



المركز الوطني للمعلومات الصحية
NATIONAL HEALTH INFORMATION CENTER



المجلس الصحي السعودي Saudi Health Council

Kingdom of Saudi Arabia
Saudi Health Council
National Health Information Center
Saudi Cancer Registry

Cancer Incidence Report Saudi Arabia 2017



المجلس الطبي السعودي Saudi Health Council

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Cancer Incidence Report
Saudi Arabia
2017



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Cancer Registry Annual Reports





Introduction

This is the twenty first cancer incidence report published by the Saudi Cancer Registry. Previous publications included the Incidence Reports for the years: 1994 - 1996, 1997 - 1998, 1999 - 2000, and yearly reports until 2017.

This report provides statistics on cancer incidence that can be used for better planning and effective measurement on early detection and management of cancer.

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 and methods of the Saudi Cancer Registry 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 presents the overall cancer incidence in Saudi Arabia diagnosed between 01 January and 31 December 2017. Figures, tables, line and bar charts are used to present cancer distribution by gender and age groups. Morphology distributions for the most common cancers are also presented in tables. In addition, incidence tables are used to present the total number of cases, Age-Standardized Incidence Rate (ASR), Crude Incidence Rate (CIR), and Cumulative Rates (per 100,000 population) by gender for each primary cancer site. Separate bar charts are used to demonstrate distribution of the most common cancers by gender in each of the 13 administrative regions of Saudi Arabia.

Part III- Cancer Incidence for Most Common Sites 2017

Among the Saudi males and females are outlined. For each cancer site, the total number and proportions of all newly diagnosed cases, the ASR, and the corresponding cancer ranking for each gender are also presented. In addition, ASR for the most common cancers among Saudis is compared with the ASR reported from selected developed and developing countries.

Part IV-Cancer Incidence among Non-Saudis

This part presents numbers of cancer cases among the 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 which large proportion aged between 25 and 44 years especially among males.

Part V-Incidence Tables

This part contains the following detailed tables for all newly diagnosed cancer types for the Saudis and the Non-Saudis diagnosed in 2017.

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

Part VI- Arabic Summary

It is enclosed an Arabic summary of Cancer Statistics in Saudi Arabia for the Year 2017.

Table of contents

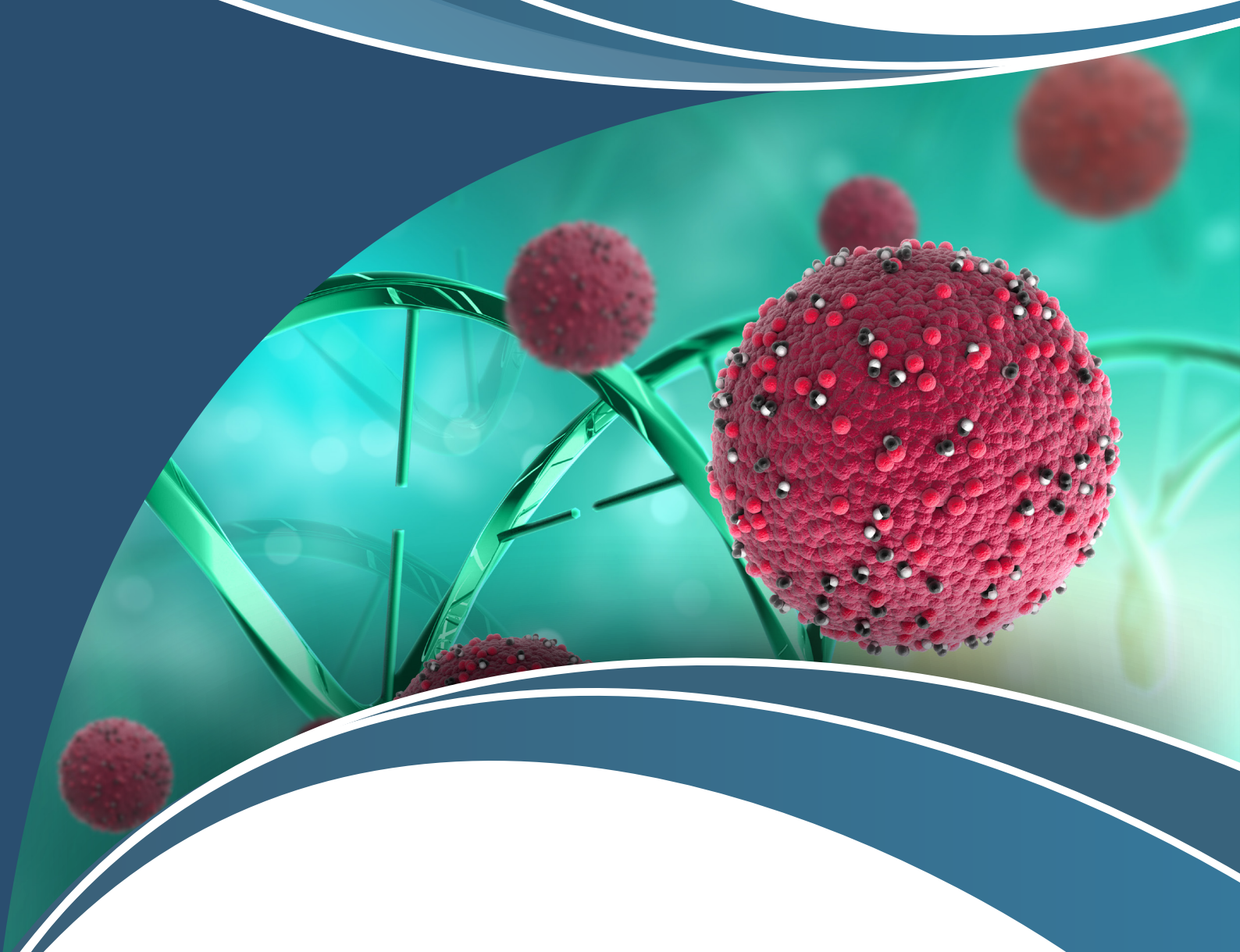
Introduction	4
PART I	
MATERIALS AND MOTHEDES	
Background on Saudi Arabia	8
Saudi Cancer Registry	8
Definitions of Statistical Terms	11
PART II	
OVERVIEW OF CANCER INCIDENCE, 2017	13
Cancer Incidence in Saudi Arabia, 2017	14
Cancer Distribution Among Saudi Nationals, 2017	15
Cancer Incidence Among Adults (> 14 Years), 2017	20
Childhood Cancer Reported to Saudi Cancer Registry 14 Years), 2017	21
International Comparison of Age-Standardized Incidence Rates	23
PART III	
Cancer Incidence for Most Common Sites, 2017	25
Female Breast Cancer (C50)	26
Colorectal Cancer (C18-C20)	28
Thyroid Cancer (C73)	30
Non- Hodgkin's Lymphoma (C82-C85; C96)	32
Leukaemia (C91-C95)	34
Hodgkin's Lymphoma (C81)	36
Lung Cancer (C33-C34)	38
Corpus Uteri Cancer (C54)	40
Prostate Cancer (C61)	42
Liver Cancer (C22)	44
PART IV	
Cancer Incidence Among Non-Saudi Population. 2017	47
PART V	
INCIDENCE TABLES	
Table 5.1.1 Number of Cases Among Saudi Males by Primary Site And Age Groups, 2017	51
Table 5.1.2 Number of Cases Among Saudi Females by Primary Site And Age Groups, 2017	52



Table 5.1.3	Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Saudi Males (per 100,000) by Primary Site and Age groups, 2017	53
Table 5.1.4	Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Saudi Females (per 100,000) by Primary Site and Age groups, 2017	54
Table 5.4.1	Number of Cases Among Non-Saudi Males by Primary Site and Age Groups, 2017	55
Table 5.4.2	Number of Cases Among Non-Saudi Females by Primary Site and Age Groups, 2017	56
Table 5.4.3	Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Non-Saudi Males (per 100,000) by Primary Site and Age groups, 2017	57
Table 5.4.4	Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Non-Saudi Females (per 100,000) by Primary Site and Age groups, 2017	58
Acknowledgment		59
Arabic Summary		60



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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 population for Saudi Arabia in 2017 was 32,612,846. Saudi nationals were estimated to be 20,427,576 of these 10,404,865 (51%) were males and 10,022,711 (49%) were females.

The Non-Saudi population was 12,185,270 of these 8,341,557 (68%) were males and 3,843,713 (32%) were females. Figures 1.2 and 1.3 show the Saudi and Non-Saudi population pyramids by gender and age group respectively.

Figure 1.2: Population pyramids of Saudis (%) by gender and age group, 2017

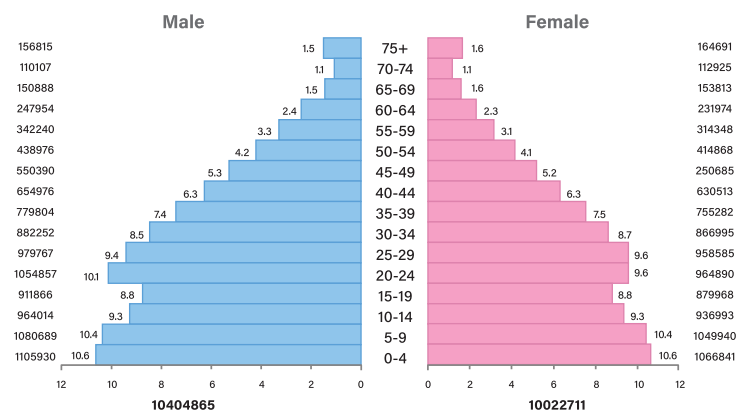
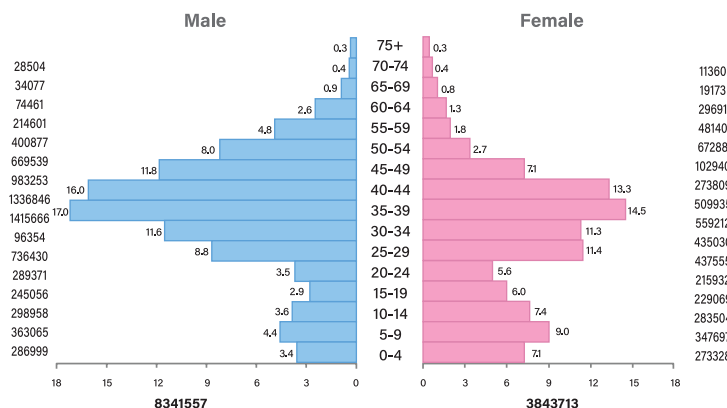


Figure 1.2: Population pyramids of Non-Saudis (%) by gender and age group, 2017



Saudi Cancer Registry

The Saudi Cancer Registry (SCR) is a population-based registry established in 1992 under the authority of the Ministry of Health (MOH) in the premises of King Faisal Specialist Hospital and research Center in Riyadh. In 2014; SCR was moved to Saudi Health Council under the department of National Registries in National Center for Health Information.

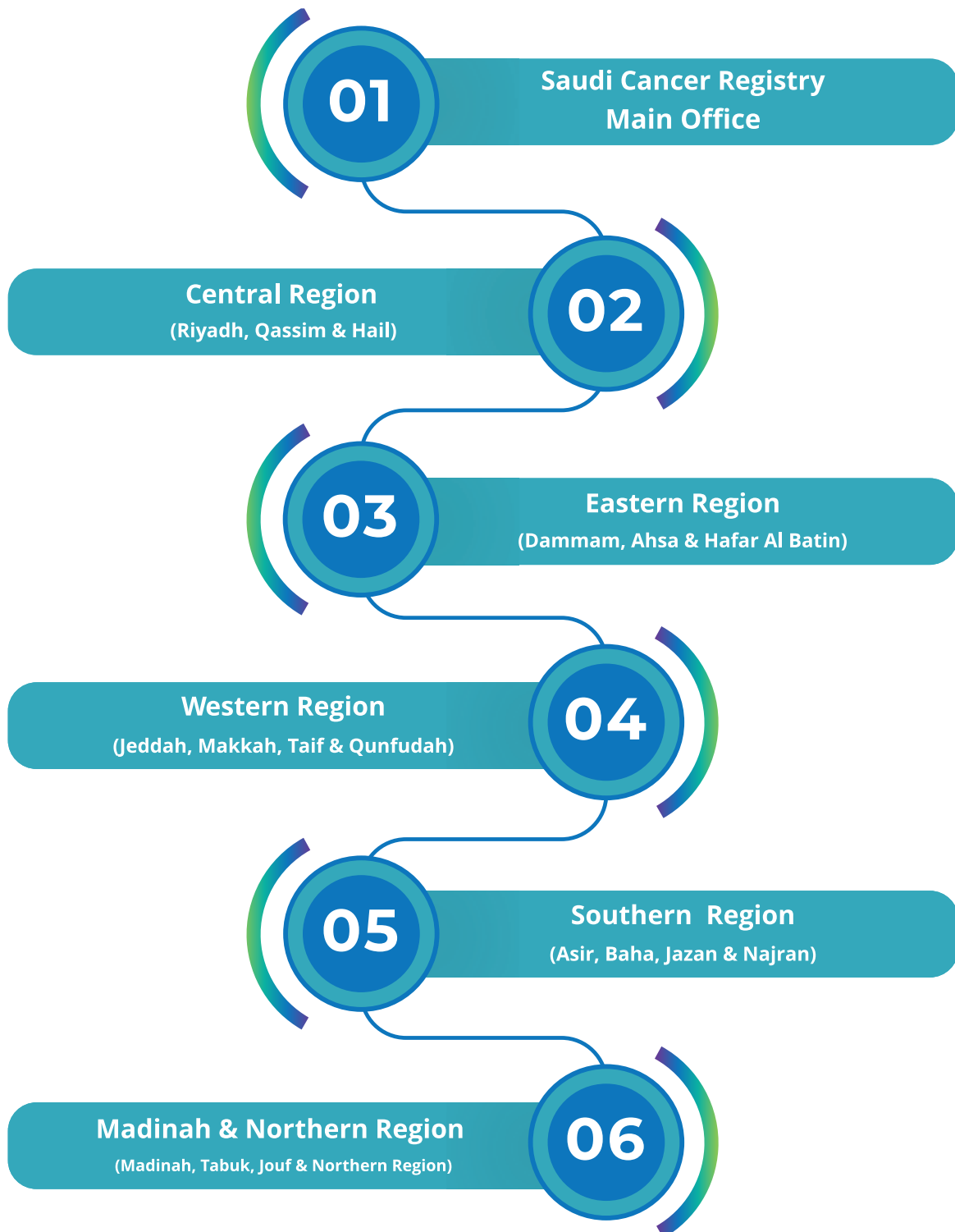
Organizational Structure

The SCR consists of the main office which oversees data collection from all over the country through five regional offices to ensure full coverage of all healthcare facilities in the Kingdom as shown in Figure 1.4. The registry is supported by registry committee.

The committee provides scientific guidance to SCR, reviews cancer statistics reports, data requests, and provides help in disseminating reliable information; In addition to ensuring data confidentiality according to national and international guidelines.

Regional Offices

Each of the SCR offices operates under a regional director who is responsible for the daily management. Staffing consists of senior and junior tumor registrars. SCR Main Office supervises regional offices to ensure accuracy and quality of data collected from all regions. Quality control processes include verification of site, morphology, staging information, case linkage (tumor and patient), and consolidation of data. The Main Office also prepares annual reports for dissemination to the medical community, government departments, international organizations and the public.





Data Management

A royal decree has categorized cancer as a mandatory modifiable disease. This ensures the opportunity for comprehensive data collection. The SCR strives for full access to cancer data from all governmental and private hospitals, 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. Abstracted data includes personal identifications (name, ID Number, gender, 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. Starting from year 2001, changes were made in coding of cancer types and behaviors as well as staging according to SEER Summary Stage 2000 to increase accuracy and consistency in stage coding SEER Summary Stage Manual 2000 is available on the web.

The cases diagnosed on or after 01 January 2008 were classified according to the updated ICD-O-3. While there have not been any changes in the primary site codes, there are significant changes regarding histology (cell types).

Leukemia and lymphoma are particularly 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, lymphoma and leukemia as well as some hematopoietic diseases will change due to changes in either the reports ability or definition. However, as with the SEER 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 ICD-10 hematopoietic disease behavior changes, our software, CanReg 4.33 (developed by the International Agency for Research on Cancer (IARC), Lyon, France) 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 reviewed, linked, and consolidated, as appropriate, so that each malignancy is counted only once for statistical analysis. Data entry and incidence tables output were generated by CanReg software.





Notification

This report covers data that were diagnosed between January and December 2016. Incident cases identified after this date (late reporting) will be reported in subsequent incidence reports. It is anticipated that the number of late-reported cases will decrease as case ascertainment processes has improved during past years. Our aim is reduce reporting lap between year of diagnosis and year of publishing the incidence report to a maximum of 2 years while maintaining high quality and completeness of data.

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 gender group, divided by the number of midyear population of that age and gender 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.

World Standard Population

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
66-69	3.000
70-74	2.000
75+	2.000
Total	100.000

*Doll R. Payne P. Waterhouse J. Cancer Incidence in Five Continents Vol.I. International Union against Cancer. 1966

Crude Incidence Rate (CIR)

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 rate is the probability or risk of individual 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.

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.

Range

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

Ratio

It is the relation between two quantities. The first quantity is a numerator and the second is a denominator.

Relative frequency

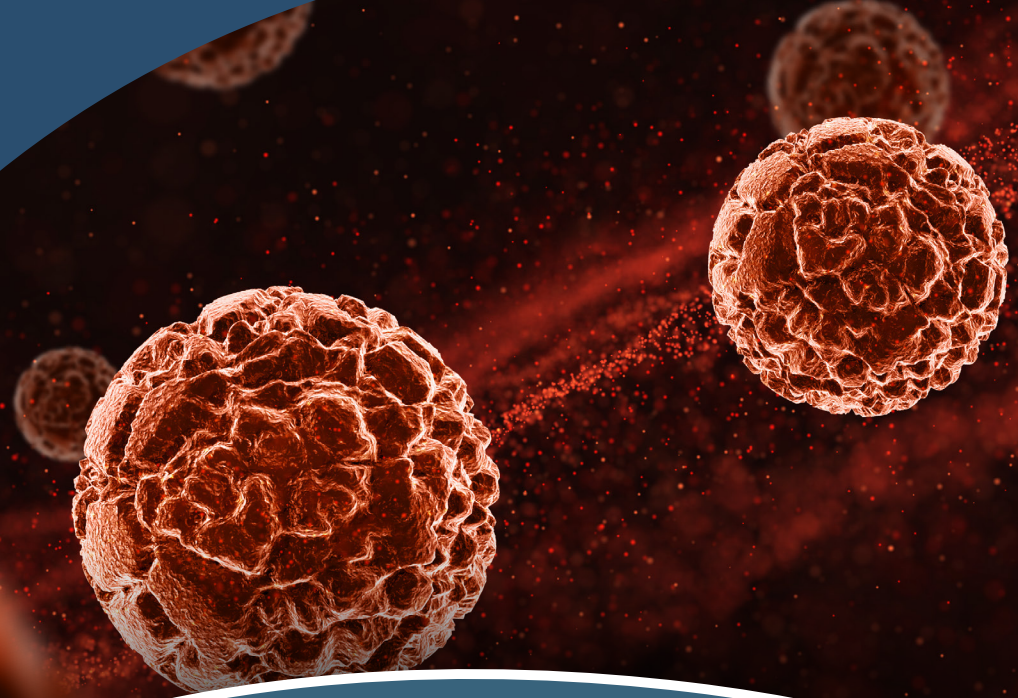
This statistic is defined as the number of specific cancer cases registered relative to the total number of all cancer. It is expressed as a percentage.

Summary Stage

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



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PART II

OVERVIEW OF
CANCER INCIDENCE
2017

Cancer incidence in Saudi Arabia, 2017.

Between January 01 and December 31, 2017, the total number of newly diagnosed cancer cases reported to the Saudi Cancer Registry (SCR) was 18,375. Overall cancer was more among women than men; it affected 8,169 (44.5%) males and 10,206 (55.5%) females. Total of 14,318 cases were reported among Saudi nationals, 3,951 among non-Saudi, and 106 of unknown nationality.

Total of 17,718 cases were analyzed, of which 13,893 (78.4%) were Saudi nationals and 3,825 (21.6%) were Non-Saudi.

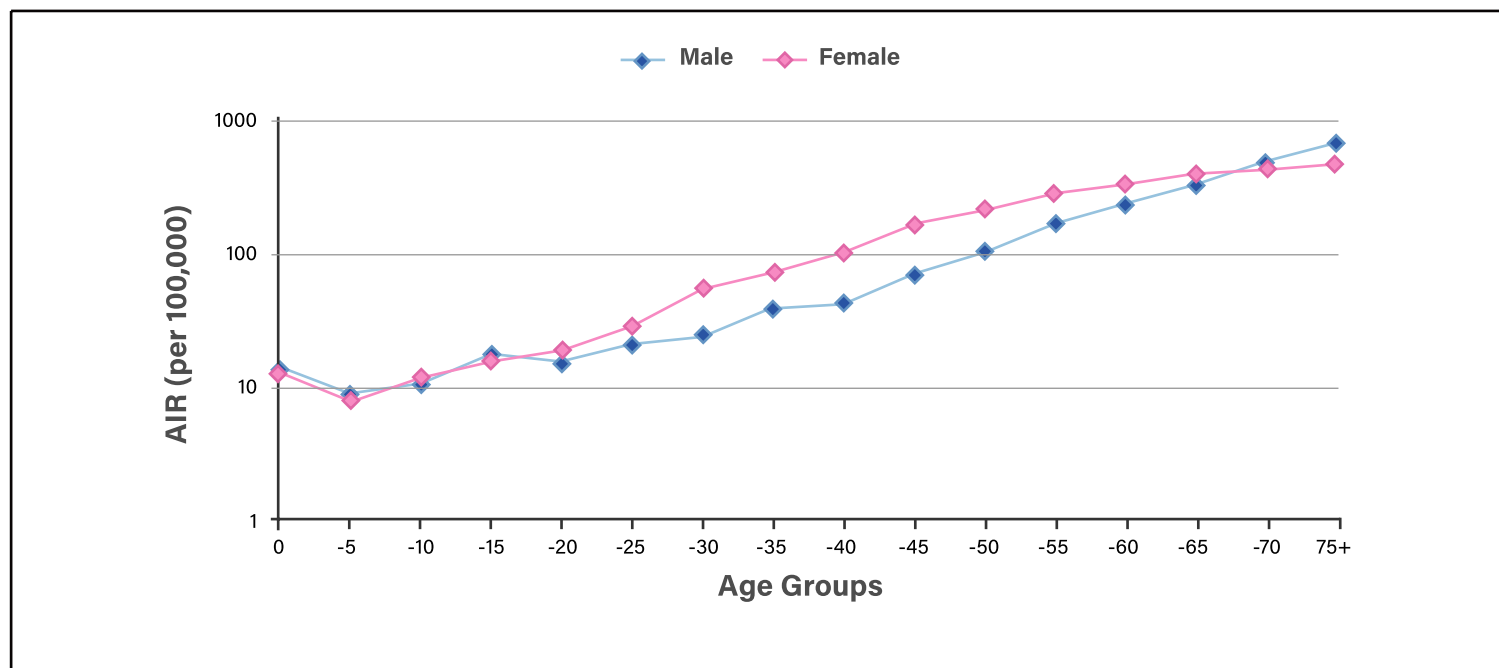
Total of 658 cases were excluded from the analysis: 106 cases of them were unknown nationalities, and 552 cases failed to be converted to ICD-10 codes. The software

(CanReg-4) does not include in situ cases in the statistical analysis, Table 2.1. Among Saudis 5,918 (42.6%) were males and 7,975 (57.4%) were females with a male to female ratio of 100 to 135. The crude incidence rates (CIR) of all cancers were 56.9/100,000 in males and 79.6/ 100,000 in females. The overall age-standardized incidence rate (ASR) was 74.9/100,000 in males and 98.6/100,000 in females.

Table 2.1 : Distribution of analyzed and non-analyzed Cancer cases reported to Saudi Cancer Registry by nationality and gender, 2017.

Saudis						**Unknown Nationality	Non – Saudis							
Analyzed			Non Analyzed				Analyzed			Non Analyzed				
Male	Female	Total	Male	Female	Total		Male	Female	Total	Male	Female	Total		
5918	7975	13893	195	230	425	43	63	106	1940	1885	3825	73	53	126

Figure 2.2 : Age-Specific Incidence Rate (AIR) for all Cancer among Saudis, 2017.



Confirmation of malignancy was based mainly on histopathology reports (86.9%), followed by hematological and cytological reports (5.2%), then histology of metastases (4.6%), then medical imaging reports (1.9%), and death certificate only (1.0%). Other sources such as clinical notes is about (0.1) and surgical and laboratory tests for tumor markers were the source is about 0.1%, and unknown source was present in 0.2% of cases, Table 2.3.

Table 2.3 : Basis of diagnosis of Cancer cases, 2017.

Basis of Diagnosis	No	%
Histology of primary	12079	86.9
Cytology/Haematological	719	5.2
Histology of metastases	646	4.6
Medical Imaging (Xray,US)	270	1.9
DCO (Death Certificate 0)	135	1.0
Clinical	7	0.1
Laboratory test (Tumor M)	4	0.0
Surgery	4	0.0
Autopsy	1	0.0
Unknown	28	0.2
Total	13893	100.0

Cancer Distribution among Saudi Nationals, 2017.

In females the highest number of cancer cases reported for the age group (45-59) years, with a total of 2,685 (33.6%) cancer cases. Whereas, in males the highest number of cases was reported for the age group (60-74) years, with a total of 1,655 (28.0%) cancer cases.

Figure 2.3 : Distribution of Cancer cases among Saudi nationals by gender and age groups, 2017.

