Thoracic organs	0	0.0%	0	0	1	1.5%	0.6	0.5	2	1.3%	0.6	1.7	0	0.0%	0	0
C40-C41	Bone	0	0.0%	0	0	1	1.5%	0.6	0.5	3	1.9%	0.9	1.5	0	0.0%	0	0
C43	Melanoma of Skin	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C44	Other Skin	4	5.9%	2.1	4.5	1	1.5%	0.6	1.2	2	1.3%	0.6	1.6	3	7.1%	2.4	7.6
C45	Mesothelioma	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C46	Kaposi sarcoma	1	1.5%	0.5	1	1	1.5%	0.6	1.2	0	0.0%	0	0	0	0.0%	0	0
C47,C49	Connective,Soft tissue	1	1.5%	0.5	0.4	1	1.5%	0.6	0.6	3	1.9%	0.9	2.6	1	2.4%	0.8	1.7
C50	Breast	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C60	Penis	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C61	Prostate	0	0.0%	0	0	6	8.8%	3.6	7.8	5	3.2%	1.5	4.5	0	0.0%	0	0
C62	Testis	0	0.0%	0	0	2	2.9%	1.2	1.2	0	0.0%	0	0	0	0.0%	0	0
C63	Other male genital	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C64	Kidney	2	2.9%	1.1	2.1	3	4.4%	1.8	2.1	1	0.6%	0.3	0.2	2	4.8%	1.6	3.6
C65	Renal Pelvis	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C66	Ureter	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C67	Bladder	6	8.8%	3.2	6.7	2	2.9%	1.2	2.3	9	5.8%	2.8	8.2	4	9.5%	3.2	8.3
C68	Other Urinary organs	0	0.0%	0	0	0	0.0%	0	0	1	0.6%	0.3	1	0	0.0%	0	0
C69	Eye	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C70-C72	Brain, Nervous system	2	2.9%	1.1	2.6	0	0.0%	0	0	4	2.6%	1.2	2.1	3	7.1%	2.4	2.4
C73	Thyroid	0	0.0%	0	0	0	0.0%	0	0	3	1.9%	0.9	2	1	2.4%	0.8	1.1
C74	Adrenal gland	0	0.0%	0	0	1	1.5%	0.6	0.5	1	0.6%	0.3	0.2	0	0.0%	0	0
C75	Other Endocrine	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C81	Hodgkin disease	1	1.5%	0.5	0.5	4	5.9%	2.4	2.6	9	5.8%	2.8	3.7	5	11.9%	3.9	5.8
C82-C85;C96	Non-Hodgkin lymphoma	9	13.2%	4.8	7.4	10	14.7%	6.1	8.5	8	5.2%	2.5	5.1	6	14.3%	4.7	8.1
C88	Immunoproliferative dis.	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C90	Multiple Myeloma	1	1.5%	0.5	1.4	2	2.9%	1.2	2.9	3	1.9%	0.9	2.4	1	2.4%	0.8	1.4
C91	Lymphoid Leukemia	3	4.4%	1.6	1.3	7	10.3%	4.2	6.6	8	5.2%	2.5	3.4	3	7.1%	2.4	2.1
C92-C94	Myeloid Leukemia	3	4.4%	1.6	2.1	4	5.9%	2.4	2.5	6	3.9%	1.8	2.8	1	2.4%	0.8	0.6
C95	Leukemia unspecified	1	1.5%	0.5	0.4	0	0.0%	0	0	3	1.9%	0.9	2.1	0	0.0%	0	0
Other	Other & unspecified	1	1.5%	0.5	1	4	5.9%	2.4	4.3	11	7.1%	3.4	9.1	0	0.0%	0	0
All	All sites Total	68	100.0%	36.5	69.1	68	100.0%	41.3	68.1	155	100.0%	47.6	117.4	42	100.0%	33.1	62.7
Not C44	All sites but C44	64	94.1%	34.3	64.5	67	98.5%	40.7	67	153	98.7%	47	115.8	39	92.9%	30.8	55.1

Table 6.2.4 Number, Relative Frequencies, Age Standardized and Crude Rates for All Cancer Cases among Saudi Males by Site and Administrative Region, 2007

ICD (10th)	Site	Riyadh			Makkah			Eastern Province			
		All Ages	% of Total	Crude Rate	All Ages	% of Total	Crude Rate	All Ages	% of Total	Crude Rate	
C00	Lip	2	0.2%	0.1	0	0.0%	0	0	0.3%	0.1	0.3
C01-C02	Tongue	9	0.8%	0.4	13	1.2%	0.7	1	0.1%	0.1	0.1
C03-C06	Mouth	3	0.3%	0.1	5	0.5%	0.3	5	0.7%	0.4	0.7
C07-C08	Salivary glands	7	0.6%	0.3	6	0.6%	0.3	2	0.3%	0.1	0.3
C09	Tonsil	2	0.2%	0.1	0	0.0%	0	1	0.1%	0.1	0.2
C10	Other Oropharynx	1	0.1%	0	1	0.1%	0.1	0	0.0%	0	0
C11	Nasopharynx	18	1.5%	0.9	29	2.8%	1.5	12	1.6%	0.9	1.6
C12-C13	Hypopharynx	3	0.3%	0.1	3	0.3%	0.2	1	0.1%	0.1	0.2
C14	Pharynx unspecified	0	0.0%	0	1	0.1%	0.1	0	0.0%	0	0
C15	Oesophagus	15	1.3%	0.7	19	1.8%	1	5	0.7%	0.4	0.9
C16	Stomach	44	3.7%	2.2	40	3.8%	2.1	21	2.9%	1.5	4
C17	Small intestine	8	0.7%	0.4	4	0.4%	0.2	3	0.4%	0.2	0.2
C18	Colon	79	6.6%	3.9	74	7.0%	3.9	54	7.4%	3.9	8.8
C19-C20	Rectum	64	5.4%	3.2	53	5.0%	2.8	43	5.9%	3.1	5.7
C21	Anus	2	0.2%	0.1	5	0.5%	0.3	1	0.1%	0.1	0.1
C22	Liver	113	9.5%	5.6	59	5.6%	3.1	32	4.4%	2.3	5.4
C23-C24	Gallbladder etc.	11	0.9%	0.5	13	1.2%	0.7	11	1.5%	0.8	2.2
C25	Pancreas	41	3.4%	2	32	3.0%	1.7	26	3.6%	1.9	4.7
C30-C31	Nose, sinuses etc.	3	0.3%	0.1	3	0.3%	0.2	2	0.3%	0.1	0.4
C32	Larynx	18	1.5%	0.9	16	1.5%	0.8	11	1.5%	0.8	2
C33-C34	Trachea, Bronchus, Lung	71	6.0%	3.5	90	8.6%	4.8	80	10.9%	5.7	15.5
C37-C38	Other Thoracic organs	5	0.4%	0.2	5	0.5%	0.3	6	0.8%	0.4	0.4
C40-C41	Bone	16	1.3%	0.8	16	1.5%	0.8	9	1.2%	0.6	0.6
C43	Melanoma of Skin	2	0.2%	0.1	3	0.3%	0.2	3	0.4%	0.2	0.9
C44	Other Skin	35	2.9%	1.7	43	4.1%	2.3	27	3.7%	1.9	4.3
C45	Mesothelioma	2	0.2%	0.1	5	0.5%	0.3	5	0.7%	0.4	0.6
C46	Kaposi sarcoma	1	0.1%	0	3	0.3%	0.2	6	0.8%	0.4	0.7
C47,C49	Connective,Soft tissue	26	2.2%	1.3	11	1.0%	0.6	10	1.4%	0.7	0.9
C50	Breast	5	0.4%	0.2	10	1.0%	0.5	1	0.1%	0.1	0.1
C60	Penis	0	0.0%	0	0	0.0%	0	0	0.0%	0	0
C61	Prostate	74	6.2%	3.6	66	6.3%	3.5	59	8.1%	4.2	12.3
C62	Testis	12	1.0%	0.6	15	1.4%	0.8	11	1.5%	0.8	0.9
C63	Other male genital	0	0.0%	0	1	0.1%	0.1	0	0.0%	0	0
C64	Kidney	51	4.3%	2.5	35	3.3%	1.9	19	2.6%	1.4	2
C65	Renal Pelvis	3	0.3%	0.1	0	0.0%	0	0	0.0%	0	0
C66	Ureter	1	0.1%	0	0	0.0%	0	0	0.0%	0	0
C67	Bladder	30	2.5%	1.5	36	3.4%	1.9	43	5.9%	3.1	7
C68	Other Urinary organs	0	0.0%	0	0	0.0%	0	0	0.0%	0	0
C69	Eye	8	0.7%	0.4	1	0.1%	0.1	2	0.3%	0.1	0.2
C70-C72	Brain, Nervous system	48	4.0%	2.4	31	2.9%	1.6	22	3.0%	1.6	2.4
C73	Thyroid	39	3.3%	1.9	19	1.8%	1	24	3.3%	1.7	2.7
C74	Adrenal gland	5	0.4%	0.2	4	0.4%	0.2	3	0.4%	0.2	0.2
C75	Other Endocrine	2	0.2%	0.1	1	0.1%	0.1	0	0.0%	0	0
C81	Hodgkin disease	46	3.9%	2.3	43	4.1%	2.3	25	3.4%	1.8	2
C82-C85,C96	Non-Hodgkin lymphoma	121	10.1%	6	106	10.1%	5.6	52	7.1%	3.7	7
C88	Immunoproliferative dis.	0	0.0%	0	0	0.0%	0	0	0.0%	0	0
C90	Multiple Myeloma	13	1.1%	0.6	3	0.3%	0.2	8	1.1%	0.6	1.2
C91	Lymphoid Leukemia	57	4.8%	2.8	47	4.5%	2.5	29	4.0%	2.1	2.6
C92-C94	Myeloid Leukemia	36	3.0%	1.8	25	2.4%	1.3	18	2.5%	1.3	1.8
C95	Leukemia unspecified	7	0.6%	0.3	4	0.4%	0.2	6	0.8%	0.4	0.7
Other	Other & unspecified	34	2.8%	1.7	52	4.9%	2.7	30	4.1%	2.1	4.8
All sites Total		1193	100.0%	58.8	1051	100.0%	55.6	731	100.0%	52.2	109.6
Not C44	All sites but C44	1158	97.1%	57.1	1008	95.9%	53.3	704	96.3%	50.3	105.3

Table 6.3.1 Number, Relative Frequencies, Age Standardized and Crude Rates for All Cancer Cases Among Saudi Females by Site and Region, 2007

ICD (10th)	Site	Asir				Baha				Jazan			
		All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World
		C00	3	1.0%	0.4	0.4	0	0.0%	0	0	0	0.0%	0
C01-C02	8	2.7%	1.1	2	1	1.4%	0.6	0.4	6	4.4%	1.1	2.1	
C03-C06	5	1.7%	0.7	0.7	0	0.0%	0	0	20	14.8%	3.7	5.7	
C07-C08	1	0.3%	0.1	0.2	0	0.0%	0	0	0	0.0%	0	0	
C09	0	0.0%	0	0	0	0.0%	0	0	1	0.7%	0.2	0.2	
C10	0	0.0%	0	0	0	0.0%	0	0	1	0.7%	0.2	0.3	
C11	2	0.7%	0.3	0.4	1	1.4%	0.6	0.8	2	1.5%	0.4	0.5	
C12-C13	0	0.0%	0	0	1	1.4%	0.6	0.9	1	0.7%	0.2	0.3	
C14	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C15	2	0.7%	0.3	0.4	1	1.4%	0.6	1	1	0.7%	0.2	0.2	
C16	14	4.7%	1.9	3.2	3	4.3%	1.7	1.7	1	0.0%	0	0	
C17	2	0.7%	0.3	0.5	0	0.0%	0	0	0	0.0%	0	0	
C18	17	5.7%	2.3	3.4	4	5.7%	2.3	2.7	4	3.0%	0.7	1.6	
C19-C20	14	4.7%	1.9	2.8	4	5.7%	2.3	3.4	2	1.5%	0.4	0.6	
C21	1	0.3%	0.1	0.3	0	0.0%	0	0	0	0.0%	0	0	
C22	9	3.0%	1.2	1.7	0	0.0%	0	0	3	2.2%	0.6	0.7	
C23-C24	5	1.7%	0.7	1.1	2	2.9%	1.1	1.2	1	0.7%	0.2	0.2	
C25	5	1.7%	0.7	0.9	1	1.4%	0.6	1	0	0.0%	0	0	
C30-C31	1	0.3%	0.1	0.1	0	0.0%	0	0	3	2.2%	0.6	0.9	
C32	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C33-C34	6	2.0%	0.8	1.2	0	0.0%	0	0	1	0.7%	0.2	0.3	
C37-C38	1	0.3%	0.1	0.1	0	0.0%	0	0	0	0.0%	0	0	
C40-C41	2	0.7%	0.3	0.2	0	0.0%	0	0	1	0.7%	0.2	0.1	
C43	2	0.7%	0.3	0.2	2	2.9%	1.1	1.9	0	0.0%	0	0	
C44	17	5.7%	2.3	3.8	3	4.3%	1.7	2.8	7	5.2%	1.3	2.7	
C45	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C46	2	0.7%	0.3	0.3	1	1.4%	0.6	0.6	0	0.0%	0	0	
C47,C49	0	0.0%	0	0	0	0.0%	0	0	2	1.5%	0.4	0.4	
C50	38	12.7%	5.1	7.6	12	17.1%	6.8	8.7	27	20.0%	5	8	
C51	1	0.3%	0.1	0.1	0	0.0%	0	0	0	0.0%	0	0	
C52	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C53	5	1.7%	0.7	0.8	2	2.9%	1.1	1.4	3	2.2%	0.6	0.7	
C54	12	4.0%	1.6	2.8	4	5.7%	2.3	3.1	3	2.2%	0.6	1.3	
C55	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C56	14	4.7%	1.9	2.8	4	5.7%	2.3	2.6	0	0.0%	0	0	
C57	0	0.0%	0	0	0	0.0%	0	0	1	0.7%	0.2	0.3	
C58	1	0.3%	0.1	0.2	0	0.0%	0	0	0	0.0%	0	0	
C64	6	2.0%	0.8	0.9	1	1.4%	0.6	0.6	2	1.5%	0.4	0.4	
C65	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C66	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C67	4	1.3%	0.5	0.9	1	1.4%	0.6	0.7	1	0.7%	0.2	0.3	
C68	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C69	2	0.7%	0.3	0.2	0	0.0%	0	0	3	2.2%	0.6	0.6	
C70-C72	9	3.0%	1.2	1.1	2	2.9%	1.1	1.3	0	0.0%	0	0	
C73	30	10.0%	4	4.8	4	5.7%	2.3	3.1	14	10.4%	2.6	3.1	
C74	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C75	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C81	12	4.0%	1.6	1.5	1	1.4%	0.6	0.8	3	2.2%	0.6	0.5	
C82-C85;C96	13	4.3%	1.7	2.1	10	14.3%	5.6	7.4	10	7.4%	1.9	2.7	
C88	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	
C90	6	2.0%	0.8	1.2	0	0.0%	0	0	1	0.7%	0.2	0.3	
C91	7	2.3%	0.9	0.9	1	1.4%	0.6	0.5	5	3.7%	0.9	0.7	
C92-C94	7	2.3%	0.9	1.4	3	4.3%	1.7	2.1	3	2.2%	0.6	0.6	
C95	3	1.0%	0.4	0.3	0	0.0%	0	0	1	0.7%	0.2	0.3	
Other	10	3.3%	1.3	1.9	0	0.0%	0	0	2	1.5%	0.4	1	
All sites Total	299	100.0%	39.8	55.9	70	100.0%	39.4	51.1	135	100.0%	25.2	37.7	
Not C44	282	94.3%	37.6	51.9	67	95.7%	37.7	48.3	128	94.8%	23.9	35	



