

# IL REGISTRO TUMORI PIEMONTE A 50 ANNI DALLA FONDAZIONE: I NUOVI DATI REGIONALI ED IL LORO UTILIZZO



Centro di Riferimento per l'Epidemiologia  
e la Prevenzione Oncologica in Piemonte

## Il quadro internazionale



**Roberto Zanetti**

9 Aprile 2019

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A.O.U. Città della Salute e della Scienza di Torino

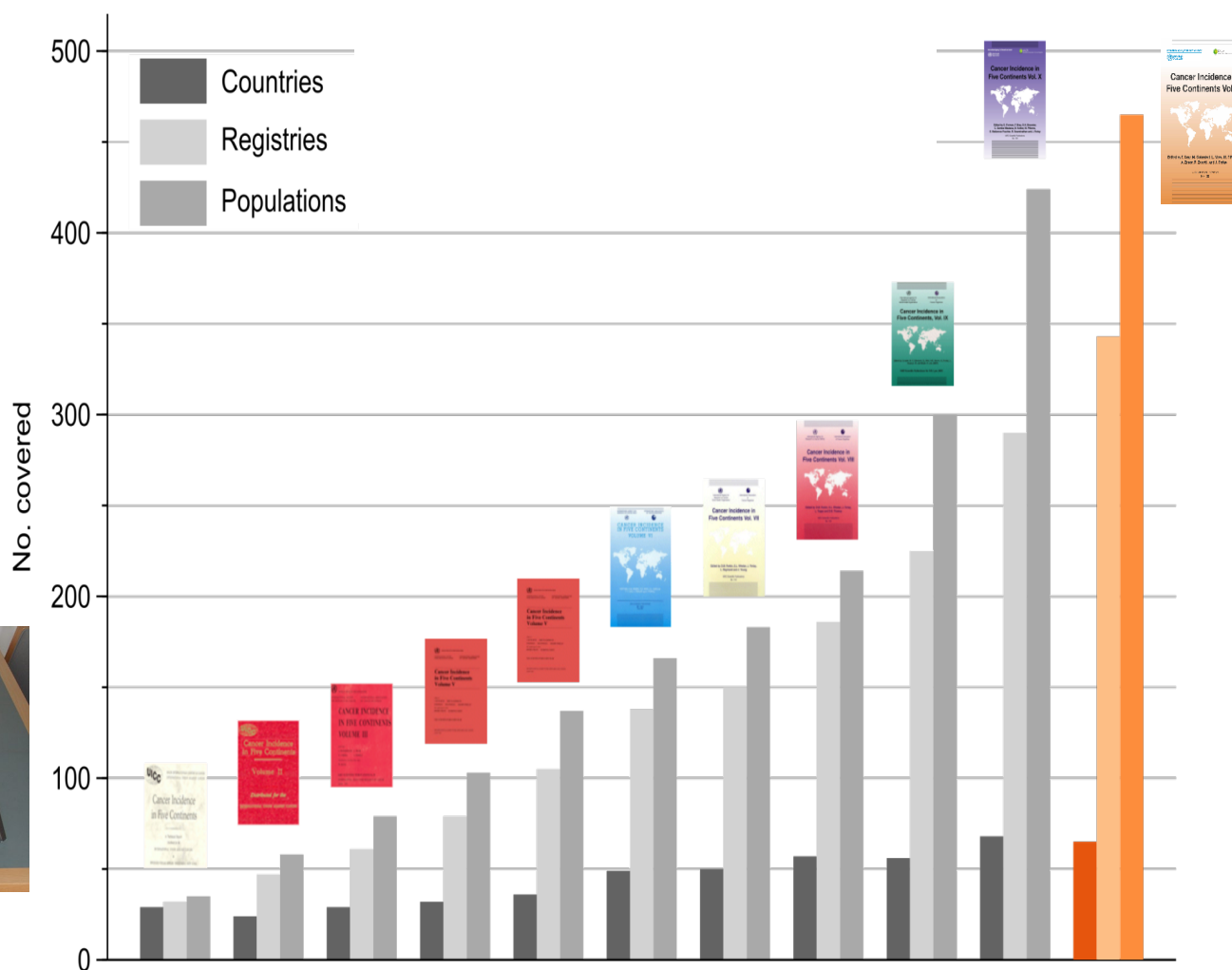
**Il cancro in Piemonte  
1965/69**

**Registro dei Tumori  
per il Piemonte  
e la valle d'Aosta**

Il cancro in Piemonte

2

Coverage in ten volumes of *Cancer Incidence in Five Continents*  
<http://ci5.iarc.fr>

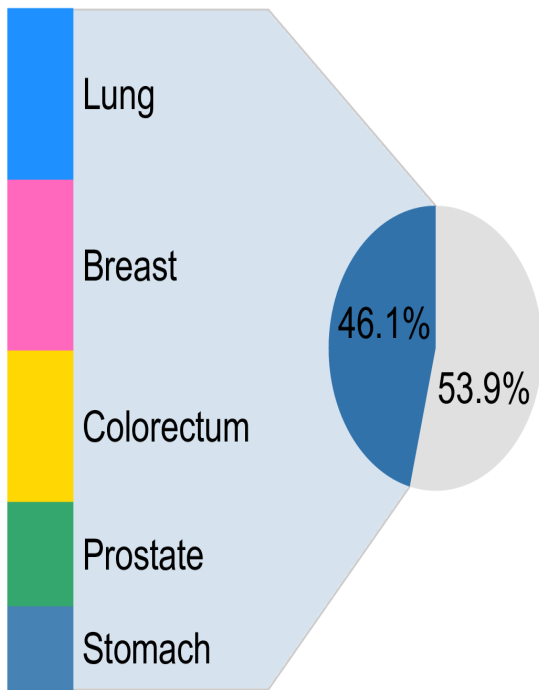


Volume	I	II	III	IV	V	VI	VII	VIII	IX	X	XI
Publication year	1966	1970	1976	1982	1987	1992	1997	2002	2007	2013	2017
Period (approx.)	1960-62	1963-67	1968-72	1973-77	1978-82	1983-87	1988-92	1993-97	1998-02	2003-07	2008-12
Countries	29	24	29	32	36	49	50	57	60	68	65
Registries	32	47	61	79	105	138	150	186	225	290	343
Populations	35	58	79	103	137	166	183	214	300	424	465