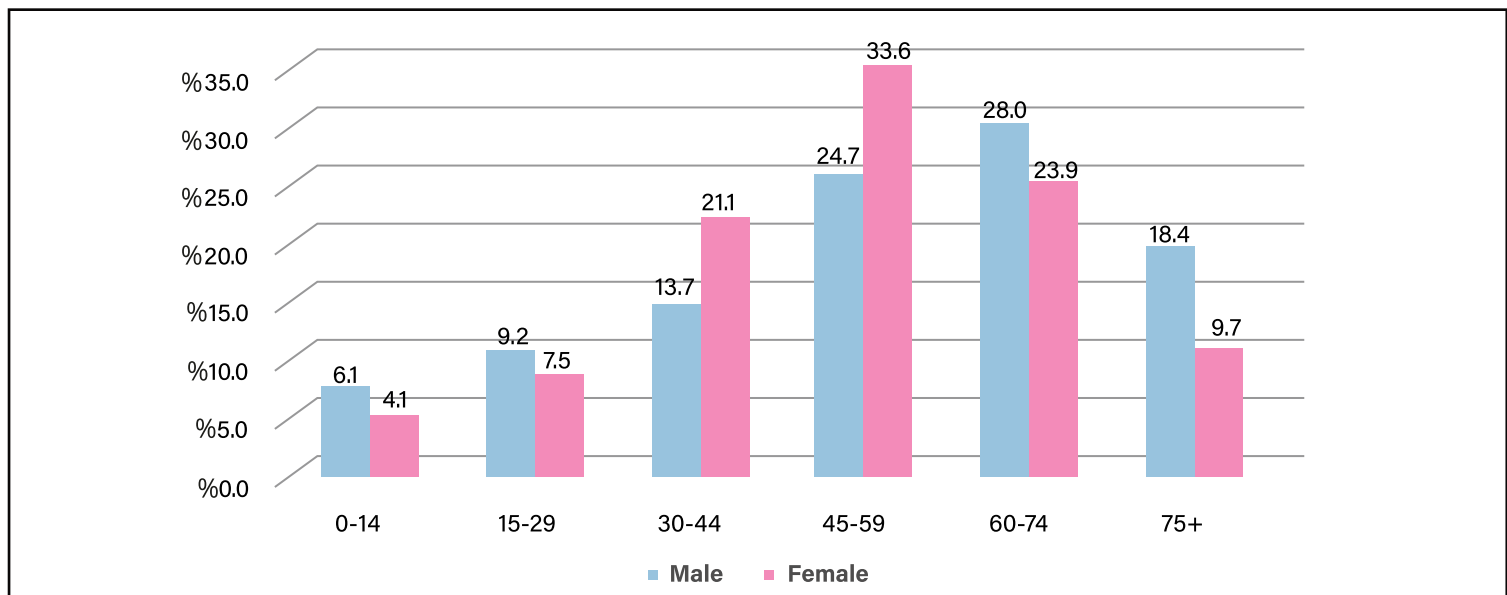
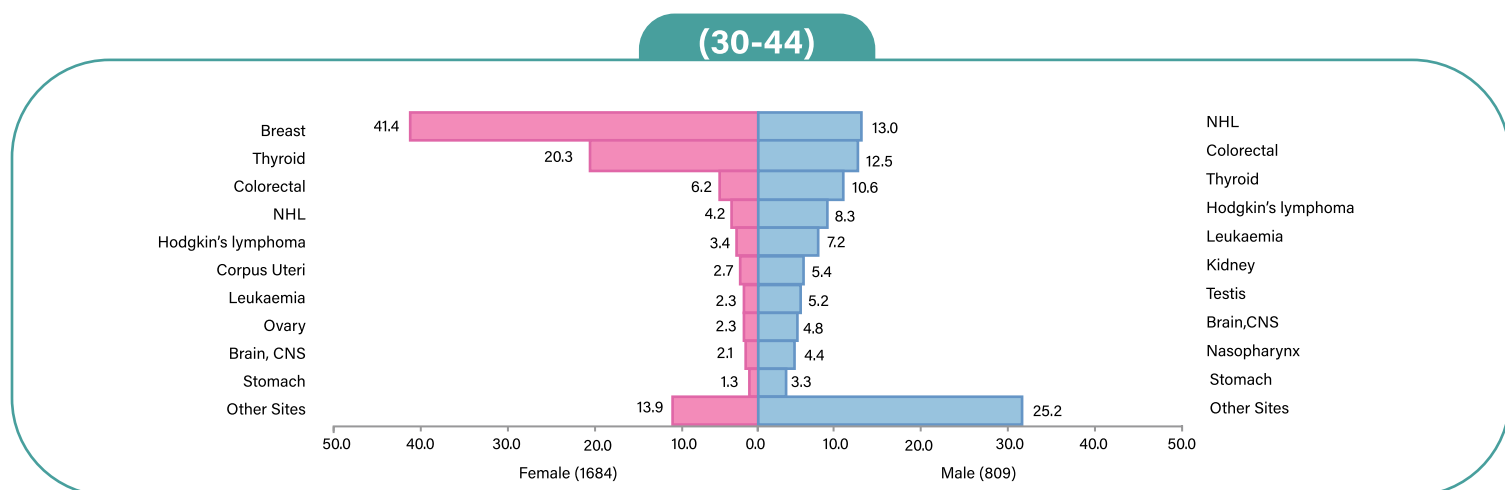
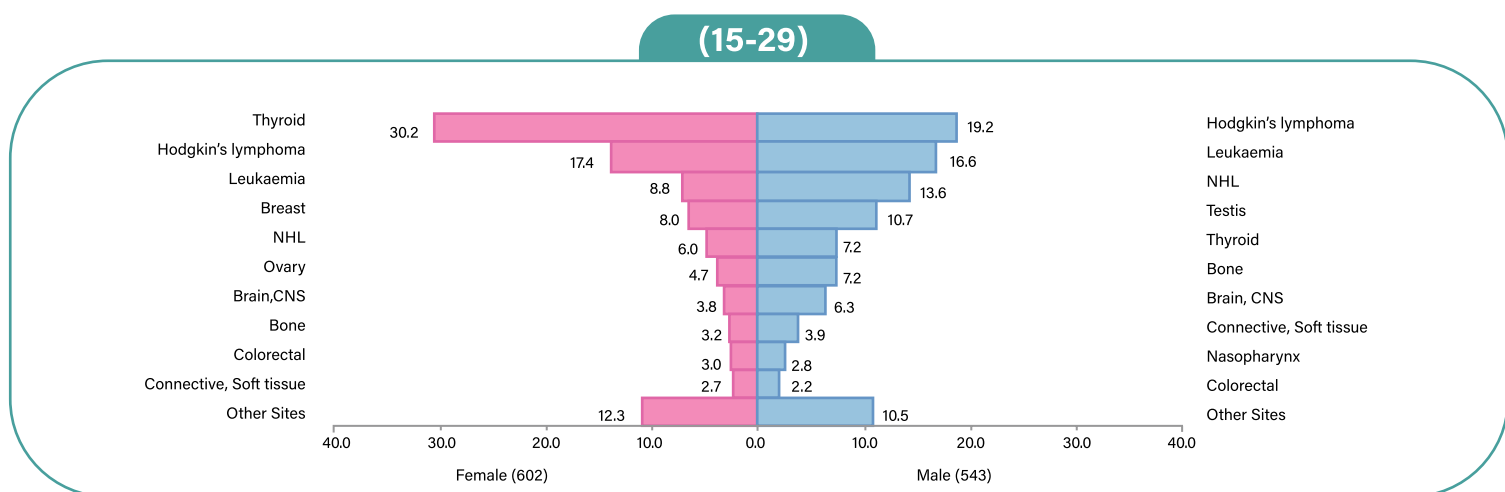
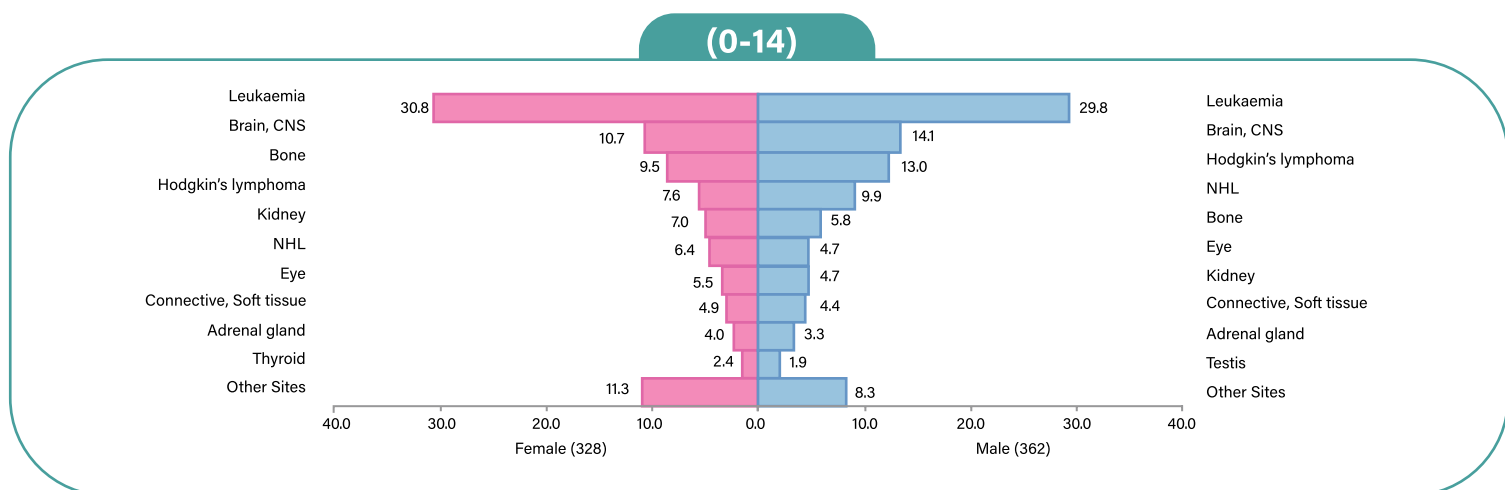
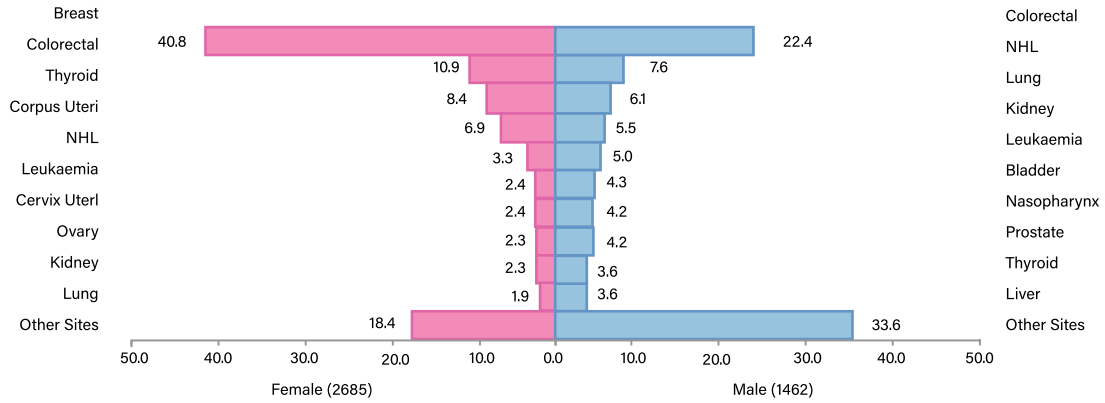


Figure 2.4 : Distributions of most frequent types of Cancer among Saudi nationals by gender and age groups, 2017.

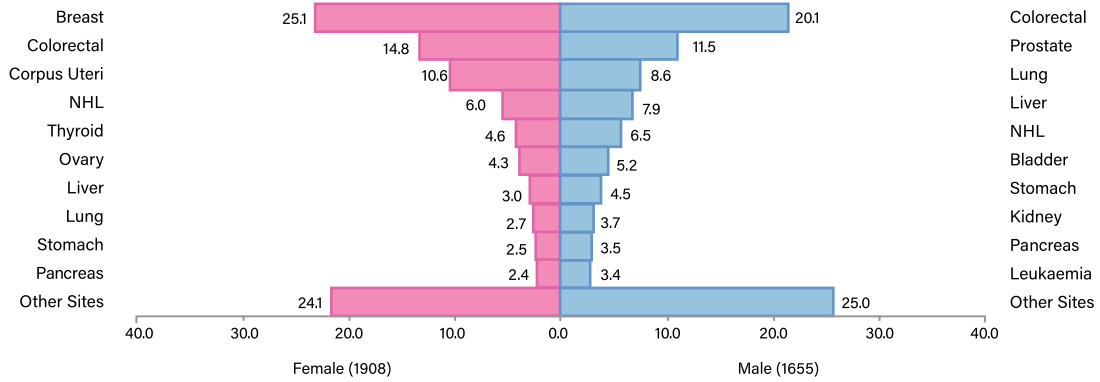




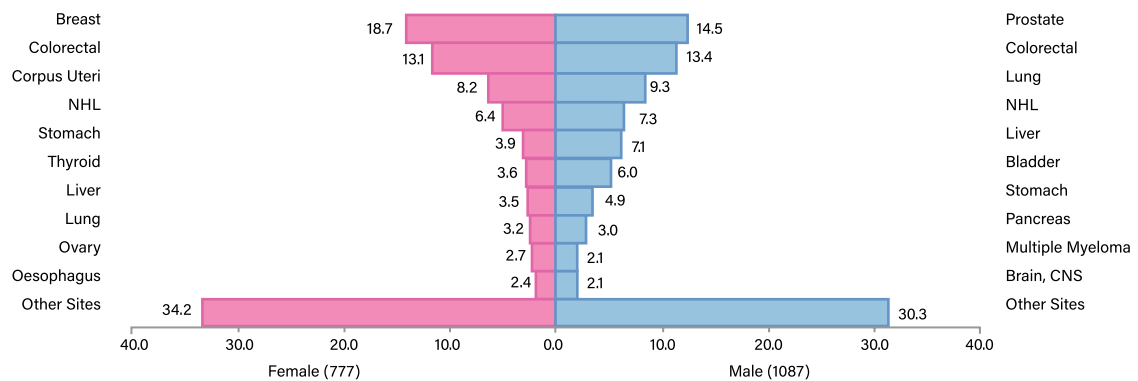
(45-59)



(60-74)



(75+)



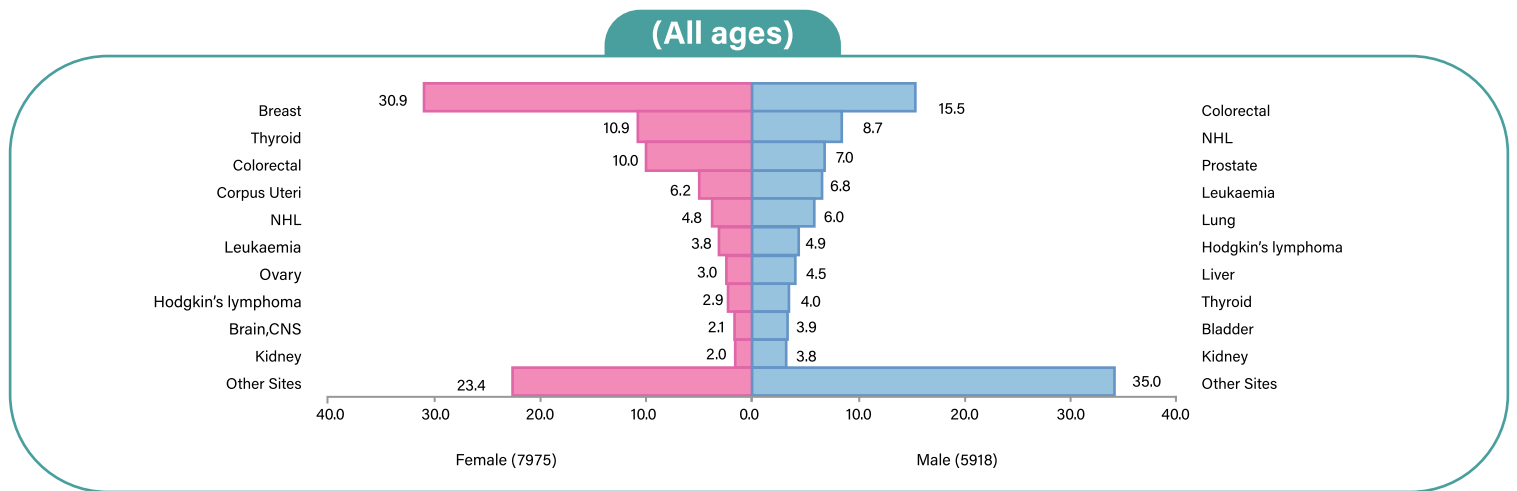


Table 2.4 : Most common Cancers among Saudi nationals, 2017.

Sites	No	%
Breast	2508	18.1
Colorectal	1720	12.4
Thyroid	1107	8.0
NHL	893	6.4
Leukaemia	706	5.1
Hodgkin's Lymphoma	517	3.7
Lung	508	3.7
Corpus Uteri	499	3.6
Prostate	412	3.0
Liver	393	2.8

Table 2.5 : Most common Cancers among Saudi nationals by gender, 2017.

Male	No	%	Female	No	%
Colorectal	919	15.5	Breast	2463	30.9
NHL	513	8.7	Thyroid	873	10.9
Prostate	412	7.0	Colorectal	801	10.0
Leukaemia	403	6.8	Corpus Uteri	499	6.3
Lung	356	6.0	NHL	380	4.8
Hodgkin's lymphoma	288	4.9	Leukaemia	303	3.8
Liver	264	4.5	Ovary	232	2.9
Thyroid	234	4.0	Hodgkin's lymphoma	229	2.9
Bladder	229	3.9	Brain, CNS	169	2.1
Kidney	227	3.8	Kidney	163	2.0
Total	5918	100	Total	7975	100

Table 2.6 : Number, percentage, CIR, ASR and Cumulative Rates (per 100,000) among Saudi Nationals by primary Cancer site and gender, 2017.

ICD-10	Site	Male						Female					
		No.	%	Crude Rate	ASR World	Cumulative Rate		No.	%	Crude Rate	ASR World	Cumulative Rate	
						0-64	0-74					0-64	0-74
All	All sites Total	5918	100.00	56.9	74.9	188.9	242	7975	100.00	79.6	98.6	303.5	359.8
Not C44	All sites but C44	5715	96.60	55.0	72.2	184.5	235	7818	98.00	78.1	96.6	299.6	354.9
C00	Lip	4	0.10	0.0	0.0	0.15	0.15	3	0.00	0	0	0.1	0.15
C01-C02	Tongue	57	1.00	0.5	0.7	2.25	2.55	59	0.70	0.6	0.8	1.9	2.4
C03-C06	Mouth	50	0.80	0.5	0.7	1.2	1.55	42	0.50	0.4	0.6	1.15	1.55
C07-C08	Salivary glands	16	0.30	0.2	0.2	0.7	0.8	28	0.40	0.3	0.3	0.95	1.25
C09	Tonsil	7	0.10	0.1	0.1	0.25	0.25	3	0.00	0	0	0.1	0.1
C10	Other Oropharynx	3	0.10	0.0	0.0	0.15	0.15	0	0.00	0	0	0	0
C11	Nasopharynx	157	2.70	1.5	1.8	6.65	7.3	61	0.80	0.6	0.7	2.85	2.9
C12-C13	Hypopharynx	3	0.10	0.0	0.0	0.05	0.1	11	0.10	0.1	0.1	0.4	0.55
C14	Pharynx unspec.	1	0.00	0.0	0.0	0.05	0.05	2	0.00	0	0	0.05	0.1
C15	Oesophagus	65	1.10	0.6	0.9	1.5	2.15	73	0.90	0.7	1	1.9	2.7
C16	Stomach	208	3.50	2.0	2.8	5.3	7.75	154	1.90	1.5	2	4.7	6.2
C17	Small intestine	44	0.70	0.4	0.5	1.75	1.95	32	0.40	0.3	0.5	0.9	1.45
C18	Colon	546	9.20	5.3	7.5	15.8	22.4	517	6.50	5.2	7	17.15	22.3
C19-C20	Rectum	373	6.30	3.6	5.0	12.15	16.3	284	3.60	2.8	3.9	9.65	12.6
C21	Anus	21	0.40	0.2	0.3	0.8	1	12	0.20	0.1	0.2	0.3	0.4
C22	Liver	264	4.50	2.5	4.0	4.85	9.35	129	1.60	1.3	1.9	2.95	5.1
C23-C24	Gallbladder etc.	77	1.30	0.7	1.0	2.05	2.75	94	1.20	0.9	1.3	2.7	3.8
C25	Pancreas	158	2.70	1.5	2.2	4.55	6.25	107	1.30	1.1	1.5	3.2	4.65
C30-C31	Nose, sinuses etc.	11	0.20	0.1	0.1	0.4	0.5	17	0.20	0.2	0.2	0.55	0.65
C32	Larynx	75	1.30	0.7	1.1	1.95	3.05	14	0.20	0.1	0.2	0.35	0.55
C33-C34	Trachea,Bronchus,Lung	356	6.00	3.4	5.0	8.45	12.8	152	1.90	1.5	2	4.8	6.35
C37-C38	Other Thoracic organs	20	0.30	0.2	0.2	0.95	1	18	0.20	0.2	0.2	0.8	0.85
C40-C41	Bone	75	1.30	0.7	0.7	3.6	3.65	78	1.00	0.8	0.8	3.5	3.7
C43	Melanoma of Skin	14	0.20	0.1	0.2	0.5	0.5	17	0.20	0.2	0.2	0.5	0.7
C44	Other Skin	203	3.40	2.0	2.7	4.45	6.45	157	2.00	1.6	2	3.95	4.95
C45	Mesothelioma	13	0.20	0.1	0.2	0.3	0.4	5	0.10	0	0.1	0.1	0.1
C46	Kaposi sarcoma	19	0.30	0.2	0.3	0.65	0.8	3	0.00	0	0	0.05	0.15
C47;C49	Connective,Soft tissue	112	1.90	1.1	1.3	4.2	4.95	81	1.00	0.8	0.9	3.45	3.9
C50	Breast	45	0.80	0.4	0.6	1.6	1.75	2463	30.90	24.6	29.7	103.3	115.9
C51	Vulva	-	-	-	-	-	-	12	0.20	0.1	0.2	0.45	0.55
C52	Vagina	-	-	-	-	-	-	4	0.10	0	0.1	0.2	0.2
C53	Cervix Uteri	-	-	-	-	-	-	126	1.60	1.3	1.6	4.65	5.65
C54	Corpus Uteri	-	-	-	-	-	-	499	6.30	5	7.1	16.2	21.75
C55	Uterus unspec.	-	-	-	-	-	-	41	0.50	0.4	0.6	1.2	1.8
C56	Ovary	-	-	-	-	-	-	232	2.90	2.3	3.1	7.8	10.55
C57	Other Female Genital	-	-	-	-	-	-	20	0.30	0.2	0.3	0.5	0.85
C58	Placenta	-	-	-	-	-	-	6	0.10	0.1	0	0.3	0.3
C60	Penis	2	0.00	0.0	0.0	0.05	0.1	-	-	-	-	-	-
C61	Prostate	412	7.00	4.0	6.2	6.1	12.7	-	-	-	-	-	-
C62	Testis	124	2.10	1.2	1.1	6.1	6.1	-	-	-	-	-	-
C63	Other male genital	3	0.10	0.0	0.0	0	0.05	-	-	-	-	-	-
C64	Kidney	227	3.80	2.2	2.8	8.55	10.3	163	0.02	1.6	2.1	6.35	7.75
C65	Renal Pelvis	5	0.10	0.0	0.1	0.15	0.2	1	0	0	0	0.05	0.05
C66	Ureter	5	0.10	0.0	0.1	0.15	0.2	1	0	0	0	0	0
C67	Bladder	229	3.90	2.2	3.2	5	8.2	64	0.008	0.6	0.9	1.35	2.25
C68	Other Urinary organs	0	0.00	0.0	0.0	0	0	0.0	0.0	0.0	0.0	0	0
C69	Eye	24	0.40	0.2	0.3	0.95	1	24.0	0.0	0.2	0.3	1.05	1.1
C70-C72	Brain, Nervous system	223	3.80	2.1	2.5	9.05	10	169.0	0.0	1.7	1.9	7.65	8.2
C73	Thyroid	234	4.00	2.3	2.5	9.6	10.8	873.0	0.1	8.7	9.0	39.95	42.2
C74	Adrenal gland	18	0.30	0.2	0.2	0.85	0.9	16	0.20	0.2	0.2	0.8	0.8
C75	Other Endocrine	4	0.10	0.0	0.1	0.1	0.2	6	0.10	0.1	0.1	0.3	0.3
C81	Hodgkin disease	288	4.90	2.8	2.8	13.15	13.7	229	2.90	2.3	2.2	10.9	11.1
C82-C85;C96	Non-Hodgkin lymphoma	513	8.70	4.9	6.0	18.55	21.7	380	4.80	3.8	4.8	12.8	16.5
C88	Immunoproliferative dis.	0	0.00	0.0	0.0	0	0	0	0.00	0	0	0	0
C90	Multiple Myeloma	80	1.40	0.8	1.0	2.15	2.85	49	0.60	0.5	0.7	1.35	2
C91	Lymphoid Leukaemia	202	3.40	1.9	2.3	9	9.8	124	1.60	1.2	1.3	5.7	5.8
C92-C94	Myeloid Leukaemia	177	3.00	1.7	1.9	7.6	8.4	161	2.00	1.6	1.8	7.15	7.75
C95	Leukaemia unspec.	24	0.40	0.2	0.3	1.05	1.1	18	0.20	0.2	0.2	0.7	0.8
Other	Other & unspecified	127	2.10	1.2	1.6	3.5	4.75	141	1.80	1.4	1.9	3.85	5.55

Cancer Incidence among Adults (>14 years), 2017.

Between January and December 2017, the total number of cancer incidence cases reported to the Saudi Cancer registry among adults aged above 14 years was 17,554. Of those, 13,633 cancer cases were among Saudis and 3,821 were among non-Saudis, and unknown nationality was reported in 100 cases. Total of 7,726 (44.0%) cases were males and 9,828 (56.0%) were females with a male to female ratio of 100 to 127, Table 2.7.1.

Table 2.7.1 : Distribution of analyzed and non-analyzed adult Cancer cases reported to Saudi Cancer Registry by nationality and gender, 2017.

Saudis						**Unknown Nationality	Non - Saudis							
Analyzed			Non Analyzed				Analyzed			Non Analyzed				
Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
5556	7655	13211	192	230	422	39	61	100	1866	1829	3695	73	53	126

Table 2.7.2: Most common Cancers among Saudi adults, 2017.

Sites	No	%
Breast	2508	19.0
Colorectal	1719	13.0
Thyroid	1095	8.3
NHL	836	6.3
Lung	508	3.8
Corpus Uteri	499	3.8
Leukaemia	497	3.8
Hodgkin's lymphoma	444	3.4
Prostate	412	3.1
Liver	391	3.0
Total	13211	100

Table 2.7.3 : Top ten Cancers reported among Saudi adults by gender, 2017.

Male	No	%	Female	No	%
Colorectal	919	16.5	Breast	2463	32.2
NHL	477	8.6	Thyroid	864	11.3
Prostate	412	7.4	Colorectal	800	10.5
Lung	356	6.4	Corpus Uteri	499	6.5
Leukaemia	295	5.3	NHL	359	4.7
Liver	264	4.8	Ovary	232	3.0
Hodgkin's lymphoma	240	4.3	Hodgkin's lymphoma	204	2.7
Thyroid	231	4.2	Leukaemia	202	2.6
Bladder	227	4.1	Stomach	154	2.0
Kidney	210	3.8	Lung	152	2.0

Childhood Cancers reported to Saudi Cancer registry (≤ 14 years), 2017.

Total of 818 cancer cases were diagnosed among children aged between 0 and 14 years accounted to 4.5% of the total number of cancers reported to Saudi Cancer Registry in 2017. The reported incidents show that cancer was more common among boys than girls, 442 (54.0 %) cases were reported among boys and 376 (46.0%) were reported among girls. Total of 682 cancer cases were reported among Saudi children, 130 were among non-Saudis, and 6 cases were with unknown nationality. The total number of analyzed cases were 809 including 682 Saudis, and 130 non-Saudis. Among Saudi, 364 (53.4 %) were boys and 318 (46.6 %) were girls, Table 2.8.1.

Table 2.8.1 : Distribution of reported childhood Cancer in Saudi Arabia by nationality and gender, 2017.

Saudis						**Unknown Nationality	Non - Saudis							
Analyzed			Non Analyzed				Analyzed			Non Analyzed				
Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
361	318	679	3	0	3	4	2	6	74	56	130	0	0	0

Childhood cancers accounted for 4.9% of all cancer among Saudis. The leading cancer among Saudi children was leukemia (30.8%), followed by brain tumors (12.7%), then Hodgkin's lymphoma (10.6 %) and NHL (8.4%), Table 2.8.2.

Table 2.8.2 : Top ten Cancers among Saudi children, 2017.

Sites	No	%
Leukaemia	209	30.8
Brain, CNS	86	12.7
Hodgkin's lymphoma	72	10.6
NHL	57	8.4
Bone	52	7.7
Kidney	40	5.9
Eye	35	5.2
Connective, Soft Tissue	32	4.7
Adrenal Gland	25	3.7
Thyroid	11	1.6

Table 2.8.3: Most Common Cancer among Saudi Children by Gender , 2017

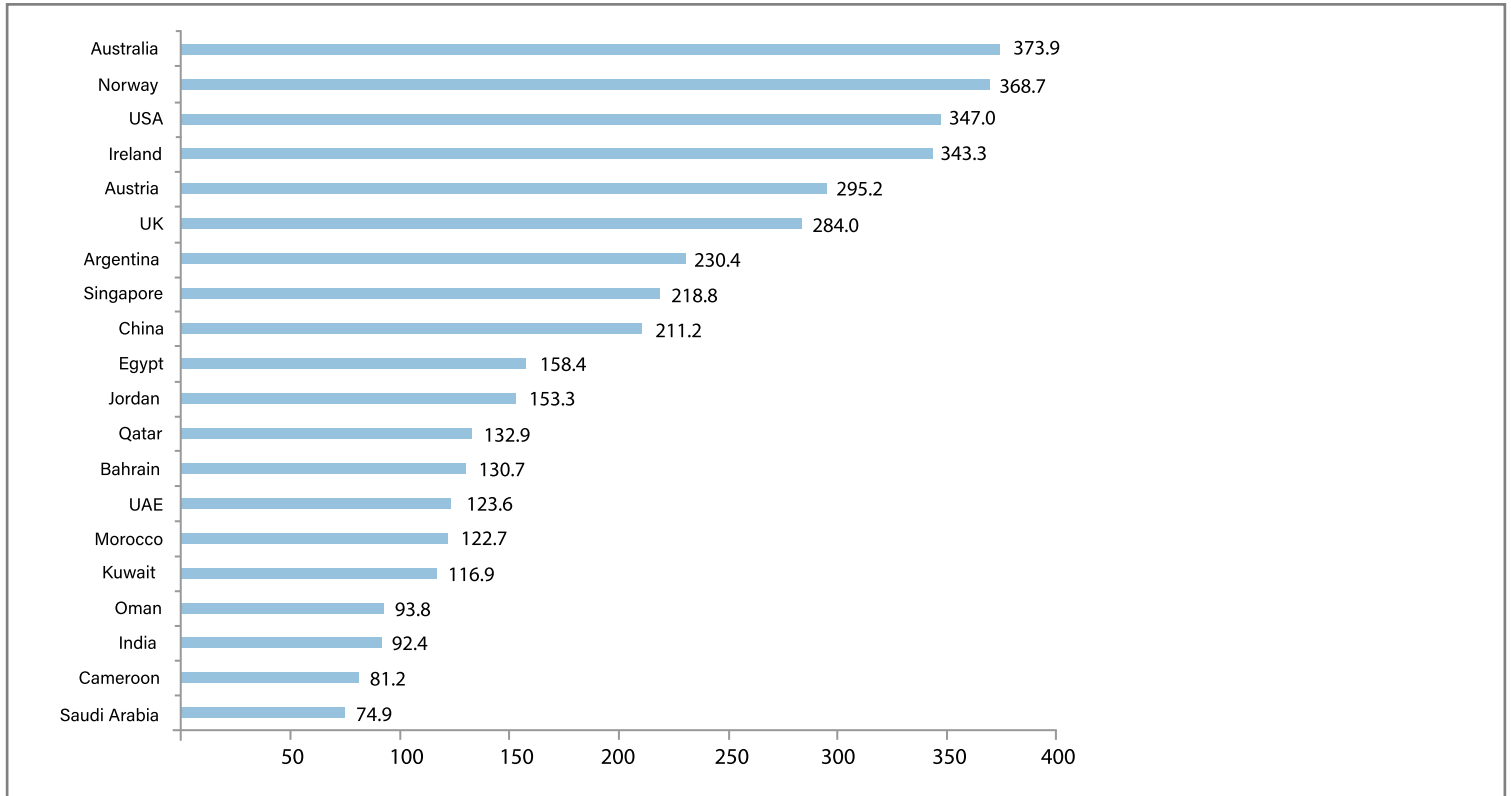
Boys	No	%	Girls	No	%
Leukaemia	108	29.9	Breast	101	31.8
Brain, CNS	51	14.1	Thyroid	35	11.0
Hodgkin's lymphoma	47	13.0	Colorectal	31	9.7
NHL	36	10.0	Corpus Uteri	25	7.9
Bone	21	5.8	NHL	23	7.2
Kidney	17	4.7	Ovary	21	6.6
Eye	17	4.7	Hodgkin's lymphoma	18	5.7
Connective,Soft tissue	16	4.4	Leukaemia	16	5.0
Adrenal gland	12	3.3	Stomach	13	4.1
Testis	7	1.9	Lung	8	2.5

Table 2.8.4: Distribution of morphological types for the most common Cancers reported among Saudi children by gender, 2017.