Table 6.3.2 Number, Relative Frequencies, Age Standardized and Crude Rates for All Cancer Cases Among Saudi Females by Site and Region, 2007

ICD (10th)	Site	Madinah			Hail			Qassim					
		All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World
C00	Lip	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C01-C02	Tongue	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C03-C06	Mouth	2	0.7%	0.3	0.3	0	0.0%	0	0	0	0.0%	0	0
C07-C08	Salivary glands	1	0.3%	0.2	0.3	0	0.0%	0	0	3	1.4%	0.7	1.3
C09	Tonsil	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C10	Other Oropharynx	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C11	Nasopharynx	5	1.7%	0.8	1.1	0	0.0%	0	0	7	3.2%	1.6	2
C12-C13	Hypopharynx	1	0.3%	0.2	0.2	1	0.9%	0.4	0.5	0	0.0%	0	0
C14	Pharynx unspecified	1	0.3%	0.2	0.1	0	0.0%	0	0	0	0.0%	0	0
C15	Oesophagus	6	2.0%	1	1.9	0	0.0%	0	0	5	2.3%	1.2	2.3
C16	Stomach	6	2.0%	1	1.2	5	4.4%	2.1	3.2	5	2.3%	1.2	2.4
C17	Small intestine	1	0.3%	0.2	0.4	1	10.6%	0.4	0.6	0	0.0%	0	0
C18	Colon	12	4.0%	2	3.5	12	10.6%	5	6.6	12	5.4%	2.8	4.8
C19-C20	Rectum	8	2.7%	1.3	1.9	3	2.7%	1.2	1.5	9	4.1%	2.1	3.7
C21	Anus	1	0.3%	0.2	0.1	0	0.0%	0	0	0	0.0%	0	0
C22	Liver	4	1.3%	0.7	1.2	2	1.8%	0.8	1.2	1	0.5%	0.2	0.6
C23-C24	Gallbladder etc.	4	1.3%	0.7	1.2	1	0.9%	0.4	0.5	6	2.7%	1.4	3
C25	Pancreas	5	1.7%	0.8	1.4	1	0.9%	0.4	0.6	0	0.0%	0	0
C30-C31	Nose, sinuses etc.	1	0.3%	0.2	0.4	1	0.9%	0.4	0.4	1	0.5%	0.2	0.6
C32	Larynx	1	0.3%	0.2	0.4	0	0.0%	0	0	0	0.0%	0	0
C33-C34	Trachea, Bronchus, Lung	1	0.3%	0.2	0.3	2	1.8%	0.8	1.3	2	0.9%	0.5	0.7
C37-C38	Other Thoracic organs	0	0.0%	0	0	1	0.9%	0.4	0.4	1	0.5%	0.2	0.2
C40-C41	Bone	3	1.0%	0.5	0.5	0	0.0%	0	0	3	1.4%	0.7	0.6
C43	Melanoma of Skin	12	4.0%	2	3.6	3	2.7%	1.2	1.8	3	1.4%	0.7	1.2
C44	Other Skin	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C45	Mesothelioma	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C46	Kaposi sarcoma	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C47,C49	Connective, Soft tissue	7	2.3%	1.2	1.2	9	8.0%	3.7	3.8	4	1.8%	0.9	1.2
C50	Breast	67	22.4%	11.2	15.9	24	21.2%	9.9	12.5	53	24.0%	12.4	16.7
C51	Vulva	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C52	Vagina	1	0.3%	0.2	0.3	0	0.0%	0	0	0	0.0%	0	0
C53	Cervix Uteri	5	1.7%	0.8	1.3	4	3.5%	1.7	1.8	5	2.3%	1.2	2.1
C54	Corpus Uteri	17	5.7%	2.8	5.5	3	2.7%	1.2	2.1	3	1.4%	0.7	1
C55	Uterus unspecified	4	1.3%	0.7	1.3	0	0.0%	0	0	1	0.5%	0.2	0.4
C56	Ovary	6	2.0%	1	1.6	5	4.4%	2.1	2.3	11	5.0%	2.6	3.3
C57	Other Female Genital	2	0.7%	0.3	0.6	1	0.9%	0.4	0.6	0	0.0%	0	0
C58	Placenta	1	0.3%	0.2	0.3	0	0.0%	0	0	0	0.0%	0	0
C64	Kidney	6	2.0%	1	1.1	3	2.7%	1.2	1.7	2	0.9%	0.5	0.7
C65	Renal Pelvis	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C66	Ureter	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C67	Bladder	1	0.3%	0.2	0.2	0	0.0%	0	0	2	0.9%	0.5	0.8
C68	Other Urinary organs	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C69	Eye	0	0.0%	0	0	1	0.9%	0.4	0.6	1	0.5%	0.2	0.2
C70-C72	Brain, Nervous system	14	4.7%	2.3	3.4	2	1.8%	0.8	1.1	7	3.2%	1.6	2.2
C73	Thyroid	18	6.0%	3	3.4	14	12.4%	5.8	7.1	30	13.6%	7	8.6
C74	Adrenal gland	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C75	Other Endocrine	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C81	Hodgkin disease	14	4.7%	2.3	2.5	0	0.0%	0	0	4	1.8%	0.9	1.1
C82-C85;C96	Non-Hodgkin lymphoma	23	7.7%	3.8	6.1	5	4.4%	2.1	2.4	12	5.4%	2.8	4.3
C88	Immunoproliferative dis.	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C90	Multiple Myeloma	1	0.3%	0.2	0.2	1	0.9%	0.4	0.6	4	1.8%	0.9	1.7
C91	Lymphoid Leukemia	4	1.3%	0.7	0.7	1	0.9%	0.4	0.4	11	5.0%	2.6	2.5
C92-C94	Myeloid Leukemia	7	2.3%	1.2	1.2	2	1.8%	0.8	1.1	5	2.3%	1.2	1.4
C95	Leukemia unspecified	3	1.0%	0.5	0.8	0	0.0%	0	0	0	0.0%	0	0
Other	Other & unspecified	22	7.4%	3.7	5.8	5	4.4%	2.1	3.1	7	3.2%	1.6	3.1
All sites Total		299	100.0%	49.9	73.4	113	100.0%	46.6	60.1	221	100.0%	51.8	75
Not C44	All sites but C44	287	96.0%	47.9	69.8	110	97.3%	45.4	58.3	218	98.6%	51.1	73.8

Table 6.3.3 Number, Relative Frequencies, Age Standardized and Crude Rates for All Cancer Cases Among Saudi Females by Site and Region, 2007

ICD (10th)	Site	Najran						Jouf						Tabuk						Northern Region					
		All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World				
C00	Lip	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C01-C02	Tongue	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C03-C06	Mouth	1	1.6%	0.5	1.9	0	0.0%	0	0	1	0.7%	0.3	0.3	0	0.0%	0	0	0	0.0%	0	0				
C07-C08	Salivary glands	0	0.0%	0	0	1	1.4%	0.6	0.9	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C09	Tonsil	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C10	Other Oropharynx	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C11	Nasopharynx	0	0.0%	0	0	3	4.2%	1.9	3.9	2	1.4%	0.6	0.5	0	0.0%	0	0	0	0.0%	0	0				
C12-C13	Hypopharynx	0	0.0%	0	0	0	0.0%	0	0	1	0.7%	0.3	0.8	0	0.0%	0	0	0	0.0%	0	0				
C14	Pharynx unspecified	0	0.0%	0	0	0	0.0%	0	0	1	0.7%	0.3	0.4	0	0.0%	0	0	0	0.0%	0	0				
C15	Oesophagus	1	1.6%	0.5	0.8	1	1.4%	0.6	1.1	7	4.9%	2.3	6.4	0	0.0%	0	0	0	0.0%	0	0				
C16	Stomach	6	9.7%	3.2	5.9	0	0.0%	0	0	8	5.6%	2.6	5	0	0.0%	0	0	0	0.0%	0	0				
C17	Small intestine	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C18	Colon	5	8.1%	2.6	5.1	1	1.4%	0.6	1.2	4	2.8%	1.3	3.4	2	1.4%	0.6	1.6	2	1.4%	0.6	1.7				
C19-C20	Rectum	3	4.8%	1.6	3	2	2.8%	1.2	2.3	3	2.1%	0.9	2.4	3	2.1%	0.9	2.4	2	1.4%	0.6	1.5				
C21	Anus	0	0.0%	0	0	2	2.8%	1.2	2.7	0	0.0%	0	0	3	2.1%	0.9	2.3	2	1.4%	0.6	1.6				
C22	Liver	2	3.2%	1.1	2.2	0	0.0%	0	0	3	2.1%	0.9	2.3	0	0.0%	0	0	0	0.0%	0	0				
C23-C24	Gallbladder etc.	0	0.0%	0	0	0	0.0%	0	0	2	1.4%	0.6	1.6	0	0.0%	0	0	0	0.0%	0	0				
C25	Pancreas	0	0.0%	0	0	3	4.2%	1.9	3.5	0	0.0%	0	0	3	2.1%	0.9	3.1	0	0.0%	0	0				
C30-C31	Nose, sinuses etc.	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C32	Larynx	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C33-C34	Trachea, Bronchus, Lung	0	0.0%	0	0	2	2.8%	1.2	2.5	3	2.1%	1	2.1	0	0.0%	0	0	0	0.0%	0	0				
C37-C38	Other Thoracic organs	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C40-C41	Bone	0	0.0%	0	0	1	1.4%	0.6	0.5	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C43	Melanoma of Skin	0	0.0%	0	0	0	0.0%	0	0	2	1.4%	0.6	1.6	1	0.7%	0.3	0.8	1	0.7%	0.3	0.6				
C44	Other Skin	4	6.5%	2.1	4.1	2	2.8%	1.2	1.2	4	2.8%	1.3	3.3	0	0.0%	0	0	0	0.0%	0	0				
C45	Mesothelioma	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C46	Kaposi sarcoma	0	0.0%	0	0	0	0.0%	0	0	1	0.7%	0.3	1	0	0.0%	0	0	0	0.0%	0	0				
C47;C49	Connective, Soft tissue	1	1.6%	0.5	0.4	2	2.8%	1.2	0.9	3	2.1%	1	0.8	2	1.4%	0.6	1.6	2	1.4%	0.6	1.7				
C50	Breast	12	19.4%	6.4	12.8	13	18.3%	8	11.1	38	26.6%	12.3	22.7	7	17.1%	5.5	11.1	11	15.2%	4.9	8.5				
C51	Vulva	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C52	Vagina	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C53	Cervix Uteri	2	3.2%	1.1	1.9	4	5.6%	2.5	4.6	1	0.7%	0.3	0.4	0	0.0%	0	0	0	0.0%	0	0				
C54	Corpus Uteri	1	1.6%	0.5	0.8	2	2.8%	1.2	2.4	7	4.9%	2.3	6.6	2	1.4%	0.6	1.6	2	1.4%	0.6	5.3				
C55	Uterus unspecified	0	0.0%	0	0	0	0.0%	0	0	1	0.7%	0.3	0.8	1	0.7%	0.3	0.8	1	0.7%	0.3	2.1				
C56	Ovary	1	1.6%	0.5	1.9	4	5.6%	2.5	4.8	4	2.8%	1.3	3.2	1	0.7%	0.3	0.8	1	0.7%	0.3	0.5				
C57	Other Female Genital	0	0.0%	0	0	1	1.4%	0.6	1.1	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C58	Placenta	1	1.6%	0.5	0.4	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C64	Kidney	0	0.0%	0	0	1	1.4%	0.6	1.2	1	0.7%	0.3	1	0	0.0%	0	0	0	0.0%	0	0				
C65	Renal Pelvis	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C66	Ureter	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C67	Bladder	0	0.0%	0	0	2	2.8%	1.2	2	2	1.4%	0.6	2.1	2	1.4%	0.6	1.6	2	1.4%	0.6	4.1				
C68	Other Urinary organs	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C69	Eye	0	0.0%	0	0	0	0.0%	0	0	1	0.7%	0.3	0.5	1	0.7%	0.3	0.8	1	0.7%	0.3	0.7				
C70-C72	Brain, Nervous system	0	0.0%	0	0	3	4.2%	1.9	1.6	6	4.2%	2	1.7	2	1.4%	0.6	1.7	2	1.4%	0.6	1.7				
C73	Thyroid	5	8.1%	2.6	4	1	1.4%	0.6	0.5	15	10.5%	4.8	6.9	1	0.7%	0.3	0.8	1	0.7%	0.3	1.7				
C74	Adrenal gland	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C75	Other Endocrine	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C81	Hodgkin disease	2	3.2%	1.1	2	1	1.4%	0.6	0.4	2	1.4%	0.6	1	0	0.0%	0	0	0	0.0%	0	0.6				
C82-C85;C96	Non-Hodgkin lymphoma	3	4.8%	1.6	2.2	8	11.3%	4.9	7.1	7	4.9%	2.3	5.3	5	12.2%	4	9.7	5	12.2%	4	9.7				
C88	Immunoproliferative dis.	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
C90	Multiple Myeloma	1	1.6%	0.5	1.2	1	1.4%	0.6	0.7	2	1.4%	0.6	1.7	1	0.7%	0.3	0.8	1	0.7%	0.3	1.7				
C91	Lymphoid Leukemia	3	4.8%	1.6	2	3	4.2%	1.9	3.3	2	1.4%	0.6	0.5	2	1.4%	0.6	0.5	2	1.4%	0.6	1.6				
C92-C94	Myeloid Leukemia	5	8.1%	2.6	3.6	3	4.2%	1.9	2.8	1	0.7%	0.3	0.2	2	1.4%	0.6	0.2	2	1.4%	0.6	1.6				
C95	Leukemia unspecified	1	1.6%	0.5	1.9	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0				
Other	Other & unspecified	2	3.2%	1.1	3	4	5.6%	2.5	4.9	4	2.8%	1.3	3.7	1	0.7%	0.3	0.8	1	0.7%	0.3	1.3				
All sites but C44		62	100.0%	32.8	60.8	71	100.0%	43.8	69.3	143	100.0%	46.2	92.9	41	100.0%	32.5	68.4	38	100.0%	32.5	68.4				
All sites but C44		58	93.5%	30.7	56.6	69	97.2%	42.6	68.1	139	97.2%	44.9	89.7	38	92.7%	30.1	59.9	38	92.7%	30.1	59.9				

Table 6.3.4 Number, Relative Frequencies, Age Standardized and Crude Rates for All Cancer Cases Among Saudi Females by Site and Region, 2007