Slide courtesy by F. Bray

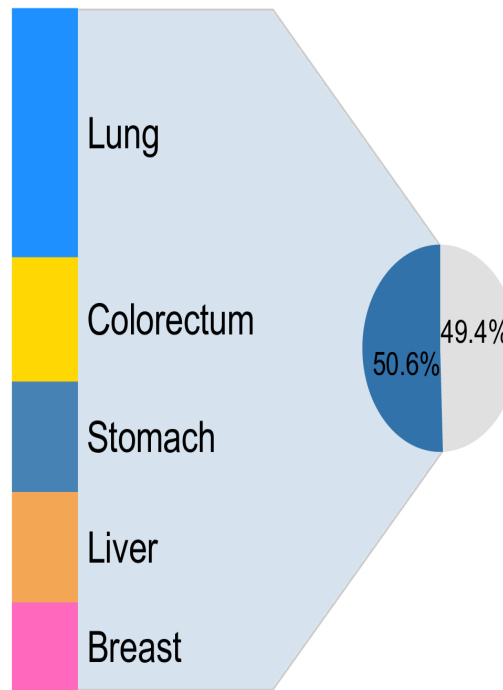
# Top five cancers: incidence, mortality and 5-year prevalence 2018

Incidence



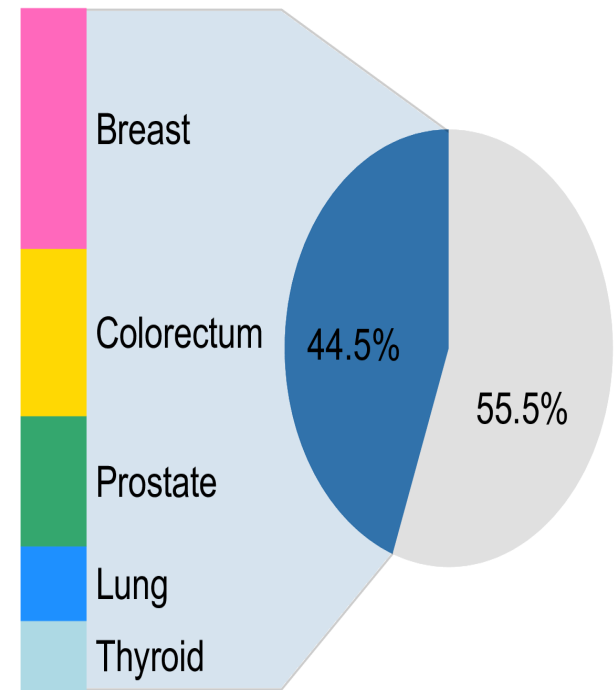
18.1 million  
new cases

Mortality



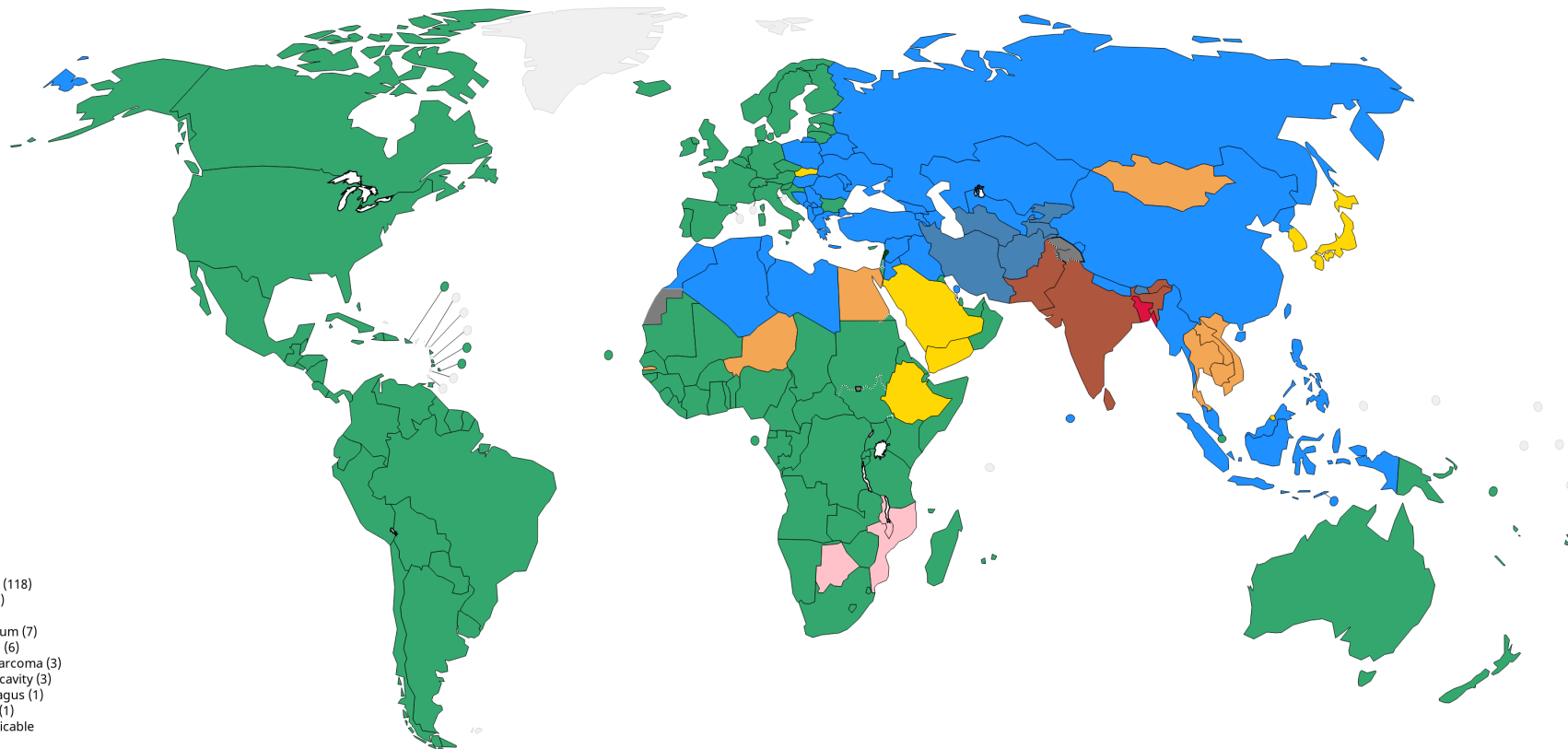
9.6 million  
deaths

Prevalence (5 years)