Primary Site	Code	Morphology	Boys	%	Girls	%
Leukaemia	98363	Precursor B-cell lymphoblastic leukemia	50	46.3	59	58.4
	98353	Precursor cell lymphoblastic leukemia, NOS	18	16.7	13	12.9
	98373	Precursor T-cell lymphoblastic leukemia	12	11.1	4	4.0
	98613	Acute myeloid leukemia, NOS	11	10.2	11	10.9
	98013	Acute leukemia, NOS	5	4.6	1	1.0
		Others	12	11.1	13	12.9
	Total		108	100.0	101	100.0
Brain, CNS	94703	Medulloblastoma, NOS	21	41.2	6	17.1
	94003	Astrocytoma, anaplastic	4	7.8	0	0.0
	93803	Glioma, malignant	4	7.8	7	20.0
	93923	Ependymoma, NOS	3	5.9	1	2.9
	94243	Pleomorphic xanthoastrocytoma	3	5.9	0	0.0
		Others	16	31.4	21	60.0
	Total		51	100.0	35	100.0
Hodgkin lymphoma	96633	Hodgkin lymphoma, nodular sclerosis, NOS	18	38.3	15	60.0
	96523	Hodgkin lymphoma, mixed cellularity, NOS	11	23.4	6	24.0
	96593	Hodgkin lymphoma, nodular lymphocyte predominance	10	21.3	1	4.0
	96503	Hodgkin lymphoma, NOS	4	8.5	3	12.0
	96513	Hodgkin lymphoma, lymphocyte-rich	1	2.1	0	0.0
		Others	3	6.4	0	0.0
	Total		47	100.0	25	100.0
NHL	96873	Burkitt lymphoma, NOS	14	38.9	9	42.9
	96803	Malignant lymphoma, large B-cell, diffuse, NOS	8	22.2	4	19.0
	97543	Langerhans cell histiocytosis, disseminated	3	8.3	1	4.8
	95903	Malignant lymphoma, NOS	3	8.3	0	0.0
	97003	Mycosis fungoides	3	8.3	3	14.3
		Others	5	13.9	4	19.0
	Total		36	100.0	21	100.0
Bone	92603	Ewing sarcoma	10	47.6	13	41.9
	91803	Osteosarcoma, NOS	7	33.3	10	32.3
	91813	Chondroblastic osteosarcoma	1	4.8	4	12.9
	88003	Sarcoma, NOS	1	4.8	2	6.5
	88063	Desmoplastic small round cell tumor	0	0.0	1	3.2
		Others	2	9.5	1	3.2
	Total		21	100.0	31	100.0
Eye	95103	Retinoblastoma, NOS	12	70.6	12	66.7
	95123	Retinoblastoma, undifferentiated	3	17.6	4	22.2
	89103	Embryonal rhabdomyosarcoma, NOS	1	5.9	1	5.6
	95113	Retinoblastoma, differentiated	0	0.0	1	5.6
	95003	Neuroblastoma, NOS	1	5.9	0	0.0
		Total		17	100.0	18
Connective, Soft tissue	89103	Embryonal rhabdomyosarcoma, NOS	3	18.8	3	18.8
	88063	Desmoplastic small round cell tumor	3	18.8	0	0.0
	94903	Ganglioneuroblastoma	2	12.5	0	0.0
	89203	Alveolar rhabdomyosarcoma	1	6.3	0	0.0
	93653	Askin tumor	1	6.3	0	0.0
		Others	6	37.5	13	81.3
	Total		16	100.0	16	100.0
Adrenal gland	95003	Neuroblastoma, NOS	11	91.7	13	100.0
	94903	Ganglioneuroblastoma	1	8.3	0	0.0
		Total		12	100.0	13
Kidney	89603	Nephroblastoma, NOS	12	300.0	16	228.6
	89503	Mullerian mixed tumor	3	75.0	3	42.9
	88143	Infantile fibrosarcoma	0	0.0	1	14.3
	95003	Neuroblastoma, NOS	0	0.0	1	14.3
	83123	Renal cell carcinoma, NOS	0	0.0	1	14.3
		Others	2	11.8	1	4.3
	Total		17	100.0	23	100.0
Thyroid	82603	Papillary adenocarcinoma, NOS	3	100.0	3	37.5
	83303	Follicular adenocarcinoma, NOS	0	0.0	1	12.5
	85103	Medullary carcinoma, NOS	0	0.0	1	12.5
	83403	Papillary carcinoma, follicular variant	0	0.0	1	12.5
	80503	Papillary carcinoma, NOS	0	0.0	1	12.5
		Others	0	0.0	1	12.5
	Total		3	100.0	8	100.0

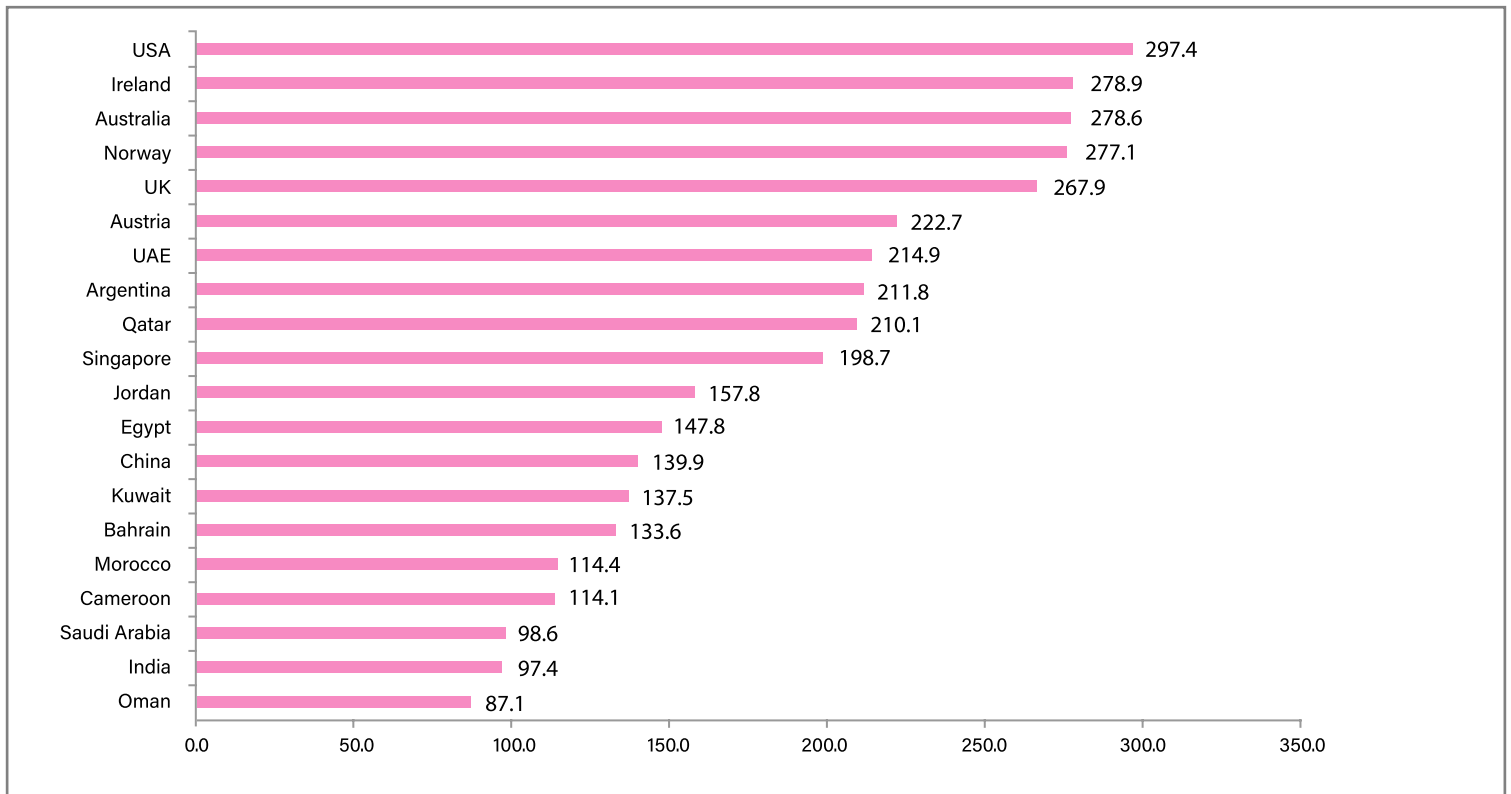
International Comparison of Age-Standardized Incidence Rates.

Figure 2.6.1 : Comparison of ASR* for Saudi males with selected countries**



*ASR per 100,000

Figure 2.6.2: Comparison of ASR* for Saudi females with selected countries**

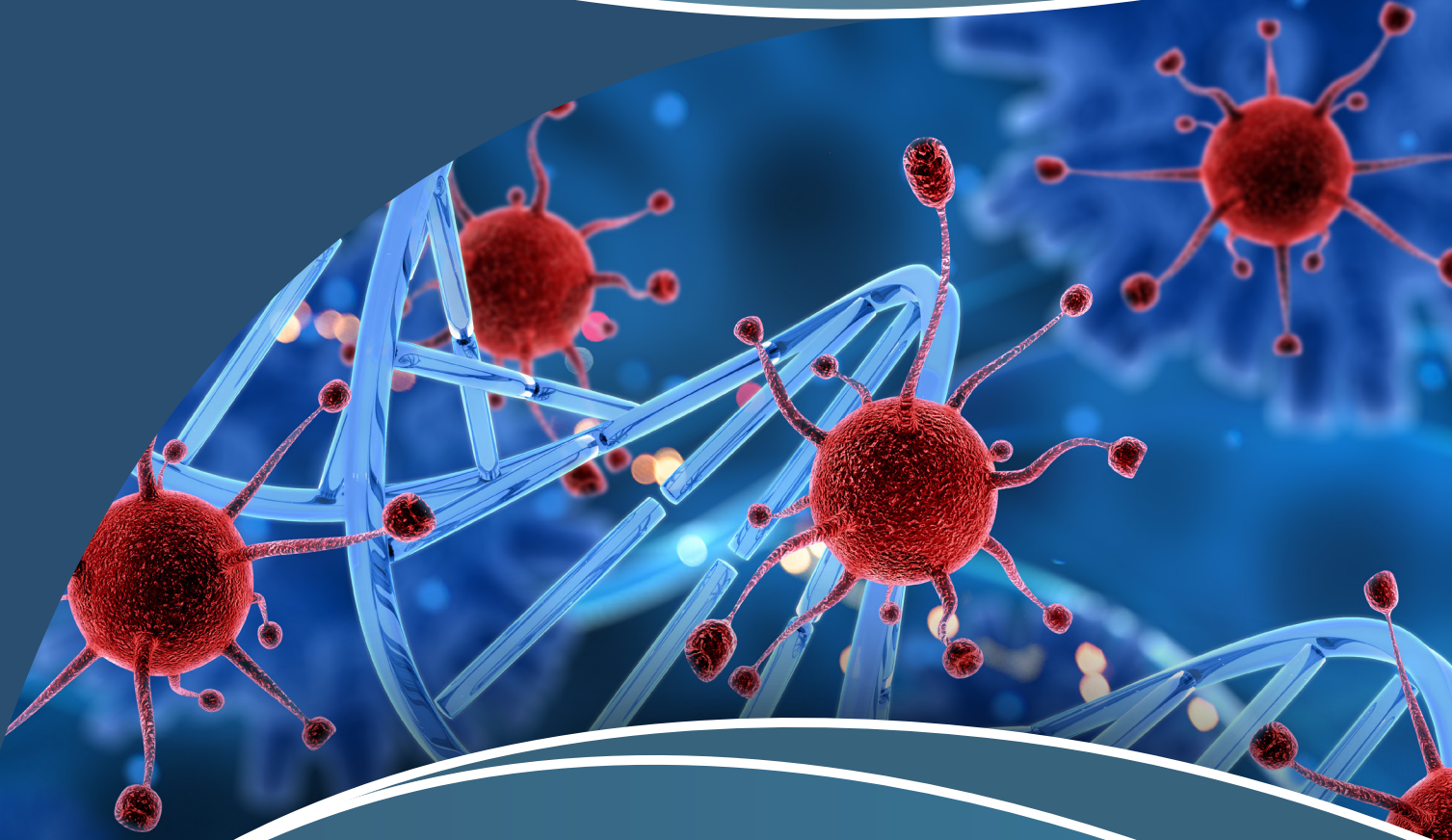


*ASR per 100,000

** Source for this information is summarized on page 54.



المجلس الصحي السعودي
Saudi Health Council



PART III

INCIDENCE OF MOST
COMMON CANCERS
DIAGNOSED AMONG
2017 ,SAUDI NATIONALS

Cancer Incidence for Most Common Sites among Saudi Nationals, 2017.

This section demonstrates the most common cancers diagnosed among Saudi nationals during the period between January and December 2017. It shows the distribution of the most common cancers by gender and geographical area. Data presented as absolute numbers, relative frequency, and incidence rates. It also presents comparisons of cancer incidence among Saudis with cancer incidence reported from selected developed and developing countries.

Table 3.1 : Most common Cancer among Saudis by gender, 2017.

Site	Male	Female	All	%
Breast	45	2463	2508	18.1
Colorectal	919	801	1720	12.4
Thyroid	234	873	1107	8.0
NHL	513	380	893	6.4
Leukaemia	403	303	706	5.1
Hodgkin's Lymphoma	288	229	517	3.7
Lung	356	152	508	3.7
Corpus Uteri	-	499	499	3.6
Prostate	412	-	412	3.0
Liver	264	129	393	2.8

Female Breast Cancer (C50)

Breast cancer was ranked first among females, between January and December 2017, there were 2,463 female breast cancer cases. Breast cancer accounted to 17.7% from all cancers reported among Saudi nationals, and 30.9% from all cancers reported among females at all ages. The ASR was 29.7/100,000 for Saudi female population. The median age at diagnosis was 51 years (ranged between 20 and 117 years).

Figure 3.1.1 : Age-Specific Incidence Rate (AIR) for Breast Cancer among Saudi females, 2017.

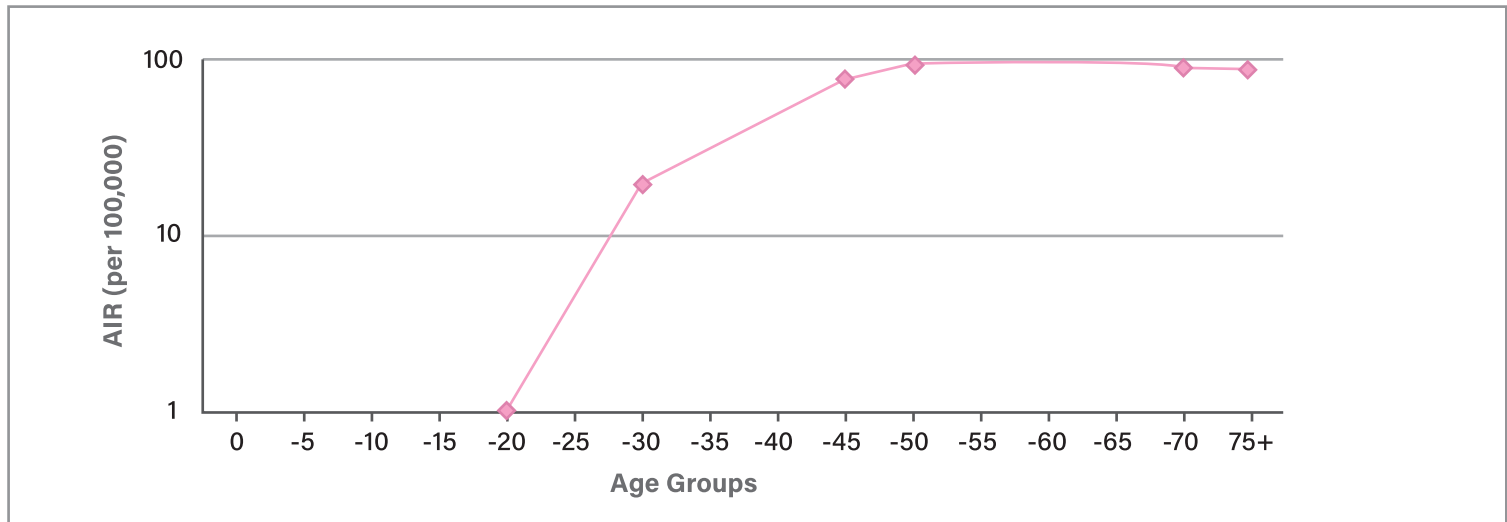


Table 3.1.1: Morphological distribution of Breast Cancer among Saudi females, 2017

ICD-O-3	Morphology	No.	%
85003	Infiltrating duct carcinoma, NOS	1901	77.2
85203	Lobular carcinoma, NOS	166	6.7
85223	Infiltrating duct and lobular carcinoma	148	6.0
80103	Carcinoma, NOS	48	1.9
85233	Infiltrating duct mixed with other types of carcinoma	44	1.8
80003	Neoplasm, malignant	21	0.9
85753	Metaplastic carcinoma, NOS	17	0.7
85103	Medullary carcinoma, NOS	14	0.6
84803	Mucinous adenocarcinoma	14	0.6
80503	Papillary carcinoma, NOS	12	0.5
	Others	78	3.2
	Total	2463	100

Figure 3.1.2: Morphological distribution of Breast Cancer among Saudi females, 2017.

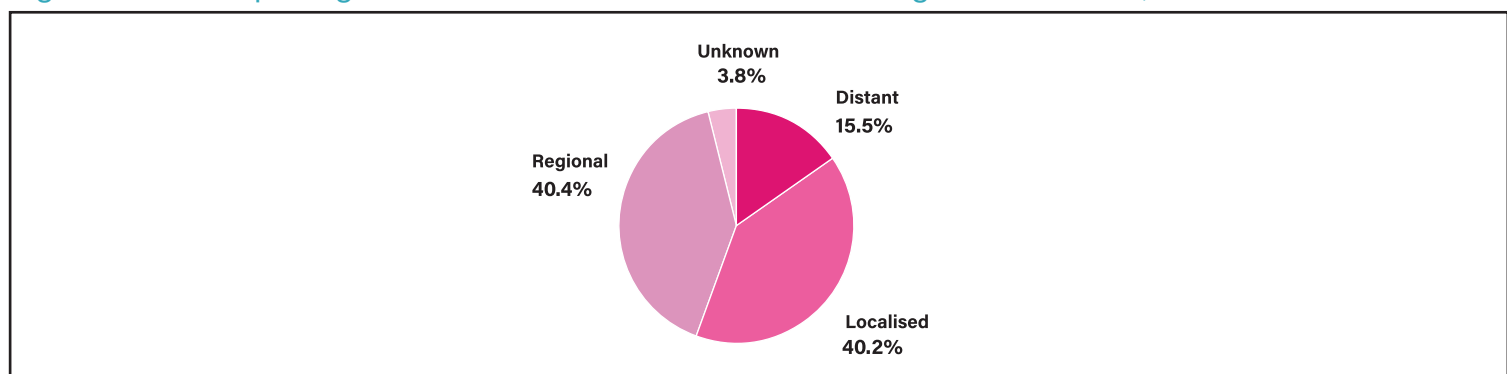
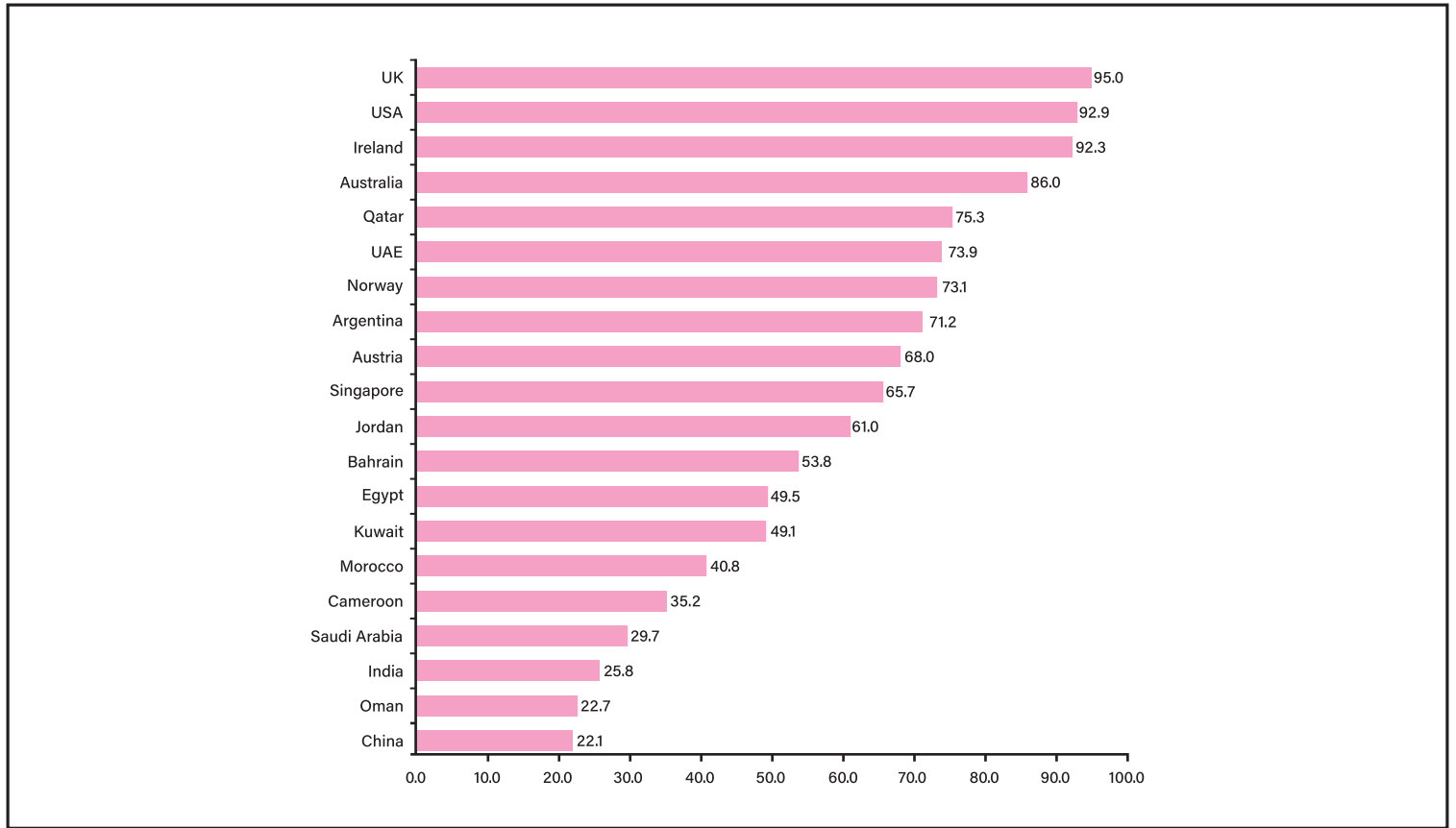


Figure 3.1.4 : Comparison of ASR* for Saudi females Breast Cancer with selected countries.



*ASR per 100,000

** Source for this information is summarized on page 54.

Colorectal Cancer (C18-C20).

There were 1,720 cases of colorectal cancer accounting for 12.4% of all newly diagnosed cases in year 2017 among Saudi nationals. Colorectal cancer was ranked first among males and third among females. It affected 919 (53.4%) males and 801 (46.6%) females with a male to female ratio of 115:100. The ASR was 12.5/100,000 for males and 10.9/100,000 for females. The median age at diagnosis was 60 years in males (ranged between 21 and 117 years) and 59 years in females (ranged between 15 and 117 years).

Figure 3.2.1: Age-Specific Incidence Rate (AIR) for Colorectal Cancer among Saudi nationals, 2017.

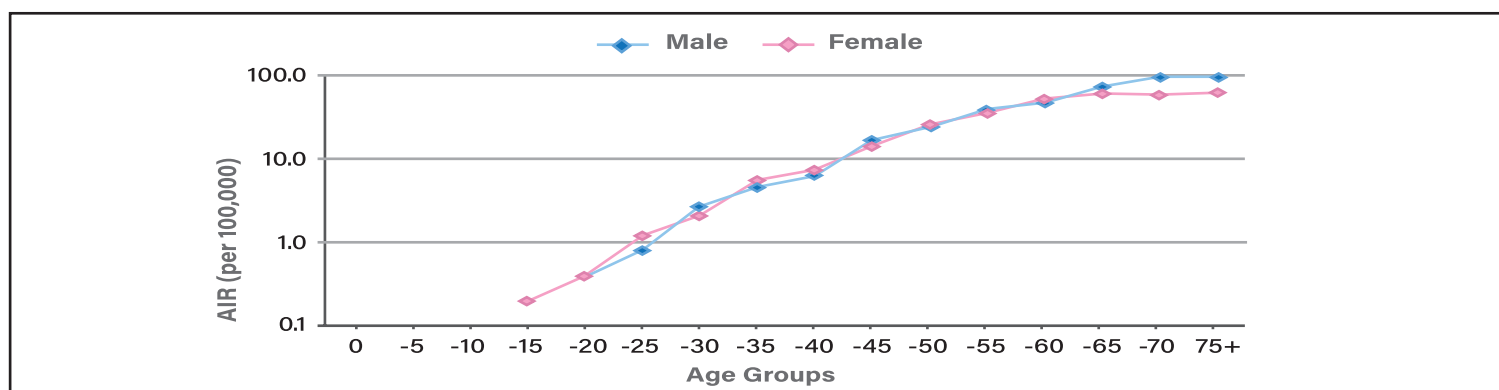


Table 3.2.1 : Morphological Distribution of Colorectal Cancer among Saudi nationals 2017

Code	Morphology	Male	%	Female	%
81403	Adenocarcinoma, NOS	736	80.1	623	77.8
84803	Mucinous adenocarcinoma	71	7.7	68	8.5
82633	Adenocarcinoma in tubulovillous adenoma	15	1.6	21	2.6
80103	Carcinoma, NOS	14	1.5	9	1.1
84903	Signet ring cell carcinoma	14	1.5	8	1.0
80003	Neoplasm, malignant	13	1.4	8	1.0
82613	Adenocarcinoma in villous adenoma	12	1.3	17	2.1
81443	Adenocarcinoma, intestinal type	12	1.3	11	1.4
82103	Adenocarcinoma in adenomatous polyp	9	1.0	7	0.9
82463	Neuroendocrine carcinoma, NOS	7	0.8	6	0.7
	Others	16	1.7	23	2.9
	Total	919	100	801	100

Figure 3.2.2: Stage distribution of Colorectal Cancer among Saudi nationals, 2017.

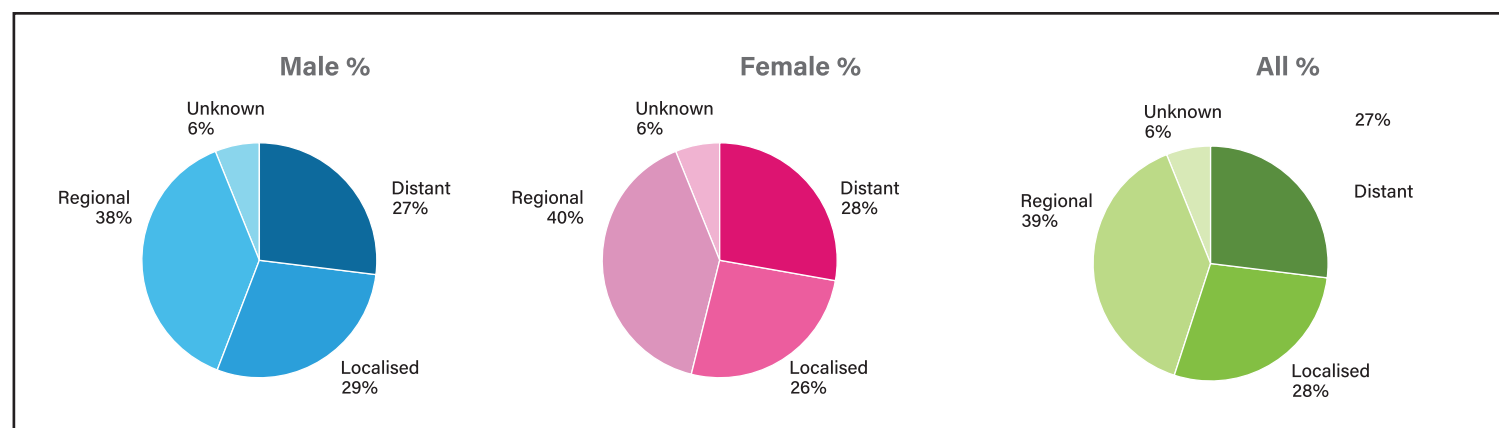
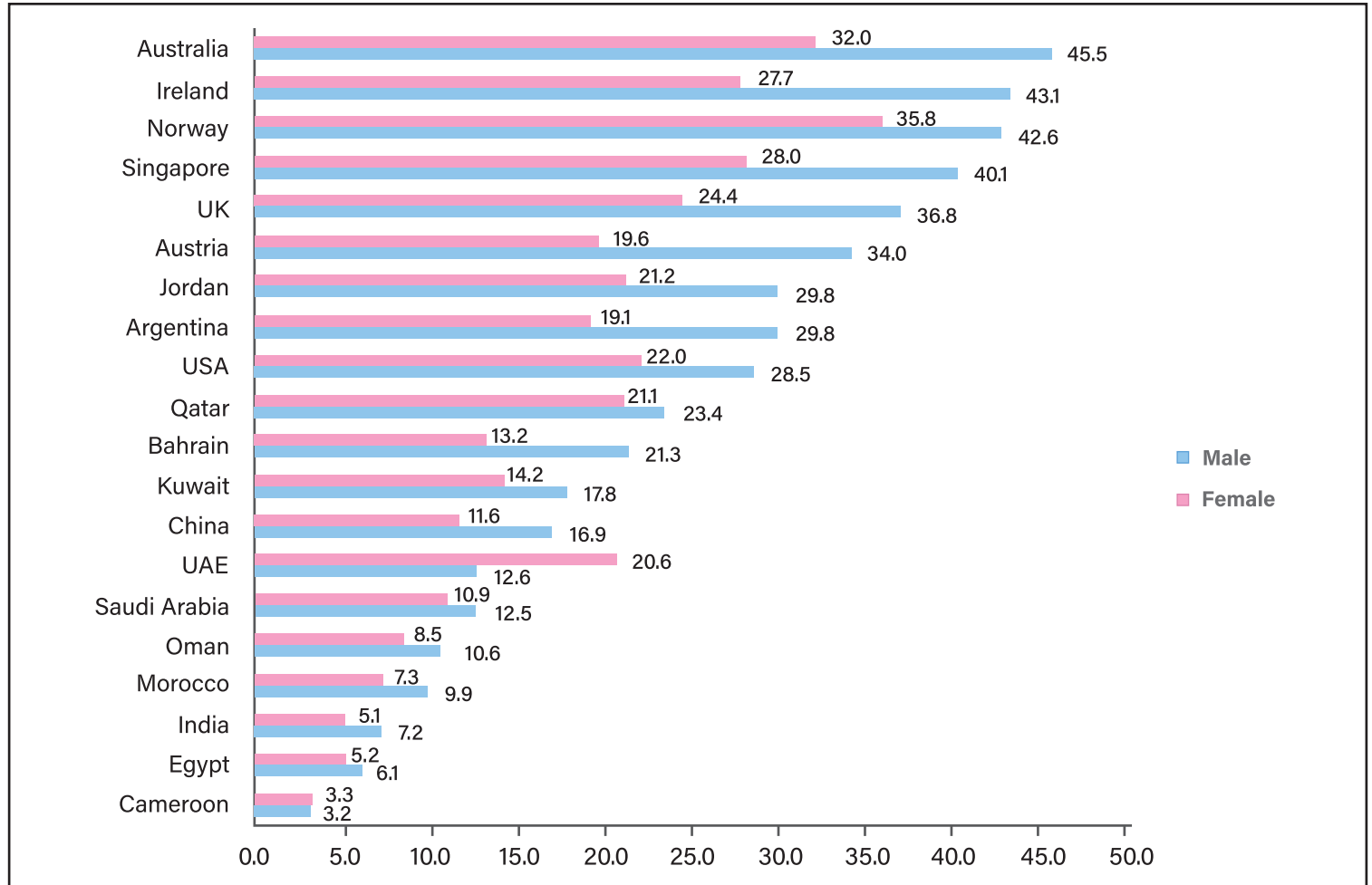


Figure 3.2.4: Comparison of ASR* for Colorectal Cancer among Saudis with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.

Thyroid Cancer (C73)

Thyroid cancer was ranked second among Saudi females and eighth among Saudi males. There were 1107 thyroid cancer cases accounting to 8% from all newly diagnosed cancers in 2017 among Saudi nationals. Thyroid cancer affected 873 (78.9%) females and 234 (21.1%) males, with a female to male ratio of 373:100. The ASR was 9/100,000 for females and 2.5/100,000 for males. The median age at diagnosis was 40 years in females (ranged between 1 and 107 years) and 42 years in males (ranged between 6 and 91 years).

Figure 3.3.1 : Age-Specific Incidence Rate (AIR) for Thyroid Cancer among Saudi nationals, 2017.