ICD (10th)	Site	Riyadh				Makkah				Eastern Province			
		All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World	All Ages	% of Total	Crude Rate	ASR World
C00	Lip	1	0.1%	0.1	0.1	2	0.2%	0.1	0.2	0	0.0%	0	0
C01-C02	Tongue	6	0.5%	0.3	0.6	11	0.9%	0.6	1	0.9%	5	0.6%	0.7
C03-C06	Mouth	8	0.6%	0.4	0.5	10	0.8%	0.5	0.9	0.6%	5	0.6%	0.7
C07-C08	Salivary glands	4	0.3%	0.2	0.2	6	0.5%	0.3	0.4	0.3%	2	0.3%	0.4
C09	Tonsil	1	0.1%	0.1	0.1	1	0.1%	0.1	0.1	0	0.0%	0	0
C10	Other Oropharynx	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C11	Nasopharynx	16	1.3%	0.8	1.2	12	1.0%	0.6	0.8	7	0.9%	0.5	0.6
C12-C13	Hypopharynx	1	0.1%	0.1	0	3	0.2%	0.2	0.3	0	0.0%	0	0
C14	Pharynx unspecified	0	0.0%	0	0	0	0.1%	0.1	0.1	0	0.0%	0	0
C15	Oesophagus	6	0.5%	0.3	0.7	15	1.2%	0.8	1.3	10	1.3%	0.8	1.6
C16	Stomach	31	2.4%	1.6	3.2	35	2.9%	1.9	3	12	1.5%	0.9	1.8
C17	Small intestine	5	0.4%	0.3	0.5	2	0.2%	0.1	0.2	2	0.3%	0.2	0.3
C18	Colon	72	5.6%	3.7	6.4	65	5.3%	3.5	5.3	41	5.2%	3.1	5.5
C19-C20	Rectum	46	3.6%	2.3	4.2	42	3.4%	2.2	3.8	31	4.0%	2.4	4.9
C21	Anus	2	0.2%	0.1	0.1	4	0.3%	0.2	0.4	0	0.0%	0	0
C22	Liver	43	3.4%	2.2	5	3.3	2.7%	1.8	3	17	2.2%	1.3	2.9
C23-C24	Gallbladder etc.	28	2.2%	1.4	3.3	20	1.6%	1.1	1.8	14	1.8%	1.1	2.4
C25	Pancreas	15	1.2%	0.8	1.8	11	0.9%	0.6	1.1	6	0.8%	0.5	0.9
C30-C31	Nose, sinuses etc.	3	0.2%	0.3	0.3	3	0.2%	0.2	0.4	3	0.4%	0.2	0.5
C32	Larynx	2	0.2%	0.1	0.1	3	0.2%	0.2	0.2	17	2.2%	1.3	2.7
C33-C34	Trachea, Bronchus, Lung	27	2.1%	1.4	2.9	23	1.9%	1.2	2	22	2.8%	1.7	4
C37-C38	Other Thoracic organs	5	0.4%	0.3	0.4	1	0.1%	0.1	0.1	0	0.0%	0	0
C40-C41	Bone	8	0.6%	0.4	0.3	12	1.0%	0.6	0.6	3	0.4%	0.2	0.2
C43	Melanoma of Skin	3	0.2%	0.2	0.3	4	0.3%	0.2	0.4	3	0.4%	0.2	0.5
C44	Other Skin	21	1.6%	1.1	2.2	24	2.0%	1.3	2.1	17	2.2%	1.3	2.7
C45	Mesothelioma	0	0.0%	0	0	0	0.0%	0	0	2	0.3%	0.2	0.2
C46	Kaposi sarcoma	2	0.2%	0.1	0.2	0	0.0%	0	0	0	0.0%	0	0
C47,C49	Connective,Soft tissue	10	0.8%	0.5	0.5	7	0.6%	0.4	0.4	13	1.7%	1	1.1
C50	Breast	312	24.4%	15.8	25.7	375	30.7%	20.1	28.8	254	32.4%	19.4	30.8
C51	Vulva	1	0.1%	0.1	0.2	2	0.2%	0.1	0.2	0	0.0%	0	0
C52	Vagina	2	0.2%	0.1	0.2	1	0.1%	0.1	0.1	0	0.0%	0	0
C53	Cervix Uteri	28	2.2%	1.4	2.4	31	2.5%	1.7	2.4	15	1.9%	1.1	2
C54	Corpus Uteri	48	3.8%	2.4	5.2	53	4.3%	2.8	4.8	31	4.0%	2.4	4.7
C55	Uterus unspecified	4	0.3%	0.2	0.5	10	0.8%	0.5	0.7	3	0.4%	0.2	0.5
C56	Ovary	43	3.4%	2.2	3.7	35	2.9%	1.9	2.7	20	2.6%	1.5	2.5
C57	Other Female Genital	1	0.1%	0.1	0.1	2	0.2%	0.1	0.1	1	0.1%	0.1	0.1
C58	Placenta	5	0.4%	0.3	0.3	1	0.1%	0.1	0.1	0	0.3%	0.2	0.1
C64	Kidney	20	1.6%	1	1.7	19	1.6%	1	1.5	19	2.4%	1.5	2.5
C65	Renal Pelvis	1	0.1%	0.1	0.2	0	0.0%	0	0	0	0.0%	0	0
C66	Ureter	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C67	Bladder	8	0.6%	0.4	0.8	11	0.9%	0.6	1	3	0.4%	0.2	0.4
C68	Other Urinary organs	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C69	Eye	7	0.5%	0.4	0.4	3	0.2%	0.2	0.2	0	0.0%	0	0
C70-C72	Brain, Nervous system	29	2.3%	1.5	1.9	31	2.5%	1.7	1.9	16	2.0%	1.2	2
C73	Thyroid	172	13.5%	8.7	11.5	93	7.6%	5	5.8	73	9.3%	5.6	6.2
C74	Adrenal gland	4	0.3%	0.2	0.2	2	0.2%	0.1	0.1	2	0.3%	0.2	0.2
C75	Other Endocrine	0	0.0%	0	0	3	0.2%	0.2	0.2	0	0.0%	0	0
C81	Hodgkin disease	33	2.6%	1.7	1.9	27	2.2%	1.4	1.5	26	3.3%	2	1.7
C82-C85:C96	Non-Hodgkin lymphoma	78	6.1%	4	6.8	72	5.9%	3.9	5.9	38	4.9%	2.9	4.7
C88	Immunoproliferative dis.	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0
C90	Multiple Myeloma	10	0.8%	0.5	1.1	9	0.7%	0.5	0.7	5	0.6%	0.4	0.8
C91	Lymphoid Leukemia	27	2.1%	1.4	1.7	28	2.3%	1.5	1.5	17	2.2%	1.3	1.9
C92-C94	Myeloid Leukemia	34	2.7%	1.7	2.5	15	1.2%	0.8	1	13	1.7%	1	1.2
C95	Leukemia unspecified	4	0.3%	0.2	0.3	4	0.3%	0.2	0.2	4	0.5%	0.3	0.6
Other	Other & unspecified	40	3.1%	2	4.5	46	3.8%	2.5	4	24	3.1%	1.8	3.8
All sites Total		1277	100.0%	64.8	109	1222	100.0%	65.4	95.1	783	100.0%	59.1	99.1
Not C44		1256	98.4%	63.8	107	1198	98.0%	64.1	93.1	766	97.8%	58.5	96.4

Table 6.4.1 Age Distribution of Cancer Cases among non-Saudi Males, 2007

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	% of Total
C00	Lip	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1%
C01-C02	Tongue	21	0	0	0	0	0	0	0	0	2	4	2	3	4	4	0	0	0	1.6%
C03-C06	Mouth	11	0	0	0	0	0	0	0	0	1	0	2	2	2	2	0	0	0	0.8%
C07-C08	Salivary glands	6	0	0	0	0	0	0	1	1	0	1	0	1	1	0	1	0	0	0.5%
C09	Tonsil	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0.2%
C10	Other Oropharynx	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.1%
C11	Nasopharynx	31	0	0	0	0	1	1	1	1	1	9	4	6	2	3	1	2	1	2.4%
C12-C13	Hypopharynx	4	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0.3%
C14	Pharynx unspecified	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.1%
C15	Oesophagus	35	0	0	0	0	0	0	0	3	2	3	8	5	3	8	1	1	1	2.7%
C16	Stomach	57	0	1	0	0	0	0	2	5	3	8	12	6	11	5	2	2	3	4.3%
C17	Small intestine	5	0	0	0	0	0	0	0	1	1	0	0	1	1	0	1	0	0	0.4%
C18	Colon	101	0	0	0	0	0	1	3	4	2	14	14	23	18	8	7	1	6	7.7%
C19-C20	Rectum	80	0	0	0	0	0	2	5	5	3	10	14	10	10	6	6	5	4	6.1%
C21	Anus	6	0	0	0	0	0	0	0	1	0	0	0	3	0	2	0	0	0	0.5%
C22	Liver	58	0	0	0	2	0	0	2	0	4	1	6	9	11	12	4	4	3	4.4%
C23-C24	Gallbladder etc.	19	0	0	0	0	0	0	0	1	0	0	2	2	3	3	4	3	1	1.4%
C25	Pancreas	21	0	0	0	0	0	0	0	2	0	0	1	5	3	2	4	2	2	1.6%
C30-C31	Nose, sinuses etc.	7	0	0	0	0	0	0	0	2	0	2	1	0	0	2	0	0	0	0.5%
C32	Larynx	29	0	0	0	0	0	0	1	1	1	4	0	2	6	7	2	2	2	2.2%
C33-C34	Trachea, Bronchus, Lung	96	0	0	0	0	0	1	0	0	4	5	14	15	19	17	9	5	7	7.3%
C37-C38	Other Thoracic organs	11	0	0	0	0	0	0	1	0	2	1	2	0	1	1	3	0	0	0.8%
C40-C41	Bone	10	0	0	1	2	1	1	1	1	0	0	1	3	0	0	0	0	0	0.8%
C43	Melanoma of Skin	7	0	0	0	0	0	0	1	0	0	1	3	0	0	1	1	0	0	0.5%
C44	Other Skin	62	0	0	0	1	0	1	1	3	2	9	7	7	17	4	4	5	2	4.7%
C45	Mesothelioma	4	0	0	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	0.3%
C46	Kaposi sarcoma	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2%
C47;C49	Connective,Soft tissue	30	0	1	0	2	1	2	3	1	3	5	6	0	3	0	3	0	0	2.3%
C50	Breast	8	0	0	0	0	0	0	1	0	1	0	0	2	1	2	1	0	0	0.6%
C60	Penis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C61	Prostate	77	0	0	0	0	0	0	0	0	0	1	4	8	13	14	19	10	8	5.8%
C62	Testis	14	0	2	0	0	2	1	4	0	3	1	1	0	0	0	0	0	0	1.1%
C63	Other male genital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C64	Kidney	36	0	1	0	0	0	0	1	0	3	3	6	6	6	1	5	0	4	2.7%
C65	Renal Pelvis	3	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0.2%
C66	Ureter	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%
C67	Bladder	66	0	0	0	0	0	0	1	4	1	1	5	15	8	11	4	10	6	5.0%
C68	Other Urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1%
C69	Eye	8	0	4	0	0	0	0	0	1	0	0	2	0	1	0	0	0	0	0.6%
C70-C72	Brain, Nervous system	45	0	3	4	4	1	4	4	4	5	4	5	3	3	1	0	0	1	3.4%
C73	Thyroid	32	0	0	0	0	0	0	3	6	6	2	2	6	3	2	1	0	1	2.4%
C74	Adrenal gland	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2%
C75	Other Endocrine	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2%
C81	Hodgkin disease	43	0	0	6	1	2	5	10	4	4	5	7	1	0	2	0	0	0	3.3%
C82-C85,C96	Non-Hodgkin lymphoma	88	0	2	2	4	2	1	3	4	7	9	18	15	9	2	4	1	5	6.7%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C90	Multiple Myeloma	17	0	0	0	0	0	0	1	1	1	4	0	5	1	3	0	1	0	1.3%
C91	Lymphoid Leukemia	35	0	12	4	4	0	1	1	1	0	2	2	2	2	2	1	0	2	2.7%
C92-C94	Myeloid Leukemia	37	0	2	1	2	3	3	3	4	4	5	1	6	1	1	0	1	0	2.8%
C95	Leukemia unspecified	6	0	0	0	0	0	0	1	0	0	2	2	0	0	0	0	0	1	0.5%
Other	Other & unspecified	76	1	1	1	0	0	3	6	3	3	8	14	9	9	10	1	1	6	5.8%
All	All sites Total	1317	1	33	18	19	16	19	56	66	75	123	174	189	175	134	91	59	69	100.0%
Not C44	All sites but C44	1255	1	33	18	19	15	19	55	63	73	114	167	182	158	130	87	54	67	95.3%