43.8 million  
persons

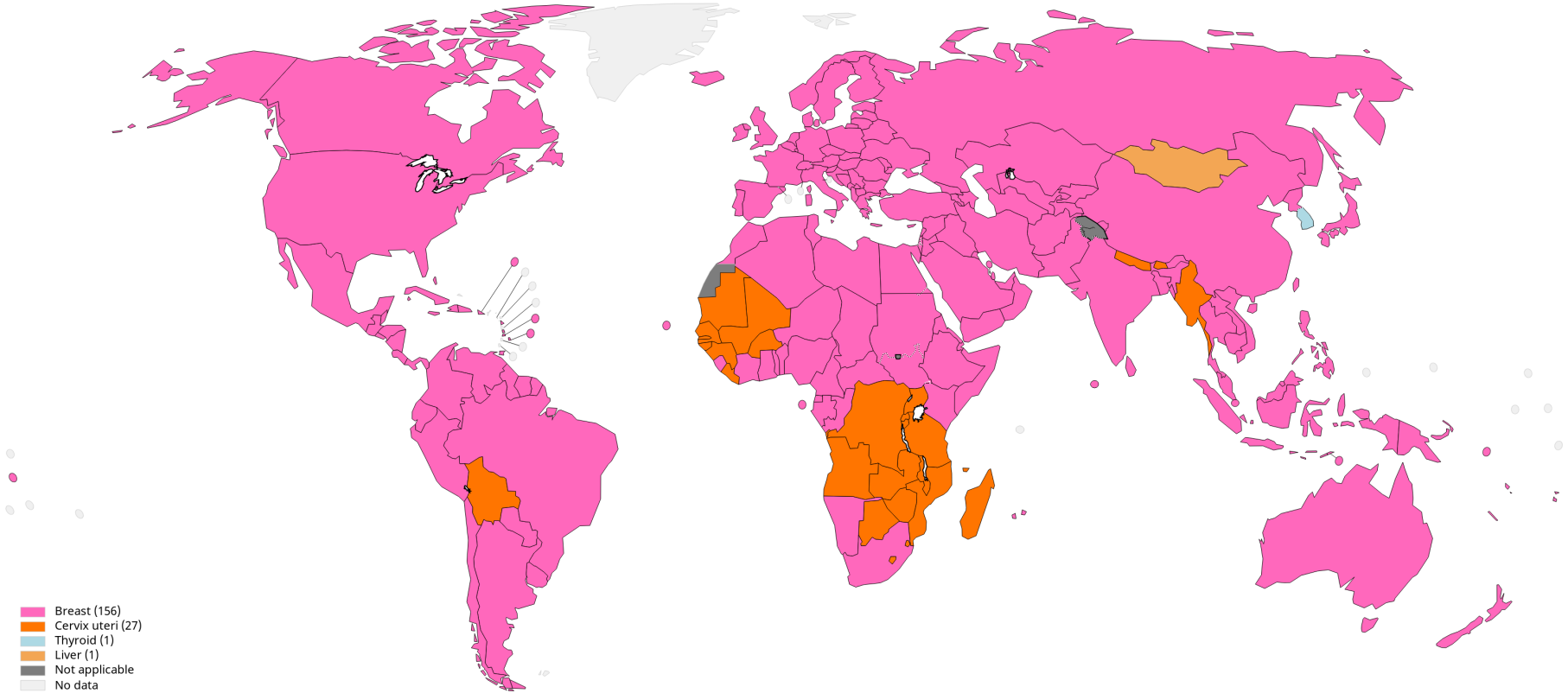
## Top cancer per country, estimated age-standardized incidence rates (World) in 2018, males, all ages



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Data source: GLOBOCAN 2018  
 Graph production: IARC  
<http://gco.iarc.fr/today>  
 World Health Organization

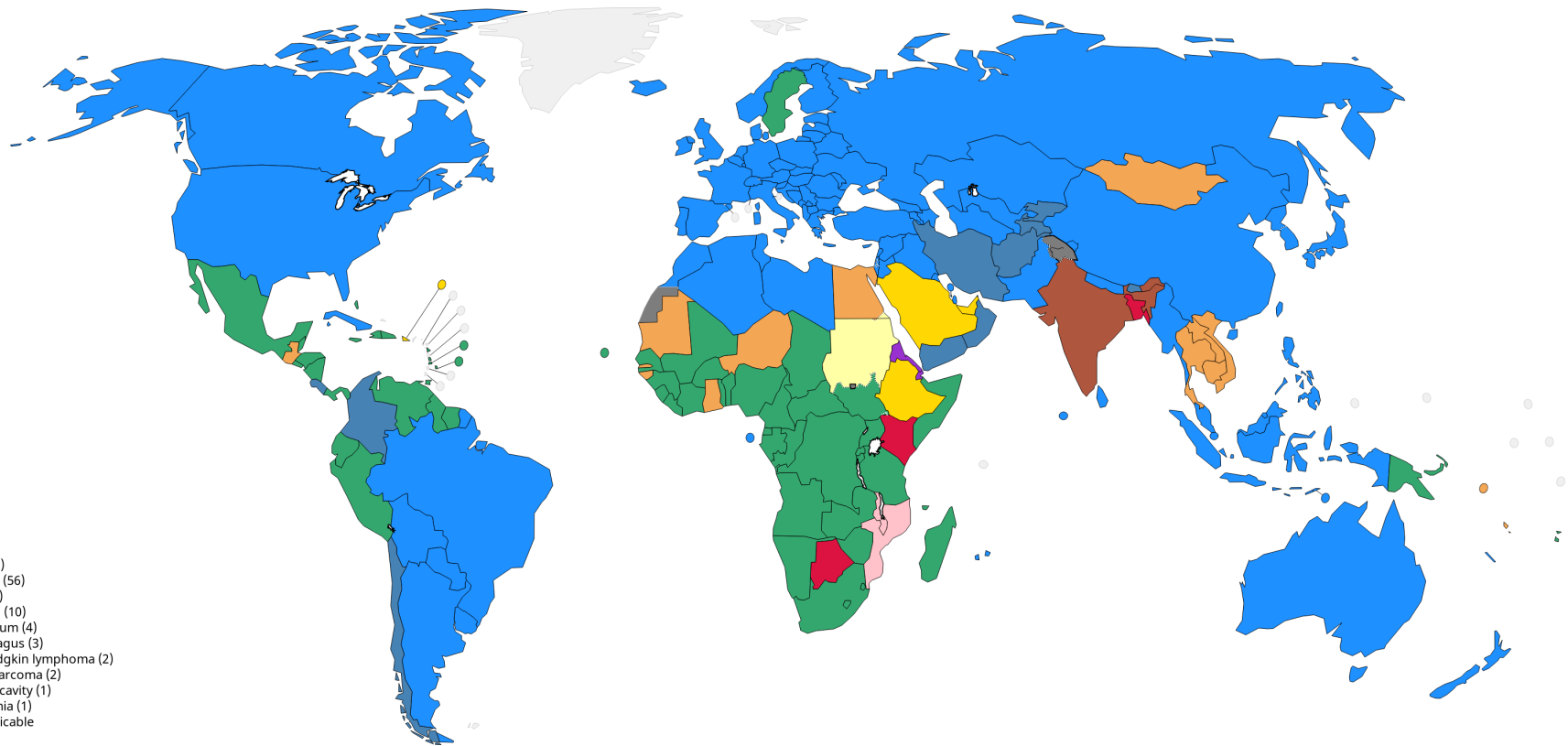
# Top cancer per country, estimated age-standardized incidence rates (World) in 2018, females, all ages



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Data source: GLOBOCAN 2018  
Graph production: IARC  
(<http://gco.iarc.fr/today>)  
World Health Organization