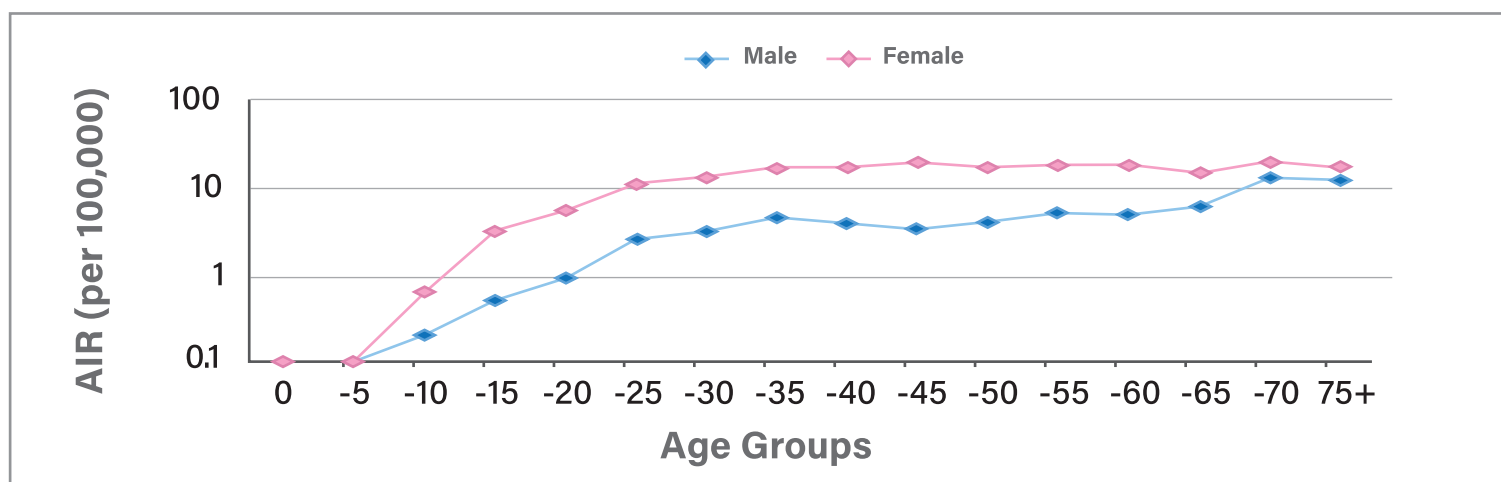


Table 3.3.1: Morphological distribution of Thyroid Cancer among Saudi nationals, 2017.

Code	Morphology	Male	%	Female	%
82603	Papillary adenocarcinoma, NOS	128	54.7	466	53.4
83403	Papillary carcinoma, follicular variant	24	10.3	144	16.5
83413	Papillary microcarcinoma	27	11.5	122	14.0
80503	Papillary carcinoma, NOS	4	1.7	22	2.5
83353	Follicular carcinoma, minimally invasive	7	3.0	21	2.4
83433	Papillary carcinoma, encapsulated	6	2.6	21	2.4
82903	Oxyphilic adenocarcinoma	4	1.7	20	2.3
83303	Follicular adenocarcinoma, NOS	6	2.6	16	1.8
83443	Papillary carcinoma, columnar cell	5	2.1	12	1.4
85103	Medullary carcinoma, NOS	7	3.0	7	0.8
	Others	16	6.8	22	2.5
	Total	234	100	873	100

Figure 3.3.2: Stage distribution of Thyroid Cancer among Saudi nationals, 2017.

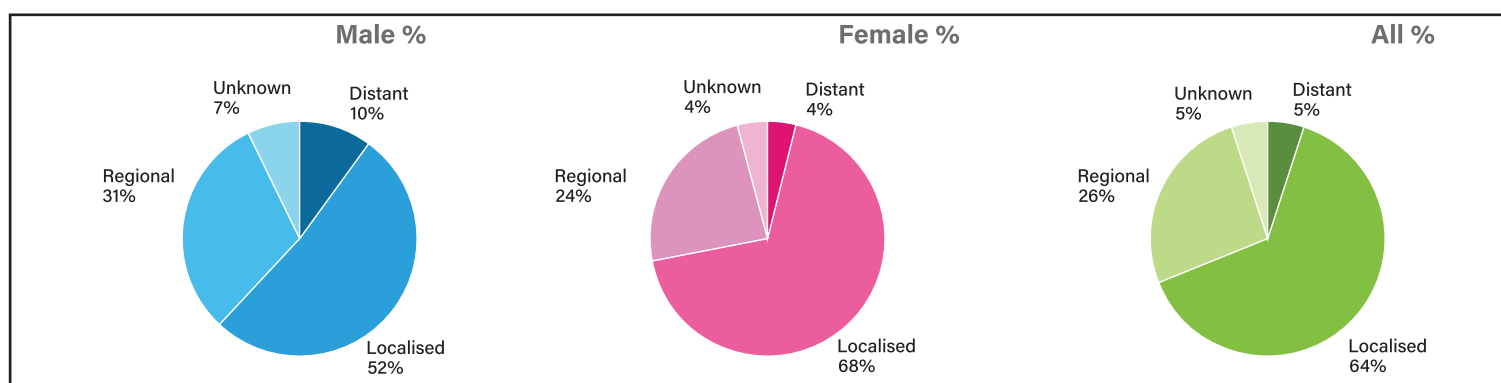
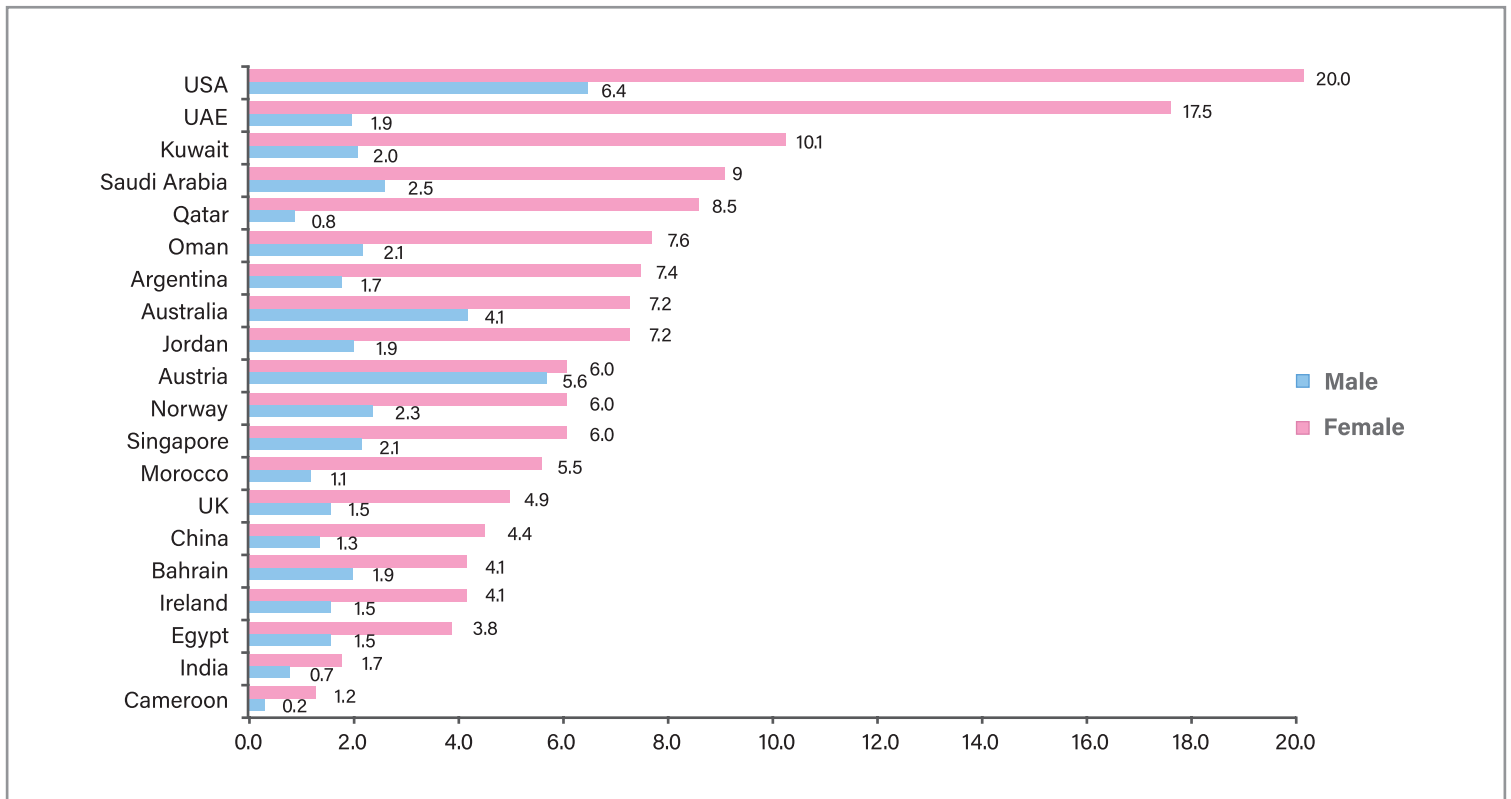


Figure 3.3.4: Comparison of ASR* for Thyroid Cancer among Saudis with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.

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

Non-Hodgkin Lymphoma (NHL) was ranked second among males and fifth among females. There were 893 cases accounted to 6.4% from all cancers diagnosed among Saudi nationals in 2017. NHL affected 513 (57.4%) males, and 380 (42.6%) females, with a male to female ratio of 135:100. The ASR was 6/100,000 for males and 4.8/100,000 for females. The median age at diagnosis was 51 years in males (ranged between 0 and 117 years) and 56 years in females (ranged between 0 and 117 years).

Figure 3.4.1 : Age-Specific Incidence Rate (AIR) for NHL among Saudi nationals, 2017.

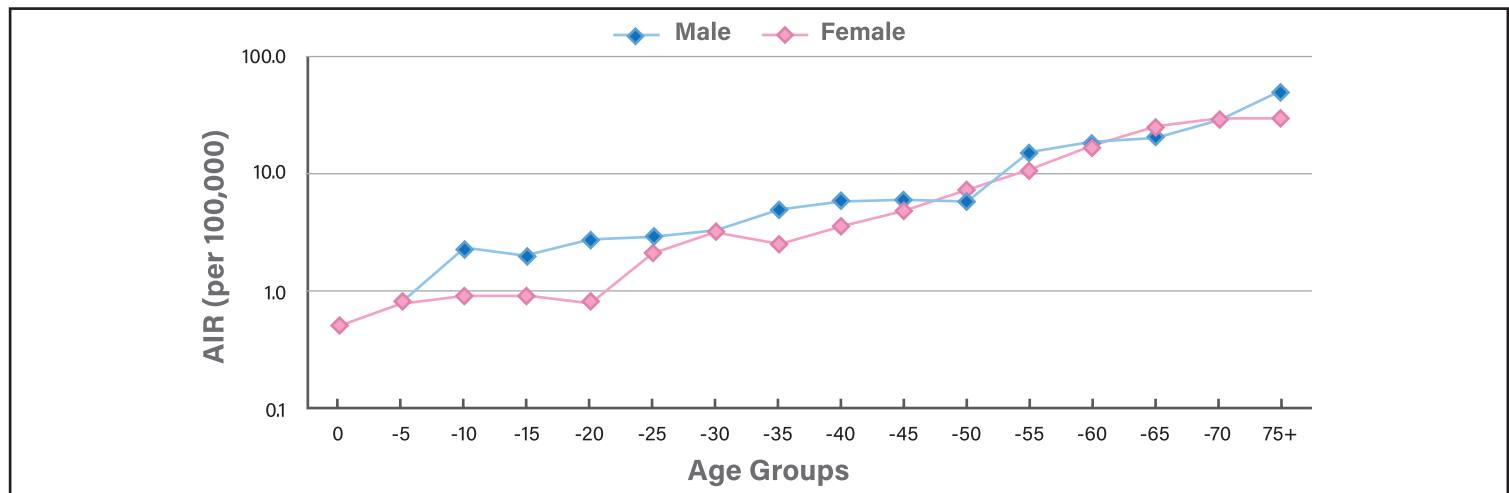


Table 3.4.1: Morphological distribution of NHL among Saudi nationals, 2017.

Code	Morphology	Male	%	Female	%
96803	Malignant lymphoma, large B-cell, diffuse, NOS	275	53.6	214	56.3
96873	Burkitt lymphoma, NOS	31	6.0	23	6.1
97003	Mycosis fungoides	30	5.8	21	5.5
95903	Malignant lymphoma, NOS	25	4.9	7	1.8
95913	Malignant lymphoma, non-Hodgkin, NOS	24	4.7	16	4.2
96913	Follicular lymphoma, grade 2	23	4.5	19	5.0
97143	Anaplastic large cell lymphoma, T cell and Null cell type	11	2.1	5	1.3
96903	Follicular lymphoma, NOS	11	2.1	10	2.6
96993	Marginal zone B-cell lymphoma, NOS	11	2.1	11	2.9
96703	Malignant lymphoma, small B lymphocytic, NOS	10	1.9	9	2.4
	Others	62	12.1	45	11.8
	Total	513	100	380	100

Figure 3.4.2: Stage distribution of NHL among Saudi nationals, 2017.

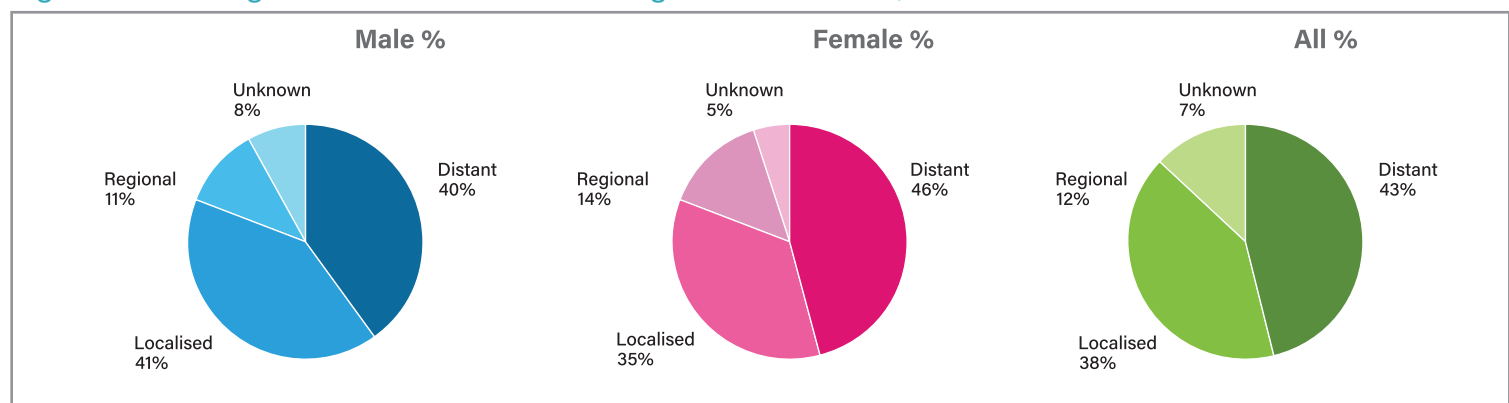
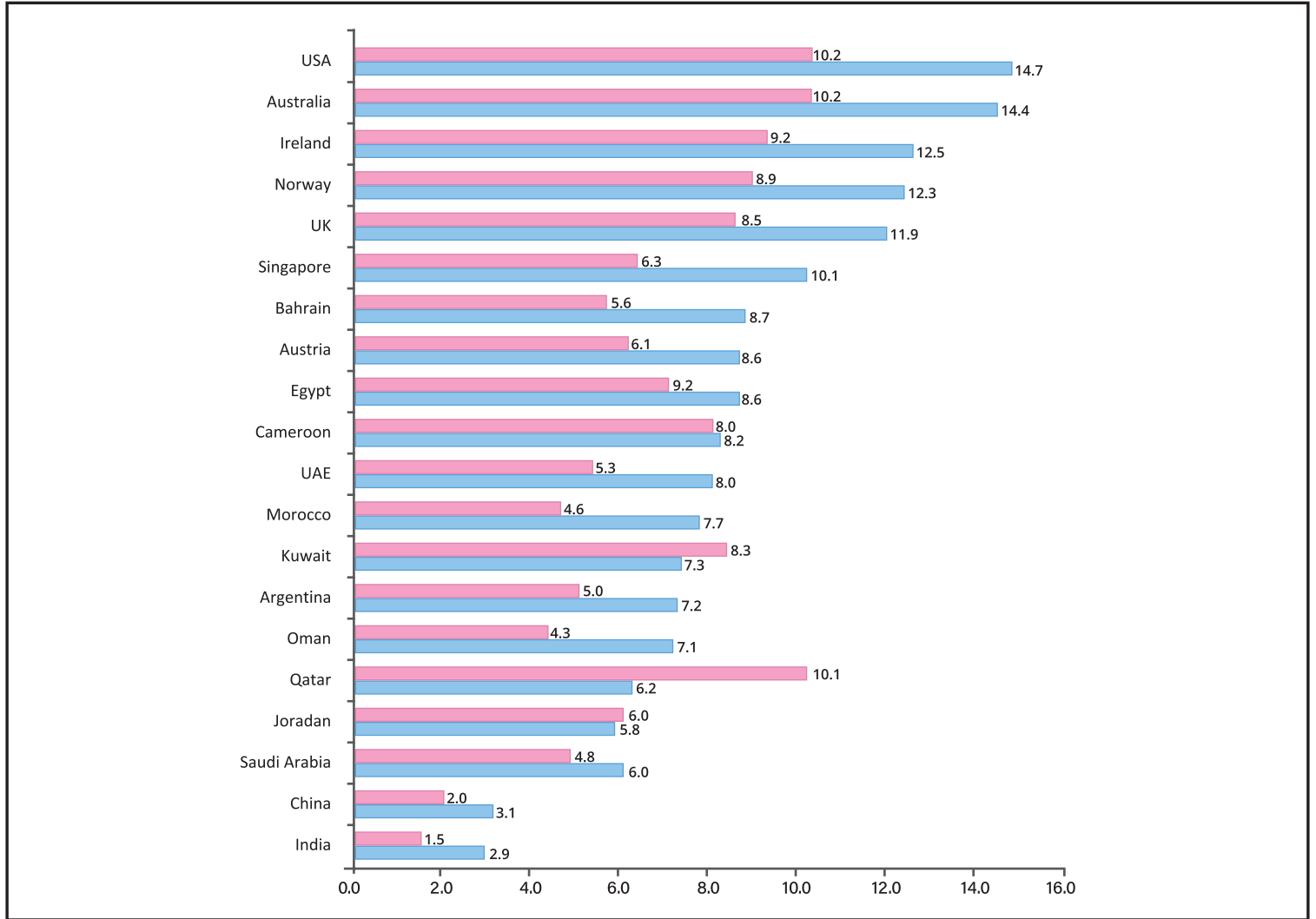


Figure 3.4.4: Comparison of ASR* for NHL among Saudis with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.

Leukaemia (C91-C95).

Leukaemia was ranked fourth among males and the sixth among females, there were 706 cases accounted to 5.1% of all cancer cases diagnosed among Saudi nationals in 2017. Leukaemia affected 403 (57.1%) males and 303 (42.9%) females with a male to female ratio of 133:100. The ASR was 4.5/100,000 for males and 3.3/100,000 for females.

The median age at diagnosis was 30 years in males (ranged between 0 and 90 years) and 28 years in females (ranged between 0 and 103 years).

Figure 3.5.1 : Age-Specific Incidence Rate (AIR) for Leukaemia among Saudi nationals, 2017.

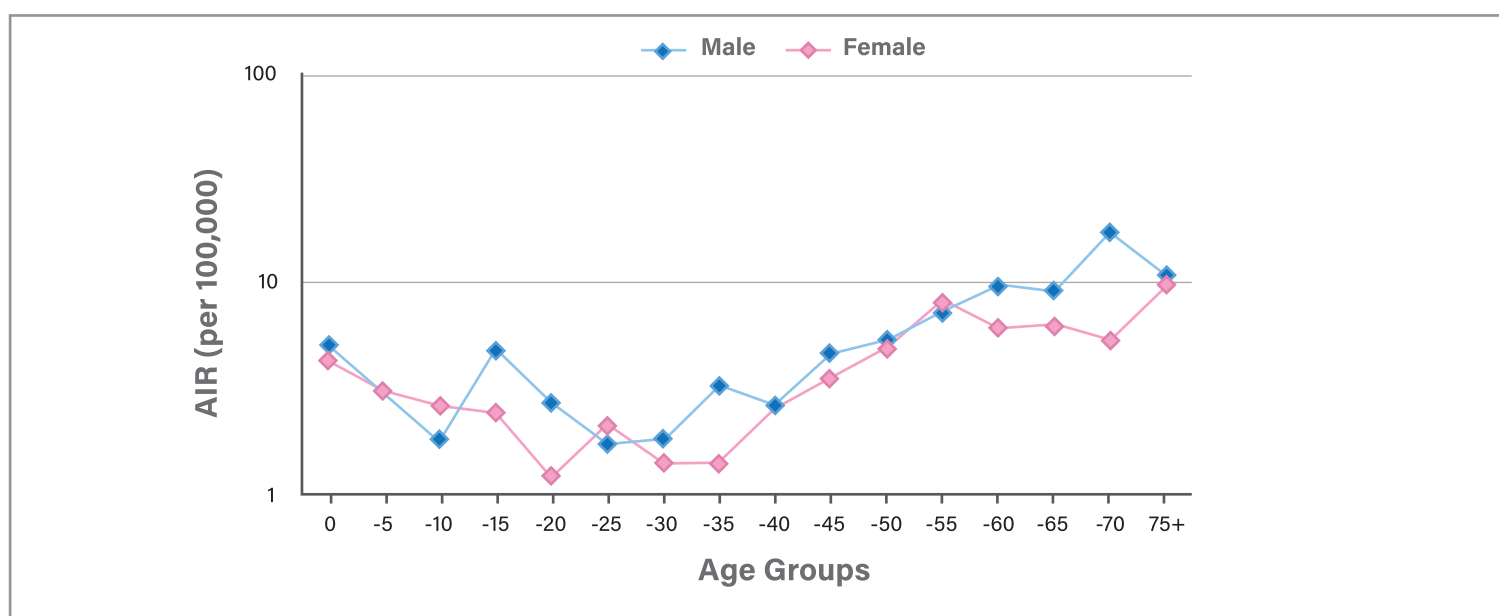
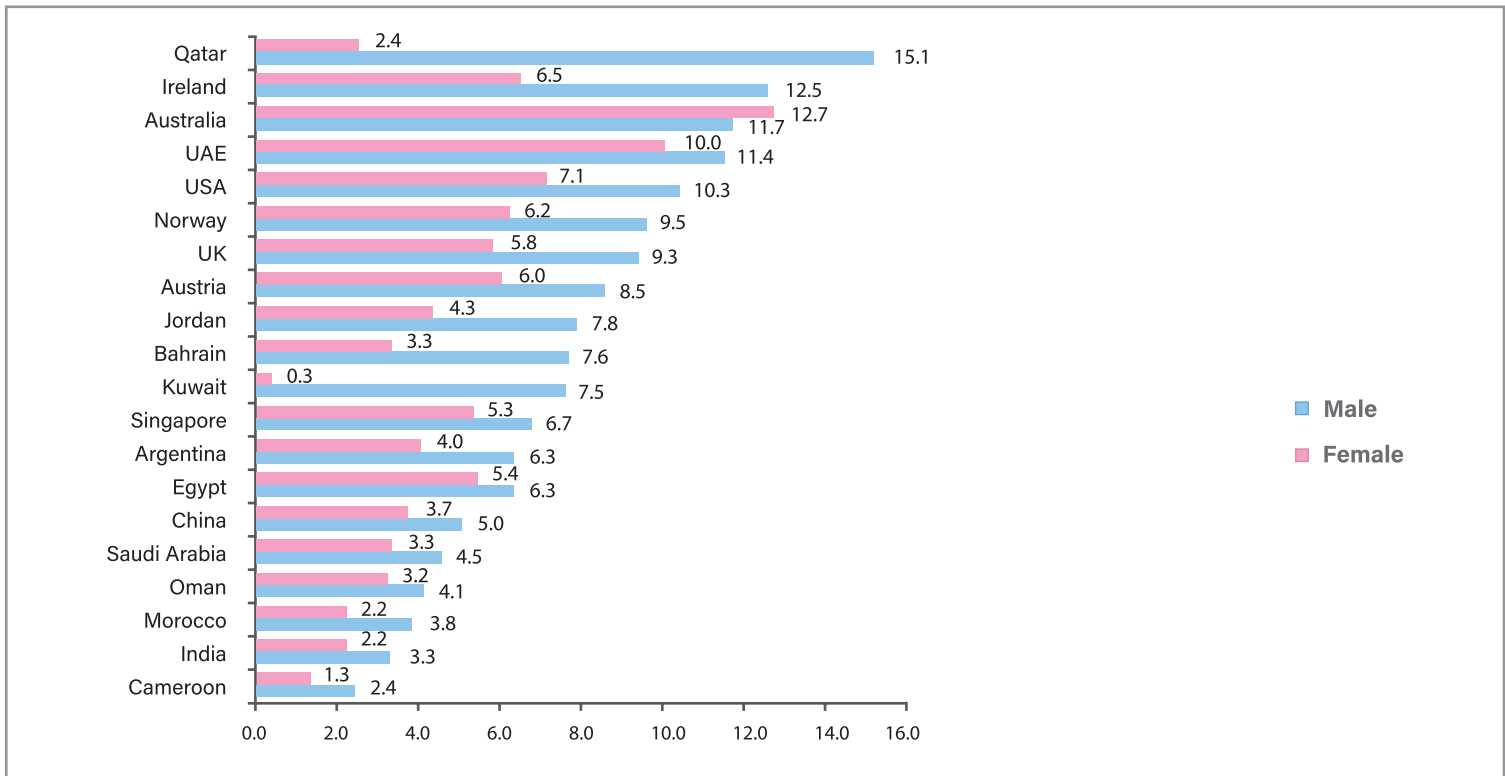


Table 3.5.1: Morphological distribution of Leukaemia among Saudi nationals, 2017.

Code	Morphology	Male	%	Female	%
98363	Precursor B-cell lymphoblastic leukemia	88	21.8	77	25.4
98613	Acute myeloid leukemia, NOS	63	15.6	61	20.1
98633	Chronic myeloid leukemia, NOS	53	13.2	57	18.8
98233	B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma	43	10.7	20	6.6
98353	Precursor cell lymphoblastic leukemia, NOS	31	7.7	18	5.9
98373	Precursor T-cell lymphoblastic leukemia	23	5.7	8	2.6
98013	Acute leukemia, NOS	16	4.0	6	2.0
98663	Acute promyelocytic leukemia, t(15;17)(q22;q11-12)	14	3.5	12	4.0
99403	Hairy cell leukemia	11	2.7	0	0.0
98673	Acute myelomonocytic leukemia	9	2.2	8	2.6
	Others	52	12.9	36	11.9
	Total	403	100	303	100

Figure 3.5.3: Comparison of ASR* for Leukaemia among Saudis with ASR in selected countries**



* ASR per 100,000

** Source for this information is summarized on page 54.

Hodgkin's Lymphoma (C81).

Hodgkin's lymphoma was ranked the sixth among Saudi males and the eightieth among Saudi females. There were 517 cases of Hodgkin's lymphoma accounted to 3.7% of all cancer cases diagnosed among Saudi nationals in 2017. Hodgkin's Lymphoma affected 288 (55.7%) males and 229 (44.3%) females, with a ratio of male to female of 126:100. The ASR was 2.8/100,000 for males and 2.2/100,000 for females. The median age at diagnosis was 29 years (ranged between 3 and 95 years) in males and 27 years (ranged between 5 and 87) in females.

Figure 3.6.1: Age-Specific Incidence Rate (AIR) for Hodgkin's Lymphoma among Saudi nationals, 2017.

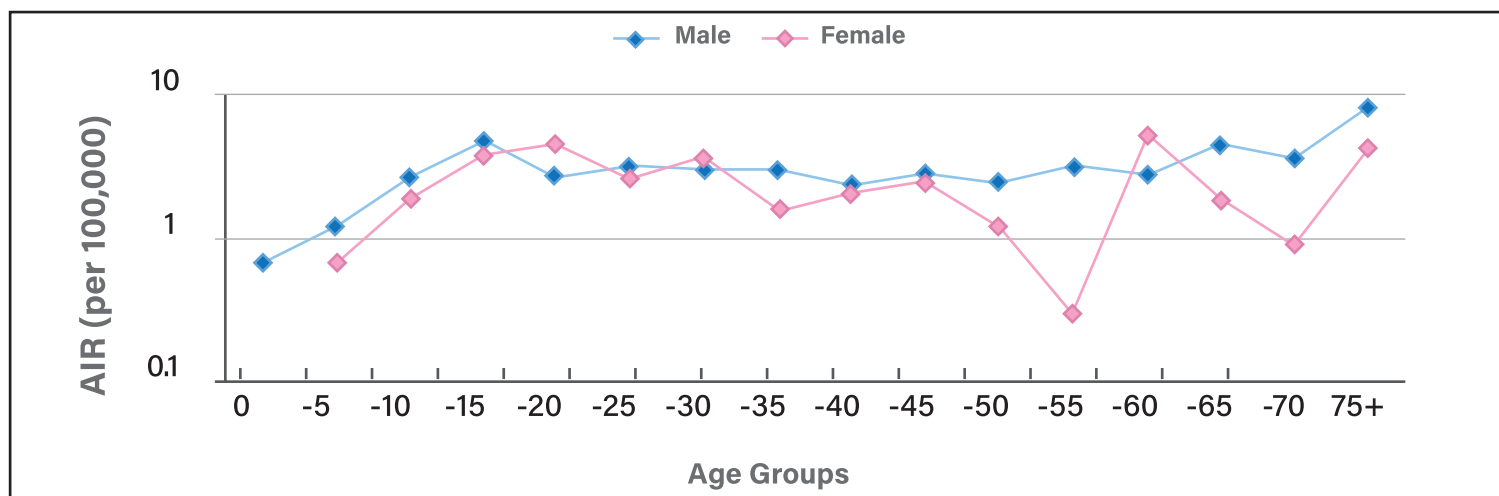


Table 3.6.1: Morphological distribution of Hodgkin's Lymphoma among Saudi nationals, 2017.

Code	Morphology	Male	%	Female	%
96633	Hodgkin lymphoma, nodular sclerosis, NOS	126	43.8	133	58.1
96503	Hodgkin lymphoma, NOS	60	20.8	45	19.7
96593	Hodgkin lymphoma, nodular lymphocyte predominance	41	14.2	17	7.4
96523	Hodgkin lymphoma, mixed cellularity, NOS	39	13.5	27	11.8
96513	Hodgkin lymphoma, lymphocyte-rich	14	4.9	3	1.3
96643	Hodgkin lymphoma, nodular sclerosis, cellular phase	3	1.0	0	0.0
96673	Hodgkin lymphoma, nodular sclerosis, grade 2	3	1.0	1	0.4
96533	Hodgkin lymphoma, lymphocyte depletion, NOS	1	0.3	1	0.4
96623	Hodgkin sarcoma	1	0.3	0	0.0
96653	Hodgkin lymphoma, nodular sclerosis, grade 1	0	0.0	2	0.9
	Total	288	100	229	100

Figure 3.6.2: Stage distribution of Hodgkin's Lymphoma among Saudi nationals, 2017.