Table 6.4.2 Age Distribution of Cancer Cases among non-Saudi Females, 2007

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	% of Total
C00	Lip	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.1%
C01-C02	Tongue	4	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0.3%
C03-C06	Mouth	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0.3%
C07-C08	Salivary glands	3	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0.2%
C09	Tonsil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C10	Other Oropharynx	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.1%
C11	Nasopharynx	12	0	0	0	0	0	0	1	3	0	2	4	1	1	0	0	0	0	1.0%
C12-C13	Hypopharynx	5	0	0	0	0	0	0	0	2	0	1	1	0	1	0	0	0	0	0.4%
C14	Pharynx unspecified	14	0	0	0	0	0	0	0	0	3	2	2	0	1	4	1	0	1	1.2%
C15	Oesophagus	18	0	0	0	0	0	0	0	1	0	2	5	2	1	2	1	0	3	1.5%
C16	Stomach	61	0	0	0	0	0	0	2	6	6	6	10	9	8	2	5	4	3	5.0%
C17	Small intestine	25	0	0	0	0	0	0	0	0	0	7	4	3	6	2	1	0	2	2.1%
C18	Colon	5	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	1	0	0.4%
C19-C20	Rectum	12	0	0	0	0	0	0	1	1	1	0	0	0	4	2	1	1	1	1.0%
C21	Anus	15	0	0	0	0	0	0	0	0	1	0	2	3	1	3	1	1	1	1.2%
C22	Liver	11	0	0	0	0	0	0	0	0	1	1	1	1	4	1	0	1	1	0.9%
C23-C24	Gallbladder etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C25	Pancreas	11	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.0%
C30-C31	Nose, sinuses etc.	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%
C32	Larynx	14	0	0	1	3	0	0	0	3	1	0	1	1	1	0	1	0	0	0.2%
C33-C34	Trachea, Bronchus, Lung	9	0	0	1	0	1	1	1	0	3	2	0	1	0	0	0	0	0	0.1%
C37-C38	Other Thoracic organs	36	0	0	0	0	0	0	0	0	2	7	6	5	3	2	0	3	4	3.0%
C40-C41	Bone	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%
C43	Melanoma of Skin	23	0	2	0	0	0	0	0	3	1	0	1	1	1	2	2	1	2	0.1%
C44	Other Skin	426	0	0	0	0	0	1	20	43	58	73	86	44	41	24	21	7	8	35.2%
C45	Mesothelioma	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.2%
C46	Kaposi sarcoma	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.4%
C47;C49	Connective;Soft tissue	47	0	0	0	0	0	0	0	1	15	10	0	6	1	1	1	1	2	3.9%
C50	Breast	42	0	0	0	0	0	1	1	0	1	4	3	13	7	2	4	3	2	3.5%
C51	Vulva	7	0	0	0	0	0	0	0	0	1	2	2	0	2	0	0	0	0	0.6%
C52	Vagina	59	0	1	3	1	0	0	4	9	6	4	7	6	8	2	4	3	0	4.9%
C53	Cervix Uteri	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0.2%
C54	Corpus Uteri	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C55	Uterus unspecified	16	0	3	0	0	0	0	1	0	0	1	1	3	2	2	1	2	0	1.3%
C56	Ovary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C57	Other Female Genital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C58	Placenta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C64	Kidney	9	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	1	0.7%
C65	Renal Pelvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C67	Bladder	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C68	Other Urinary organs	18	0	2	0	2	0	0	1	1	3	0	0	0	0	0	0	0	0	0.0%
C69	Eye	84	0	0	1	0	6	14	13	15	11	11	11	5	3	2	1	0	2	0.3%
C70-C72	Brain, Nervous system	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C73	Thyroid	21	0	1	0	0	1	3	0	0	0	0	0	0	2	2	0	1	0	1.5%
C74	Adrenal gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C75	Other Endocrine	46	0	1	0	4	1	5	3	4	7	3	5	2	5	4	4	1	1	1.7%
C81	Hodgkin disease	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
C82-C85;C96	Non-Hodgkin lymphoma	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1%
C88	Immunoproliferative dis.	24	0	6	4	1	2	2	1	0	0	0	0	1	3	5	4	1	0	0.4%
C90	Multiple Myeloma	20	0	0	2	1	1	1	1	5	3	2	0	4	0	0	0	0	0	2.0%
C91	Lymphoid Leukemia	4	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1.7%
C92-C94	Myeloid Leukemia	56	0	2	0	0	0	2	3	6	7	5	6	4	9	3	2	4	3	0.3%
C95	Leukemia unspecified	1210	0	26	14	16	13	22	65	112	143	158	172	129	126	74	56	39	45	100.0%
Other	Other & unspecified	1174	0	26	14	16	13	22	64	109	141	151	166	124	123	72	56	36	41	97.0%
All sites Total		1174	0	26	14	16	13	22	64	109	141	151	166	124	123	72	56	39	45	100.0%
Not C44	All sites but C44	1174	0	26	14	16	13	22	64	109	141	151	166	124	123	72	56	36	41	97.0%

Table 6.4.3.3 Incidence Rates for Cancer Cases among non- Saudi Males by Age Group (per 100,000), 2007

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World
C00	Lip	1	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
C01-C02	Tongue	21	0	0	0	0	0	0	0	0	0.3	0.7	0.5	1.3	3.7	9.3	0	0	0	0.5	1
C03-C06	Mouth	11	0	0	0	0	0	0	0	0.1	0	0.4	0.5	0.9	4.7	0	0	0	0	0.2	0.4
C07-C08	Salivary glands	6	0	0	0	0	0	0	0.2	0.1	0	0.2	0	0.4	0.8	0	5.7	0	0	0.1	0.3
C09	Tonsil	3	0	0	0	0	0	0	0	0	0	0	0	1.8	0	0	5.7	0	0	0.1	0.2
C10	Other Oropharynx	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0
C11	Nasopharynx	31	0	0	0	0	0.5	0.2	0	0	0.1	1.6	1.1	2.7	1.8	7	5.7	18.5	8	0.7	1.4
C12-C13	Hypopharynx	4	0	0	0	0	0	0	0	0	0	0.2	0.3	0.4	0	0	0	0	8	0.1	0.2
C14	Pharynx unspecified	1	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0	0	0	0	0	0
C15	Oesophagus	35	0	0	0	0	0	0	0	0.4	0.3	0.5	2.1	2.2	2.8	18.7	5.7	9.2	8	0.8	1.7
C16	Stomach	57	0	0.4	0	0	0	0.4	0.4	1.4	1.4	1.4	3.2	2.7	10.1	11.7	11.4	18.5	23.9	1.3	2.6
C17	Small intestine	5	0	0	0	0	0	0	0	0.1	0.1	0	0	0.4	0.9	0	5.7	0	0	0.1	0.2
C18	Colon	101	0	0	0	0	0.5	0.5	0.3	0.5	0.3	2.5	3.7	10.2	16.6	18.7	40	9.2	47.8	2.3	4.8
C19-C20	Rectum	80	0	0	0	0	1	0.9	0.6	0.4	1.8	3.7	4.5	9.2	14	34.3	46.1	31.9	1.8	1.8	4.3
C21	Anus	6	0	0	0	0	0	0	0	0.1	0	0	1.3	0	0	4.7	0	0	0	0.1	0.3
C22	Liver	58	0	0	1.1	0	0	0.4	0	0	0.5	0.2	1.6	4	10.1	28	22.9	36.9	23.9	1.3	3.9
C23-C24	Gallbladder etc.	19	0	0	0	0	0	0	0	0.1	0	0	0.5	0.9	2.8	7	22.9	27.7	8	0.4	1.9
C25	Pancreas	21	0	0	0	0	0	0	0	0.3	0	0	0.3	2.2	2.8	4.7	22.9	18.5	15.9	0.5	1.8
C30-C31	Nose, sinuses etc.	7	0	0	0	0	0	0	0	0.3	0	0.4	0.3	0	0	4.7	0	0	0	0.2	0.2
C32	Larynx	29	0	0	0	0	0	0.2	0	0.1	0.5	0	0.5	2.7	6.5	4.7	11.4	18.5	15.9	0.6	1.7
C33-C34	Trachea, Bronchus, Lung	96	0	0	0	0	0.5	0	0.2	0	0.5	0.9	3.7	6.7	17.5	39.7	51.4	46.1	55.8	2.1	6.5
C37-C38	Other Thoracic organs	11	0	0	0	0	0	0.2	0	0	0.3	0.2	0.5	0	0.9	2.3	17.1	0	0	0.2	0.7
C40-C41	Bone	10	0	0	0.5	1.4	0.5	0	0	0.1	0	0	0.3	1.3	0	0	0	0	0	0.2	0.3
C43	Melanoma of Skin	7	0	0	0	0	0	0.2	0	0	0	0.2	0.8	0	0	2.3	5.7	0	0	0.2	0.3
C44	Other Skin	62	0	0	0	0.7	0	0.2	0.4	0.3	1.6	1.6	1.9	3.1	15.7	9.3	22.9	46.1	15.9	1.4	3.4
C45	Mesothelioma	4	0	0	0	0	0	0	0	0	0	0.2	0.5	0	0	0	5.7	0	0	0.1	0.2
C46	Kaposi sarcoma	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.2	8	0	0.3
C47-C49	Connective,Soft tissue	30	0	0.4	0	1.1	0.7	1	0.5	0.1	0.4	0.9	1.6	0	2.8	0	17.1	0	0	0.7	1.1
C50	Breast	8	0	0	0	0	0	0	0.2	0	0.1	0	0	0.9	0.9	4.7	5.7	0	0	0.2	0.5
C60	Penis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C61	Prostate	77	0	0	0	0	0	0	0	0	0	0.2	1.1	3.6	12	32.7	108.6	92.3	63.7	1.7	8.4
C62	Testis	14	0	0.8	0	0	1.4	0.5	0.7	0	0.4	0.2	0.3	0	0	0	0	0	0	0.3	0.4
C63	Other male genital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C64	Kidney	36	0	0.4	0	0	0	0	0.2	0	0.4	0.5	1.6	2.7	5.5	2.3	28.6	0	31.9	0.8	2.2
C65	Renal Pelvis	3	0	0	0	0	0	0	0	0	0	0	0	0.9	0	2.3	0	0	0	0.1	0.1
C66	Ureter	1	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
C67	Bladder	66	0	0	0	0	0	0.2	0.5	0.1	0.2	0.2	1.3	6.7	7.4	25.7	22.9	92.3	47.8	1.5	5.3
C68	Other Urinary organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0.2
C69	Eye	8	0	1.7	0	0	0	0	0	0.1	0	0	0.5	0	0.9	0	0	0	0	0.2	0.3
C70-C72	Brain, Nervous system	45	0	1.3	1.3	2.2	2.8	0.5	0.7	0.5	0.6	0.7	1.3	1.3	2.8	2.3	0	0	8	1	1.5
C73	Thyroid	32	0	0	0	0	0	0.5	0.8	0.8	0.8	0.4	0.5	2.7	2.8	4.7	5.7	0	8	0.7	1
C74	Adrenal gland	3	0	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
C75	Other Endocrine	2	0	0.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
C81	Hodgkin disease	43	0	0	2.7	0	0.7	1	0.9	1.3	0.5	0.9	1.9	0.4	0	4.7	0	0	0	1	1
C82-C85;C96	Non-Hodgkin lymphoma	88	0	0.8	0.9	2.2	1.4	0.5	0.5	0.5	0.9	1.6	4.8	6.7	8.3	4.7	22.9	9.2	39.8	2	3.6
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C90	Multiple Myeloma	17	0	0	0	0	0	0	0.2	0.1	0.1	0.7	0	2.2	0.9	7	0	9.2	0	0.4	0.7
C91	Lymphoid Leukemia	35	0	5.1	1.8	2.2	0	0	0.2	0	0.3	0.2	0.5	0.9	1.8	4.7	5.7	0	15.9	0.8	1.8
C92-C94	Myeloid Leukemia	37	0	0.8	0.4	1.1	2.1	1.4	0.5	0.5	0.5	0.9	0.3	2.7	0.9	2.3	0	9.2	0	0.8	1.2
C95	Leukemia unspecified	6	0	0	0	0	0	0.2	0	0	0	0.4	0.5	0	0	0	0	0	8	0.1	0.2
Other	Other & unspecified	76	1	0.4	0.4	0	0	1.4	1.1	0.4	0.4	1.4	3.7	4	8.3	23.4	5.7	9.2	47.8	1.7	3.5
All	All sites Total	1317	1	14	8	10	11	9	10	8	10	22	46	84	161	313	520	544	550	29.4	71.8
Not C44	All sites but C44	1255	1	14	8	10	11	9	10	8	9	20	44	81	146	304	497	498	534	28	68.4

Table 6.4.4 Incidence Rates for Cancer Cases among non-Saudi Females by Age Group (per 100,000), 2007

ICD (10th)	Site	All Ages	Age Unk	0-4	5-9	15-19	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World
C00	Lip	1	0	0	0	0	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0
C01-C02	Tongue	4	0	0	0	0	0	0	0	0	0	2.2	0	0	0	0	0	0	12.8	0.2	0.4
C03-C06	Mouth	4	0	0	0	0	0	0	0	0	0	0	0	3.8	0	0	0	0	38.3	0.2	0.9
C07-C08	Salivary glands	3	0	0	0	0	0	0	0	0	0	0.7	1.4	0	3.8	0	0	0	0	0.1	0.3
C09	Tonsil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C10	Other Oropharynx	1	0	0	0	0	0	0	0.4	1	0	1.5	5.4	2.1	3.8	0	0	0	0	0	0.2
C11	Nasopharynx	12	0	0	0	0	0	0	0	0.7	0	0	0	0	3.8	0	0	0	0	0.6	0.8
C12-C13	Hypopharynx	5	0	0	0	0	0	0	0	0	0	0	0	3.8	0	0	0	0	0	0.2	0.3
C14	Pharynx unspecified	14	0	0	0	0	0	0	0	0	1.2	1.5	2.7	0	3.8	27.4	11	0	12.8	0.7	2.2
C15	Oesophagus	18	0	0	0	0	0	0.4	0.3	0	1.5	6.8	4.3	3.8	13.7	11	0	38.3	0.9	2.6	
C16	Stomach	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C17	Small intestine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C18	Colon	61	0	0	0	0	0	0.9	2	2.4	4.5	13.5	19.3	30.4	13.7	55.2	47	38.3	3	7.5	3.3
C19-C20	Rectum	25	0	0	0	0	0	0	0	0	5.2	5.4	6.4	22.8	13.7	11	0	25.5	1.2	3.3	7.5
C21	Anus	5	0	0	0	0	0	0	0	0	0.8	0	0	0	6.9	11	11.7	0	0.2	0.9	0.9
C22	Liver	12	0	0	0	0	0.7	0.4	0.3	0	0	0	0	15.2	13.7	11	11.7	12.8	0.6	2.1	2.4
C23-C24	Gallbladder etc.	15	0	0	0	0	0	0.4	0.3	0.4	0	2.7	6.4	3.8	20.6	11	11.7	12.8	0.7	2.1	2.4
C25	Pancreas	11	0	0	0	0	0	0	0	0.4	0.7	1.4	2.1	15.2	6.9	0	11.7	12.8	0.5	1.6	1.6
C30-C31	Nose, sinuses etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C32	Larynx	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C33-C34	Trachea, Bronchus, Lung	26	0	0	0	0	0	0	0	0	0.8	0.7	6.8	10.7	15.2	13.7	11	47	25.5	1.3	4
C37-C38	Other Thoracic organs	2	0	0	0	0	0	0	0	0	0	0	1.4	2.1	0	0	0	0	0	0.1	0.2
C40-C41	Bone	14	0	0.4	0.5	1.7	2.2	0	0	1	0.4	0	0	3.8	0	0	11	0	0	0.7	1
C43	Melanoma of Skin	9	0	0	0.6	0	0.7	0.4	0	0	1.2	1.5	0	2.1	0	0	0	0	0	0.4	0.4
C44	Other Skin	36	0	0	0	0	0	0	0	0	0.8	5.2	8.1	10.7	11.4	13.7	0	35.2	51	1.8	4.2
C45	Mesotheiloma	1	0	0	0	0	0	0	0	0	0	0	1.4	0	0	0	0	0	0	0	0.1
C46	Kaposi sarcoma	1	0	0	0	0	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0
C47;C49	Connective,Soft tissue	23	0	0.9	0.9	0	0.7	1.3	0.7	0.4	3.7	1.4	2.1	3.8	13.7	0	0	25.5	1.1	1.1	2.1
C50	Breast	426	0	0	0	0	0.7	8.8	14.3	23.6	54.3	116.3	94.2	155.7	164.5	231.9	82.2	102.1	21.2	41.4	41.4
C51	Vulva	3	0	0	0	0	0.7	0	0	0	0	0	0	0	6.9	11	0	0	0.1	0.7	0.7
C52	Vagina	5	0	0	0	0	0	0	0	0.3	0	0	0	2.1	3.8	6.9	0	11.7	0	0.2	0.8
C53	Cervix Uteri	47	0	0	0	0	0.4	1.7	6.1	7.4	6.1	7.4	0	12.9	3.8	27.4	22.1	25.5	2.3	2.3	4.2
C54	Corpus Uteri	42	0	0	0	0.7	0.7	0.4	0	0.4	3	4.1	27.8	26.6	13.7	44.2	35.2	25.5	2.1	2.1	6.1
C55	Uterus unspecified	7	0	0	0	0	0	0	0	0	0.4	1.5	2.7	0	7.6	0	0	0	0	0.3	0.6
C56	Ovary	59	0	0.4	1.4	0.6	0.7	1.8	3	2.4	3	9.5	12.9	30.4	13.7	44.2	35.2	0	2.9	2.9	6
C57	Other Female Genital	2	0	0	0	0	0	0	0	0.4	0	0	0	2.1	0	0	0	0	0	0.1	0.1
C58	Placenta	3	0	0	0	0	0	0	0	0.4	0	1.5	0	0	0	0	0	0	0	0.1	0.1
C64	Kidney	16	0	1.3	0	0	0	0	0	0.7	1.4	6.4	7.6	13.7	11	23.5	0	0	0.8	0.8	2.3
C65	Renal Pelvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.3
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C67	Bladder	9	0	0	0	0	0	0	0	0	0	0	1.4	4.3	3.8	20.6	0	11.7	12.8	0.4	1.8
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C69	Eye	4	0	0.9	0	0	0	0	0.4	0	0	0	0	0	0	0	11	0	0	0.2	0.5
C70-C72	Brain, Nervous system	18	0	0.9	0	1.1	0	0.7	0.4	0.3	1.2	0	1.4	4.3	7.6	0	11	0	25.5	0.9	1.8
C73	Thyroid	84	0	0	0.6	0	4	6.2	4.3	6.1	8.2	14.9	10.7	11.4	13.7	11	0	25.5	4.2	4.2	5.3
C74	Adrenal gland	4	0	1.3	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2
C75	Other Endocrine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C81	Hodgkin disease	21	0	0.4	0	2.2	0.7	3.3	1.3	0	0.4	0.7	1.4	4.3	0	13.7	0	0	1	1	1.6
C82-C85;C96	Non-Hodgkin lymphoma	46	0	0.4	0.5	1.1	1.4	0	1.3	1.3	2.8	6.8	6.4	19	27.4	44.2	11.7	12.8	2.3	5.2	5.2
C88	Immunoproliferative dis.	1	0	0	0	0	0	0	0	0	0	0	1.4	0	0	0	0	0	0	0	0.1
C90	Multiple Myeloma	5	0	0	0	0	0	0	0	0	0	0	2.1	11.4	0	11	0	0	0.2	0.2	0.9
C91	Lymphoid Leukemia	24	0	2.6	1.9	0.6	1.4	1.3	0.4	0	0.4	0	4.1	7.6	6.9	0	11.7	0	1.2	1.2	1.9
C92-C94	Myeloid Leukemia	20	0	0.9	0.6	0.7	0.7	0.4	1.7	1.2	1.5	0	8.6	0	0	0	0	0	0	1	1
C95	Leukemia unspecified	4	0	0.9	0	0	0.7	0	0.3	0	0	0	0	0	0	0	0	0	0	0.2	0.2
Other	Other & unspecified	56	0	0.9	0	0	1.3	1.3	2	2.8	3.7	8.1	8.6	34.2	20.6	22.1	47	38.3	2.8	2.8	6.3
All	All sites Total	1210	0	11	7	9	9	15	29	37	58	118	233	276	479	507	618	458	574	60.3	126.3
Not C44	All sites but C44	1174	0	11	7	9	9	15	28	36	57	112	225	266	467	493	618	423	523	58.5	122.1