## Top cancer per country, estimated age-standardized mortality rates (World) in 2018, males, all ages

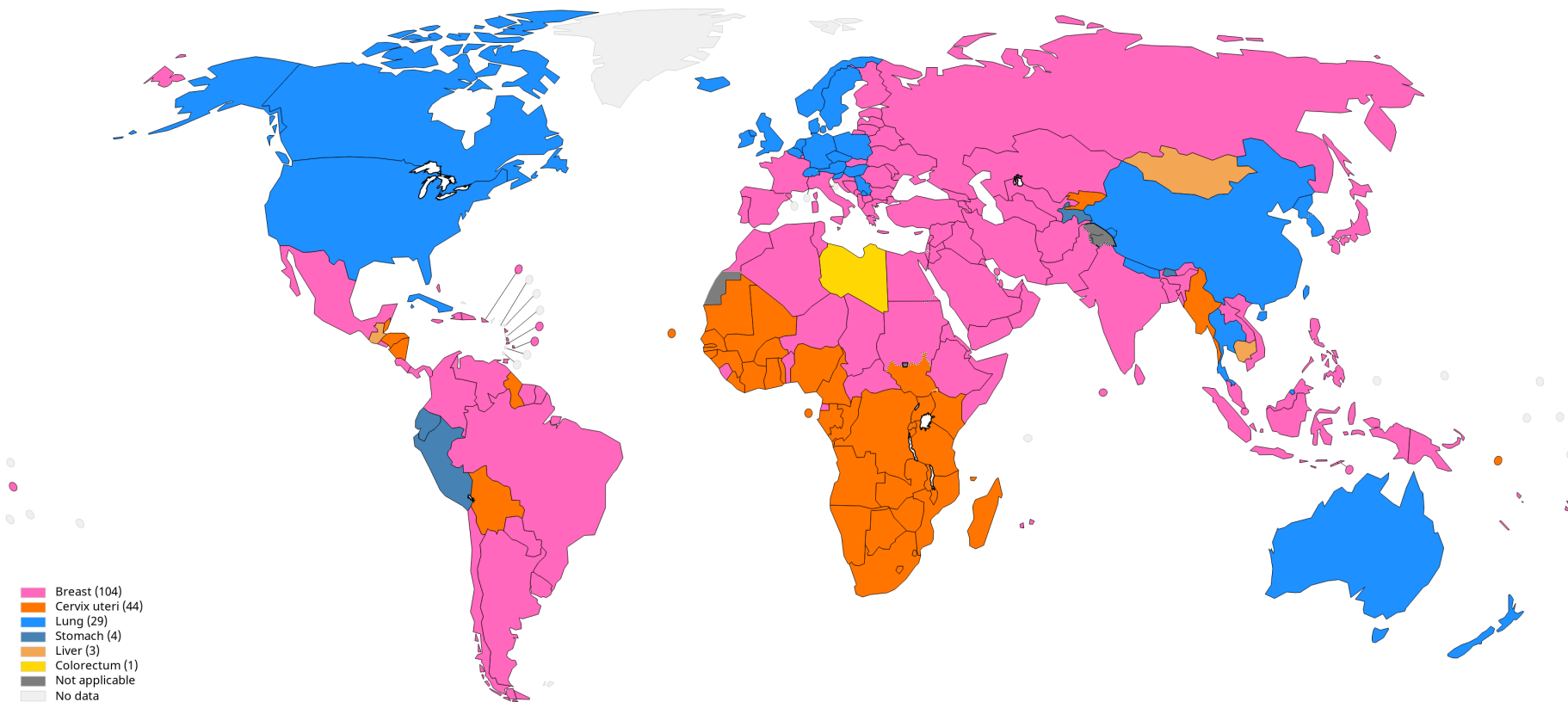


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Data source: GLOBOCAN 2018  
 Graph production: IARC  
 (<http://gco.iarc.fr/today>)  
 World Health Organization