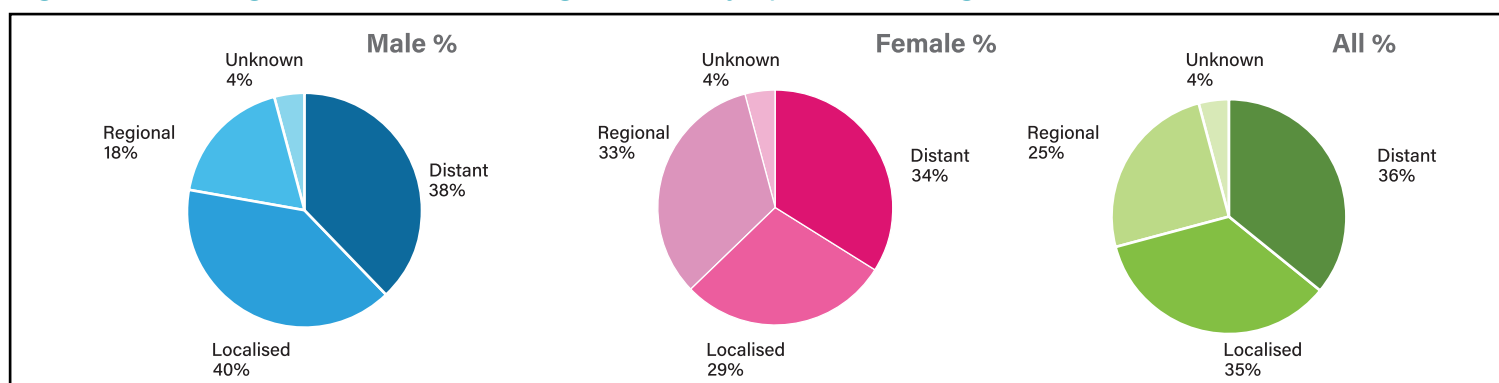
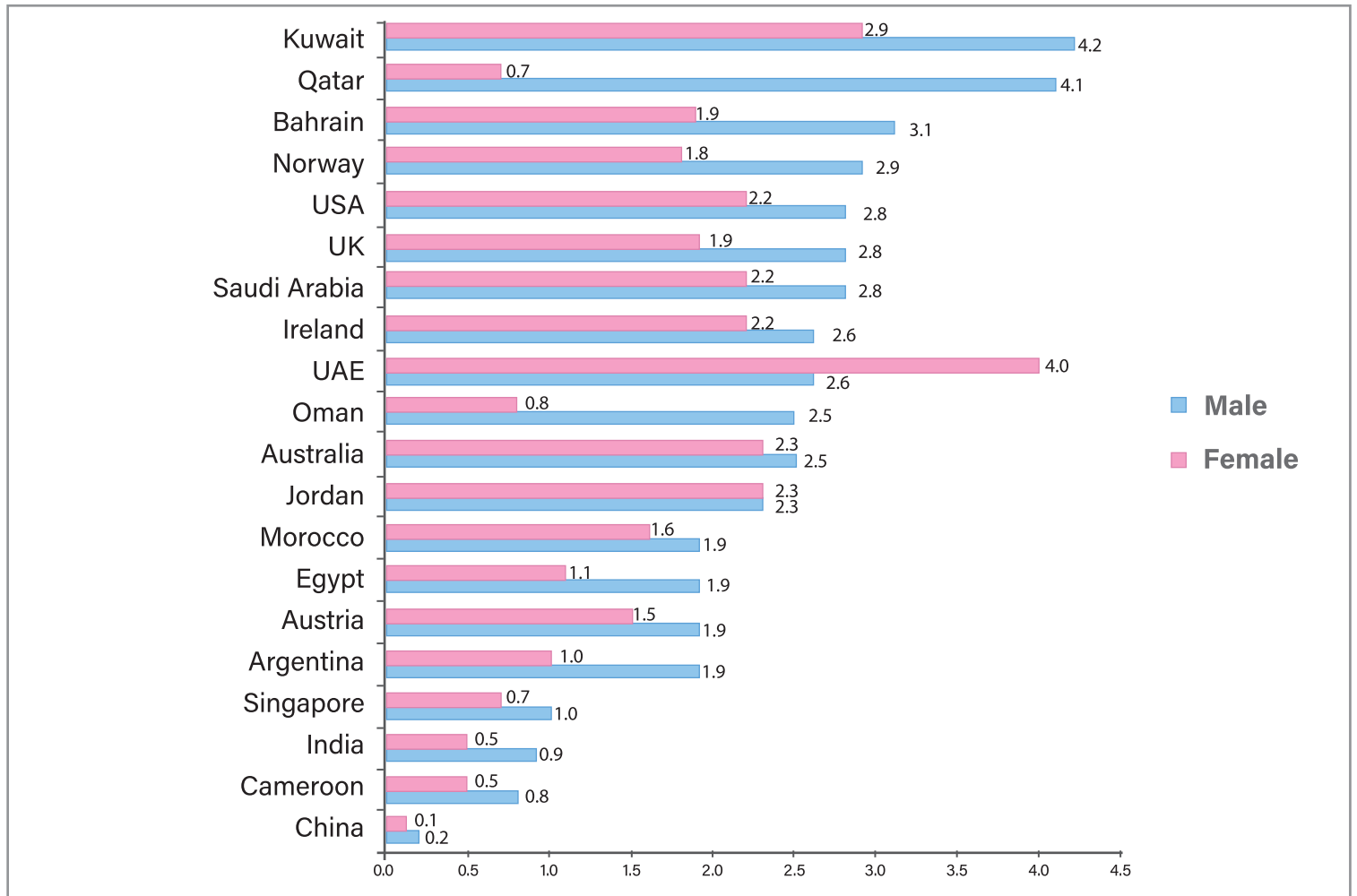


Figure 3.6.4: Comparison of ASR* for Hodgkin's Lymphoma among Saudis with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.

Lung Cancer (C33 - C34)

Lung cancer was ranked fifth among Saudi males and thirteenth among Saudi females. There were 508 cases of lung cancer accounted to 3.7 % of all newly diagnosed cases among Saudis in 2017. Lung cancer affected 356 (70.1%) males and 152 (29.9%) females with a male to female ratio of 234:100. The ASR was 5/100,000 for males and 2/100,000 for females. The median age at diagnosis was 66 years in males (ranged between 31 and 96 years) and 59 years in females (ranged between 21 and 92 years).

Figure 3.7.1 : Age-Specific Incidence Rate (AIR) for Lung Cancer among Saudi nationals, 2017.

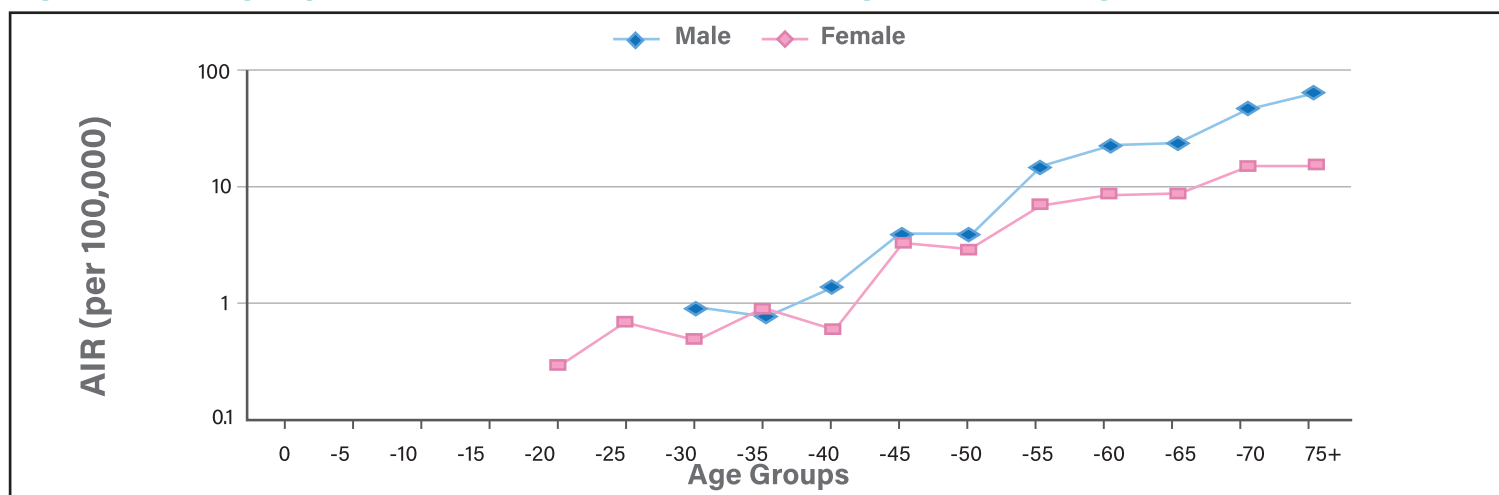


Table 3.7.1: Morphological distribution of Lung Cancer among Saudi nationals, 2017.

Code	Morphology	Male	%	Female	%
81403	Adenocarcinoma, NOS	132	37.1	71	46.7
80703	Squamous cell carcinoma, NOS	66	18.5	10	6.6
80463	Non-small cell carcinoma	30	8.4	10	6.6
80413	Small cell carcinoma, NOS	22	6.2	8	5.3
80103	Carcinoma, NOS	17	4.8	1	0.7
80003	Neoplasm, malignant	16	4.5	5	3.3
85503	Acinar cell carcinoma	14	3.9	6	3.9
84803	Mucinous adenocarcinoma	8	2.2	8	5.3
80713	Squamous cell carcinoma, keratinizing, NOS	6	1.7	3	2.0
82463	Neuroendocrine carcinoma, NOS	6	1.7	2	1.3
	Others	39	11.0	28	18.4
	Total	356	100	152	100

Figure 3.7.2: Stage distribution of Lung Cancer among Saudi nationals, 2017.

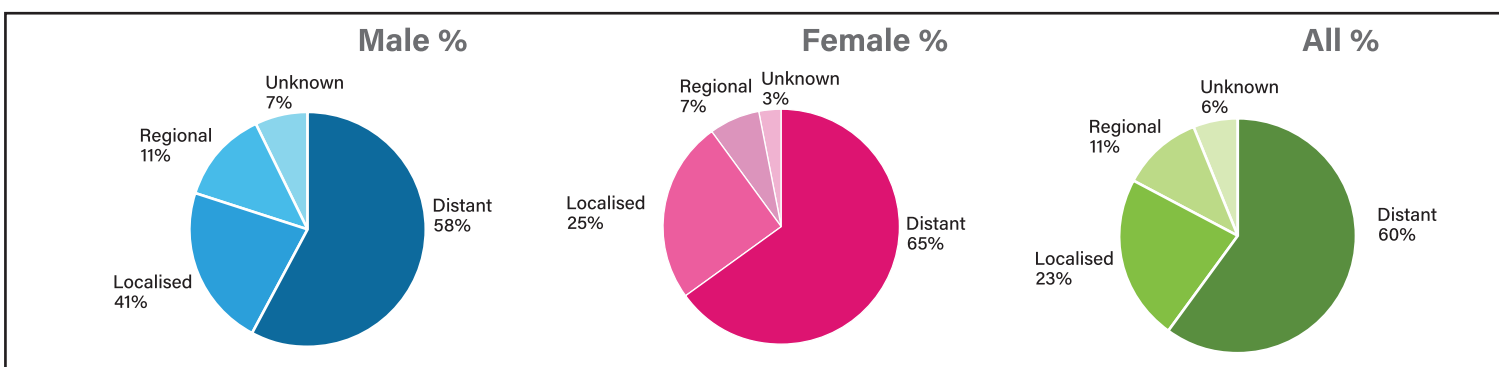
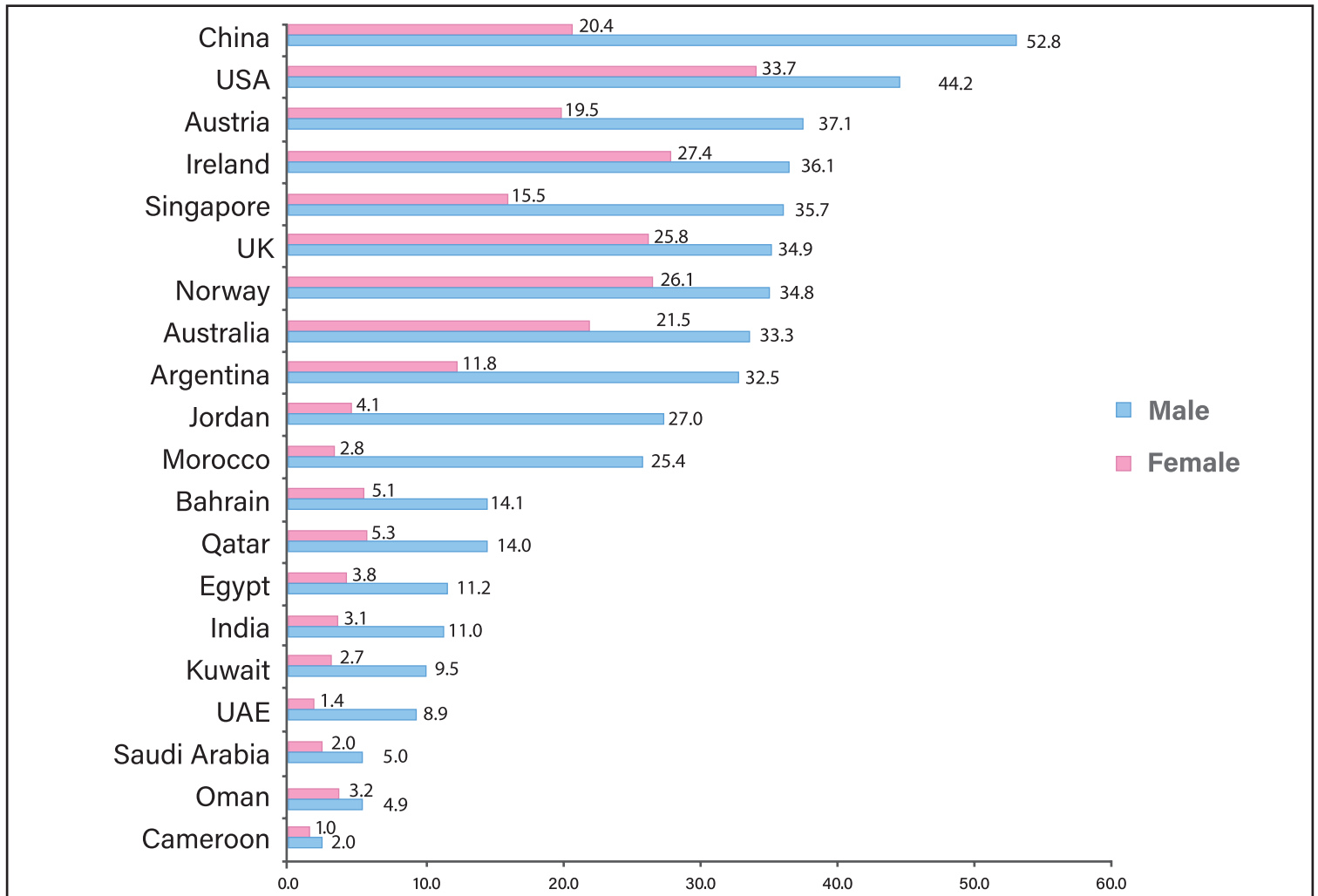


Figure 3.7.4: Comparison of ASR* for Lung Cancer among Saudis with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.

Corpus Uteri Cancer (C54).

Corpus Uteri cancer was ranked fourth among Saudi females with 499 cases accounted to 6.3 % of all cancer cases diagnosed among Saudi females in 2017. The ASR was 7.1/100,000 for Saudi female population. The median age at diagnosis was 60 years (ranged between 22 and 117 years).

Figure 3.8.1: Age-Specific Incidence Rate (AIR) for Corpus Uteri Cancer among Saudi nationals, 2017.

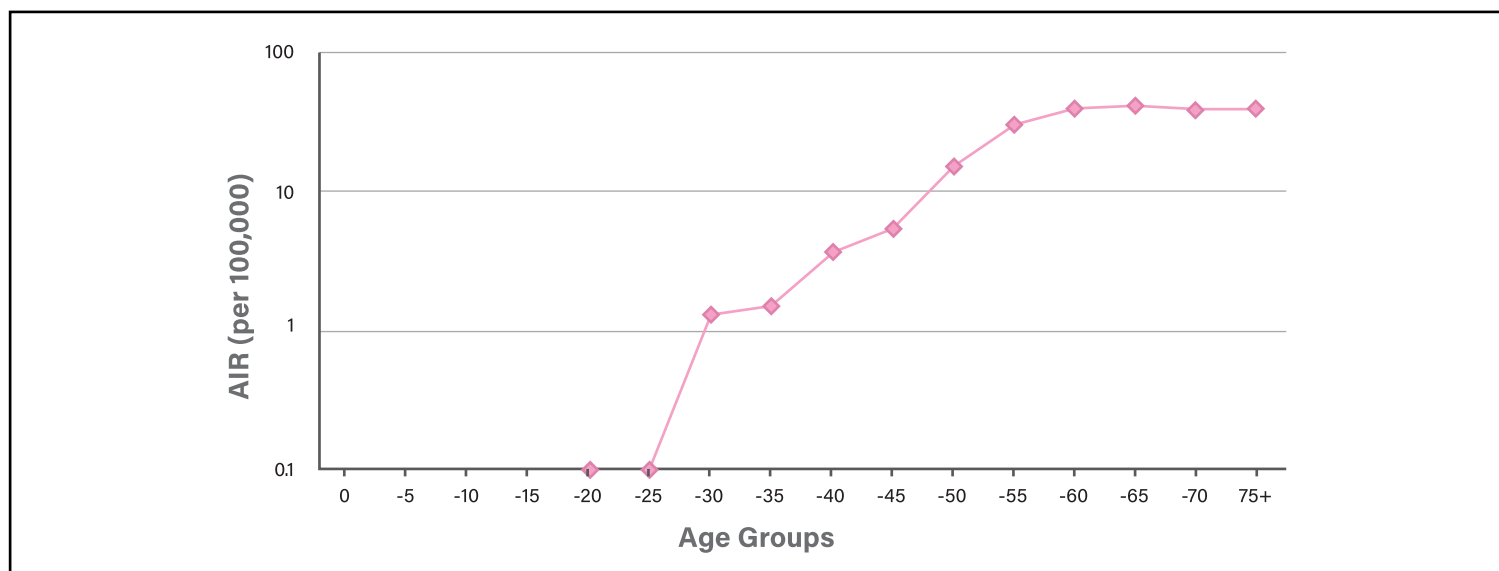


Table 3.8.1: Morphological distribution of Corpus Uteri Cancer among Saudi nationals, 2017.

Code	Morphology	No.	%
83803	Endometrioid adenocarcinoma, NOS	319	63.9
81403	Adenocarcinoma, NOS	47	9.4
84413	Serous cystadenocarcinoma, NOS	24	4.8
89803	Carcinosarcoma, NOS	21	4.2
89503	Mullerian mixed tumor	9	1.8
84603	Papillary serous cystadenocarcinoma	8	1.6
89313	Endometrial stromal sarcoma, low grade	7	1.4
80723	Squamous cell carcinoma, large cell, nonkeratin	7	1.4
83103	Clear cell adenocarcinoma, NOS	6	1.2
89303	Endometrial stromal sarcoma, NOS	5	1.0
	Others	46	9.2
	Total	499	100

Figure 3.8.2: Stage distribution of Corpus Uteri Cancer among Saudi nationals, 2017.

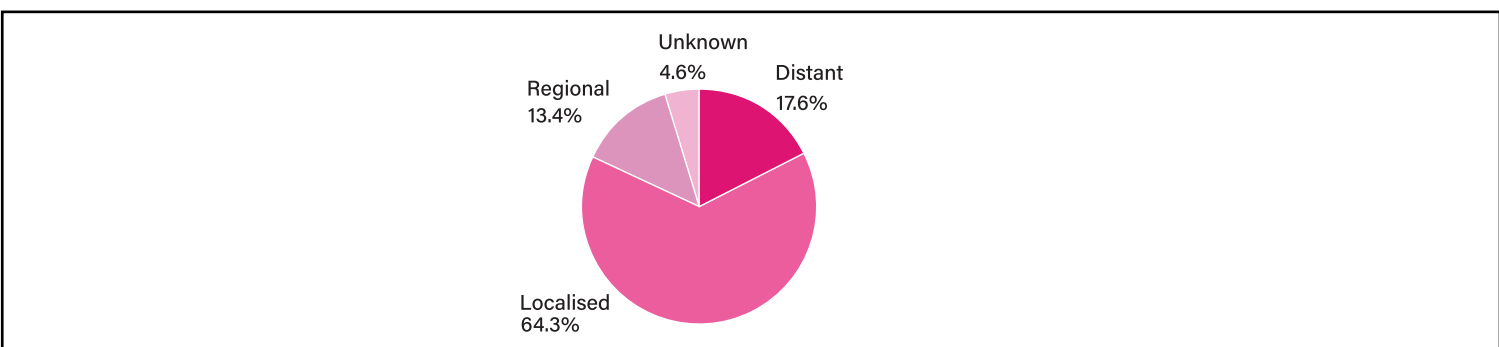
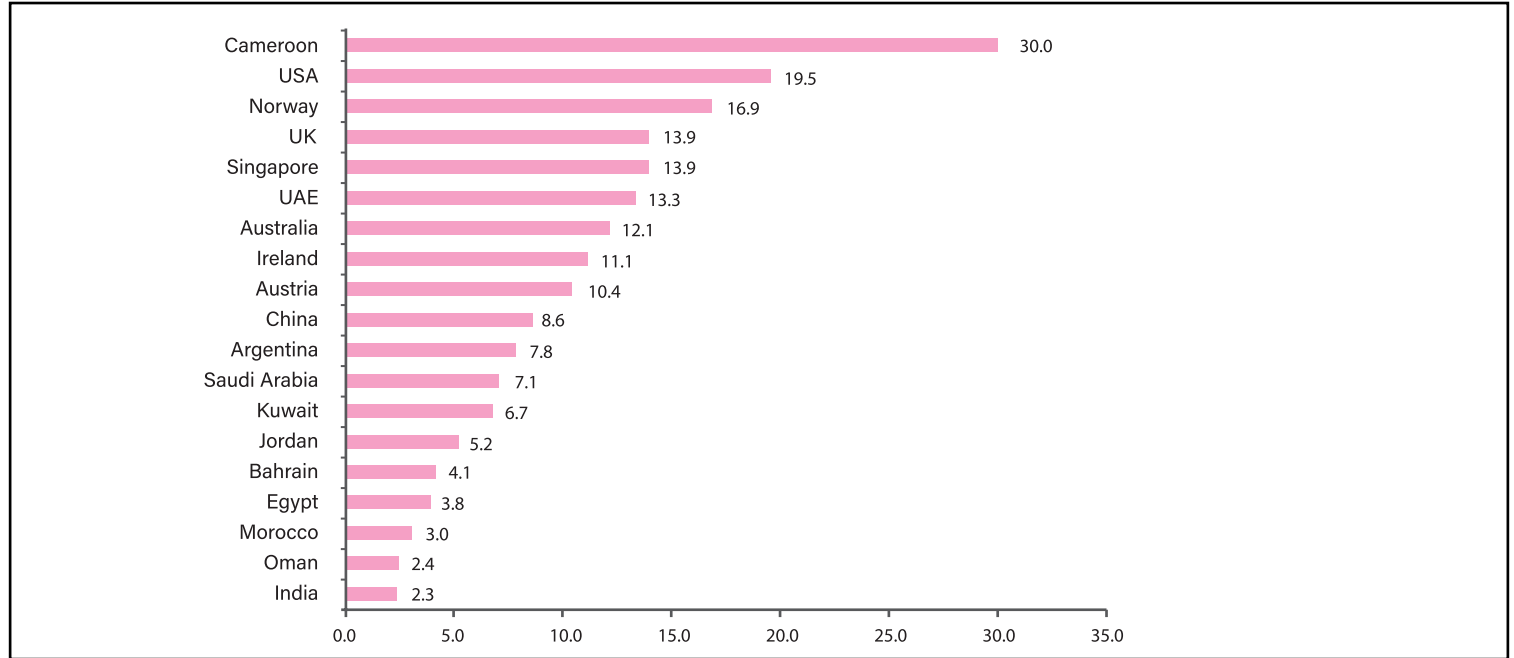


Figure 3.8.4: Comparison of ASR* for Corpus Uteri Cancer among Saudis with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.

Prostate Cancer (C61)

Prostate cancer was ranked the third among Saudi males, and ninth among all cancers in both genders with 412 cases accounted to 7.0% of all cancers cases diagnosed among Saudi Males in 2017. The ASR was 6.2/100,000 for Saudi male population. The median age at diagnosis was 71 years (ranged between 39 and 117 years).

Figure 3.9.1: Age-Specific Incidence Rate (AIR) Prostate Cancers among Saudi nationals, 2017.

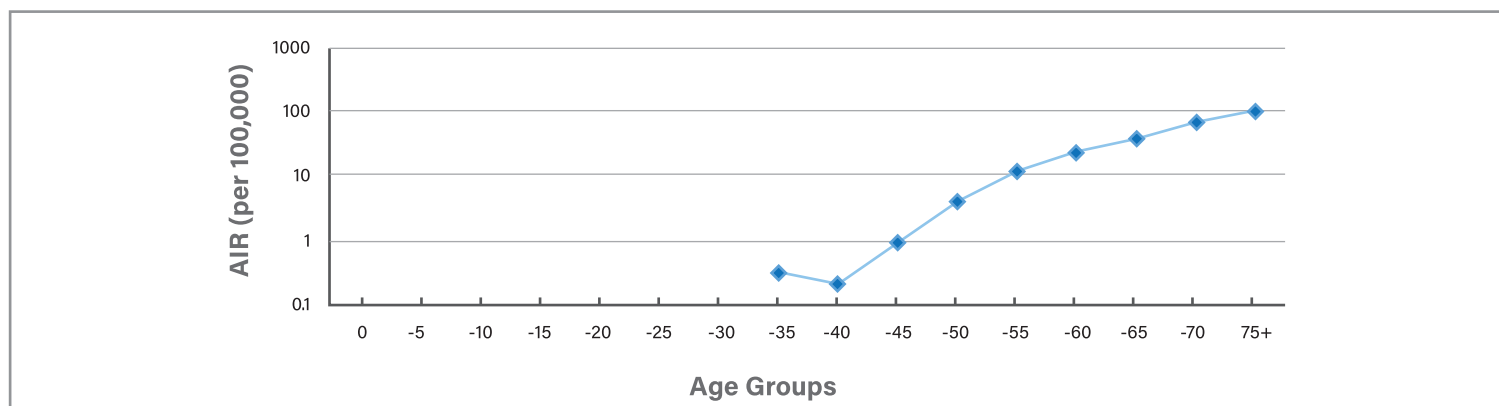


Table 3.9.1: Morphological distribution of Prostate Cancers among Saudi nationals, 2017.

Code	Morphology	No.	%
81403	Adenocarcinoma, NOS	335	81.3
85503	Acinar cell carcinoma	55	13.3
80003	Neoplasm, malignant	11	2.7
80103	Carcinoma, NOS	4	1.0
81203	Transitional cell carcinoma, NOS	2	0.5
82553	Adenocarcinoma with mixed subtypes	1	0.2
82463	Neuroendocrine carcinoma, NOS	1	0.2
81303	Papillary transitional cell carcinoma	1	0.2
88003	Sarcoma, NOS	1	0.2
80413	Small cell carcinoma, NOS	1	0.2
	Total	412	100

Figure 3.9.2: Stage distribution of Prostate Cancers among Saudi nationals, 2017.

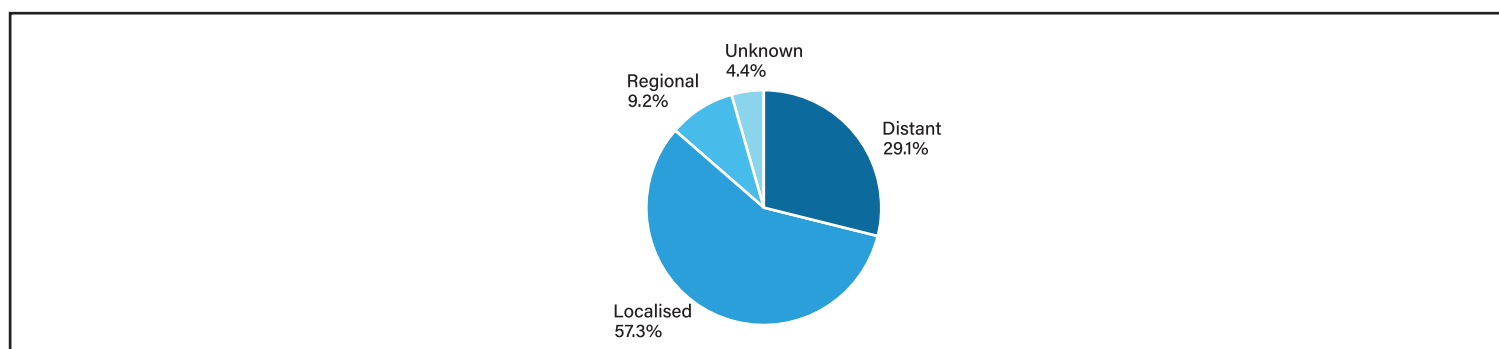
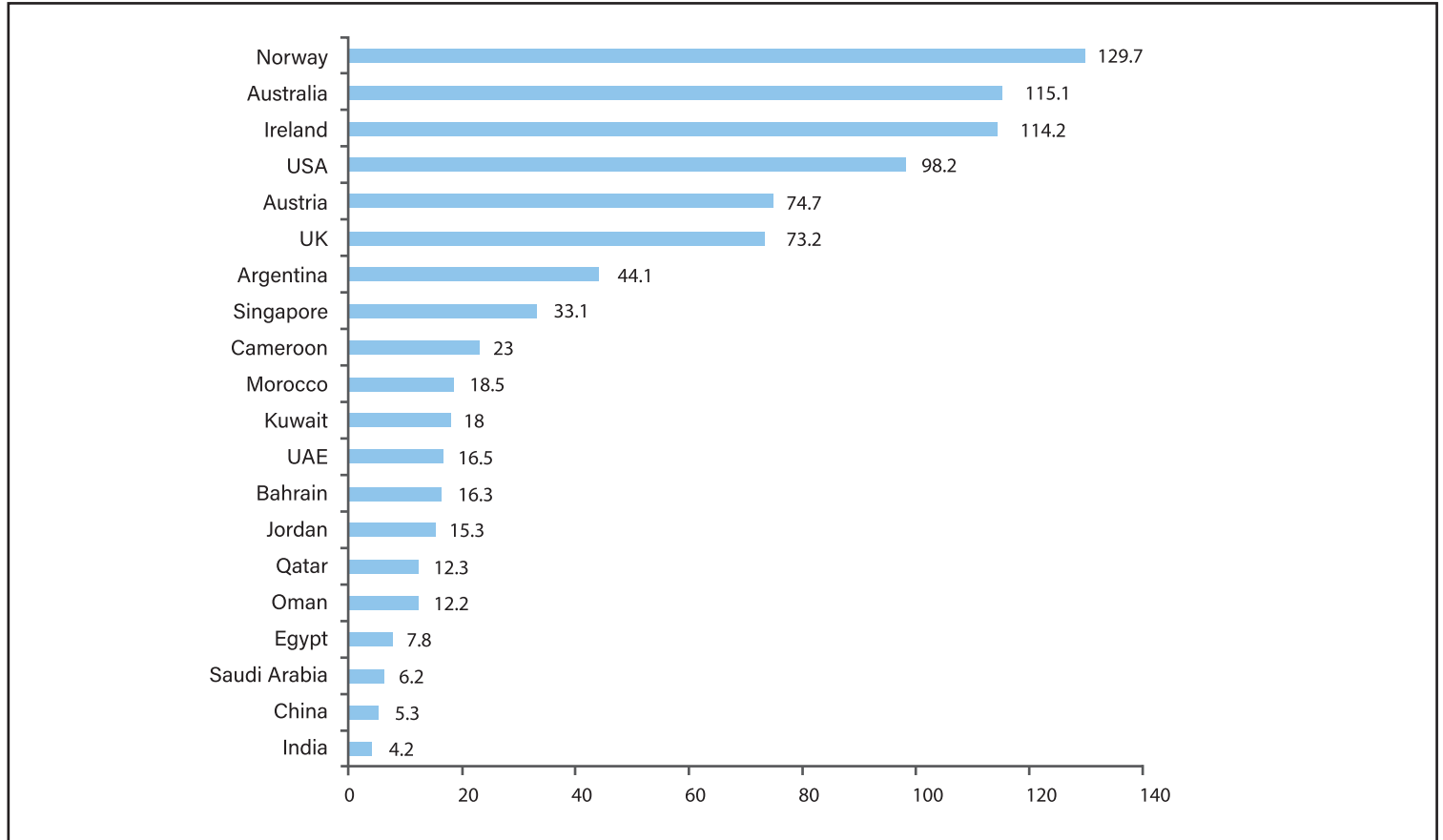


Figure 3.9.4: Comparison of ASR* for Prostate Cancers among Saudis with ASR in selected countries**



*ASR per 100,000

** Source for this information is summarized on page 54.

Liver Cancer (C22)

Liver cancer was ranked seventh among Saudi males and fifteenth among Saudi females. There were 393 liver cancer cases accounted to 2.8 % of all cancer cases diagnosed among Saudi nationals in 2017. Liver cancer affected 264 (67.2%) males and 129 (32.8%) females with a male to female ratio of 204:100. The ASR was 4/100,000 for males and 1.9/100,000 for females. The median age at diagnosis was 68 years in males (ranged between 24 and 99 years) and 65 years in females (ranged between 0 and 93 years).