**Table 6.5.1 Number of New Cases by Primary Site and Years among Saudi Males, 1994 - 2007**

ICD-10	Site	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
C00	Lip	9	2	4	5	4	1	6	1	5	5	8	6	5	12
C01-C02	Tongue	32	15	22	24	13	26	29	14	24	29	33	38	37	39
C03-C06	Mouth	24	23	30	25	26	27	25	27	26	26	40	30	31	37
C07-C08	Salivary glands	4	10	6	11	7	12	8	16	14	12	15	15	17	19
C09	Tonsil	4	9	2	4	6	2	1	4	6	5	2	3	0	4
C10	Other Oropharynx	2	3	3	2	1	3	0	3	3	0	2	3	0	2
C11	Nasopharynx	78	60	86	100	109	98	89	122	85	89	104	116	99	94
C12-C13	Hypopharynx	11	10	18	7	6	6	5	8	6	8	7	12	9	15
C14	Pharynx unspecified	0	2	0	0	1	1	0	2	2	4	4	4	3	2
C15	Oesophagus	77	71	67	63	79	58	68	63	70	68	55	57	58	75
C16	Stomach	131	128	133	109	124	104	124	125	147	181	151	162	171	173
C17	Small intestine	10	8	11	10	15	13	16	13	17	14	22	23	21	27
C18	Colon	62	88	74	85	107	100	117	119	153	180	203	262	234	275
C19-C20	Rectum	83	66	66	66	66	89	84	108	123	143	173	189	186	211
C21	Anus	10	8	6	8	6	5	10	12	14	11	17	16	8	12
C22	Liver	300	298	279	269	328	296	290	274	287	285	276	285	311	315
C23-C24	Gallbladder etc.	24	31	25	22	28	25	27	39	42	39	27	36	47	52
C25	Pancreas	50	49	53	45	60	59	68	53	74	84	82	98	101	127
C30-C31	Nose, sinuses etc.	5	6	10	5	10	13	5	9	14	10	10	15	10	12
C32	Larynx	49	48	44	41	46	43	44	51	33	60	53	53	64	56
C33-C34	Trachea,Bronchus,Lung	188	186	188	163	223	205	197	190	194	203	253	281	235	323
C37-C38	Other Thoracic organs	7	11	13	13	8	17	7	6	5	12	12	21	16	21
C40-C41	Bone	48	50	34	46	51	56	52	67	50	45	66	55	65	64
C43	Melanoma of Skin	21	8	8	8	6	7	11	9	12	10	13	13	12	15
C44	Other Skin	104	120	113	110	100	121	114	156	149	166	143	155	191	163
C45	Mesothelioma	5	4	5	5	7	2	7	5	3	5	6	8	8	13
C46	Kaposi sarcoma	15	11	14	14	12	11	19	20	21	26	27	23	22	17
C47;C49	Connective,Soft tissue	84	68	50	60	50	69	55	47	64	69	60	76	63	75
C50	Breast	11	16	6	12	19	11	16	12	15	16	14	15	19	20
C60	Penis	3	4	1	8	0	1	1	1	3	1	3	6	1	0
C61	Prostate	150	148	155	125	163	149	187	170	200	192	248	271	234	259
C62	Testis	32	22	25	30	38	31	35	36	45	38	47	44	39	58
C63	Other male genital	1	2	0	3	1	2	3	3	3	4	3	2	4	1
C64	Kidney	70	80	57	63	72	79	75	85	90	85	126	104	116	143
C65	Renal Pelvis	5	5	0	0	10	2	6	2	1	7	8	4	5	4
C66	Ureter	1	3	1	0	3	0	4	1	0	6	3	3	1	2
C67	Bladder	164	154	128	128	156	151	159	143	161	178	177	169	175	171
C68	Other Urinary organs	1	1	1	0	1	1	0	0	1	1	1	0	0	1
C69	Eye	21	12	18	35	17	24	25	22	24	21	21	17	26	22
C70-C72	Brain, Nervous system	132	99	127	123	103	120	141	120	120	147	154	140	150	133
C73	Thyroid	73	62	59	72	85	85	75	74	93	89	95	93	119	115
C74	Adrenal gland	8	9	8	8	4	9	11	7	7	15	6	10	20	15
C75	Other Endocrine	2	3	5	1	2	2	1	4	1	5	3	6	5	3
C81	Hodgkin disease	104	106	106	98	137	121	128	136	120	144	181	168	180	180
C82-C85;C96	Non-Hodgkin lymphoma	273	216	233	226	285	270	269	246	272	328	352	359	365	418
C88	Immunoproliferative dis.	0	0	0	1	0	1	0	0	0	1	2	0	0	0
C90	Multiple Myeloma	59	41	30	36	47	37	46	36	28	39	45	60	52	43
C91	Lymphoid Leukemia	152	118	148	144	156	137	152	158	144	164	153	161	157	194
C92-C94	Myeloid Leukemia	95	91	83	105	94	110	93	127	112	89	115	106	123	113
C95	Leukemia unspecified	10	5	5	5	8	7	14	13	12	13	15	15	24	28
Other	Other & unspecified	149	122	100	132	145	141	126	136	152	143	151	178	186	178
All	All sites Total	2953	2712	2660	2675	3045	2960	3045	3095	3247	3515	3787	3986	4025	4351
Not C44	All sites but C44	2849	2592	2547	2565	2945	2839	2931	2939	3098	3349	3644	3831	3834	4188



**Table 6.5.2 Number of New Cases by Primary Site and Years among Saudi Females, 1994-2007**

ICD-10	Site	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
C00	Lip	3	3	4	2	1	5	4	3	7	5	8	6	4	6
C01-C02	Tongue	23	20	28	28	29	31	23	19	31	30	29	21	27	37
C03-C06	Mouth	23	40	37	22	33	39	26	27	29	29	23	43	36	53
C07-C08	Salivary glands	8	7	6	3	12	9	14	8	6	10	12	13	13	18
C09	Tonsil	0	3	3	3	1	1	3	1	5	4	1	1	2	3
C10	Other Oropharynx	0	1	0	0	1	0	0	0	2	0	2	2	0	1
C11	Nasopharynx	39	28	39	33	37	35	24	41	41	39	46	35	43	58
C12-C13	Hypopharynx	19	10	15	15	19	16	10	12	12	2	16	16	11	9
C14	Pharynx unspecified	2	3	1	1	1	1	2	0	3	1	3	0	1	3
C15	Oesophagus	75	54	69	53	47	48	55	37	58	53	52	68	65	57
C16	Stomach	67	73	64	59	67	71	62	73	77	76	78	74	115	126
C17	Small intestine	9	11	9	10	16	8	10	15	8	10	13	13	15	14
C18	Colon	64	80	86	75	74	107	108	143	135	146	183	198	231	252
C19-C20	Rectum	44	51	52	59	57	86	73	88	104	109	119	144	146	169
C21	Anus	6	4	2	3	5	2	4	2	5	9	6	9	9	12
C22	Liver	110	89	100	87	125	93	121	101	117	128	120	112	136	121
C23-C24	Gallbladder etc.	51	38	25	32	51	60	46	54	41	59	55	67	71	86
C25	Pancreas	28	30	24	25	50	42	35	35	54	41	36	53	78	51
C30-C31	Nose, sinuses etc.	6	9	5	4	8	8	6	6	8	2	6	10	11	14
C32	Larynx	10	2	7	10	9	10	10	3	7	4	7	6	9	10
C33-C34	Trachea, Bronchus, Lung	52	55	49	53	51	49	53	56	52	64	71	87	81	89
C37-C38	Other Thoracic organs	7	6	5	6	5	5	8	5	3	10	10	12	11	9
C40-C41	Bone	26	38	38	25	45	36	39	43	35	39	41	41	38	33
C43	Melanoma of Skin	11	8	7	2	8	8	6	8	7	8	12	9	13	18
C44	Other Skin	79	55	87	59	82	78	81	104	95	123	132	132	136	120
C45	Mesothelioma	1	0	1	1	0	4	1	1	3	7	5	7	5	2
C46	Kaposi sarcoma	0	3	0	8	7	8	4	5	3	6	5	8	15	6
C47;C49	Connective, Soft tissue	42	55	42	46	61	49	49	43	39	53	75	50	40	60
C50	Breast	435	434	468	483	535	518	613	562	675	721	833	960	994	1239
C51	Vulva	8	6	7	3	3	3	8	7	6	6	11	1	4	4
C52	Vagina	5	6	2	6	2	3	1	5	5	1	5	7	1	4
C53	Cervix Uteri	79	74	84	77	98	78	84	84	87	92	95	96	80	105
C54	Corpus Uteri	58	47	39	50	61	59	93	79	89	113	125	151	149	189
C55	Uterus unspecified	4	2	11	10	17	13	6	15	14	14	14	16	23	24
C56	Ovary	97	100	97	114	111	101	107	111	110	127	120	143	140	149
C57	Other Female Genital	1	1	0	2	2	4	3	5	4	5	10	6	9	9
C58	Placenta	16	10	11	7	9	12	9	14	15	6	8	14	23	11
C64	Kidney	61	37	50	57	53	64	49	70	68	67	85	65	81	84
C65	Renal Pelvis	0	1	0	2	3	3	2	1	1	2	1	5	4	1
C66	Ureter	0	1	1	0	1	1	0	1	1	1	2	4	2	0
C67	Bladder	29	40	23	31	41	37	39	52	41	45	43	39	42	37
C68	Other Urinary organs	0	0	0	0	0	1	1	0	0	0	1	1	0	0
C69	Eye	15	16	18	14	11	25	25	18	20	16	19	20	20	20
C70-C72	Brain, Nervous system	78	75	76	93	87	78	88	84	85	94	110	103	107	120
C73	Thyroid	206	218	203	215	271	282	264	258	277	366	348	395	438	471
C74	Adrenal gland	10	6	10	11	9	10	13	8	8	13	17	10	10	8
C75	Other Endocrine	2	1	2	1	2	3	1	0	0	1	2	5	5	4
C81	Hodgkin disease	59	70	59	61	74	75	89	77	76	112	109	102	121	129
C82-C85;C96	Non-Hodgkin lymphoma	144	149	141	148	189	179	189	202	203	239	246	264	245	285
C88	Immunoproliferative dis.	0	0	0	1	0	1	1	1	0	1	0	0	0	0
C90	Multiple Myeloma	20	33	20	13	24	27	26	19	19	16	26	27	31	43
C91	Lymphoid Leukemia	77	89	80	79	73	95	112	86	102	92	83	85	91	111
C92-C94	Myeloid Leukemia	78	80	74	91	83	91	93	103	101	97	122	98	118	101
C95	Leukemia unspecified	6	6	0	5	7	12	9	4	5	11	12	15	10	19
Other	Other & unspecified	105	96	94	96	143	129	125	116	120	164	182	148	178	169
All	All sites Total	2398	2374	2375	2394	2811	2813	2927	2916	3119	3489	3795	4017	4288	4773
Not C44	All sites but C44	2319	2319	2288	2335	2729	2735	2846	2812	3024	3366	3663	3885	4152	4653