## Top cancer per country, estimated age-standardized mortality rates (World) in 2018, females, all ages

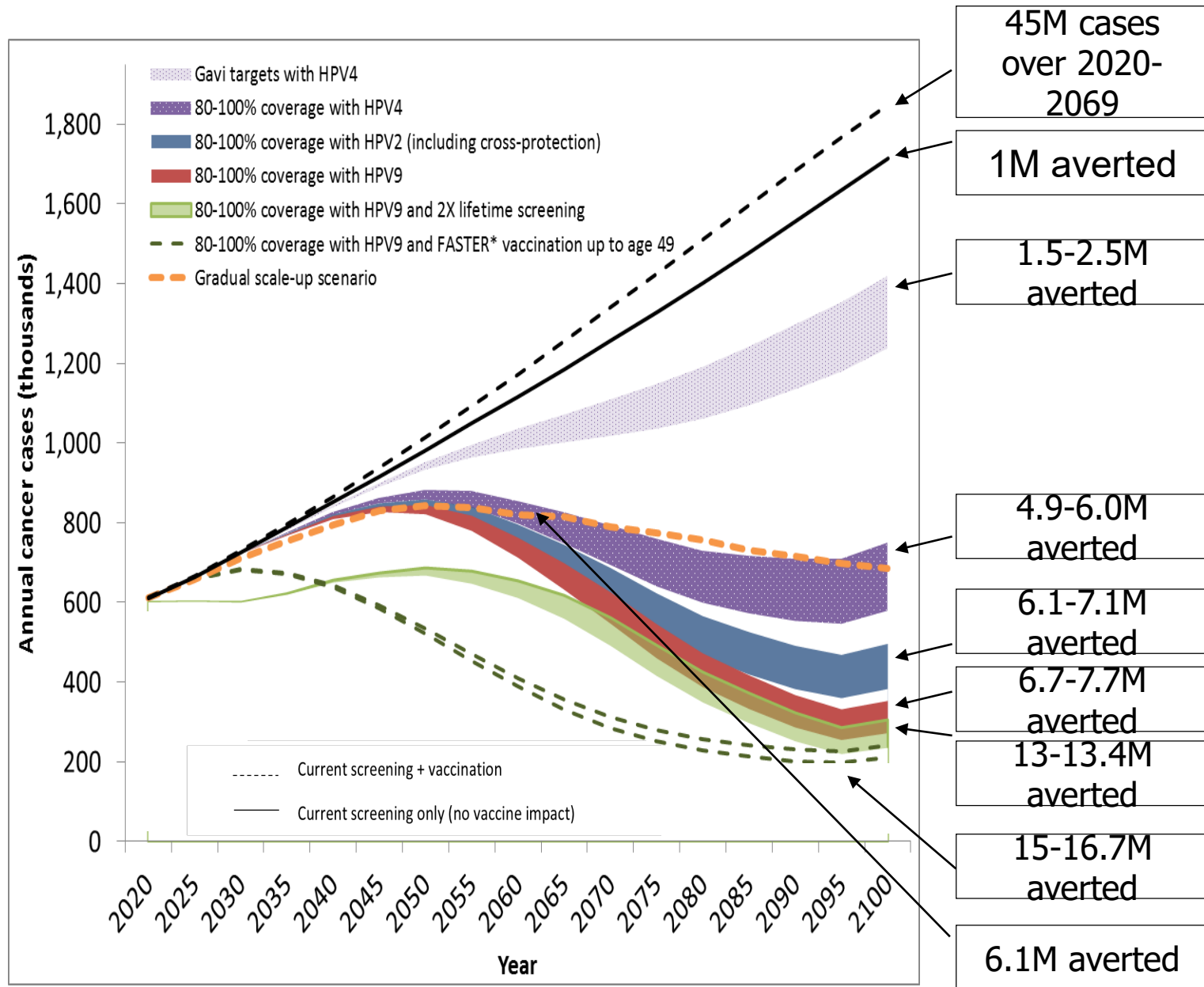


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Data source: GLOBOCAN 2018  
 Graph production: IARC  
<http://gco.iarc.fr/today>  
 World Health Organization



# Projected cervical cancer incidence rates 2020-2100 by HDI



*Simms KT et al, LancetOnc 2019*

# Cancer Stat Facts: Cancer of Any Site

Expand All

Collapse All

## Reports on Cancer

Annual Report to the Nation

Cancer Stat Facts —

Common Cancer Sites

Cancer Disparities

Bladder

Breast (Female)

Colon and Rectum

Kidney and Renal Pelvis

Leukemia

Lung and Bronchus

Melanoma of the Skin

Non-Hodgkin Lymphoma

Pancreas

Prostate

Thyroid

Uterus

More Cancer Types

Cancer Statistics Review, 1975-  
2015 +

## Statistics at a Glance

### At a Glance

Estimated New Cases in 2018	1,735,350
-----------------------------	-----------

% of All New Cancer Cases	100.0%
---------------------------	--------

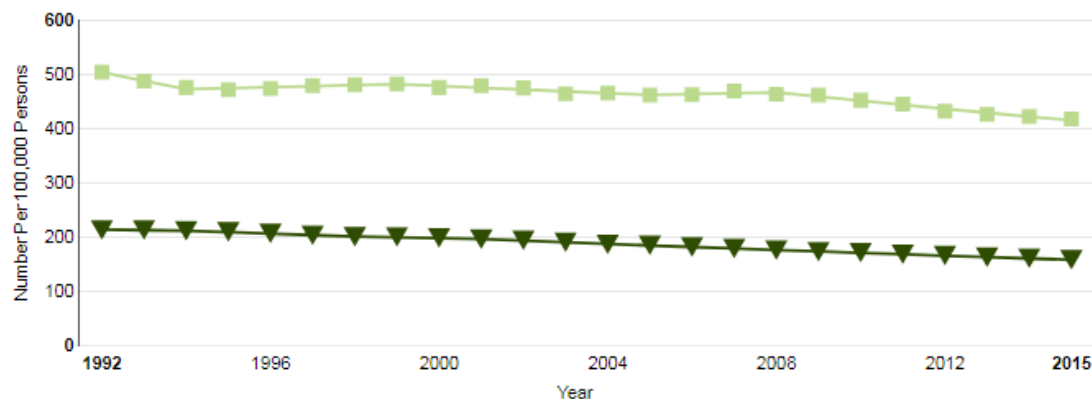
Estimated Deaths in 2018	609,640
--------------------------	---------

% of All Cancer Deaths	100.0%
------------------------	--------

Percent Surviving 5 Years
------------------------------

<b>66.9%</b>
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2008-2014
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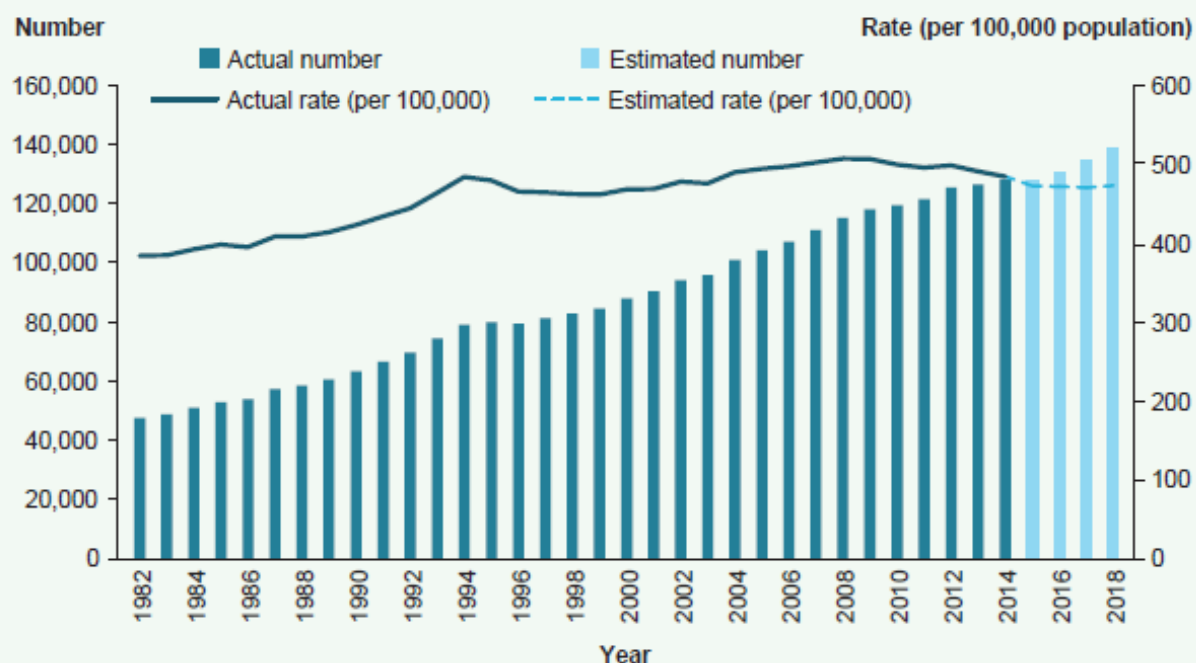
■ New Cases - SEER 13

▼ Deaths - U.S.

Modeled trend lines were calculated from the underlying rates using the [Joinpoint Trend Analysis Software](#).



Figure 3.4.1: Trends in incidence of all cancers combined, 1982–2018



Notes

1. Cancers coded in the International Statistical Classification of Diseases and Related Health Problems, tenth revision (ICD-10) as C00-C97, D45, D46, D47.1 and D47.3, except those C44 codes that indicate basal or squamous cell carcinoma of the skin.
2. The 2015–2018 estimates presented in blue bars and the blue dotted line are based on 2002–2013 incidence data.
3. The rates were age standardised to the Australian population as at 30 June 2001 and are expressed per 100,000 population.