Figure 3.7.1 : Age-Specific Incidence Rate (AIR) for Liver Cancer among Saudi nationals, 2017.

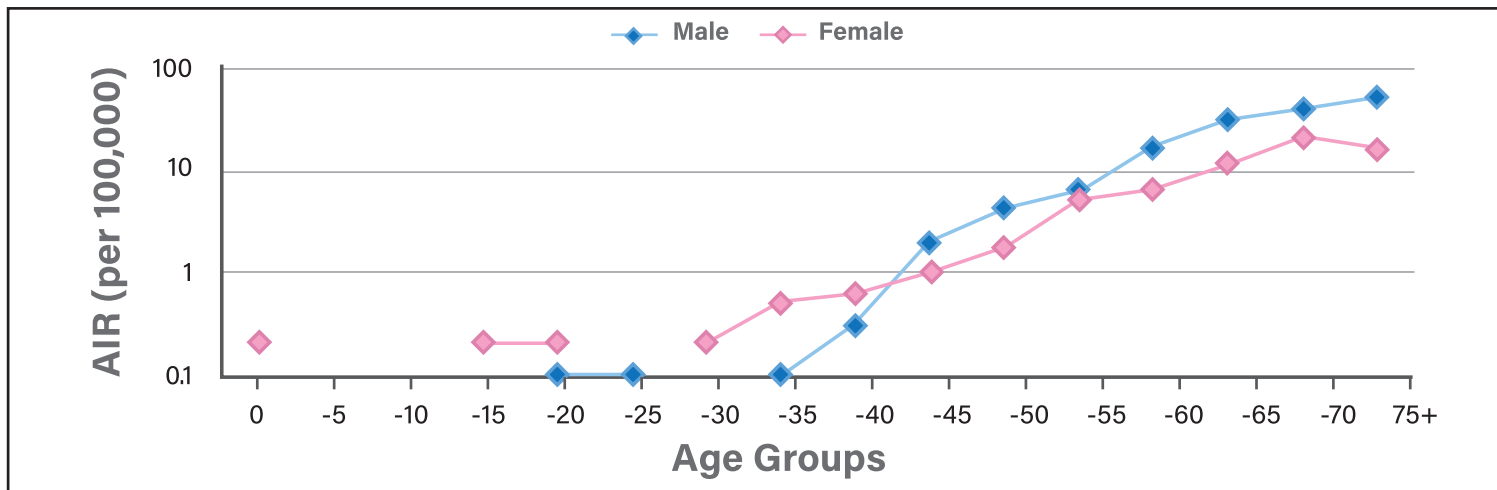


Table 3.10.1 : Morphological distribution of Liver Cancer among Saudi nationals, 2017

Code	Morphology	Male	%	Female	%
81703	Hepatocellular carcinoma, NOS	217	82.2	73	56.6
81603	Cholangiocarcinoma	14	5.3	23	17.8
81723	Hepatocellular carcinoma, scirrhous	10	3.8	3	2.3
80003	Neoplasm, malignant	10	3.8	7	5.4
81403	Adenocarcinoma, NOS	3	1.1	7	5.4
81803	Combined hepatocellular carcinoma and cholangiocarcinoma	3	1.1	1	0.8
82403	Carcinoid tumor, NOS	2	0.8	0	0.0
82463	Neuroendocrine carcinoma, NOS	2	0.8	3	2.3
81743	Hepatocellular carcinoma, clear cell type	1	0.4	0	0.0
81623	Klatskin tumor	1	0.4	2	1.6
	Others	1	0.4	10	7.8
	Total	264	100	129	100

Figure 3.10.2: Stage distribution of Liver Cancer among Saudi nationals, 2017.

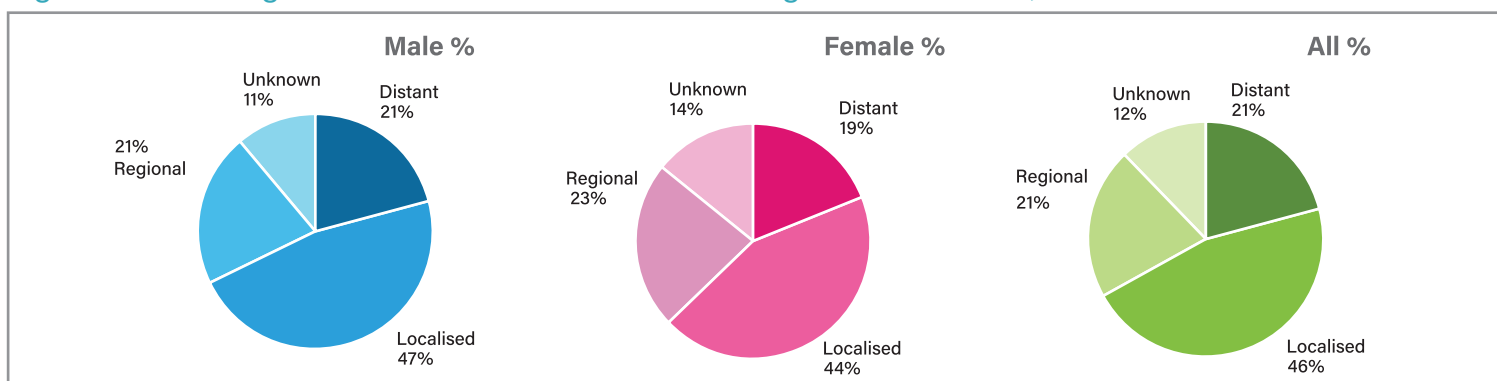
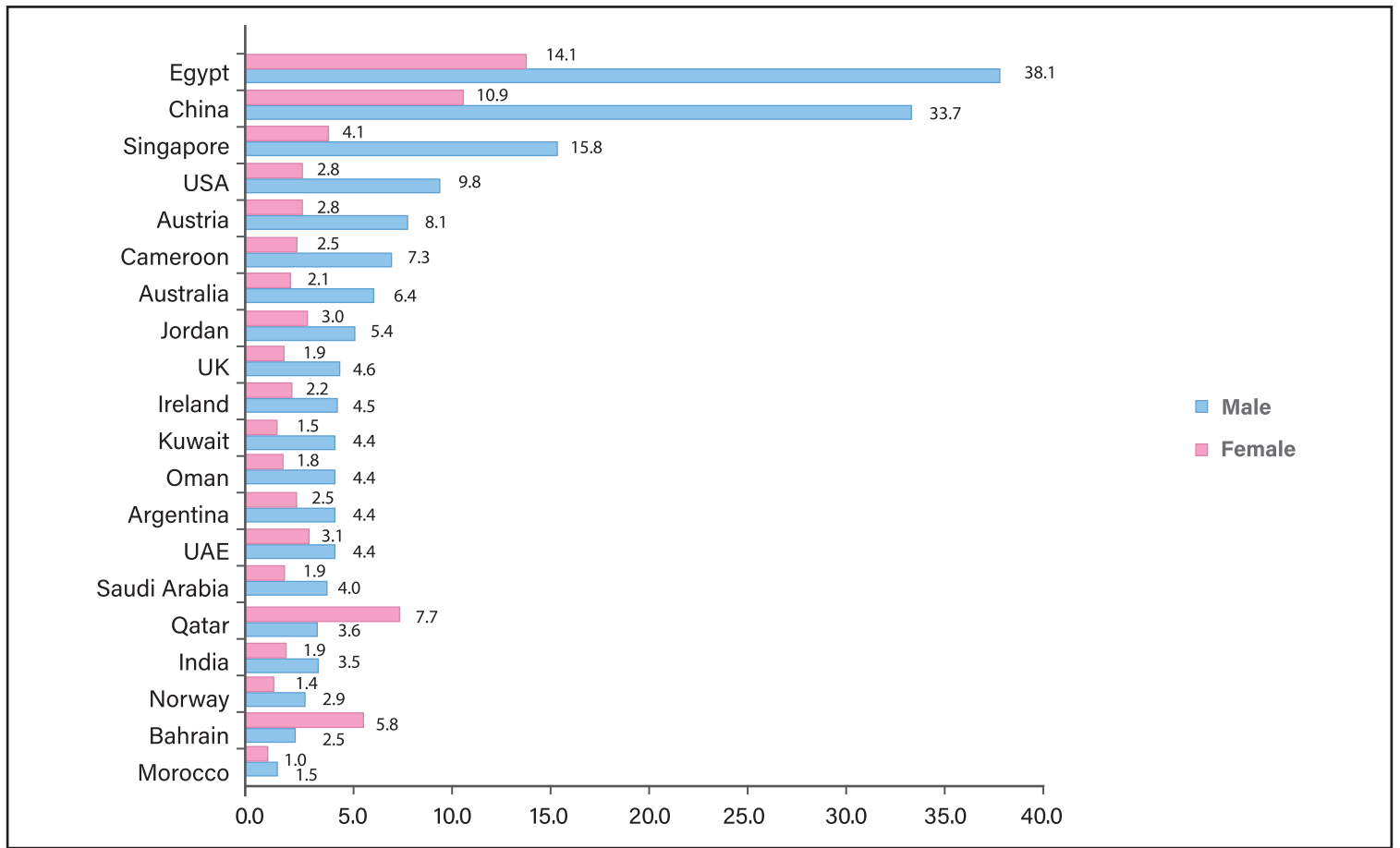


Figure 3.10.4: Comparison of ASR* for Liver Cancer among Saudis with ASR in selected countries**

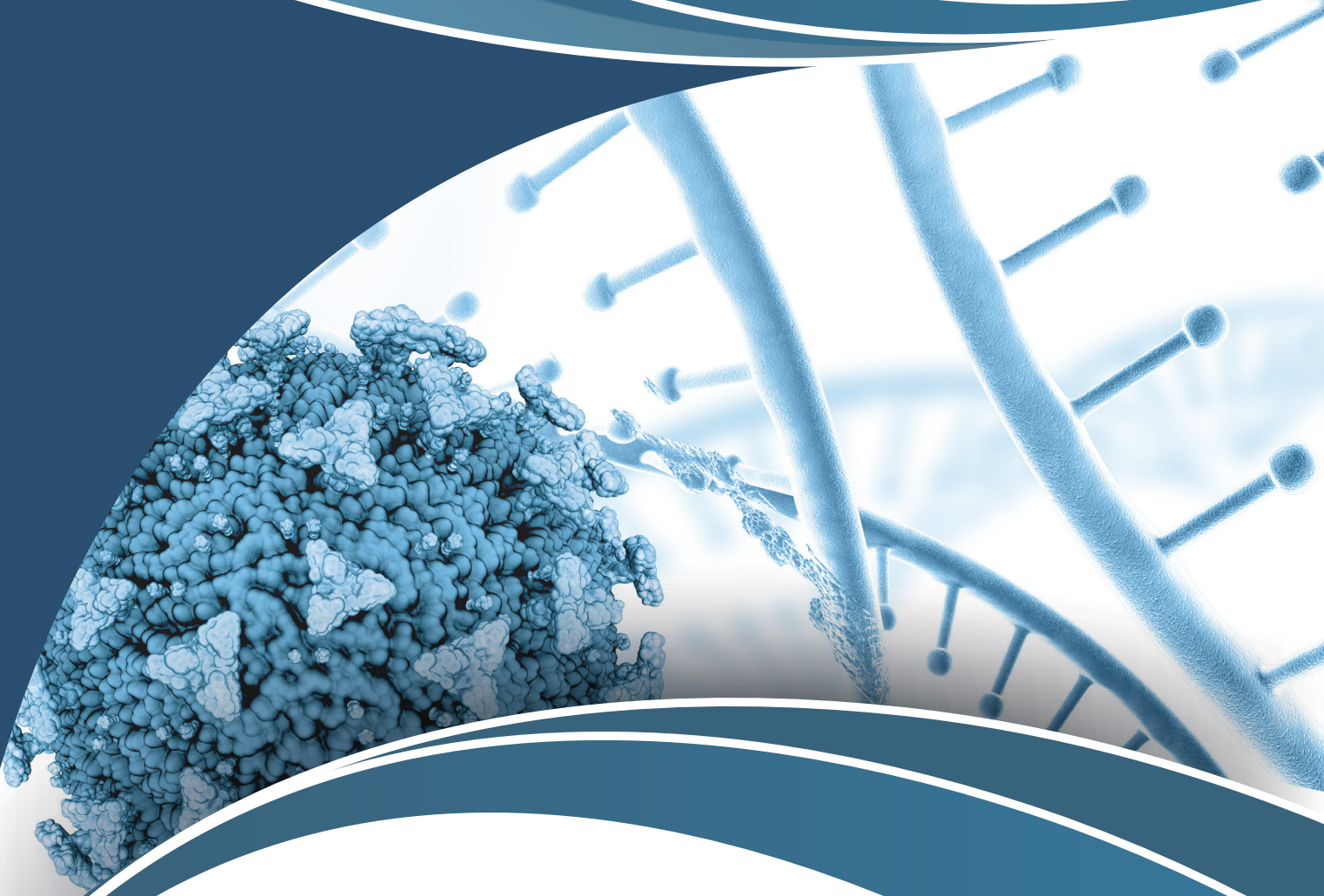


References :

1. GLOBOCAN 2012, Cancer Incidence and Mortality Worldwide, IARC, Lyon: International agency for Research on Cancer. Available from: <http://globocan.iarc.fr/Pages/online.aspx>
2. 15- Year Cancer Incidence among Nationals of the GCC States, 1998-2012 <http://ghc.sa/ar-sa/Documents/GCCCP/GCCCP%20-%20ReportcY020-%20Pages.pdf>



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PART IV

CANCER INCIDENCE
MAONG NON-SAUDI
2017

Cancer Incidence Among Non-Saudi Population, 2017.

Between January and December 2017, a total of 3,951 cancer cases were reported among the Non-Saudi population, 126 cases were excluded from analysis due to In Situ and mismatch between ICD-O-3 and ICD-10 codes. Therefore, the total number of cases analyzed was 3,825 Out of this 1,940 (50.7 %) were males and 1,885 (49.2 %) were females.

The ratio of male to female was 102:100. 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 who were under 15 represented 15.2% of the population, those aged 60 years and above represented 3.8%, and the 15 to 59 age group represented 81% of Non-Saudi population.

During 2017, approximately 3.5 % of all cancers occurred before the age of 15, 29.4% occurred between the ages 15 to 39 years, 55.9% were between the ages 40-64, and 11.2 % occurred after the age of 64. The median age at diagnosis was 54 years in males (ranged between 0 and 102 years) and 49 years in females (ranged between 0 and 117),

Table 4.1: Ten most common cancers among Non-Saudi population, 2017

Sites	No	%
Breast	793	20.7
Colorectal	455	11.9
Thyroid	223	5.8
Skin	195	5.1
NHL	185	4.8
Lung	166	4.3
Prostate	150	3.9
Stomach	137	3.6
Leukaemia	130	3.4
Bladder	128	3.3
Total	3825	100.0

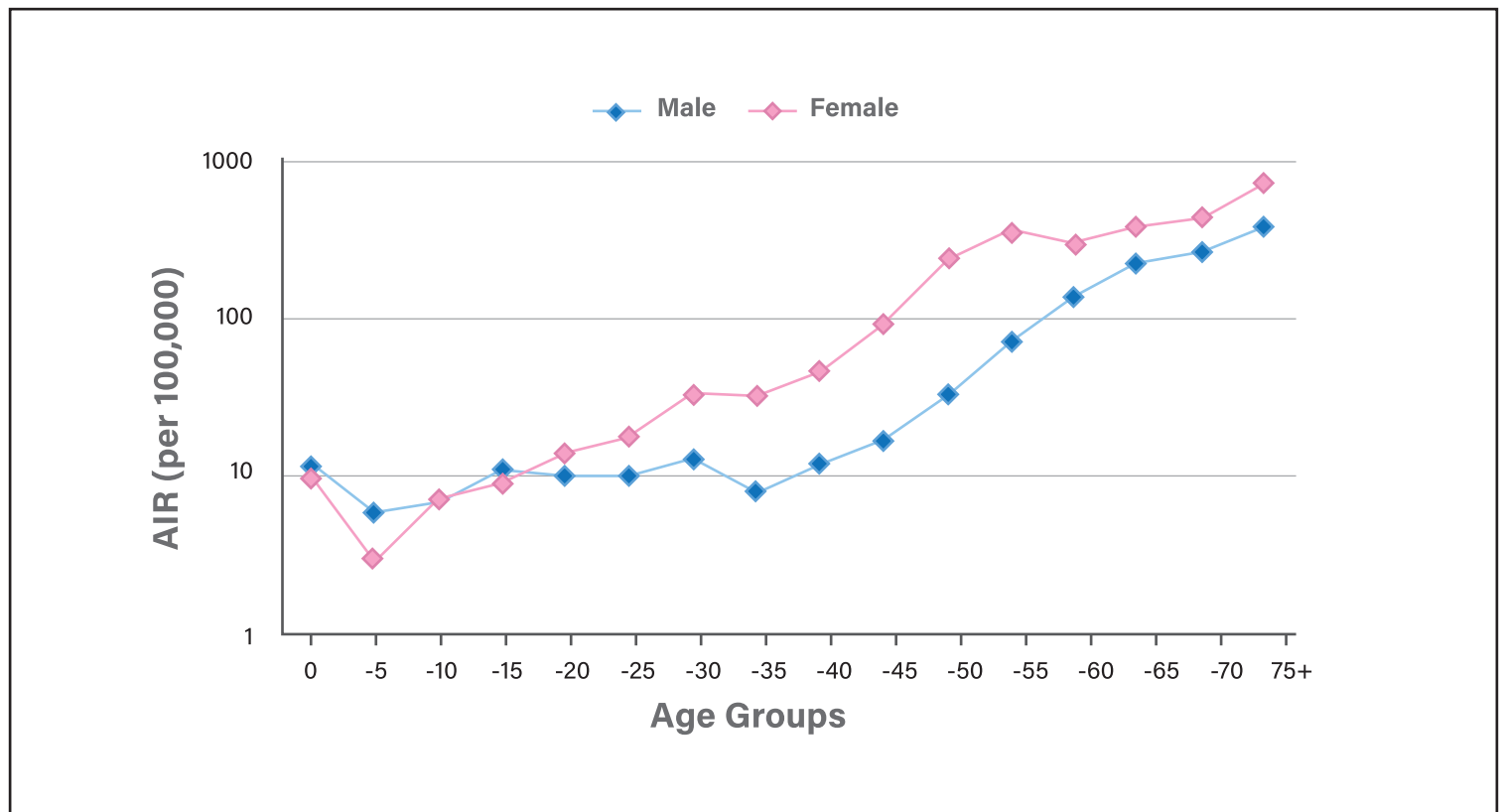
Table 4.2 : Distribution of cancer cases among Non-Saudi by nationality and gender, 2017.

Nationality	Male	%	Female	%	Total	%
Yemen	375	19.3	343	18.2	718	18.8
Syrian Arab Republic	215	11.1	219	11.6	434	11.3
Egypt	234	12.1	182	9.7	416	10.9
Philippines	120	6.2	230	12.2	350	9.2
Sudan	187	9.6	155	8.2	342	8.9
Pakistan	128	6.6	91	4.8	219	5.7
India	119	6.1	50	2.7	169	4.4
Gaza Strip(Palestine)	69	3.6	64	3.4	133	3.5
Jordan	60	3.1	53	2.8	113	3.0
Bangladesh	62	3.2	16	0.8	78	2.0
Myanmar (Formerly Burma)	36	1.9	38	2.0	74	1.9
Ethiopia	16	0.8	50	2.7	66	1.7
Indonesia	12	0.6	54	2.9	66	1.7
Eritrea	21	1.1	34	1.8	55	1.4
United States of America	40	2.1	15	0.8	55	1.4
Lebanon	20	1.0	20	1.1	40	1.0
United Kingdom	29	1.5	10	0.5	39	1.0
Afghanistan	13	0.7	22	1.2	35	0.9
Non-Saudi, NOS	12	0.6	20	1.1	32	0.8
Somalia	16	0.8	16	0.8	32	0.8
Chad	9	0.5	19	1.0	28	0.7
Morocco	3	0.2	22	1.2	25	0.7
Sri Lanka	11	0.6	12	0.6	23	0.6
Canada	14	0.7	8	0.4	22	0.6
Kuwait	9	0.5	12	0.6	21	0.5
Others	110	5.7	130	6.9	240	6.3
Total	1940	100.0	1885	100.0	3825	100.0

Table 4.3 : Most common cancers among Non-Saudi population by gender, 2017.

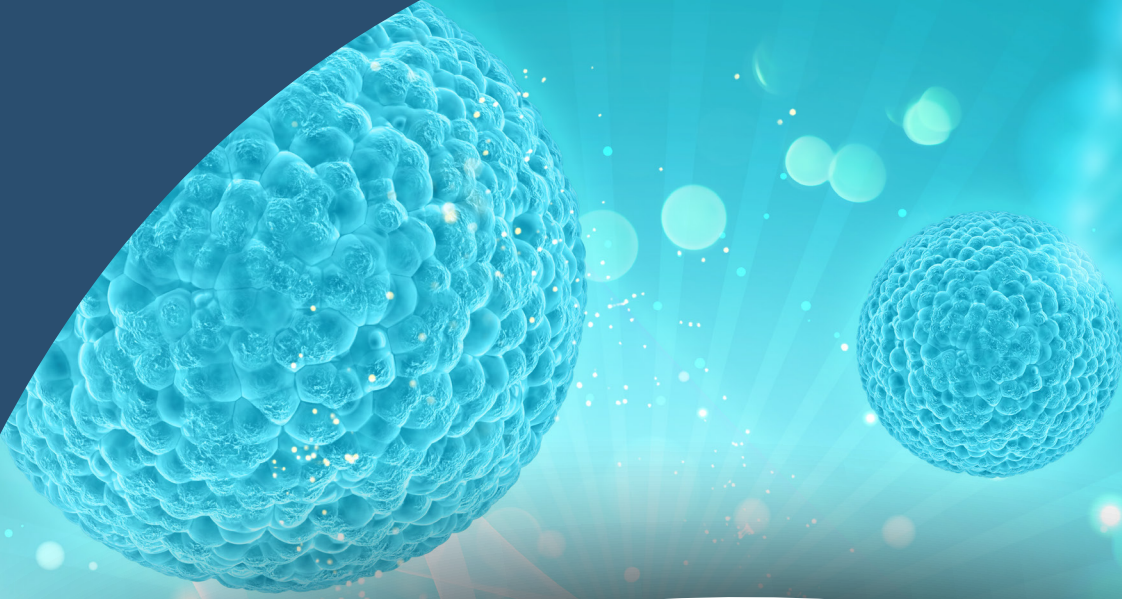
Male		%	Female		%
Colorectal	311	16.0	Breast	785	41.6
Prostate	150	7.7	Thyroid	149	7.9
Skin	138	7.1	Colorectal	144	7.6
Lung	124	6.4	Ovary	85	4.5
NHL	116	6.0	Corpus Uteri	71	3.8
Bladder	109	5.6	Nhl	69	3.7
Stomach	108	5.6	Cervix Uteri	64	3.4
Leukaemia	85	4.4	Brain, CNS	47	2.5
Kidney	81	4.2	Leukaemia	45	2.4
Brain, CNS	74	3.8	Lung	42	2.2
Total	1940	100.0	Total	1885	100.0

Figure 4.1 : Age-Specific Incidence Rate (AIR) for all cancers among Non-Saudi population, 2017.





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PART V

INCIDENCE TABLES

Table 5.1.1 Number Of Cases Among Saudi Males by Primary Site And Age Groups, 2017

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Total (%)	
C00	Lip	4	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0.30%	
C01-C02	Tongue	57	0	0	1	0	0	0	0	2	5	6	7	8	8	8	4	2	6	1.00%	
C03-C06	Mouth	50	0	0	0	1	1	0	2	1	1	3	2	5	2	6	5	2	19	1.00%	
C07-C08	Salivary glands	16	0	0	0	1	0	2	2	0	3	2	0	1	2	1	1	1	0	0.40%	
C09	Tonsil	7	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	0	2	0.10%	
C10	Other Oropharynx	3	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0.10%	
C11	Nasopharynx	157	0	0	2	1	5	1	9	6	18	12	21	28	13	17	11	2	11	2.70%	
C12-C13	Hypopharynx	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0.10%	
C14	Pharynx unspec.	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.00%	
C15	Oesophagus	65	0	0	0	0	0	0	2	0	2	3	8	6	5	4	4	9	22	1.30%	
C16	Stomach	208	0	0	0	0	0	3	4	4	16	7	14	16	16	26	24	25	53	3.60%	
C17	Small intestine	44	0	0	0	0	0	1	3	3	3	7	3	5	9	1	1	3	5	0.60%	
C18	Colon	546	0	0	0	0	0	1	5	18	22	26	47	56	70	71	66	65	99	10.00%	
C19-C20	Rectum	373	0	0	0	0	0	3	3	6	14	15	45	51	59	47	43	40	47	6.40%	
C21	Anus	21	0	0	0	0	0	0	0	0	0	1	2	3	4	6	1	3	1	0.40%	
C22	Liver	264	0	0	0	0	0	1	1	0	1	2	11	19	22	40	48	42	77	5.00%	
C23-C24	Gallbladder etc.	77	0	0	0	0	0	0	0	0	1	4	10	10	7	9	8	6	22	1.40%	
C25	Pancreas	158	0	0	0	0	0	0	0	2	4	12	9	16	24	24	17	17	33	2.90%	
C30-C31	Nose, sinuses etc.	11	0	1	0	0	0	0	1	2	0	1	1	1	1	0	1	1	1	0.30%	
C32	Larynx	75	0	0	0	0	0	1	0	0	1	1	5	9	12	10	10	12	14	1.20%	
C33-C34	Trachea,Bronchus,Lung	356	0	0	0	0	0	0	0	8	6	9	22	17	50	57	35	51	101	5.10%	
C37-C38	Other Thoracic organs	20	0	1	2	0	1	1	0	3	0	0	5	4	1	1	1	0	0	0.30%	
C40-C41	Bone	75	0	1	6	14	19	12	8	5	1	1	2	1	1	1	0	1	2	1.60%	
C43	Melanoma of Skin	14	0	0	0	0	0	0	0	1	0	0	6	0	3	0	0	0	4	0.20%	
C44	Other Skin	203	0	0	0	2	1	2	4	3	8	8	8	18	21	14	19	21	74	3.60%	
C45	Mesothelioma	13	0	0	0	0	0	1	0	0	1	1	0	0	1	2	1	1	5	0.20%	
C46	Kaposi sarcoma	19	0	1	0	0	0	0	1	0	0	0	2	1	4	4	3	0	3	0.50%	
C47;C49	Connective,Soft tissue	112	0	9	4	3	7	10	4	9	10	5	3	3	7	10	7	8	13	1.50%	
C50	Breast	45	0	0	0	0	1	0	3	1	4	2	4	6	3	8	3	0	10	0.70%	
C60	Penis	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0.10%	
C61	Prostate	412	0	0	0	0	0	0	0	0	2	1	5	17	39	58	56	76	158	7.00%	
C62	Testis	124	0	5	1	1	5	20	33	22	14	6	9	5	0	1	0	0	2	2.10%	
C63	Other male genital	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0.10%	
C64	Kidney	227	0	14	3	0	0	2	0	7	20	17	22	26	32	28	20	14	22	3.40%	
C65	Renal Pelvis	5	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	1	0.10%	
C66	Ureter	5	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	1	0.10%	
C67	Bladder	229	0	1	1	0	1	1	1	1	1	8	12	23	28	22	27	37	65	3.90%	
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.10%	
C69	Eye	24	0	15	2	0	1	0	0	0	0	0	1	0	0	0	1	0	4	0.50%	
C70-C72	Brain, Nervous system	223	0	18	16	17	12	10	12	14	14	11	10	17	13	17	11	8	23	3.70%	
C73	Thyroid	234	0	0	1	2	5	10	24	27	34	25	18	17	17	12	9	14	19	3.80%	
C74	Adrenal gland	18	0	11	1	0	0	0	0	2	0	1	0	0	2	0	0	1	0	0.40%	
C75	Other Endocrine	4	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0.10%	
C81	Hodgkin disease	288	1	8	13	26	44	28	32	27	24	16	16	11	11	7	7	4	13	4.60%	
C82-C85;C9	Non-Hodgkin lymphoma	513	0	5	9	22	18	28	28	29	38	38	33	26	52	45	31	32	79	8.10%	
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
C90	Multiple Myeloma	80	0	0	0	0	0	0	0	0	5	7	10	7	6	8	3	11	23	1.20%	
C91	Lymphoid Leukaemia	202	0	49	25	8	24	12	4	2	8	4	7	9	13	15	7	9	6	2.80%	
C92-C94	Myeloid Leukaemia	177	0	8	7	6	13	16	12	13	16	12	16	14	11	8	6	10	9	2.40%	
C95	Leukaemia unspec.	24	0	0	1	4	7	1	1	1	1	1	2	0	1	1	1	0	2	0.50%	
Other	Other & unspecified	127	0	10	0	0	1	4	5	3	6	6	7	8	12	8	14	11	32	2.40%	
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All	All sites Total	5918	1	157	95	109	166	171	206	222	306	281	407	469	586	603	507	545	1087	100.00%	
Not C44	All sites but C44	5715	1	157	95	107	165	169	202	219	298	273	399	451	565	589	488	524	1013	96.40%	

Table 5.1.2 Number Of Cases Among Saudi Females by Primary Site And Age Groups, 2017