**Table 6.5.3 Age Adjusted Incidence Rate by Primary Site and Years among Saudi Males, 1994-2007**

ICD-10	Site	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
C00	Lip	0.2	0.1	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.2
C01-C02	Tongue	0.9	0.5	0.6	0.6	0.3	0.6	0.8	0.3	0.6	0.6	0.8	0.9	0.8	0.8
C03-C06	Mouth	0.7	0.7	0.9	0.6	0.7	0.6	0.5	0.7	0.6	0.6	0.8	0.7	0.8	0.8
C07-C08	Salivary glands	0.1	0.3	0.2	0.3	0.1	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.4
C09	Tonsil	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
C10	Other Oropharynx	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0
C11	Nasopharynx	2.1	1.6	2.3	2.5	2.6	2.3	2.0	2.5	1.9	1.7	2.1	2.3	1.7	1.5
C12-C13	Hypopharynx	0.3	0.2	0.4	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.2	0.3
C14	Pharynx unspecified	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
C15	Oesophagus	2.2	1.9	1.7	1.6	1.9	1.3	1.6	1.6	1.6	1.6	1.2	1.3	1.5	1.5
C16	Stomach	3.7	3.6	3.5	2.7	3.0	2.4	3.0	2.9	3.2	4.2	3.5	3.6	4.2	3.6
C17	Small intestine	0.3	0.2	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.5	0.5	0.5	0.5
C18	Colon	1.8	2.4	2.0	2.1	2.7	2.5	2.9	2.8	3.5	4.2	4.5	5.8	5.3	5.5
C19-C20	Rectum	2.4	1.9	1.6	1.7	1.7	2.4	2.1	2.5	2.7	3.3	4.0	4.3	4.5	4.1
C21	Anus	0.3	0.2	0.2	0.2	0.2	0.1	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2
C22	Liver	8.8	8.5	7.5	7.1	8.4	7.5	7.3	7.3	6.9	7.1	6.6	6.7	8.1	6.8
C23-C24	Gallbladder etc.	0.7	0.9	0.7	0.6	0.7	0.6	0.7	1.0	1.0	1.0	0.7	0.8	1.2	1.1
C25	Pancreas	1.4	1.3	1.5	1.2	1.5	1.4	1.6	1.3	1.7	2.0	2.0	2.3	2.6	2.7
C30-C31	Nose, sinuses etc.	0.1	0.2	0.3	0.1	0.2	0.3	0.1	0.3	0.3	0.2	0.2	0.3	0.2	0.2
C32	Larynx	1.5	1.4	1.2	1.1	1.2	1.1	1.1	1.4	0.8	1.5	1.3	1.3	1.6	1.2
C33-C34	Trachea,Bronchus,Lung	5.6	5.4	5.1	4.4	5.8	5.2	5.0	4.9	5.0	5.2	5.9	6.6	6.2	6.9
C37-C38	Other Thoracic organs	0.2	0.2	0.3	0.2	0.2	0.3	0.1	0.1	0.1	0.3	0.2	0.3	0.2	0.4
C40-C41	Bone	0.7	0.7	0.5	0.7	0.7	0.7	0.7	0.8	0.6	0.6	0.7	0.6	0.7	0.7
C43	Melanoma of Skin	0.6	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3
C44	Other Skin	2.7	3.1	2.8	2.8	2.4	2.7	2.5	3.6	3.2	3.7	3.2	3.3	4.5	3.1
C45	Mesothelioma	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3
C46	Kaposi sarcoma	0.5	0.3	0.3	0.3	0.3	0.2	0.4	0.5	0.5	0.6	0.6	0.5	0.5	0.3
C47;C49	Connective,Soft tissue	1.7	1.4	1.0	1.2	0.8	1.2	1.0	0.8	1.1	1.2	0.9	1.0	1.0	1.1
C50	Breast	0.3	0.5	0.1	0.3	0.5	0.2	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.4
C60	Penis	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
C61	Prostate	4.0	3.9	3.8	3.0	4.0	3.5	4.1	4.3	4.4	4.6	5.9	6.4	6.3	5.7
C62	Testis	0.7	0.4	0.5	0.5	0.7	0.6	0.6	0.5	0.7	0.5	0.6	0.5	0.5	0.7
C63	Other male genital	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0
C64	Kidney	1.8	2.0	1.4	1.5	1.7	1.6	1.7	1.8	1.8	1.8	2.6	2.1	2.5	2.7
C65	Renal Pelvis	0.1	0.1	0.0	0.0	0.3	0.1	0.1	0.0	0.0	0.2	0.2	0.1	0.1	0.1
C66	Ureter	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.2	0.1	0.1	0.0	0.0
C67	Bladder	4.6	4.3	3.5	3.3	3.9	3.7	4.0	3.4	3.5	4.1	4.1	3.6	4.2	3.5
C68	Other Urinary organs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C69	Eye	0.5	0.2	0.3	0.5	0.2	0.4	0.3	0.5	0.4	0.3	0.4	0.3	0.3	0.3
C70-C72	Brain, Nervous system	2.9	1.8	2.4	2.2	1.7	2.1	2.3	2.1	2.0	2.4	2.4	2.2	2.6	1.9
C73	Thyroid	1.9	1.5	1.5	1.8	1.9	1.7	1.5	1.6	1.9	1.8	1.7	1.6	2.1	1.8
C74	Adrenal gland	0.1	0.1	0.2	0.1	0.0	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2
C75	Other Endocrine	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0
C81	Hodgkin disease	2.1	1.9	1.7	1.5	2.2	1.8	1.8	1.9	1.7	1.9	2.3	2.1	2.1	2.2
C82-C85;C96	Non-Hodgkin lymphoma	6.7	5.1	5.5	5.0	6.2	6.1	5.5	4.9	5.2	6.4	6.3	6.7	6.8	7.0
C88	Immunoproliferative dis.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
C90	Multiple Myeloma	1.8	1.1	0.8	1.0	1.3	1.0	1.1	0.9	0.6	0.9	1.1	1.3	1.3	0.9
C91	Lymphoid Leukemia	2.2	1.8	2.1	2.1	2.4	1.9	2.1	2.4	2.0	2.2	2.1	1.9	2.3	2.4
C92-C94	Myeloid Leukemia	1.9	1.7	1.7	2.0	2.0	1.8	1.7	2.0	1.9	1.5	1.8	1.6	1.9	1.6
C95	Leukemia unspecified	0.2	0.1	0.1	0.1	0.2	0.1	0.3	0.2	0.2	0.3	0.2	0.2	0.4	0.4
Other	Other & unspecified	4.0	3.1	2.6	3.3	3.5	3.4	2.8	3.4	3.4	3.3	3.3	3.8	4.3	3.5
All	All sites Total	76.1	67.4	63.5	61.5	69.3	65.1	65.6	67.6	67.3	74.0	76.9	79.9	86.2	80.0
Not C44	All sites but C44	73.4	64.2	60.7	58.6	66.9	62.4	63.1	64.0	64.1	70.3	73.8	76.6	81.7	76.8

**Table 6.5.4 Age Adjusted Incidence Rate by Primary Site and Years among Saudi Females, 1994-2007**

ICD-10	Site	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
C00	Lip	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1
C01-C02	Tongue	0.8	0.7	0.9	0.8	0.9	0.9	0.6	0.5	0.8	0.7	0.7	0.5	0.7	0.8
C03-C06	Mouth	0.7	1.3	1.1	0.7	1.1	1.1	0.7	0.6	0.7	0.7	0.5	0.9	0.8	1.0
C07-C08	Salivary glands	0.2	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.3
C09	Tonsil	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1
C10	Other Oropharynx	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
C11	Nasopharynx	0.9	0.6	1.0	0.8	0.9	0.8	0.5	0.7	0.8	0.7	0.9	0.7	0.8	0.9
C12-C13	Hypopharynx	0.6	0.3	0.5	0.5	0.6	0.4	0.3	0.3	0.2	0.0	0.4	0.4	0.2	0.2
C14	Pharynx unspecified	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0
C15	Oesophagus	2.7	1.8	2.2	1.7	1.5	1.4	1.5	1.0	1.5	1.3	1.2	1.6	1.6	1.2
C16	Stomach	2.4	2.4	2.1	1.8	2.0	1.9	1.6	1.7	1.8	1.8	1.7	1.7	2.7	2.5
C17	Small intestine	0.3	0.4	0.3	0.3	0.5	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3
C18	Colon	2.2	2.7	2.6	2.2	2.2	2.9	2.6	3.4	3.1	3.4	4.2	4.3	5.3	4.8
C19-C20	Rectum	1.6	1.7	1.6	1.9	1.7	2.3	1.8	2.0	2.3	2.5	2.7	3.1	3.4	3.3
C21	Anus	0.2	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2
C22	Liver	3.9	3.1	3.3	2.9	3.8	2.7	3.2	2.7	2.8	3.3	2.9	2.6	3.3	2.6
C23-C24	Gallbladder etc.	1.8	1.4	0.8	1.0	1.6	1.7	1.3	1.4	1.1	1.5	1.3	1.6	1.7	1.9
C25	Pancreas	1.1	1.1	0.8	0.9	1.6	1.2	0.9	0.8	1.4	1.0	0.9	1.3	2.0	1.1
C30-C31	Nose, sinuses etc.	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.0	0.1	0.2	0.2	0.2
C32	Larynx	0.3	0.1	0.2	0.3	0.3	0.3	0.3	0.1	0.2	0.1	0.2	0.1	0.2	0.2
C33-C34	Trachea,Bronchus,Lung	1.9	2.0	1.5	1.6	1.6	1.4	1.5	1.4	1.2	1.6	1.7	1.9	2.0	1.9
C37-C38	Other Thoracic organs	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.2	0.2	0.2	0.1
C40-C41	Bone	0.4	0.7	0.7	0.4	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.3
C43	Melanoma of Skin	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.4
C44	Other Skin	2.7	1.8	2.7	1.9	2.4	2.1	2.0	2.5	2.2	2.9	3.0	2.9	3.0	2.5
C45	Mesothelioma	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.1	0.2	0.1	0.0
C46	Kaposi sarcoma	0.0	0.1	0.0	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.1
C47;C49	Connective,Soft tissue	0.9	1.3	1.0	1.0	1.1	1.0	0.8	0.6	0.6	0.8	1.3	0.7	0.6	0.7
C50	Breast	13.5	12.9	13.4	13.2	14.3	12.5	13.8	12.0	14.0	14.8	16.5	18.6	18.2	21.6
C51	Vulva	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.0	0.1	0.1
C52	Vagina	0.2	0.2	0.0	0.2	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.0	0.1
C53	Cervix Uteri	2.4	2.2	2.5	2.3	2.9	2.0	1.9	2.0	1.8	1.9	2.0	2.0	1.6	1.9
C54	Corpus Uteri	2.1	1.4	1.4	1.6	2.0	1.6	2.5	2.0	2.2	2.8	3.0	3.6	3.8	4.0
C55	Uterus unspecified	0.1	0.1	0.3	0.3	0.5	0.4	0.1	0.4	0.3	0.3	0.4	0.4	0.5	0.6
C56	Ovary	2.9	3.0	2.7	3.1	3.1	2.3	2.2	2.4	2.3	2.4	2.5	2.9	3.0	2.6
C57	Other Female Genital	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2
C58	Placenta	0.4	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.1
C64	Kidney	1.5	1.0	1.1	1.3	1.4	1.4	0.9	1.4	1.4	1.4	1.8	1.2	1.6	1.4
C65	Renal Pelvis	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0
C66	Ureter	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
C67	Bladder	1.0	1.2	0.7	1.0	1.3	1.0	1.1	1.3	1.0	1.1	1.0	0.8	1.0	0.8
C68	Other Urinary organs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C69	Eye	0.3	0.3	0.4	0.2	0.2	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3
C70-C72	Brain, Nervous system	1.4	1.5	1.4	1.8	1.5	1.4	1.5	1.5	1.3	1.6	1.7	1.4	1.7	1.7
C73	Thyroid	5.5	5.2	4.7	5.0	5.7	5.4	4.8	4.6	4.7	6.1	5.7	6.3	6.7	6.6
C74	Adrenal gland	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1
C75	Other Endocrine	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
C81	Hodgkin disease	1.4	1.3	1.0	1.1	1.3	1.2	1.2	1.1	1.0	1.5	1.4	1.3	1.6	1.5
C82-C85;C96	Non-Hodgkin lymphoma	4.3	4.2	4.1	4.0	5.0	4.3	4.1	4.4	4.4	5.0	5.0	5.3	5.1	5.1
C88	Immunoproliferative dis.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C90	Multiple Myeloma	0.8	1.2	0.7	0.4	0.8	0.8	0.7	0.5	0.5	0.4	0.6	0.6	0.7	0.9
C91	Lymphoid Leukemia	1.1	1.6	1.2	1.0	1.0	1.2	1.6	1.2	1.3	1.2	1.0	1.0	1.2	1.4
C92-C94	Myeloid Leukemia	1.8	1.7	1.6	1.7	1.6	1.7	1.6	1.8	1.8	1.6	1.9	1.5	2.1	1.5
C95	Leukemia unspecified	0.1	0.1	0.0	0.1	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3
Other	Other & unspecified	3.5	3.1	2.8	2.8	4.3	3.3	3.2	3.0	2.8	3.9	4.1	3.2	4.2	3.4
All	All sites Total	71.3	67.4	64.7	63.3	73.2	66.0	64.0	62.4	64.2	71.3	75.9	78.1	85.4	84.2
Not C44	All sites but C44	68.5	65.7	62.0	61.4	70.8	63.9	62.0	59.9	62.0	68.4	72.9	75.2	82.4	81.6

## Errors in 2006 Cancer Incidence Report

In 2006 Cancer Incidence Report, in Jordan; the Crude Incidence Rate (CIR) 70.9 in males and 79.3 in females was used instead of the Age-Standardized Rate (ASR) which is 125.8 in males and 127.9 in females.