Source: Australian Cancer Database 2014; Table S3.4.1.

# Cancer burden in Japan based on the latest cancer statistics: need for evidence-based cancer control programs

Tomohiro Matsuda, Kumiko Saika

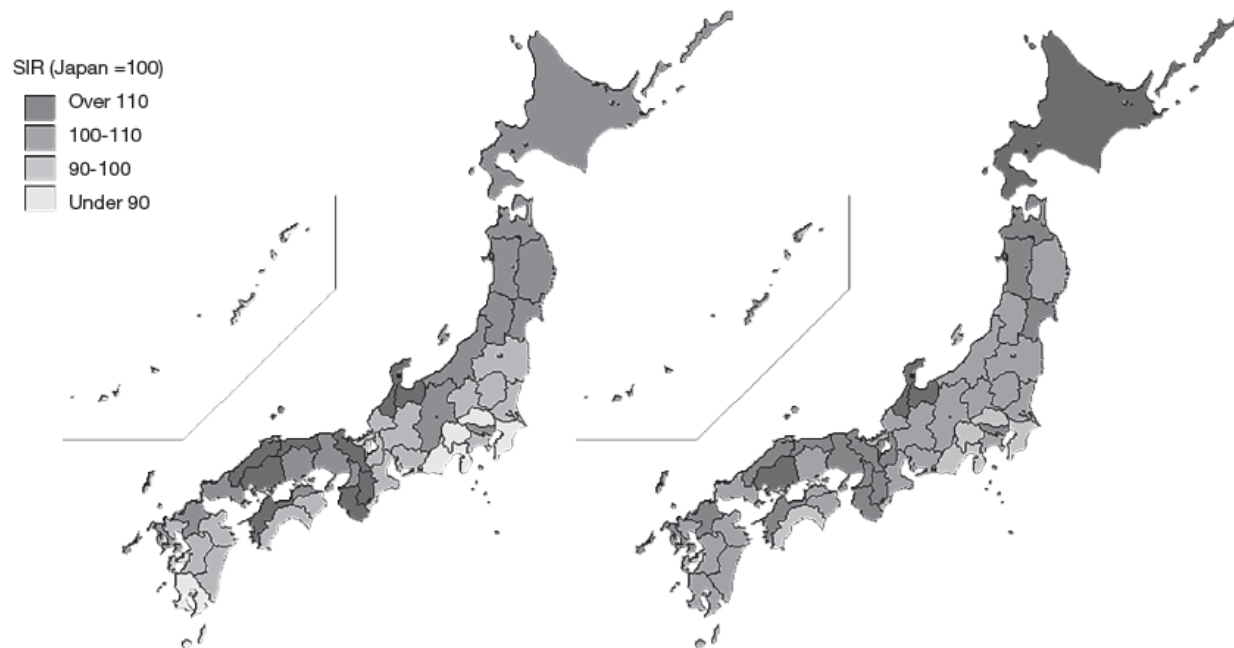
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ace.amegroups.com