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Total (%)
C00	Lip	3	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0.10%
C01-C02	Tongue	59	0	0	0	0	0	0	1	1	2	3	1	6	8	8	4	6	11	0.60%
C03-C06	Mouth	42	0	0	2	0	2	0	0	0	2	0	1	5	4	2	6	2	11	0.80%
C07-C08	Salivary glands	28	0	0	0	0	0	1	2	2	3	4	2	1	2	2	4	2	3	0.40%
C09	Tonsil	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.00%
C10	Other Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C11	Nasopharynx	61	0	0	0	0	3	9	0	3	5	6	3	9	9	3	1	0	3	0.80%
C12-C13	Hypopharynx	11	0	0	0	0	0	0	0	0	2	1	1	1	3	0	2	1	0	0.20%
C14	Pharynx unspec.	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0.00%
C15	Oesophagus	73	0	0	0	0	0	0	1	2	2	3	6	9	8	4	9	7	19	0.70%
C16	Stomach	154	0	0	0	0	0	0	3	3	2	7	13	13	22	17	12	18	30	1.50%
C17	Small intestine	32	0	0	0	0	0	0	0	0	1	2	3	3	4	4	6	5	3	0.40%
C18	Colon	517	1	1	0	0	0	0	2	9	11	30	26	64	73	80	61	42	70	6.10%
C19-C20	Rectum	284	0	0	0	0	0	2	2	3	7	11	20	43	39	40	35	24	32	3.50%
C21	Anus	12	0	0	0	0	0	0	0	0	0	0	1	2	2	0	1	1	4	0.10%
C22	Liver	129	0	0	2	0	0	2	2	0	2	4	4	7	16	15	19	24	27	1.70%
C23-C24	Gallbladder etc.	94	0	0	0	0	0	0	0	1	0	1	3	6	22	15	11	11	18	1.50%
C25	Pancreas	107	0	0	0	0	0	0	0	0	2	4	4	9	17	16	19	10	14	1.40%
C30-C31	Nose, sinuses etc.	17	0	0	0	0	2	1	0	0	2	2	0	2	0	0	0	2	4	0.10%
C32	Larynx	14	0	0	0	0	0	0	0	0	0	0	0	3	1	2	3	1	3	0.10%
C33-C34	Trachea,Bronchus,Lung	152	0	0	0	0	0	0	3	7	4	7	4	12	22	20	14	17	25	2.00%
C37-C38	Other Thoracic organs	18	0	0	4	0	1	1	1	1	0	0	1	3	1	0	0	1	1	0.10%
C40-C41	Bone	78	0	0	3	7	21	7	7	5	5	3	1	6	0	2	4	0	4	0.70%
C43	Melanoma of Skin	17	0	0	1	0	1	0	0	0	0	1	1	2	0	2	2	2	3	0.30%
C44	Other Skin	157	0	0	0	0	0	0	4	4	7	4	12	12	13	15	11	9	58	2.30%
C45	Mesothelioma	5	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3	0.10%
C46	Kaposi sarcoma	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0.10%
C47;C49	Connective,Soft tissue	81	0	0	5	4	7	8	3	5	6	7	3	9	4	3	7	2	3	1.00%
C50	Breast	2463	0	0	0	0	0	0	10	38	171	224	301	393	303	226	152	101	145	30.40%
C51	Vulva	12	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	0	1	0.10%
C52	Vagina	4	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0.10%
C53	Cervix Uteri	126	0	0	0	0	0	0	0	1	4	8	7	19	17	9	10	10	13	1.50%
C54	Corpus Uteri	499	0	0	0	0	0	0	1	1	11	11	23	62	95	92	67	44	64	6.20%
C55	Uterus unspec.	41	0	0	0	0	0	0	1	0	2	2	5	0	8	3	7	5	5	0.50%
C56	Ovary	232	0	0	0	0	0	9	11	8	14	12	12	20	21	27	36	19	21	3.00%
C57	Other Female Genital	20	0	0	0	0	0	1	1	0	1	0	1	2	1	2	2	5	3	0.20%
C58	Placenta	6	0	0	0	0	0	0	1	2	2	0	1	0	0	0	0	0	0	0.10%
C64	Kidney	163	0	0	19	4	0	2	1	1	5	6	11	17	22	16	12	16	8	1.90%
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.00%
C66	Ureter	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.00%
C67	Bladder	64	0	0	0	0	0	0	0	0	0	1	1	3	8	10	9	9	19	0.80%
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C69	Eye	24	0	0	17	1	0	0	0	0	1	0	1	0	0	1	1	0	2	0.20%
C70-C72	Brain, Nervous system	169	0	0	16	11	8	9	3	11	13	13	9	15	16	15	7	4	5	2.10%
C73	Thyroid	873	1	1	1	1	6	27	52	103	112	125	105	70	56	42	23	22	28	11.60%
C74	Adrenal gland	16	0	0	10	3	0	0	0	1	0	0	0	0	1	0	0	0	0	0.30%
C75	Other Endocrine	6	0	0	0	0	1	0	0	0	2	0	0	0	0	2	0	0	0	0.10%
C81	Hodgkin disease	229	0	0	0	7	18	34	45	26	32	12	13	5	1	12	3	1	7	3.10%
C82-C85;C9	Non-Hodgkin lymphoma	380	0	0	5	8	8	8	8	20	28	19	23	30	34	40	40	34	50	5.10%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C90	Multiple Myeloma	49	0	0	0	0	0	0	0	0	1	1	4	7	6	6	11	2	9	0.70%
C91	Lymphoid Leukaemia	124	0	0	39	22	16	5	5	1	3	4	1	4	7	4	2	0	8	1.40%
C92-C94	Myeloid Leukaemia	161	0	0	6	8	8	13	6	16	9	7	13	16	18	8	8	4	6	2.10%
C95	Leukaemia unspec.	18	0	0	0	2	0	3	1	3	1	0	1	0	1	2	0	2	2	0.20%
Other	Other & unspecified	141	0	0	5	2	0	0	2	2	0	7	7	14	17	11	19	15	30	1.50%
All	All sites Total	7975	2	2	136	80	102	142	180	280	479	553	651	907	905	782	642	484	777	100.00%
Not C44	All sites but C44	7818	2	2	136	80	102	142	176	276	472	549	639	895	892	767	631	475	719	97.70%

Table 5.1.3 Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Saudi Males (per 100,000) by Primary Site and Age groups, 2017

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World	
C00	Lip	4	0	0	0	0	0	0	0.1	0	0	0	0	0	0.3	0.4	0	0	0.6	0	0	
C01-C02	Tongue	57	0	0	0.1	0	0	0	0	0.2	0.6	0.9	1.3	1.8	2.3	3.2	2.7	1.8	3.8	0.5	0.7	
C03-C06	Mouth	50	0	0	0	0.1	0.1	0	0.2	0.1	0.1	0.5	0.4	1.1	0.6	2.4	3.3	1.8	12.1	0.5	0.7	
C07-C08	Salivary glands	16	0	0	0	0.1	0	0.2	0.2	0	0.4	0.3	0	0.2	0.6	0.4	0.7	0.9	0	0.2	0.2	
C09	Tonsil	7	0	0	0	0	0	0	0	0	0.3	0	0	0	0.6	0.4	0	0	1.3	0.1	0.1	
C10	Other Oropharynx	3	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8	0	0	0	0	0	
C11	Nasopharynx	157	0	0	0.2	0.1	0.5	0.1	0.9	0.7	2.3	1.8	3.8	6.4	3.8	6.9	7.3	1.8	7	1.5	1.8	
C12-C13	Hypopharynx	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0.9	0.6	0	0	
C14	Pharynx unspec.	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	
C15	Oesophagus	65	0	0	0	0	0	0	0.2	0	0.3	0.5	1.5	1.4	1.5	1.6	2.7	8.2	14	0.6	0.9	
C16	Stomach	208	0	0	0	0	0	0.3	0.4	0.5	2.1	1.1	2.5	3.6	4.7	10.5	15.9	22.7	33.8	2	2.8	
C17	Small intestine	44	0	0	0	0	0	0.1	0.3	0.3	0.4	1.1	0.5	1.1	2.6	0.4	0.7	2.7	3.2	0.4	0.5	
C18	Colon	546	0	0	0	0	0	0.1	0.5	2	2.8	4	8.5	12.8	20.5	28.7	43.8	59.1	63.2	5.3	7.5	
C19-C20	Rectum	373	0	0	0	0	0	0.3	0.3	0.7	1.8	2.3	8.2	11.6	17.3	19	28.5	36.4	30	3.6	5	
C21	Anus	21	0	0	0	0	0	0	0	0	0.2	0.4	0.7	1.2	2.4	0.7	2.7	0.6	0.2	0.2	0.3	
C22	Liver	264	0	0	0	0	0	0.1	0.1	0	0.1	0.3	2	4.3	6.4	16.1	31.8	38.2	49.1	2.5	4	
C23-C24	Gallbladder etc.	77	0	0	0	0	0	0	0	0	0.1	0.6	1.8	2.3	2	3.6	5.3	5.5	14	0.7	1	
C25	Pancreas	158	0	0	0	0	0	0	0	0.2	0.5	1.8	1.6	3.6	7	9.7	11.3	15.5	21.1	1.5	2.2	
C30-C31	Nose, sinuses etc.	11	0	0.1	0	0	0	0	0.1	0.2	0	0.2	0.2	0.2	0.3	0	0.7	0.9	0.6	0.1	0.1	
C32	Larynx	75	0	0	0	0	0	0.1	0	0	0.1	0.2	0.9	2.1	3.5	4	6.6	10.9	8.9	0.7	1.1	
C33-C34	Trachea, Bronchus, Lung	356	0	0	0	0	0	0	0	0.9	0.8	1.4	4	3.9	14.6	23	23.2	46.4	64.5	3.4	5	
C37-C38	Other Thoracic organs	20	0	0.1	0.2	0	0.1	0.1	0	0.3	0	0	0.9	0.9	0.3	0.4	0.7	0	0	0.2	0.2	
C40-C41	Bone	75	0	0.1	0.6	1.5	2.1	1.1	0.8	0.6	0.1	0.2	0.4	0.2	0.3	0.4	0	0.9	1.3	0.7	0.7	
C43	Melanoma of Skin	14	0	0	0	0	0	0	0	0.1	0	0	1.1	0	0.9	0	0	0	2.6	0.1	0.2	
C44	Other Skin	203	0	0	0	0.2	0.1	0.2	0.4	0.3	1	1.2	1.5	4.1	6.1	5.7	12.6	19.1	47.2	2	2.7	
C45	Mesothelioma	13	0	0	0	0	0	0.1	0	0	0.1	0.2	0	0	0.3	0.8	0.7	0.9	3.2	0.1	0.2	
C46	Kaposi sarcoma	19	0	0.1	0	0	0	0	0.1	0	0	0	0.4	0.2	1.2	1.6	2	0	1.9	0.2	0.3	
C47;C49	Connective, Soft tissue	112	0	0.8	0.4	0.3	0.8	0.9	0.4	1	1.3	0.8	0.5	0.7	2	4	4.6	7.3	8.3	1.1	1.3	
C50	Breast	45	0	0	0	0	0.1	0	0.3	0.1	0.5	0.3	0.7	1.4	0.9	3.2	2	0	6.4	0.4	0.6	
C60	Penis	2	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0.9	0	0	0	
C61	Prostate	412	0	0	0	0	0	0	0	0	0.3	0.2	0.9	3.9	11.4	23.4	37.1	69.1	100.8	4	6.2	
C62	Testes	124	0	0.5	0.1	0.1	0.5	1.9	3.4	2.5	1.8	0.9	1.6	1.1	0	0.4	0	0	1.3	1.2	1.1	
C63	Other male genital	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	1.3	0	0	
C64	Kidney	227	0	1.3	0.3	0	0	0.2	0	0.8	2.6	2.6	4	5.9	9.4	11.3	13.3	12.7	14	2.2	2.8	
C65	Renal Pelvis	5	0	0	0	0	0	0	0	0	0	0	0	0.7	0	0	0.7	0	0.6	0	0.1	
C66	Ureter	5	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0	0.4	0	0.9	0.6	0	0.1	
C67	Bladder	229	0	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	1.2	2.2	5.2	8.2	8.9	17.9	33.6	41.5	2.2	3.2	
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	24	0	1.4	0.2	0	0.1	0	0	0	0	0	0.2	0	0	0	0.7	0	2.6	0.2	0.3	
C70-C72	Brain, Nervous system	223	0	1.6	1.5	1.8	1.3	0.9	1.2	1.6	1.8	1.7	1.8	3.9	3.8	6.9	7.3	7.3	14.7	2.1	2.5	
C73	Thyroid	234	0	0	0.1	0.2	0.5	0.9	2.5	3.1	4.4	3.8	3.3	3.9	5	4.8	6	12.7	12.1	2.3	2.5	
C74	Adrenal gland	18	0	1	0.1	0	0	0	0	0.2	0	0.2	0	0	0.6	0	0	0.9	0	0.2	0.2	
C75	Other Endocrine	4	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	1.8	0	0	0.1	
C81	Hodgkin disease	288	1	0.7	1.2	2.7	4.8	2.7	3.3	3.1	3.1	2.4	2.9	2.5	3.2	2.8	4.6	3.6	8.3	2.8	2.8	
C82-C85;C9	Non-Hodgkin lymphoma	513	0	0.5	0.8	2.3	2	2.7	2.9	3.3	4.9	5.8	6	5.9	15.2	18.2	20.6	29.1	50.4	4.9	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	80	0	0	0	0	0	0	0	0	0.6	1.1	1.8	1.6	1.8	3.2	2	10	14.7	0.8	1	
C91	Lymphoid Leukaemia	202	0	4.4	2.3	0.8	2.6	1.1	0.4	0.2	1	0.6	1.3	2.1	3.8	6.1	4.6	8.2	3.8	1.9	2.3	
C92-C94	Myeloid Leukaemia	177	0	0.7	0.6	0.6	1.4	1.5	1.2	1.5	2.1	1.8	2.9	3.2	3.2	3.2	4	9.1	5.7	1.7	1.9	
C95	Leukaemia unspec.	24	0	0	0.1	0.4	0.8	0.1	0.1	0.1	0.1	0.2	0.4	0	0.3	0.4	0.7	0	1.3	0.2	0.3	
Other	Other & unspecified	127	0	0.9	0	0	0.1	0.4	0.5	0.3	0.8	0.9	1.3	1.8	3.5	3.2	9.3	10	20.4	1.2	1.6	
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All	All sites Total	5918	1	14	9	11	18	16	21	25	40	43	74	107	171	243	336	495	694	56.9	74.9	
Not C44	All sites but C44	5715	1	14	9	11	18	16	21	25	39	42	73	103	165	238	324	476	646	55	72.2	

Table 5.1.4 Age-Spesific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Saudi Females (per 100,000) by Primary Site and Age groups, 2017

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World	
C00	Lip	3	0	0	0	0	0	0.1	0	0	0	0.2	0	0	0	0	0	0.9	0	0	0	
C01-C02	Tongue	59	0	0	0	0	0	0.1	0.1	0.2	0.4	0.2	1.5	1.4	2.5	3.5	2.5	5.3	6.7	0.6	0.8	
C03-C06	Mouth	42	0	0.2	0	0.2	0	0	0	0.2	0	0.2	1	1.2	1.3	0.9	3.8	1.8	6.7	0.4	0.6	
C07-C08	Salivary glands	28	0	0	0	0	0.1	0.2	0.2	0.3	0.5	0.3	0	0.2	0.6	0.9	2.5	1.8	1.8	0.3	0.3	
C09	Tonsil	3	0	0.1	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0.6	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	61	0	0	0	0.3	1	0	0.3	0.6	0.8	0.5	1.3	2.2	2.9	1.3	0.6	0	1.8	0.6	0.7	
C12-C13	Hypopharynx	11	0	0	0	0	0	0	0	0.2	0.1	0.2	0	0.2	1	0	1.3	0.9	0	0.1	0.1	
C14	Pharynx unspec.	2	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0.9	0	0	0	
C15	Oesophagus	73	0	0	0	0	0	0.1	0.2	0.2	0.4	1	0.6	2.2	2.5	1.7	5.6	6.2	11.5	0.7	1	
C16	Stomach	154	0	0	0	0	0	0.3	0.3	0.2	0.9	2.1	2.7	3.1	7	7.3	7.5	16	18.2	1.5	2	
C17	Small intestine	32	0	0	0	0	0	0	0	0.1	0.3	0.5	0.2	0.7	1.3	1.7	3.8	4.4	1.8	0.3	0.5	
C18	Colon	517	1	0	0	0	0	0.2	0.9	1.3	4	4.1	9.2	15.4	23.2	34.5	38.2	37.2	42.5	5.2	7	
C19-C20	Rectum	284	0	0	0	0	0.2	0.2	0.3	0.8	1.5	3.2	5	10.4	12.4	17.3	21.9	21.3	19.4	2.8	3.9	
C21	Anus	12	0	0	0	0	0	0	0	0	0	0.2	0.2	0.5	0.6	0	0.6	0.9	2.4	0.1	0.2	
C22	Liver	129	0	0.2	0	0	0.2	0.2	0	0.2	0.5	0.6	1	1.7	5.1	6.5	11.9	21.3	16.4	1.3	1.9	
C23-C24	Gallbladder etc.	94	0	0	0	0	0	0	0.1	0	0.1	0.5	1.2	1.4	7	6.5	6.9	9.7	10.9	0.9	1.3	
C25	Pancreas	107	0	0	0	0	0	0	0	0.2	0.5	0.6	2.3	2.2	5.4	6.9	11.9	8.9	8.5	1.1	1.5	
C30-C31	Nose, sinuses etc.	17	0	0	0	0.2	0.1	0	0	0.2	0.3	0	0.4	0.5	0	0	0	1.8	2.4	0.2	0.2	
C32	Larynx	14	0	0	0	0	0	0	0	0	0	0	0.2	0.7	0.3	0.9	1.9	0.9	1.8	0.1	0.2	
C33-C34	Trachea,Bronchus,Lung	152	0	0	0	0	0	0.3	0.7	0.5	0.9	0.6	3.3	2.9	7	8.6	8.8	15.1	15.2	1.5	2	
C37-C38	Other Thoracic organs	18	0	0.4	0	0.1	0.1	0.1	0.1	0	0	0.2	0.6	0.7	0.3	0	0	0.9	0.6	0.2	0.2	
C40-C41	Bone	78	0	0.3	0.7	2.2	0.8	0.7	0.5	0.6	0.4	0.2	0.6	1.4	0	0.9	2.5	0	2.4	0.8	0.8	
C43	Melanoma of Skin	17	0	0.1	0	0.1	0	0	0	0	0.1	0.2	0.4	0.5	0	0.9	1.3	1.8	1.8	0.2	0.2	
C44	Other Skin	157	0	0	0	0	0	0.4	0.4	0.8	0.5	1.9	1.5	2.9	4.1	6.5	6.9	8	35.2	1.6	2	
C45	Mesothelioma	5	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0.4	0	0	1.8	0	0.1	
C46	Kaposi sarcoma	3	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	1.8	0	0	0	
C47;C49	Connective,Soft tissue	81	0	0.5	0.4	0.7	0.9	0.3	0.5	0.7	0.9	0.5	1	2.2	1.3	1.3	4.4	1.8	1.8	0.8	0.9	
C50	Breast	2463	0	0	0	0	0	1	4	19.7	29.7	47.8	76.7	94.8	96.5	97.5	95.2	89.5	88.1	24.6	29.7	
C51	Vulva	12	0	0	0	0	0	0	0	0.1	0.1	0.2	0.6	0.2	0.3	0.4	1.3	0	0.6	0.1	0.2	
C52	Vagina	4	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0.9	0	0	0	0	0.1	
C53	Cervix Uteri	126	0	0	0	0	0	0	0.1	0.5	1.1	1.1	5.4	4.6	5.4	3.9	6.3	8.9	7.9	1.3	1.6	
C54	Corpus Uteri	499	0	0	0	0	0	0.1	0.1	1.3	1.5	3.7	5.4	15	30.2	39.7	42	39	38.9	5	7.1	
C55	Uterus unspec.	41	0	0	0	0	0	0.1	0	0.2	0.3	0.8	0.6	0	2.5	1.3	4.4	4.4	3	0.4	0.6	
C56	Ovary	232	0	0	0	0	1	1.1	0.8	1.6	1.6	1.9	4.2	4.8	6.7	11.6	22.5	16.8	12.8	2.3	3.1	
C57	Other Female Genital	20	0	0	0	0	0.1	0.1	0	0.1	0	0.2	0.2	0.5	0.3	0.9	1.3	4.4	1.8	0.2	0.3	
C58	Placenta	6	0	0	0	0	0	0.1	0.2	0.2	0	0.2	0	0	0	0	0	0	0	0.1	0	
C64	Kidney	163	0	1.8	0.4	0	0.2	0.1	0.1	0.6	0.8	1.7	4.4	4.1	7	6.9	7.5	14.2	4.9	1.6	2.1	
C65	Renal Pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	
C66	Ureter	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	
C67	Bladder	64	0	0	0	0	0	0	0	0	0.1	0.2	0.8	0.7	2.5	4.3	5.6	8	11.5	0.6	0.9	
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	24	0	1.6	0.1	0	0	0	0	0.1	0	0.2	0	0	0	0.4	0.6	0	1.2	0.2	0.3	
C70-C72	Brain, Nervous system	169	0	1.5	1.1	0.9	1	0.3	1.1	1.5	1.7	1.4	2.7	3.6	5.1	6.5	4.4	3.5	3	1.7	1.9	
C73	Thyroid	873	1	0.1	0.1	0.6	3.1	5.4	10.8	12.9	16.6	16.7	19	16.9	17.8	18.1	14.4	19.5	17	8.7	9	
C74	Adrenal gland	16	0	0.9	0.3	0	0	0	0.1	0	0	0	0.2	0	0.3	0	0	0	0	0.2	0.2	
C75	Other Endocrine	6	0	0	0	0.1	0	0	0	0.2	0	0	0.2	0	0	0.9	0	0	0	0.1	0.1	
C81	Hodgkin disease	229	0	0	0.7	1.9	3.9	4.7	2.7	3.7	1.6	2.1	2.5	1.2	0.3	5.2	1.9	0.9	4.3	2.3	2.2	
C82-C85;C9	Non-Hodgkin lymphoma	380	0	0.5	0.8	0.9	0.9	0.8	2.1	3.2	2.5	3.7	4.8	7.2	10.8	17.3	25	30.1	30.4	3.8	4.8	
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	49	0	0	0	0	0	0	0	0.1	0.1	0.6	0.4	1.7	1.9	2.6	6.9	1.8	5.5	0.5	0.7	
C91	Lymphoid Leukaemia	124	0	3.7	2.1	1.7	0.6	0.5	0.1	0.3	0.5	0.2	0.6	1	2.2	1.7	1.3	0	4.9	1.2	1.3	
C92-C94	Myeloid Leukaemia	161	0	0.6	0.8	0.9	1.5	0.6	1.7	1	0.9	2.1	2.9	3.9	5.7	3.5	5	3.5	3.6	1.6	1.8	
C95	Leukaemia unspec.	18	0	0	0.2	0	0.3	0.1	0.3	0.1	0	0.2	0	0	0.3	0.9	0	1.8	1.2	0.2	0.2	
Other	Other & unspecified	141	0	0.5	0.2	0	0	0.2	0.2	0	0.9	1.1	1.9	3.4	5.4	4.7	11.9	13.3	18.2	1.4	1.9	
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All	All sites Total	7975	2	13	8	11	16	19	29	55	73	103	168	219	288	337	402	429	472	79.6	98.6	
Not C44	All sites but C44	7818	2	13	8	11	16	18	29	54	73	101	166	216	284	331	395	421	437	78.1	96.6	



Table 5.4.1 Number Of Cases Among Non-Saudi Males by Primary Site And Age Groups, 2017

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Total (%)	
C00	Lip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
C01-C02	Tongue	22	0	0	0	0	0	0	0	2	2	4	2	3	3	3	2	1	0	1.10%	
C03-C06	Mouth	28	0	0	0	0	0	0	2	2	4	3	5	4	3	1	2	0	2	1.40%	
C07-C08	Salivary glands	12	0	0	0	1	0	1	0	1	2	0	2	1	2	0	0	0	2	0.60%	
C09	Tonsil	4	0	0	0	0	0	0	0	0	0	0	0	2	1	0	1	0	0	0.20%	
C10	Other Oropharynx	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.10%	
C11	Nasopharynx	43	0	0	0	0	3	0	2	6	3	6	9	5	5	1	1	2	0	2.20%	
C12-C13	Hypopharynx	3	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0.20%	
C14	Pharynx unspec.	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.10%	
C15	Oesophagus	19	0	0	0	0	0	0	1	1	1	4	2	3	2	2	2	1	0	1.00%	
C16	Stomach	108	0	0	0	0	0	0	5	4	7	15	5	14	18	24	6	5	5	5.60%	
C17	Small intestine	17	0	0	0	0	0	0	0	2	0	1	4	1	2	3	2	0	2	0.90%	
C18	Colon	201	0	0	0	1	1	0	7	12	12	12	19	26	33	35	18	10	15	10.40%	
C19-C20	Rectum	110	0	0	0	0	0	1	1	8	8	11	14	16	21	12	10	2	6	5.70%	
C21	Anus	10	0	0	0	0	0	0	0	1	0	1	0	3	2	1	1	1	0	0.50%	
C22	Liver	33	0	1	0	0	0	0	0	0	1	2	2	4	5	13	1	2	2	1.70%	
C23-C24	Gallbladder etc.	15	0	0	0	0	0	0	0	0	0	1	0	4	1	4	1	1	3	0.80%	
C25	Pancreas	38	0	0	0	0	0	0	0	0	1	1	9	1	5	8	7	4	2	2.00%	
C30-C31	Nose, sinuses etc.	12	0	0	0	0	1	0	1	0	1	1	1	0	7	0	0	0	0	0.60%	
C32	Larynx	22	0	0	0	0	0	0	0	0	0	0	2	5	3	9	2	0	1	1.10%	
C33-C34	Trachea,Bronchus,Lung	124	0	0	0	0	0	0	0	2	2	11	11	16	27	24	11	11	9	6.40%	
C37-C38	Other Thoracic organs	2	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0.10%	
C40-C41	Bone	27	0	1	1	5	5	4	2	4	1	2	1	0	1	0	0	0	0	1.40%	
C43	Melanoma of Skin	15	0	0	0	0	0	0	0	2	1	6	0	3	3	0	0	0	0	0.80%	
C44	Other Skin	138	0	0	1	1	1	2	6	4	6	8	13	8	27	21	19	8	13	7.10%	
C45	Mesothelioma	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.10%	
C46	Kaposi sarcoma	5	0	0	0	0	0	0	1	1	0	1	0	0	1	0	0	0	1	0.30%	
C47;C49	Connective,Soft tissue	55	0	3	1	0	2	1	4	7	5	5	5	10	4	2	3	2	1	2.80%	
C50	Breast	8	0	0	0	0	0	0	0	0	2	0	1	1	0	3	1	0	0	0.40%	
C60	Penis	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.10%	
C61	Prostate	150	0	0	1	0	0	0	0	1	1	2	3	20	18	40	23	19	22	7.70%	
C62	Testis	29	0	1	0	0	3	4	3	10	3	4	0	0	1	0	0	0	0	1.50%	
C63	Other male genital	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.10%	
C64	Kidney	81	0	5	0	0	0	1	0	1	5	4	17	6	16	16	6	2	2	4.20%	
C65	Renal Pelvis	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0.20%	
C66	Ureter	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.10%	
C67	Bladder	109	0	0	0	0	0	0	2	5	1	7	8	10	20	18	19	9	10	5.60%	
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
C69	Eye	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.20%	
C70-C72	Brain, Nervous system	74	0	5	4	1	2	1	6	7	9	7	6	8	4	7	7	0	0	3.80%	
C73	Thyroid	74	0	0	0	0	1	0	5	11	9	6	11	13	9	4	3	2	0	3.80%	
C74	Adrenal gland	5	0	1	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0.30%	
C75	Other Endocrine	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.10%	
C81	Hodgkin disease	56	0	0	3	6	2	5	7	7	5	7	4	2	5	3	0	0	0	2.90%	
C82-C85;C9	Non-Hodgkin lymphoma	116	0	2	3	1	3	3	5	14	13	14	6	11	12	15	6	3	5	6.00%	
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	
C90	Multiple Myeloma	21	0	0	0	0	0	1	1	0	1	1	2	0	5	6	2	1	1	1.10%	
C91	Lymphoid Leukaemia	30	0	7	4	3	0	3	0	3	1	2	1	2	3	1	0	0	0	1.50%	
C92-C94	Myeloid Leukaemia	41	0	2	2	1	1	1	3	5	5	6	0	4	1	4	4	0	2	2.10%	
C95	Leukaemia unspec.	14	0	0	0	0	1	0	4	1	1	2	2	1	0	1	1	0	0	0.70%	
Other	Other & unspecified	54	0	1	0	1	1	1	5	3	3	7	3	8	5	9	3	3	1	2.80%	
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All	All sites Total	1940	0	33	20	21	27	29	75	128	119	165	171	217	281	292	165	89	108	100.00%	
Not C44	All sites but C44	1802	0	33	19	20	26	27	69	124	113	157	158	209	254	271	146	81	95	92.90%	

Table 5.4.2 Number Of Cases Among Non-Saudi Females by Primary Site And Age Groups, 2017