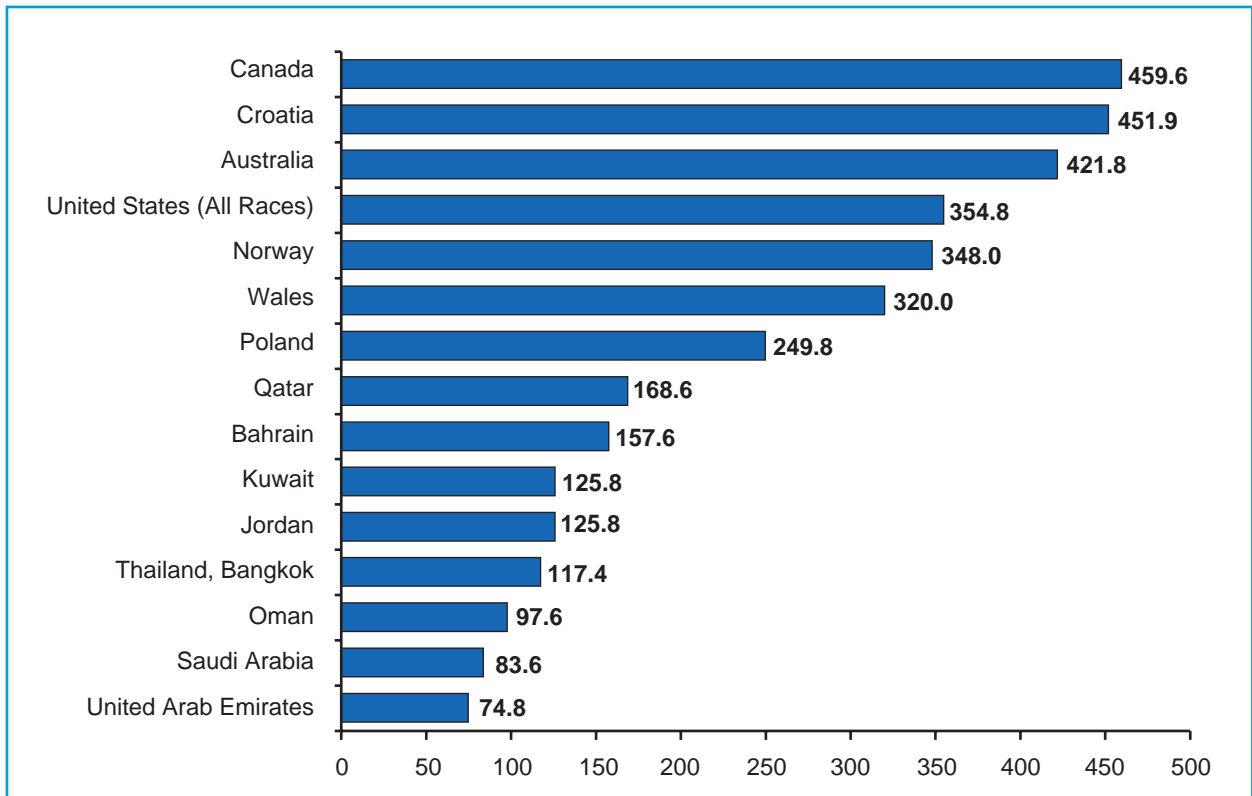


Figure 2.9.A Comparison of ASR\* for Saudi Males with Selected Countries\*\*

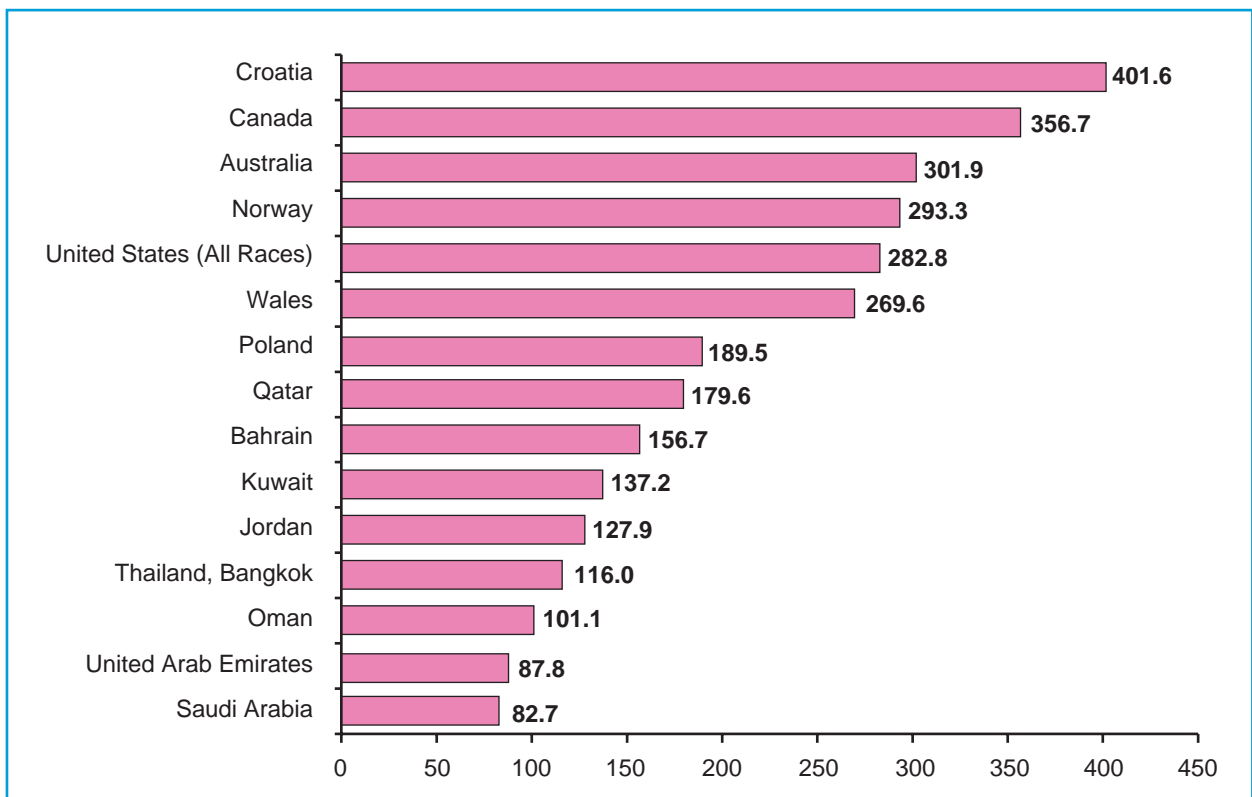


Figure 2.9.B Comparison of ASR\* for Saudi Females with Selected Countries\*\*

**PART VII**  
**APPENDICES**

## APPENDIX: A Reporting Health care Facilities

<b>Asir Region</b>	
Abha General Hospital (Maternity) Abha Private Hospital AFH Military Hospital Ahli Hospital (Abha) Asir Central Hospital (Abha) Balasmar General Hospital Bisha General Hospital Dhahran Janoob Hospital Khamis Mushayt Civil Hospital King Fahad Hospital, AFH (Khamis Mushayt)	King Faisal Military Hospital Mahael General Hospital Majaridah General Hospital Namas General Hospital Prince Abdul Bin Abdul Aziz Hospital Rijal Al Maa Hospital Sarat Obeidah General Hospital Saudi German Hospital (Abha) Tathleeth General Hospital
<b>Baha Region</b>	
Baha National Hospital Baljurashi General Hospital Ghodran Hospital	King Fahad Hospital (Baha) Mandaq Hospital Mikhwah Hospital
<b>Eastern Region</b>	
Ahsa Hospital (Hofuf) AL Borg Lab (DM) Anak General Hospital ARAMCO Clinic Armed Forces Hospital (Hafr Al Batin) Astoon Hospital (Thomairy) Badr Rubaie Dispensary Dammam Central Hospital Dossary Hospital (Khobar) Dr. Fakhry & Mouhawis Hospital Dr. Noor Khan Hospital (Hafr Al Batin) Fanateer Hospital Faraby Dispensary Huwaylat Hospital Imam Abdul Rahman Bin Faisal, NGH (DM) Jabir Eye & ENT Hospital Jubail General Hospital Jubail Military Hospital Jufer Hospital (Hofuf) Khafji General Hospital Khafji Joint Operation King Abdul Aziz Airbase King Abdul Aziz Port Clinic King Abdul Aziz Navy Base King Abdulaziz (NGH Hospital) King Fahad Hospital (Hofuf) King Fahad Hospital of the University (Khobar)	King Fahad Military Medical Complex (AFH) King Fahad Specialist Hospital (DM) King Khalid General Hospital King Khalid Military Complex Mana General Hospital (DM) Mana General Hospital (Hofuf) Mana General Hospital (Jubail) Mana General Hospital (Khobar) Maternity & Children's Hospital (Hofuf) Maternity & Children's Hospital (Khobar) Mousa Hospital (Hofuf) Mouwasat Hospital (DM) Naireia General Hospital Prince Saud Bin Jalawi Hospital Qatif Central Hospital Qatif General Hospital Ras Tanura Center (ARAMCO Clinic) Rowdha Dispensary Saad Specialist Hospital Center (Khobar) Saddiq Hospital Salama Hospital Saudi ARAMCO Medical Services Organizations Tadawy General Hospital Tapline Qaisuma Hospital (ARAMCO) Yousif Hospital Zamil Hospital
<b>Hail Region</b>	
AlBorg Lab (Hail) Baqah Hospital Hail General Hospital King Khaled General Hospital Maternity & Children's Hospital	Rashid Hospital Safa Polyclinic Salamat Private Hospital Shamli (Hail)

## APPENDIX: A (continued...)

<b>Jazan Region</b>	
Abu Arish General Hospital Baysh General Hospital Darb Hospital Jazan General Hospital	Jazan Military Hospital King Fahad Central Hospital Samtah General Hospital
<b>Jouf Region</b>	
Dawamat Jandal Hospital Maternity & Children's Hospital Pr AbdulRahman Sudairi General Hospital	Qurayat General Hospital Tabarjal General Hospital
<b>Madinah Region</b>	
Al Borg Lab Aneis Al Khair Lab Ansar Hospital (MD) Ansary Specialist Hospital Badr General Hospital (Yanbu) Dr Erfan Saadi Hospital (Yanbu) Hanakyah General Hospital Khaybar General Hospital King Abdul Aziz NGH Hospital King Fahad Hospital (MD) Madina National Hospital Madinah Maternity & Children's Hospital	Magrabi Eye Hospital (MD) Mahd General Hospital Meeqat Hospital Mouwasat Hospital (Madinah) Ohoud Hospital Prince Abdul Mohsen Ola General Hospital Royal Commission Medical Center (Yanboa) Saudi German Hospital (MD) Yanboa General Hospital Zahra Private Hospital Zen Laboratory
<b>Makkah Region</b>	
Abdul Rahman Qari Center Abdullah Saeim Daher Abuzinada Hospital Adwani General Hospital (Taif) Ahli Clinic Ajiyad General Hospital (MK) Alawi Tunki & Bros Hospital AlBorg Lab (JD) AlBorg Lab (MK) Amen Hospital (Taif) Ansar Hospital (JD) Bugshan General Hospital (JD) Chest Disease Hospital (Taif) Dr Abdul Rahman Bakhsh Hospital Dr Erfan & Bagedo Hospital Dr Ghassan Pharaon Hospital Dr Khalid Idrissi Hospital Dr Solaiman Fakeeh Hospital Elaj Laboratory (JD) Eye Hospital (JD) Ghannam Clinic Hada Military Hospital (AFH) Hai Jamea Hospital Hayat Hospital (JD) Hera General Hospital (MK) International Medical Jazerah Hospital (JD)	King Faisal Hospital (Taif) King Faisal Specialist Hospital (JD) King Saud Hospital (JD) Leeth Hospital Maghraby Eye Hospital (JD) Maternity & Children's Hospital (JD) Maternity & Children's Hospital (TF) Maternity & Children's Hospital (MK) Muhammad Saleh Bashrahi Misan Blhareth (Taif) Mustaqbal Hospital (Dhagastani) Nahda National Hospital (TF) National Saudi Hospital (JD) New Jeddah Clinic Noor Specialist Hospital (MK) Nourah Oncology Center Pioneers Laboratory Qunfudah General Hospital Rabegh General Hospital Rafie Hospital (MK) Rahmah Polyclinic (JD) Royal Commission Medical Center (Yanboa) Salam Hospital Saudi German Hospital (JD) Saudi Hospital

## APPENDIX: A (continued...)

<b>Makkah Region continued.....</b>	
Jedaani Hospital Jeddah Clinic Hospital Jeddah General Hospital Khadra Lab (JD) King AbdulAziz Hospital & Oncology Center (JD) King AbdulAziz Hospital (Al Zaher) (MK) King AbdulAziz Specialist Hospital (Taif) King AbdulAziz University Hospital (JD) King Fahad General Hospital King Fahad Hospital, AFH (JD) King Fahd Air Base Hospital King Faisal (Al Shesha) Hospital (MK)	Saudia Airlines Medical Services Shaty Hospital (Closed) Sheffaa Hospital Taif Chest Hospital Taif Children's Hospital (Taif) Taif Medical Center Thagher Hospital Torbah Hospital Umm Qura General Hospital United Doctors Hospital (Shaty Hospital) Zahra Hospital (JD)
<b>Najran Region</b>	
Dhafer Hospital (Najran) King Khaled Hospital (Najran) Maternity & Children's Hospital Najran Armed Forces Hospital	Najran General Hospital Sharourah Armed Forces Sharourah General Hospital
<b>Northern Region</b>	
Arar Central Hospital	Rafha General Hospital Turayf General Hospital
<b>Qassim Region</b>	
Bukairiya General Hospital Buraidah Central Hospital King Fahd Specialist Hospital King Saud University Hospital Maternity & Children's Hospital	Midhnaab General Hospital Rass General Hospital Wafa Hospital
<b>Riyadh Region</b>	
Abdullah Medical Clinic Adama Hospital Advance Cell Laboratory AFH Millitary (RKH) Afif General Hospital Aflaj General Hospital Ahad Madina Polyclinic Alam Medical Center AlBorg Lab (RY) Amal Clinic (I) Amal Psychiatric Hospital Ameed Polyclinic (Kharj) Anda Medical Laborator Armed Forces (Wadi Dawasir) Artwiyah Clinic Ashbelia Medical Clinic Aziziah Medical Laboratory Basheer Obaid Dental Clinic Bustan Clinic Chest Diseases Hospital (Kharj) Consultative Medical Center	Ismail Raslan Polyclinic Jafel International Ho Jazeera Laboratories Jazeera Medical Clinic Khaleejy Medical Clinic King Abdul Aziz Medical City King Abdul Aziz University King Fahad Medical City King Faisal Specialist Hospital & Research Center King Khaled Eye Specialist Hospital King Khaled General Hospital King Khaled University Hospital Maghraby Eye Hospital (RY) Mamlaka Hospital (Kingdom) Masaudi Clinic Maternity & Children's Hospital (RY) Mobarak Hospital Mouwasat Hospital (Ry) Mowed Medical Center Obeid Hospital (RY) Olaya Medical Center



## APPENDIX: A (continued....)

<b>Riyadh Region continued.....</b>	
Consulting Radiologist Dallah Hospital Dar Hekma Clinic (RY) Dar Shifa Hospital Dawadmi General Hospital Dawssary Polyclinic (Kharj) Delta Medical Laboratory Digits Clinic Dilem General Hospital (Kharj) Dr Abdul Rahman Mishari Hospital Dr Fahd Sheduokhy Polyclinic Dr Hamed Mutabagani Med Dr Moagel's Polyclinic Dr Mofarreh Polyclinic Dr Mohamed Anazi Medical Center Dr Mohamed Shaker Heto Dr Suliman Habib Medical Center Elaj Laboratory Elite Medical & Surgical Eman General Hospital ENT Medical Center Faiha Medical Center Faleh International Hospital Finger Print Laboratory Green Cresent Hospital Gulf Radiology Center Hammadi Hospital Hayat Polyclinic (Kharj) Hilah Medical Clinic Hotta Bani Tammim Hospital Howtat Sudair Hospital Huraymila General Hospital Ibn Sina Lab (RY)	Osrah Clinic Osrah International Hospital Prince Nasser Bin Saad Prince Salman Bin Abdulaziz Hospital Quwayiyah General Hospital Rathawiah Medical Spec Rawabi Qurtuba Clinic Riyadh Care Hospital (Social Insurance) Riyadh Medical Center Riyadh Medical Complex Saati Medical Center Clinic Safa Makka Polyclinic Saudi German Hospital Saudi Medical Services Security Forces Hospital Shaqra General Hospital Shibel National Clinic Shifa Health Center Specialized Medical Center Sports Medicine Hospital Sughayyer Clinic Sulail Hospital Taif Medical Center (RY) Tumayr (Majmaah) United Medical Laboratory Wadi Dawasser Hospital Watan Clinic Watani Hospital (RY) Wroud Medical Clinic Yamamah Hospital Zulfi General Hospital
<b>Tabuk Region</b>	
Badaa Hospital (Tabuk) Dhuba General Hospital King Abd Aziz Military King Fahad Hospital (Tabuk) King Khalid Civil King Khalid General Hospital	Maternity & Children's Hospital North West Armed Forces Hospital Prince Fahad Bin Sultan Hospital Taima General Hospital Umlujj General Hospital Wajh General Hospital
<b>International Hospitals in the following Countries</b>	
Bahrain Bangladesh Canada China Cyprus Egypt Eritrea Ethiopia France Germany India Iraq Ireland Japan	Jordan Kuwait Lebanon Nigeria Pakistan Philippines Qatar Sudan Syrian Arab Republic United Arab Emirates United Kingdom United States of America Yemen