*Ann Cancer Epidemiol* 2018;2:2

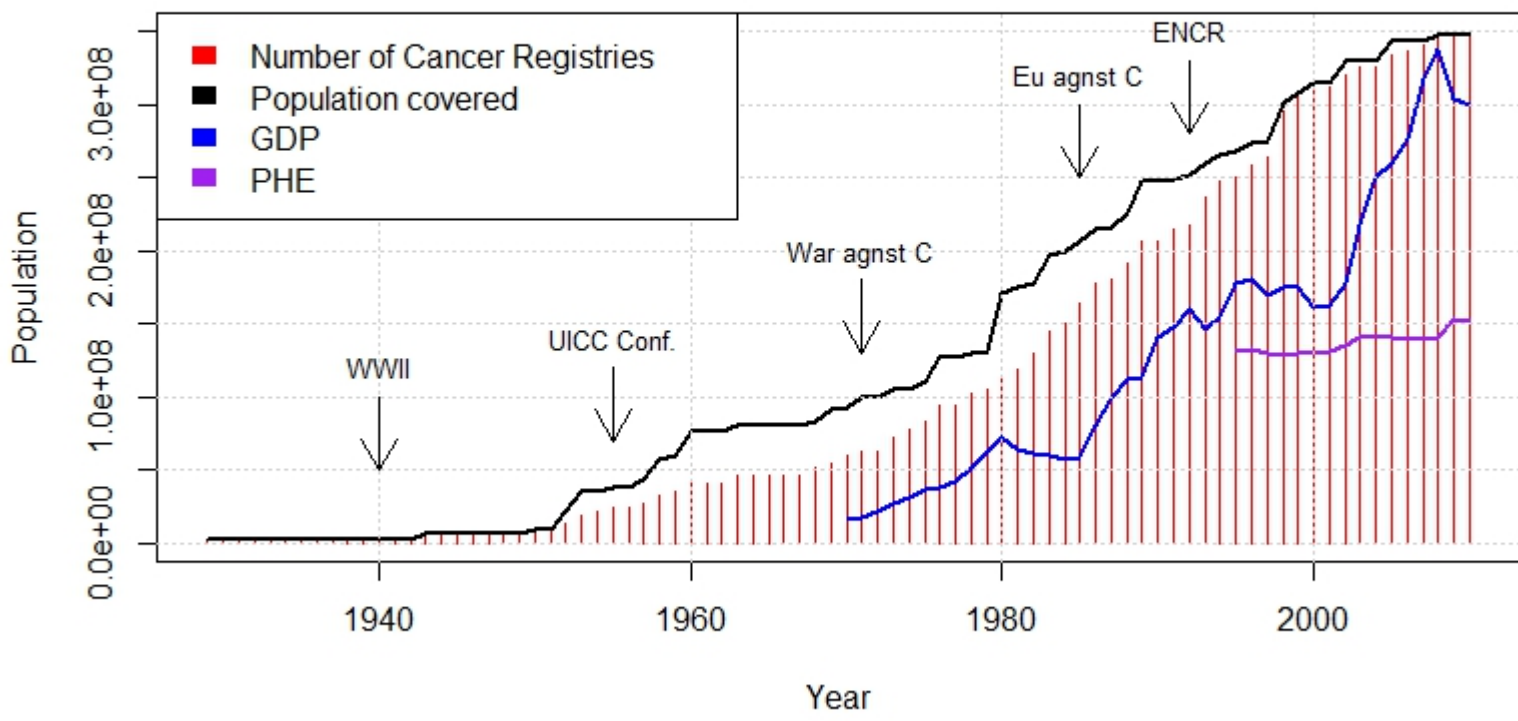
Annals of Cancer Epidemiology, 2018

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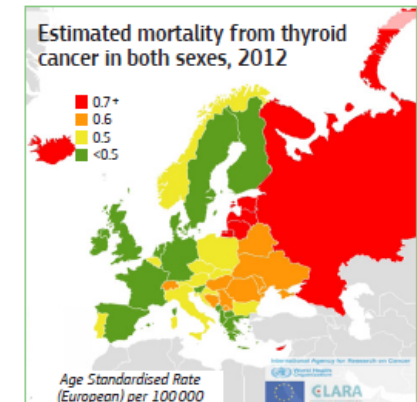
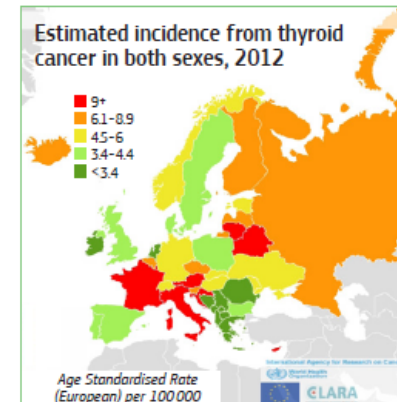
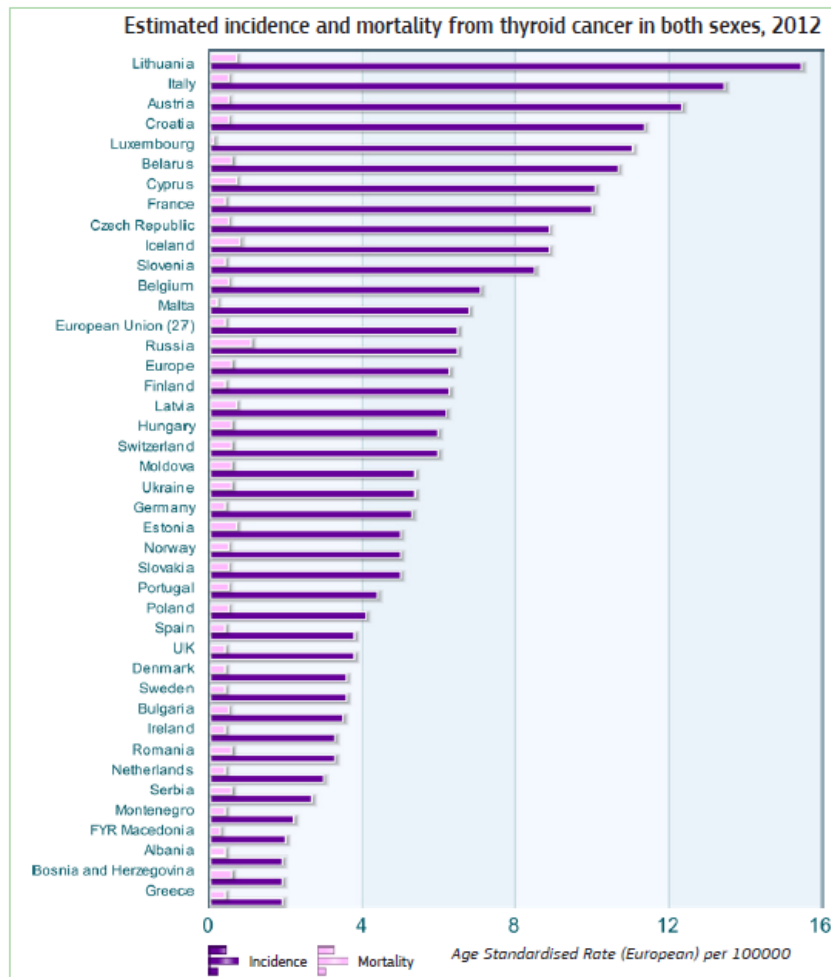


**Figure 3** Geographical disparities of cancer incidence (SIR, left: male, right: female).

## The Epidemic of Cancer Registration in Europe



## Thyroid cancer (TC) Factsheet



- Higher incidence rates of TC are observed in the more developed countries compared with less developed countries; the mortality rates however are the same.<sup>5</sup>

### Gender differences in Europe in 2012\* Estimated incidence and mortality<sup>4</sup>

- Women have a 3-fold higher estimated age standardized rate (ASR-E)\* of incidence than men, with 9.3 and 3.1 cases per 100 000 person-years respectively.
- In terms of mortality the ASR-Es are similar, with 0.7 and 0.5 cases per 100 000 person-years for women and men respectively.

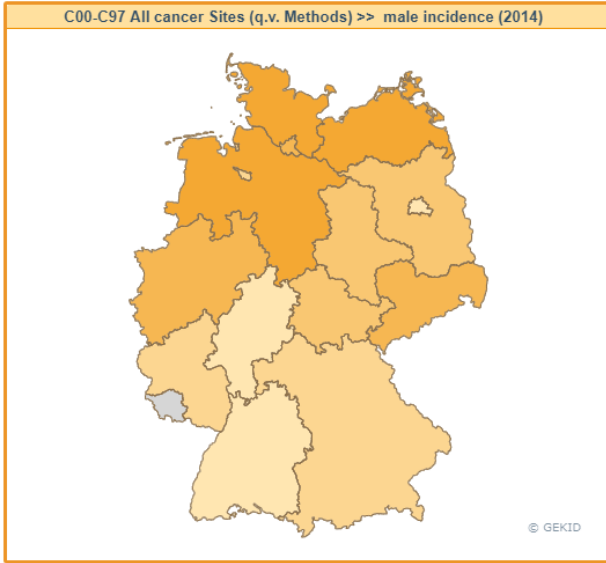
# Association of Population-based Cancer Registries in Germany



Map | Table | Bar Chart | Time Chart

Data as Table | Methods | Survival - Datatable | Menu

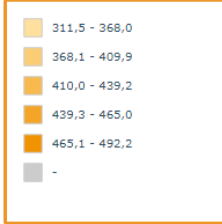
Age-specific data | Data Germany



C00-C97 All cancer Sites (q.v. Methods) >> male incidence (2014)

Indicator	Federal state	No. Cases	Rate/%	Germany	Comparator to German avg. rate
▶ C00-C97 All cancer Sites (q.v. Methods)					
▶ C00-C14 Oral cavity and pharynx					
▶ C15 Oesophagus					
▶ C16 Stomach					
▶ C18-C21 Colon and rectum					
▶ C22 Liver					
▶ C23-C24 Gallbladder and biliary tract					
▶ C25 Pancreas					
▶ C32 Larynx					
▶ C33-C34 Lung					
▶ C43 Malignant melanoma					
▶ C44 Non-malignant skin cancer					
▶ C45 Mesothelioma					
▶ C50 Breast					

Please select a region to display data!