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Total (%)
C00	Lip	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0.20%
C01-C02	Tongue	13	0	0	0	0	0	0	0	0	2	0	2	3	1	3	0	1	1	0.70%
C03-C06	Mouth	10	0	0	0	0	0	0	1	0	1	0	2	1	1	0	1	2	1	0.50%
C07-C08	Salivary glands	10	0	1	0	0	0	1	1	1	0	0	4	1	0	0	0	1	0	0.50%
C09	Tonsil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C10	Other Oropharynx	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.10%
C11	Nasopharynx	10	0	0	0	0	0	0	0	0	3	2	3	2	0	0	0	0	0	0.50%
C12-C13	Hypopharynx	4	0	0	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0	0.20%
C14	Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C15	Oesophagus	7	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	1	2	0.40%
C16	Stomach	29	0	0	0	0	0	0	1	2	1	1	0	6	9	2	3	3	1	1.50%
C17	Small intestine	5	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1	0.30%
C18	Colon	92	0	0	0	1	0	1	4	3	9	8	3	19	14	7	12	6	5	4.90%
C19-C20	Rectum	52	0	0	0	0	0	0	2	1	1	5	6	7	10	7	6	4	3	2.80%
C21	Anus	3	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0.20%
C22	Liver	16	0	0	0	1	1	0	0	0	2	1	0	1	3	1	2	3	1	0.80%
C23-C24	Gallbladder etc.	11	0	0	0	0	0	0	0	0	0	0	1	1	3	0	4	1	1	0.60%
C25	Pancreas	14	0	0	0	0	0	0	0	0	1	0	3	2	3	2	0	1	2	0.70%
C30-C31	Nose, sinuses etc.	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.10%
C32	Larynx	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.10%
C33-C34	Trachea,Bronchus,Lung	42	0	0	0	0	0	1	0	3	3	7	6	4	2	8	2	2	4	2.20%
C37-C38	Other Thoracic organs	5	0	0	0	0	1	0	0	1	0	2	0	0	0	1	0	0	0	0.30%
C40-C41	Bone	11	0	1	0	2	1	1	4	1	1	0	0	0	0	0	0	0	0	0.60%
C43	Melanoma of Skin	4	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0.20%
C44	Other Skin	57	0	0	0	0	0	1	0	1	3	7	9	6	3	5	6	10	6	3.00%
C45	Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C46	Kaposi sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C47;C49	Connective,Soft tissue	24	0	3	1	1	0	0	5	2	2	1	3	3	1	1	1	0	0	1.30%
C50	Breast	785	0	0	0	0	0	4	14	55	91	122	139	110	112	61	30	18	29	41.60%
C51	Vulva	6	0	0	0	0	0	0	0	0	0	0	0	2	0	1	2	1	0	0.30%
C52	Vagina	5	0	1	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0.30%
C53	Cervix Uteri	64	0	0	0	0	0	0	2	8	8	9	15	8	9	0	3	0	2	3.40%
C54	Corpus Uteri	71	0	0	0	0	0	0	0	2	4	10	5	11	12	12	7	4	4	3.80%
C55	Uterus unspec.	6	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	2	0.30%
C56	Ovary	85	0	0	0	2	0	3	5	4	7	14	14	11	8	7	6	1	3	4.50%
C57	Other Female Genital	5	0	0	0	0	1	0	0	0	1	0	0	0	1	0	1	1	0	0.30%
C58	Placenta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C64	Kidney	26	0	1	0	0	0	0	0	4	3	1	1	6	3	2	2	2	1	1.40%
C65	Renal Pelvis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C66	Ureter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C67	Bladder	19	0	0	0	0	0	0	0	1	2	1	1	3	5	1	3	1	1	1.00%
C68	Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C69	Eye	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.10%
C70-C72	Brain, Nervous system	47	0	5	2	1	2	3	2	3	3	6	3	3	4	1	4	4	1	2.50%
C73	Thyroid	149	0	0	0	1	4	7	27	26	22	24	11	10	9	2	4	1	1	7.90%
C74	Adrenal gland	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.20%
C75	Other Endocrine	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.10%
C81	Hodgkin disease	31	0	0	0	4	3	4	3	7	1	3	1	1	2	2	0	0	0	1.60%
C82-C85;C9	Non-Hodgkin lymphoma	69	0	0	2	2	2	2	5	5	6	4	7	5	12	8	4	2	3	3.70%
C88	Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
C90	Multiple Myeloma	5	0	0	0	0	1	0	0	1	0	1	0	1	0	1	0	0	0	0.30%
C91	Lymphoid Leukaemia	17	0	5	3	3	1	0	1	0	0	0	0	0	1	0	1	1	1	0.90%
C92-C94	Myeloid Leukaemia	21	0	2	2	1	1	0	1	4	3	0	0	1	1	3	0	2	0	1.10%
C95	Leukaemia unspec.	7	0	1	0	0	0	0	0	2	0	0	0	0	1	2	1	0	0	0.40%
Other	Other & unspecified	36	0	3	0	0	1	2	0	2	1	1	5	8	4	0	3	4	2	1.90%
All	All sites Total	1885	0	27	10	19	20	30	78	142	181	234	249	242	239	142	110	81	81	100.00%
Not C44	All sites but C44	1828	0	27	10	19	20	29	78	141	178	227	240	236	236	137	104	71	75	97.00%

Table 5.4.3 Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Non-Saudi Males (per 100,000) by Primary Site and Age groups, 2017

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	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	
C01-C02	Tongue	22	0	0	0	0	0	0	0	0.2	0.1	0.3	0.2	0.4	0.7	1.4	2.7	2.9	0	0.3	0.3	
C03-C06	Mouth	28	0	0	0	0	0	0	0.3	0.2	0.3	0.2	0.5	0.6	0.7	0.5	2.7	0	7	0.3	0.4	
C07-C08	Salivary glands	12	0	0	0	0.3	0	0.3	0	0.1	0.1	0	0.2	0.1	0.5	0	0	0	7	0.1	0.3	
C09	Tonsil	4	0	0	0	0	0	0	0	0	0	0	0	0.3	0.2	0	1.3	0	0	0	0.1	
C10	Other Oropharynx	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	
C11	Nasopharynx	43	0	0	0	0	1.2	0	0.3	0.6	0.2	0.4	0.9	0.7	1.2	0.5	1.3	5.9	0	0.5	0.5	
C12-C13	Hypopharynx	3	0	0	0	0	0	0	0	0.1	0	0	0	0	0.5	0	0	0	0	0	0	
C14	Pharynx unspec.	1	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	
C15	Oesophagus	19	0	0	0	0	0	0	0.1	0.1	0.1	0.3	0.2	0.4	0.5	0.9	2.7	2.9	0	0.2	0.3	
C16	Stomach	108	0	0	0	0	0	0	0.7	0.4	0.5	1.1	0.5	2.1	4.5	11.2	8.1	14.7	17.6	1.3	1.8	
C17	Small intestine	17	0	0	0	0	0	0	0	0.2	0	0.1	0.4	0.1	0.5	1.4	2.7	0	7	0.2	0.3	
C18	Colon	201	0	0	0	0.3	0.4	0	1	1.2	0.8	0.9	1.9	3.9	8.2	16.3	24.2	29.4	52.7	2.4	4	
C19-C20	Rectum	110	0	0	0	0	0	0.3	0.1	0.8	0.6	0.8	1.4	2.4	5.2	5.6	13.4	5.9	21.1	1.3	1.8	
C21	Anus	10	0	0	0	0	0	0	0	0.1	0	0.1	0	0.4	0.5	0.5	1.3	2.9	0	0.1	0.2	
C22	Liver	33	0	0.3	0	0	0	0	0	0	0.1	0.1	0.2	0.6	1.2	6.1	1.3	5.9	7	0.4	0.7	
C23-C24	Gallbladder etc.	15	0	0	0	0	0	0	0	0	0	0.1	0	0.6	0.2	1.9	1.3	2.9	10.5	0.2	0.4	
C25	Pancreas	38	0	0	0	0	0	0	0	0	0.1	0.1	0.9	0.1	1.2	3.7	9.4	11.7	7	0.5	0.9	
C30-C31	Nose, sinuses etc.	12	0	0	0	0	0.4	0	0.1	0	0.1	0.1	0.1	0	1.7	0	0	0	0	0.1	0.1	
C32	Larynx	22	0	0	0	0	0	0	0	0	0	0	0.2	0.7	0.7	4.2	2.7	0	3.5	0.3	0.4	
C33-C34	Trachea, Bronchus, Lung	124	0	0	0	0	0	0	0	0.2	0.1	0.8	1.1	2.4	6.7	11.2	14.8	32.3	31.6	1.5	2.7	
C37-C38	Other Thoracic organs	2	0	0	0	0	0	0	0.1	0	0	0	0.1	0	0	0	0	0	0	0	0	
C40-C41	Bone	27	0	0.3	0.3	1.7	2	1.4	0.3	0.4	0.1	0.1	0.1	0	0.2	0	0	0	0	0.3	0.6	
C43	Melanoma of Skin	15	0	0	0	0	0	0	0	0.2	0.1	0.4	0	0.4	0.7	0	0	0	0	0.2	0.1	
C44	Other Skin	138	0	0	0.3	0.3	0.4	0.7	0.8	0.4	0.4	0.6	1.3	1.2	6.7	9.8	25.5	23.5	45.6	1.7	3.3	
C45	Mesothelioma	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.3	0	0	0	0.1	
C46	Kaposi sarcoma	5	0	0	0	0	0	0	0.1	0.1	0	0.1	0	0	0.2	0	0	0	3.5	0.1	0.1	
C47;C49	Connective, Soft tissue	55	0	1	0.3	0	0.8	0.3	0.5	0.7	0.4	0.4	0.5	1.5	1	0.9	4	5.9	3.5	0.7	0.9	
C50	Breast	8	0	0	0	0	0	0	0	0	0.1	0	0.1	0.1	0	1.4	1.3	0	0	0.1	0.1	
C60	Penis	1	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	
C61	Prostate	150	0	0	0.3	0	0	0	0	0.1	0.1	0.1	0.3	3	4.5	18.7	30.9	55.8	77.2	1.8	4.7	
C62	Testes	29	0	0.3	0	0	1.2	1.4	0.4	1	0.2	0.3	0	0	0.2	0	0	0	0	0.3	0.4	
C63	Other male genital	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	
C64	Kidney	81	0	1.7	0	0	0	0.3	0	0.1	0.4	0.3	1.7	0.9	4	7.5	8.1	5.9	7	1	1.4	
C65	Renal Pelvis	3	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0	3.5	0	0.1	
C66	Ureter	1	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	
C67	Bladder	109	0	0	0	0	0	0	0.3	0.5	0.1	0.5	0.8	1.5	5	8.4	25.5	26.4	35.1	1.3	2.7	
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	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	
C70-C72	Brain, Nervous system	74	0	1.7	1.1	0.3	0.8	0.3	0.8	0.7	0.6	0.5	0.6	1.2	1	3.3	9.4	0	0	0.9	1.2	
C73	Thyroid	74	0	0	0	0	0.4	0	0.7	1.1	0.6	0.4	1.1	1.9	2.2	1.9	4	5.9	0	0.9	0.8	
C74	Adrenal gland	5	0	0.3	0	0	0	0	0.1	0	0.1	0	0	0.1	0.2	0	0	0	0	0.1	0.1	
C75	Other Endocrine	1	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	
C81	Hodgkin disease	56	0	0	0.8	2	0.8	1.7	1	0.7	0.4	0.5	0.4	0.3	1.2	1.4	0	0	0	0.7	0.8	
C82-C85;C9	Non-Hodgkin lymphoma	116	0	0.7	0.8	0.3	1.2	1	0.7	1.5	0.9	1	0.6	1.6	3	7	8.1	8.8	17.6	1.4	1.9	
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	21	0	0	0	0	0	0.3	0.1	0	0.1	0.1	0.2	0	1.2	2.8	2.7	2.9	3.5	0.3	0.4	
C91	Lymphoid Leukaemia	30	0	2.4	1.1	1	0	1	0	0.3	0.1	0.1	0.1	0.3	0.7	0.5	0	0	0	0.4	0.7	
C92-C94	Myeloid Leukaemia	41	0	0.7	0.6	0.3	0.4	0.3	0.4	0.5	0.4	0.4	0	0.6	0.2	1.9	5.4	0	7	0.5	0.8	
C95	Leukaemia unspec.	14	0	0	0	0	0.4	0	0.5	0.1	0.1	0.1	0.2	0.1	0	0.5	1.3	0	0	0.2	0.2	
Other	Other & unspecified	54	0	0.3	0	0.3	0.4	0.3	0.7	0.3	0.2	0.5	0.3	1.2	1.2	4.2	4	8.8	3.5	0.6	0.9	
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All	All sites Total	1940	0	12	6	7	11	10	10	13	8	12	17	32	70	136	222	261	379	23.3	37.6	
Not C44	All sites but C44	1802	0	12	5	7	11	9	9	13	8	12	16	31	63	126	196	238	334	21.6	34.3	

Table 5.4.4 Age-Specific Incidence Rate (AIR), Age Standardised Incidence Rate (ASR) Among Non-Saudi Females (per 100,000) by Primary Site and Age groups, 2017

ICD (10th)	Site	All Ages	Age unk	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Crude Rate	ASR World	
C00	Lip	3	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	5.2	8.8	0.1	0.3	
C01-C02	Tongue	13	0	0	0	0	0	0	0	0	0.4	0	0.7	2.9	1.5	6.2	0	5.2	8.8	0.3	0.8	
C03-C06	Mouth	10	0	0	0	0	0	0	0.2	0	0.2	0	0.7	1	1.5	0	3.4	10.4	8.8	0.3	0.7	
C07-C08	Salivary glands	10	0	0.4	0	0	0	0.5	0.2	0.2	0	0	1.5	1	0	0	0	5.2	0	0.3	0.4	
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	0	0	0	0	8.8	0	0.2	
C11	Nasopharynx	10	0	0	0	0	0	0	0	0	0.5	0.4	1.1	1.9	0	0	0	0	0	0.3	0.2	
C12-C13	Hypopharynx	4	0	0	0	0	0	0	0	0.5	0	0.2	0	0	0	2.1	0	0	0	0.1	0.1	
C14	Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C15	Oesophagus	7	0	0	0	0	0	0	0	0	0	0.2	0	1	3	0	0	5.2	17.6	0.2	0.6	
C16	Stomach	29	0	0	0	0	0	0.2	0.5	0.2	0.2	0	0	5.8	13.4	4.2	10.1	15.7	8.8	0.8	1.9	
C17	Small intestine	5	0	0	0	0	0	0	0	0	0	0	0	1	1.5	0	0	10.4	8.8	0.1	0.5	
C18	Colon	92	0	0	0	0.4	0	0.5	0.9	0.7	1.6	1.6	1.1	18.5	20.8	14.6	40.4	31.3	44	2.4	5.5	
C19-C20	Rectum	52	0	0	0	0	0	0.5	0.2	0.2	1	2.2	6.8	14.9	14.6	20.2	20.9	26.4	1.4	3.3		
C21	Anus	3	0	0	0	0	0	0	0	0	0	0	0.4	1	0	2.1	0	0	0	0.1	0.2	
C22	Liver	16	0	0	0	0.4	0.4	0	0	0	0.4	0.2	0	1	4.5	2.1	6.7	15.7	8.8	0.4	1.1	
C23-C24	Gallbladder etc.	11	0	0	0	0	0	0	0	0	0	0	0.4	1	4.5	0	13.5	5.2	8.8	0.3	0.9	
C25	Pancreas	14	0	0	0	0	0	0	0	0	0.2	0	1.1	1.9	4.5	4.2	0	5.2	17.6	0.4	1	
C30-C31	Nose, sinuses etc.	2	0	0	0	0	0.4	0	0	0	0	0	0	0	0	0	0	0	8.8	0.1	0.2	
C32	Larynx	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
C33-C34	Trachea,Bronchus,Lung	42	0	0	0	0	0	0.5	0	0.7	0.5	1.4	2.2	3.9	3	16.6	6.7	10.4	35.2	1.1	2.4	
C37-C38	Other Thoracic organs	5	0	0	0	0	0.4	0	0	0.2	0	0.4	0	0	0	2.1	0	0	0	0.1	0.2	
C40-C41	Bone	11	0	0.4	0	0.7	0.4	0.5	0.9	0.2	0.2	0	0	0	0	0	0	0	0	0.3	0.3	
C43	Melanoma of Skin	4	0	0	0	0	0	0	0	0	0	0.2	0.4	1	0	0	3.4	0	0	0.1	0.2	
C44	Other Skin	57	0	0	0	0	0	0.5	0	0.2	0.5	1.4	3.3	5.8	4.5	10.4	20.2	52.2	52.9	1.5	4	
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C47;C49	Connective,Soft tissue	24	0	1.1	0.3	0.4	0	0	1.1	0.5	0.4	0.2	1.1	2.9	1.5	2.1	3.4	0	0	0.6	0.8	
C50	Breast	785	0	0	0	0	0	1.9	3.2	12.7	16.3	23.9	50.8	106.9	166.6	126.8	101.1	93.9	255.5	20.4	33.7	
C51	Vulva	6	0	0	0	0	0	0	0	0	0	0	0	1.9	0	2.1	6.7	5.2	0	0.2	0.5	
C52	Vagina	5	0	0.4	0	0	0	0	0	0	0	0	0.4	1	0	0	3.4	5.2	0	0.1	0.3	
C53	Cervix Uteri	64	0	0	0	0	0	0	0.5	1.8	1.4	1.8	5.5	7.8	13.4	0	10.1	0	17.6	1.7	2.2	
C54	Corpus Uteri	71	0	0	0	0	0	0	0	0.5	0.7	2	1.8	10.7	17.8	24.9	23.6	20.9	35.2	1.8	4.4	
C55	Uterus unspec.	6	0	0	0	0	0	0	0	0	0	0.2	0.4	0	3	0	0	0	17.6	0.2	0.5	
C56	Ovary	85	0	0	0	0.7	0	1.4	1.1	0.9	1.3	2.7	5.1	10.7	11.9	14.6	20.2	5.2	26.4	2.2	3.7	
C57	Other Female Genital	5	0	0	0	0	0.4	0	0	0	0.2	0	0	0	1.5	0	3.4	5.2	0	0.1	0.3	
C58	Placenta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C64	Kidney	26	0	0.4	0	0	0	0	0	0.9	0.5	0.2	0.4	5.8	4.5	4.2	6.7	10.4	8.8	0.7	1.4	
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	19	0	0	0	0	0	0	0	0.2	0.4	0.2	0.4	2.9	7.4	2.1	10.1	5.2	8.8	0.5	1.2	
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	1	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C70-C72	Brain, Nervous system	47	0	1.8	0.6	0.4	0.9	1.4	0.5	0.7	0.5	1.2	1.1	2.9	5.9	2.1	13.5	20.9	8.8	1.2	2.2	
C73	Thyroid	149	0	0	0	0.4	1.7	3.2	6.2	6	3.9	4.7	4	9.7	13.4	4.2	13.5	5.2	8.8	3.9	3.9	
C74	Adrenal gland	3	0	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
C75	Other Endocrine	1	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0	0	
C81	Hodgkin disease	31	0	0	0	1.4	1.3	1.9	0.7	1.6	0.2	0.6	0.4	1	3	4.2	0	0	0	0.8	0.9	
C82-C85;C9	Non-Hodgkin lymphoma	69	0	0	0.6	0.7	0.9	0.9	1.1	1.2	1.1	0.8	2.6	4.9	17.8	16.6	13.5	10.4	26.4	1.8	3.5	
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	5	0	0	0	0	0.4	0	0	0.2	0	0.2	0	1	0	2.1	0	0	0	0.1	0.2	
C91	Lymphoid Leukaemia	17	0	1.8	0.9	1.1	0.4	0	0.2	0	0	0	0	0	1.5	0	3.4	5.2	8.8	0.4	0.9	
C92-C94	Myeloid Leukaemia	21	0	0.7	0.6	0.4	0.4	0	0.2	0.9	0.5	0	0	1	1.5	6.2	0	10.4	0	0.5	0.9	
C95	Leukaemia unspec.	7	0	0.4	0	0	0	0	0	0.5	0	0	0	0	1.5	4.2	3.4	0	0	0.2	0.4	
Other	Other & unspecified	36	0	1.1	0	0	0.4	0.9	0	0.5	0.2	0.2	1.8	7.8	5.9	0	10.1	20.9	17.6	0.9	2.1	
		----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
All	All sites Total	1885	0	10	3	7	9	14	18	33	32	46	91	235	355	295	371	423	714	49.1	89.2	
Not C44	All sites but C44	1828	0	10	3	7	9	13	18	32	32	45	88	229	351	285	351	371	661	47.6	85.2	



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المجلس الصحي السعودي
Saudi Health Council

PART VI

المملكة العربية السعودية
المجلس الصحي السعودي
المركز الوطني للمعلومات الصحية
السجل السعودي للأورام

تقرير معدل الإصابة لمرض السرطان

٢٠١٧

السرطانات العشرة الأكثر شيوعاً بين السعوديين لكلا الجنسين

احتل سرطان الثدي المرتبة الأولى (2508 حالة) بنسبة 18,1% تلاه سرطان القولون والمستقيم (1720 حالة) بنسبة 12,4% ثم سرطان الغدة الدرقية (1107 حالة) بنسبة 8,0% ثم السرطان اللمفاوي اللاهودجكن (893 حالة) بنسبة 6,4% ثم سرطان ابيضاض الدم (706 حالة) بنسبة 5,1% يليه السرطان اللمفاوي هودجكن (517 حالة) بنسبة 3,7% ثم سرطان الرئة (508 حالة) بنسبة 3,7% يليه سرطان الرحم (499 حالة) بنسبة 3,6% ثم سرطان البروستات (412 حالة) بنسبة 3,0% وأخيراً سرطان الكبد (393 حالة) بنسبة 2,8%.

السرطانات العشرة الأكثر شيوعاً بين الأطفال السعوديين لكلا الجنسين

احتل سرطان ابيضاض الدم المرتبة الأولى (209 حالة) بنسبة 30,8% تلاه سرطان الدماغ والجهاز العصبي (86 حالة) بنسبة 12,7% ثم السرطان اللمفاوي هودجكن (72 حالة) بنسبة 10,6% ثم السرطان اللمفاوي اللاهودجكن (57 حالة) بنسبة 8,4% ثم سرطان العظام (52 حالة) بنسبة 7,7% يليه سرطان الكلى (40 حالة) بنسبة 5,9% ، ثم سرطان العين (35 حالة) بنسبة 5,2% ، ثم سرطان الأنسجة الضامة (32 حالة) بنسبة 4,7% ، ثم سرطان الغدة الكظرية (25 حالة) بنسبة 3,7% ، وأخيراً سرطان الغدة الدرقية (11 حالة) بنسبة 1,7%.

السرطانات العشرة الأكثر شيوعاً بين السعوديين لكلا الجنسين

%	الذكور		%	الإناث	
15.5	919	القولون والمستقيم	30.9	2463	الثدي
8.7	513	الليمفاوي اللاهودجكن	10.9	873	الغدة الدرقية
7.0	412	البروستات	10.0	801	القولون والمستقيم
6.8	403	ابيضاض الدم	6.3	499	الرحم
6.0	356	الرئة	4.8	380	الليمفاوي اللاهودجكن
4.9	288	الليمفاوي هودجكن	3.8	303	ابيضاض الدم
4.5	264	الكبد	2.9	232	المبيض
4.0	234	الغدة الدرقية	2.9	229	الليمفاوي هودجكن
3.9	229	المثانة	2.1	169	الدماغ والجهاز العصبي
3.8	227	الكلى	2.0	163	الكلى
65.1	3845	المجموع الكلي	76.6	6112	المجموع الكلي

السرطانات العشرة الأكثر شيوعاً بين الأطفال السعوديين لكلا الجنسين

%	الذكور		%	الإناث	
29.9	81	ابيضاض الدم	31.8	101	ابيضاض الدم
4.11	15	الدماغ والجهاز العصبي	11.0	53	الدماغ والجهاز العصبي
13.0	47	الليمفاوي هودجكن	9.7	31	العظام
0.01	36	الليمفاوي اللاهودجكن	7.9	52	الليمفاوي هودجكن
5.8	21	العظام	7.2	23	الكلى
4.7	71	العين	6.6	21	الليمفاوي اللاهودجكن
4.7	71	الكلى	5.7	81	العين
4.4	61	الأنسجة الضامة	5.0	61	الأنسجة الضامة
3.3	12	الغدة الكظرية	4.1	31	الغدة الكظرية
1.9	7	الخصية	2.5	8	الغدة الدرقية
71.82	422	المجموع الكلي	91.5	462	المجموع الكلي



إحصائيات السرطان في المملكة العربية السعودية لعام 2017

السجل السعودي للأورام

أنشئ السجل السعودي للأورام في عام 1412 هـ (1992م) 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 عدد من القطاعات الصحية. بدأ السجل نشاطه في جمع المعلومات من شهر يناير في عام 1994 م، حيث يتم جمع وترميز البيانات وتدخّل حسب النظام المعتمد من منظمة الصحة العالمية وتحليل البيانات بشكل دوري. يقوم السجل بتزويد الجهات المختصة والباحثين بمعلومات إحصائية وفق نموذج خاص على صفحة السجل في الموقع الرسمي للمجلس الصحي السعودي:

<https://nhic.gov.sa/eServices/Pages/TumorRegistration.aspx>

إحصائيات السرطان لعام 2017

بلغ إجمالي عدد حالات السرطان المكتشفة في عام 2017 و المسجلة من مختلف المرافق الصحية الحكومية والخاصة بالمملكة العربية السعودية 17718 حالة ، من بين هذه الحالات 13893 سعوديين بنسبة 78,4 % وغير سعوديين 3825 بنسبة 21,6 % . وكان عدد حالات السرطان لدى السعوديين الذكور 5918 حالة بنسبة أجمالية قدرها 42,6 % بينما بلغ عدد الحالات لدى الإناث السعوديات 7975 حالة بنسبة إجمالية قدرها 57,4 %.

غير سعوديين			سعوديين			المجموع الكلي
المجموع	أنثى	ذكر	المجموع	أنثى	ذكر	
3825	1885	1940	13893	7975	5918	17718

بلغ المعدل المعياري للإصابة بالسرطان بين الرجال 74,9 حالة لكل 100000 نسمة ، وبين النساء 98,6 حالة لكل 100000 نسمة.



مشكرة وتقدير

بذلت جهود ضخمة لإنجاز هذا التحليل الشامل لبيانات الأورام في المملكة العربية السعودية، حيث قمنا بجمع وتحليل هذه البيانات والتأكد من سلامتها وصحتها لإصدار تقرير الأورام لعام 2017. لم يكن لهذه الجهود أن تكلل بالنجاح دون الدعم الذي حظينا به من جميع القطاعات الصحية، وفي هذا المقام لا يسعنا إلا أن نتقدم بخالص الشكر والتقدير لجميع القطاعات الصحية على تعاونها في توفير بيانات الأورام لمساعدتنا في إعداد وإصدار هذا التقرير.

نشكر الفريق الفني القائم بإعداد وتنفيذ هذا التقرير:

زياد الشهراني

مدير السجل الوطني للأورام

أحمد الرعوي

محلل سجلات

صالح العلياني

محلل سجلات

أكرم الزمزي

محلل سجلات

أحمد النمري

محلل سجلات

و نقدم جليل الشكر لجميع أعضاء اللجنة العلمية للأورام ولرؤسائهم على ما قدموه من جهود ملموسة في السجل الوطني للأورام، كان هذا التقرير لدى المركز الوطني للمعلومات الصحية - المجلس الصحي السعودي.

م. هاشم أبو بكر

مدير عام

المركز الوطني للمعلومات الصحية



الحمد لله رب العالمين، والصلاة والسلام على أشرف الأنبياء والمرسلين، نبينا محمد وعلى آله وصحبه أجمعين، وبعد يسر المجلس الصحي السعودي ممثلاً في المركز الوطني للمعلومات الصحية أن يضع بين أيديكم التقرير السنوي لأعمال السجل السعودي للأورام لعام 2017، الذي يحتوي على أحدث إنجازات السجل وأنشطته وبرامجه التي تمت مؤخرًا، وتمثلت في رصد وتسجيل حالات السرطان كافة من مختلف المرافق الصحية الحكومية والخاصة في المملكة.

وقد ساعدت الإحصائيات الصادرة عن "السجل السعودي للأورام" على دعم الجهود التوعوية وبرامج التثقيف الصحي، وتزويد الباحثين والمختصين في مجال السرطان في المملكة بالبيانات الدقيقة التي تعكس الوضع الحقيقي لحالات السرطان في المملكة، وتحديد أكثر أنواع السرطان شيوعًا حسب النوع والعمر والموقع الجغرافي.

وأود أن أنوه بأن المجلس الصحي السعودي قام بالإشراف على تنفيذ استراتيجية وطنية طويلة المدى لعلاج ومكافحة السرطان، وتطوير وتحسين مستويات الرعاية الصحية المقدمة لمرضى السرطان وتبادل الخبرات بين المراكز الطبية في القطاعات الحكومية المختلفة.

إن ما نراه من تطور ملموس في المجال الصحي في بلادنا جاء بفضل من الله تعالى ثم بدعم حكومتنا الرشيدة وعلى رأسها خادم الحرمين الشريفين وسمو ولي عهده الأمين أيدهما الله، وكذلك بجهود قيادات ومنسوبي القطاع الصحي والهيئات والمؤسسات الذين أولوا مرضى السرطان عناية كبيرة وقاموا بإعداد البرامج العلاجية والتوعوية للوقاية منه.

وفي الختام..

هذا التقرير تحقق نتيجة العمل الدؤوب والجهد المستمر الذي قام به الزملاء في "السجل السعودي للأورام" مشكورين، لتحقيق رسالته وأهدافه لتسجيل حالات السرطان كافة في المملكة.

د. نهار بن مزي العازمي

الأمين العام



كلمة معالي وزير الصحة رئيس المجلس الصحي السعودي لتقرير الأورام لعام ٢٠١٧م

لطالما كان تقديم الرعاية الصحية للمواطن والمقيم على السواء هي جل اهتمام المملكة العربية السعودية تحت القيادة الرشيدة لخادم الحرمين الشريفين وولي عهده الأمين -يحفظهم الله-، حيث بدى ذلك واضحاً في التطور المستمر للمرافق الصحية والقوى العاملة وأساليب تقديم الخدمة على كافة المستويات. إلا أن التغيرات الإقليمية والعالمية الهائلة في محددات الأمراض وأسباب الوفيات أدت بطبيعة الحال إلى تغيرات كبيرة في معدلات الأمراض والوفيات كما أدت إلى حدوث مشاكل صحية عامة بل وطارئة في بعض الأحيان مما دفع دول العالم إلى المزيد من الاستخدام الفعال وبكفاءة للموارد في تقديم الرعاية الصحية لمواطنيها.

ولقد كان أكبر دليل على ذلك ما شهدناه في الآونة الأخيرة من تفشي لمرض كورونا المستجد الذي أدى إلى جائحة عالمية تسببت في ضغوطات بالغة على المرافق الصحية وغير الصحية شملت العالم بأكمله كما أدت إلى تحولات لا يتوقعها أحد من قبل على المستوى المحلي والعالمي على كافة المستويات والأنشطة وبخاصة الاقتصادية منها حيث أظهرت الأهمية البالغة للاستعمال الفعال والكفؤ للموارد في تقديم الرعاية الصحية وبخاصة المبنية على تقارير واقعية عن الحسابات الصحية للبلدان.

وقد كان ولله الحمد للمملكة العربية السعودية بقيادةها الحكيمة السابق في ذلك برؤيتها الثاقبة (٢٠٣٠) التي أكدت على أهمية السجلات الصحية والتي هي عبارة عن مصدر لجمع البيانات توضح مدى انتشار المشاكل الصحية في المجتمع، وتحدد عوامل الخطر المحتملة وبناءً على ذلك يتم اقتراح الخطط والتدابير العلاجية والوقائية والتطويرية.

يعتبر السجل السعودي للأورام من أوائل السجلات الوطنية في المملكة حيث تم إنشائه في عام ١٤١٢هـ بمستشفى الملك فيصل التخصصي ومركز الأبحاث تحت إشراف وزارة الصحة وبمشاركة عدد من القطاعات الصحية الحكومية، وقد انتقل مقره للمجلس الصحي السعودي في عام ١٤٣٥هـ، وأستأنف نشاطه تحت إدارة السجلات الصحية الوطنية بالمجلس.

ولهذا يسرنا أن ننشر هذا التقرير الهام عن حالات الأورام بالمملكة، آمليين أن يكون داعماً كبيراً لعملية التخطيط وصناعة القرار في تقديم العلاج ومساعدة المرضى. وفي هذا المقام لا يسعني إلا أن أتقدم بخالص شكري وتقديري لفريق العمل الذي تكلفت جهوده بإخراج هذا التقرير القيم بهذا الشكل الرائع والمحتوى عظيم الفائدة كما أتقدم بخالص شكري وامتناني لجميع الجهات التي تقدم الرعاية الصحية الحكومية والخاصة على السواء على ما قدموه من مجهودات كبيرة وتعاون مستمر في جمع البيانات اللازمة لإعداد هذا التقرير.

وزير الصحة
رئيس المجلس الصحي السعودي

توفيق بن فوزان الربيعة



المجلس الصحي السعودي Saudi Health Council

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تقرير معدل الإصابة بمرض
السرطان
2017



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تقرير معدل الإصابة بمرض
السرطان
٢٠١٧