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Haya Al Eid, BDS, DFE, CTR  
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**Ali Al-Zahrani, MD, PhD**

## APPENDIX: B Continued....

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<b>Southern Region</b> King Khalid University PO Box 641, Abha Tel: 07-224-0711 / 224-7800 x 118 Fax: 07-224-0964 / 224-7570	<b>Director:</b>	<b>Abdul Rahman Al Shehri, MD</b>
<b>Western Region</b> King Abdulaziz Hosp. & Oncology Center PO Box 31467, Jeddah 21497 Tel: 02-637-5555 x 2276 Fax: 02-635-6410 Email: <a href="mailto:hasna_ncr_w@hotmail.com">hasna_ncr_w@hotmail.com</a>	<b>Director:</b>	<b>Hasnah Al Ghamdi, MD</b>
<b>Ministry of Health</b> Kingdom of Saudi Arabia PO Box 335157, Riyadh 11314 Tel: 01-475-0426 x 201 Fax: 01-475-0428 Email: <a href="mailto:mysa88@yahoo.com">mysa88@yahoo.com</a>	<b>Representative:</b>	<b>Mohammad Y. Saeedi, MD</b>
<b>Nasser Al Hamdan,</b>	<b>Dep. Chairman</b>	<b>1992 - 2006</b>
<b>Edward De Vol, PhD</b>	<b>Director</b>	<b>January 2001 - April 2006</b>
<b>Hadir Meir, MD</b>	<b>Director</b>	<b>January 2001 - August 2005</b>
<b>Hassan Trabulsi, MD</b>	<b>Director</b>	<b>November 2001 - June 2007</b>
<b>Dahish Ajarim, MD</b>	<b>Director</b>	<b>1992 - December 2009</b>
<b>Susan E. Young, CCHRA®, CTR</b>	<b>Admin. Director</b>	<b>March 2003-May 2006</b>

# APPENDIX C: Cancer Registration Abstract Form

**SAUDI CANCER REGISTRY**  
**Ministry of Health**  
**Kingdom of Saudi Arabia**

## CANCER REGISTRATION ABSTRACT

Revised 03, 2010

1. ACCESSION DATE              
d d m m y y y y

2. CanReg-4 No. (Accession Number)                       
(Computer Assigned)

### PATIENT

3. First (Must be filled)	4. FATHER (Must be filled)	5. GRANDFATHER	6. FAMILY (Must be filled)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

*Use SCR standardized name spellings*

7. Saudi ID/Passport/ Iqama Number

8. Sex                       
1-Male 2-Female 9-Unknown (if only year is known, use 01/07//\_ \_ \_ \_)

9. Date of Birth                       
d d m m y y y y

10. Age at Diagnosis

11. Nationality Code

12. Nationality Text (Must be filled)

13. Marital Status                       
1. Single 2. Married 3. Divorced 4. Widowed 9. Unknown

14. Address Code (Must be filled)

15. Address Details (Must be filled)  
 City:  Suburb/District:  P.O. Box:  Zip Code:

16. Mobile Number (Must be filled)

17. Telephone Number 1 (Must be filled)

18. Extension 1

19. Telephone Number 2

20. Extension 2

### TUMOR

21. Date of Diagnosis (Must be filled)  
(First time physician states that patient has a malignancy clinically or pathologically) (if only year is known, use 01/07//\_ \_ \_ \_)  
                      
d d m m y y y y

22. Topography Code

23. Topography Text (Must be filled)

24. Morphology Code

25. Morphology Text (Must be filled)

(behavior)

26. Behavior

27. Grade

28. SEER Summary Stage (Extent)

29. Laterality

30. Basis of Diagnosis

**APPENDIX C: Cancer Registration Abstract Form**

**HOSPITAL**

31. Date first seen at Source1 for this cancer  
*(Must be filled)*

d	d	m	m	y	y	y	y

32. Source 1	33. Reporting Hospital Text	34. MRN 1	35. Path 1
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

36. Source 2	37. Referral Hospital Text	38. MRN 2	39. Path 2
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

40. Source 3	41. Referral Hospital Text	42. MRN 3	43. Path 3
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

44. Source 4	45. Referral Hospital Text	46. MRN 4	47. Path 4
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

48. Source 5	49. Referral Hospital Text	50. MRN 5	51. Path 5
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

52. Source 6	53. Referral Hospital Text	54. MRN 6	55. Path 6
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**FOLLOW-UP**

56. Last Contact

d	d	m	m	y	y

57. Status

- 1. Dead
- 2. Alive
- 9. Unknown

58. Cause of Death

- 1. Cancer
- 2. Other
- 3. Not Applicable
- 9. Unknown

59. Coder ID #

60. Data Entry ID #

Signature: \_\_\_\_\_ Signature: \_\_\_\_\_

QUESTIONS / QUERIES / PROBLEMS

## ملخص

### إحصائيات السرطان في المملكة العربية السعودية لعام ٢٠٠٧ م

أنشئ السجل السعودي للأورام في عام ١٤١٢هـ (١٩٩٢م) بمستشفى الملك فيصل التخصصي ومركز الأبحاث تحت إشراف وزارة الصحة وبمشاركة من القطاعات الصحية الحكومية. يضم السجل خمسة فروع في مناطق المملكة بالإضافة إلى وجود مكاتب في كل من مستشفيات الملك فيصل التخصصي ومركز الأبحاث والقوات المسلحة بالرياض ومدينة الملك عبد العزيز الطبية بجدة وقوى الأمن بالرياض.

بدأ السجل نشاطه في جمع المعلومات من شهر يناير في عام ١٩٩٤م. تدون المعلومات عن كل حالة سرطان وفق نموذج خاص بالسجل وتُرمز البيانات وتدخل حسب النظام المعتمد من منظمة الصحة العالمية وتحلل بشكل دوري. كما أن السجل يقوم بتزويد الجهات المختصة والباحثين بمعلومات إحصائية مفصلة بناءً على طلبهم وفق نموذج خاص على الموقع الرسمي الإلكتروني للسجل (<http://www.scr.org.sa>)

بلغ إجمالي عدد حالات السرطان المسجلة في عام ٢٠٠٧ ما مجموعه ١١,٦٥١ حالة. من بين هذه الحالات ٩,١٢٤ سعوديبن بنسبة ٧٨.٣% و ٢,٥٢٧ غير سعوديبن بنسبة ٢١.٧%. من بين السعوديبن ٤,٣٥١ حالة رجال بنسبة ٤٧.٧% والنساء ٤,٧٧٣ حالة بنسبة ٥٢.٣%.

سعوديين			غير سعوديبن			جنسيات غير محددة			الكل
ذكر	انثى	المجموع	ذكر	انثى	المجموع	ذكر	انثى	المجموع	المجموع
٤٣٥١	٤٧٧٣	٩١٢٤	١٣١٧	١٢١٠	٢٥٢٧	١٦٣	١٩٨	٣٦١	١١٦٥١

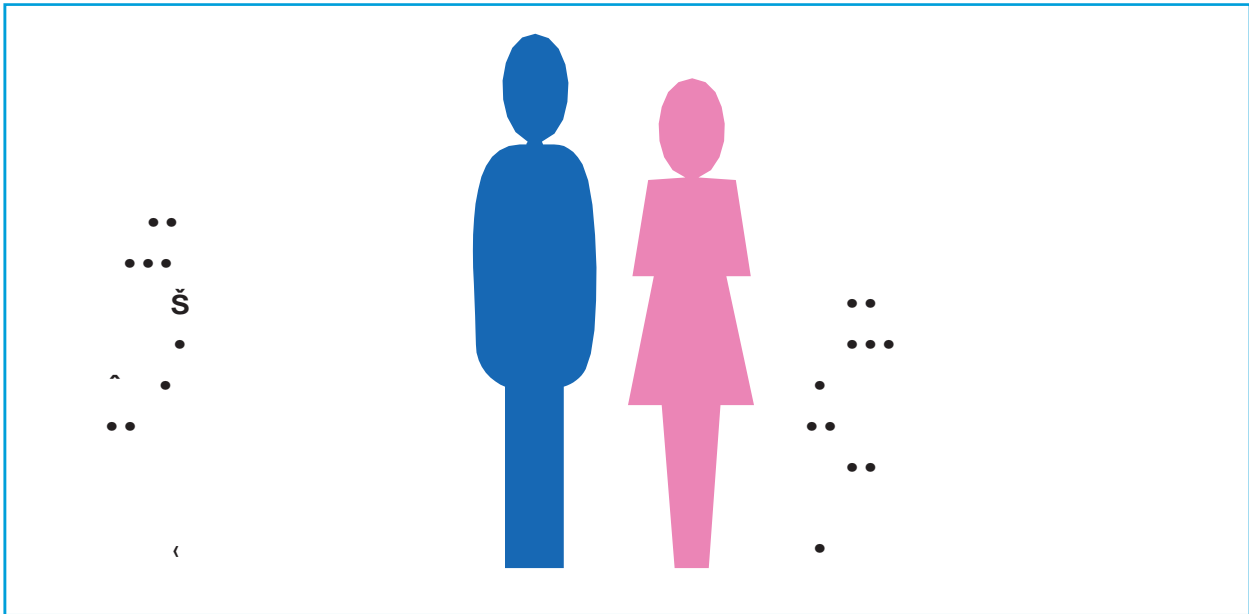
بلغ المعدل العمري المعياري للإصابة بالسرطان ٨٣.١ في كل ١٠٠,٠٠٠ من السكان (٨٠ بين الرجال و ٨٤.٢ بين النساء). سجلت منطقة الرياض أعلى معدل لحدوث حالات السرطان ٩٨.١ في كل ١٠٠,٠٠٠ من السكان تليها المنطقة الشرقية بمعدل ٩٤ في كل ١٠٠,٠٠٠ من السكان ثم منطقة تبوك بمعدل ٨٩.٦ في كل ١٠٠,٠٠٠ من السكان ثم منطقة مكة المكرمة بمعدل ٧٧.٧ في كل ١٠٠,٠٠٠ من السكان وأخيراً منطقة المدينة المنورة بمعدل ٧٧.٢ في كل ١٠٠,٠٠٠ من السكان.

### السرطانات العشرة الأكثر شيوعاً بين السعوديبن في كلا الجنسين

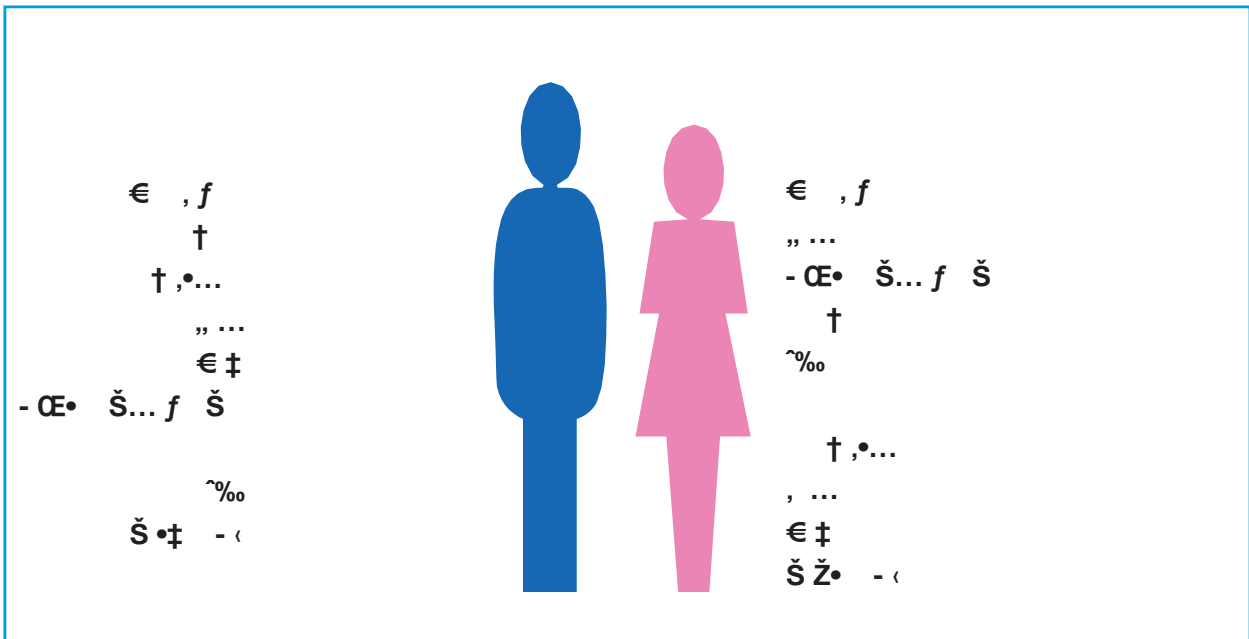
يحتل سرطان الثدي المرتبة الأولى (١٢٥٩) حالة بنسبة ١٣.٨% ثم سرطان القولون والمستقيم (٩٠٧) حالة بنسبة ٩.٩% يليه السرطان اللمفاوي لاهودجكن (٧٠٣) بنسبة ٧.٧% ثم سرطان الغدة الدرقية (٥٨٦) بنسبة ٦.٤% يليه سرطان ابيضاض الدم (٥٦٦) بنسبة ٦.٢% يليه سرطان الكبد (٤٣٦) بنسبة ٤.٨% يليه سرطان الرئة (٤١٢) بنسبة ٤.٥% يليه السرطان اللمفاوي هودجكن (٣٠٩) بنسبة ٣.٤% وأخيراً سرطان المعدة (٢٩٩) بنسبة ٣.٣%.

## السرطانات العشرة الأكثر شيوعاً بين الأطفال السعوديين في كلا الجنسين

يحتل سرطان ابيضاض الدم المرتبة الأولى (٢٦٦) حالة بنسبة ٣٤.٦ % يليه سرطان المخ (٧٤) حالة بنسبة ١١.٣ % ثم السرطان اللمفاوي لاهودجكن (٧١ حالة) بنسبة ١٠.٩ % يليه السرطان اللمفاوي هودجكن (٥٥) بنسبة ٨.٤ % ثم سرطان الأنسجة الضامة والرخوة (٤٠) بنسبة ٦.١ % يليه سرطان العظام (٣٥) بنسبة ٥.٤ % يليه سرطان الكلى (٣٤) بنسبة ٥.٢ % يليه سرطان العين (٣٠) بنسبة ٤.٦ % ثم سرطان الغدة الأدرينالية (١٨) بنسبة ٢.٨ % وأخيراً سرطان سرطان المبيض (١٠) بنسبة ١.٥ %



٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠



٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠