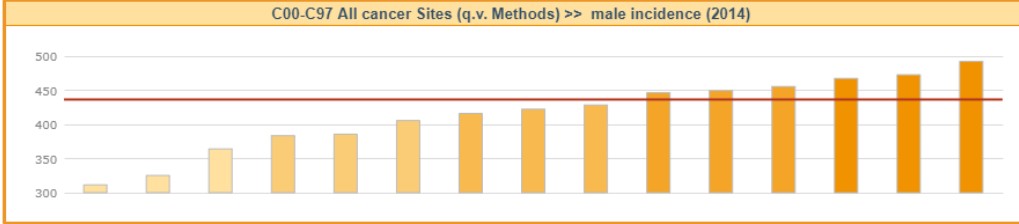
rate = age-standardised rate (European standard population) per 100.000 inhabitants

'-' = No or incomplete data. The number of cases of the Survival rate differs from the number of cases specified under incidence by methodological reasons and will not be shown here.

**Incidence:** number and rate of new diagnosed cases of cancer per year

**Data source:** Cancer statistic (GEKID), population statistic (Federal Statistical Office), date of data: July 2017

The rates are age-standardised. This takes into account variation in the age structures of populations of the federal states to allow comparisons between different areas to be made. The age-standardised rate is calculated per 100.000 inhabitants (of the respective sex). The incidence includes DCO cases (death certificate only). The cancer registries register



1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

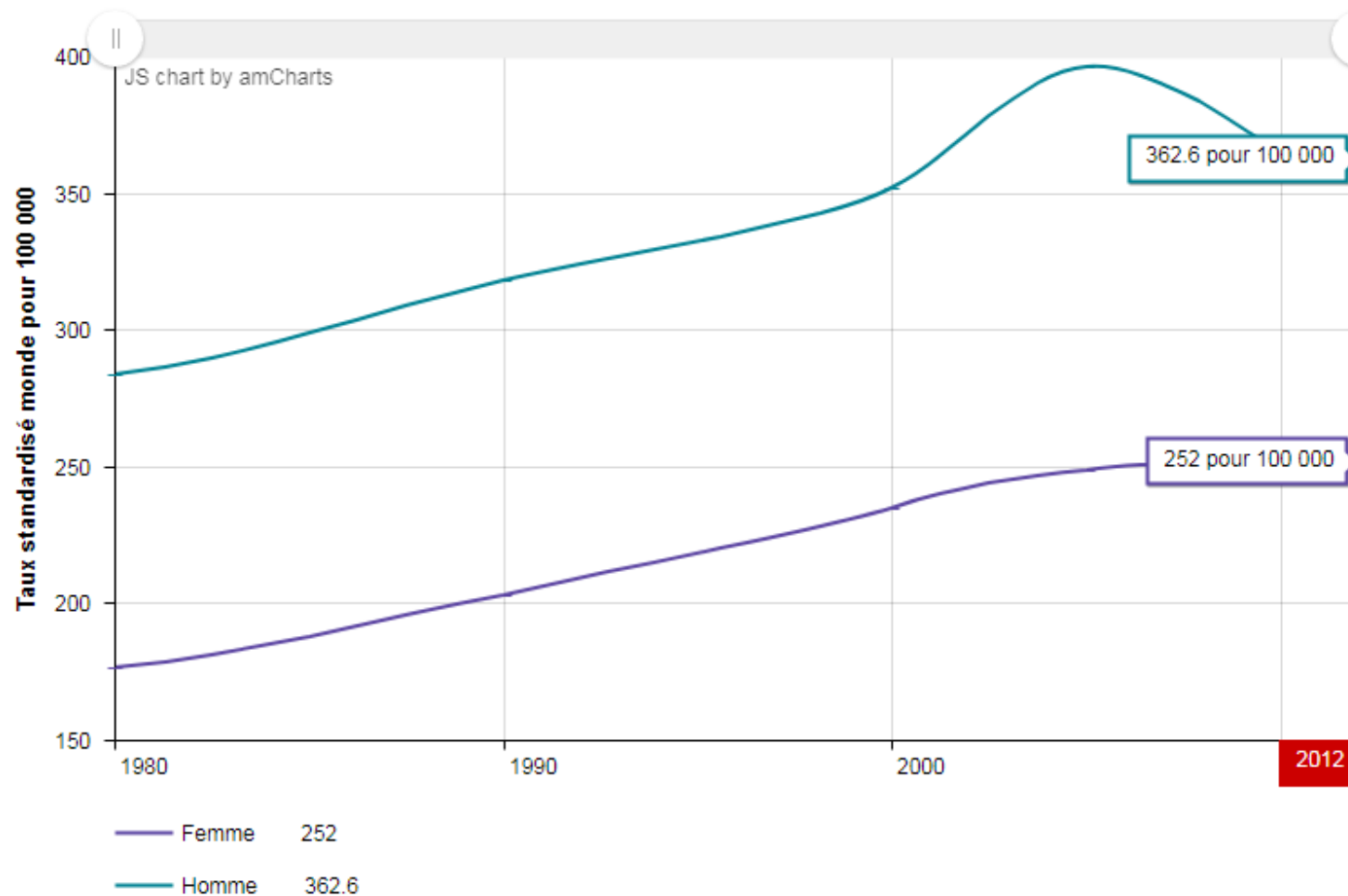




Graphique

Données

### Evolution de l'incidence estimée de l'ensemble des cancers selon le sexe de 1980 à 2012 - Taux standardisé monde (TSM) estimé pour 100 000 personnes-années



## ANCR

- » ANCR
- » Cancer Data
  - » **NORDCAN on the web**
  - » PC-Nordcan
  - » Cancer Survival
  - » Description Nordic Cancer Registries
- » Projects
- » Meetings
- » Summer School
- » News
- » Links

## NORDCAN on the web

NORDCAN presents the incidence, mortality, prevalence and survival statistics from more than 50 major cancers in the Nordic countries

The present version contains:

The NORDCAN database (Version 8.2, 03.2019) link til <http://www-dep.iarc.fr/nordcan.htm>

Data availability

Country	Incidence	Mortality	Prevalence	Survival*
Nordic countries	1960-2016	1953-2016	1980-2016	-
Denmark, national	1943-2016	1951-2016	1963-2016	1967-2016
Denmark, regional	1971-2016	1971-2016	1991-2016	-
Faroe Islands	1960-2015	1983-2013	-	-
Finland, national	1953-2016	1953-2016	1973-2016	1967-2016
Finland, regional	1953-2016	1953-2016	1973-2016	-
Greenland	1968-2016	1983-2016	-	-
Iceland, national	1955-2016	1951-2016	1975-2016	1967-2016
Iceland, regional	1971-2016	1971-2016	1991-2016	-
Norway, national	1953-2016	1953-2016	1973-2016	1967-2016
Norway, regional	1953-2016	1953-2016	1973-2016	-
Sweden, national	1960-2016	1952-2016	1980-2016	1967-2016
Sweden, regional	1970-2016	1970-2016	1990-2016	-

\*Data available by five-year periods

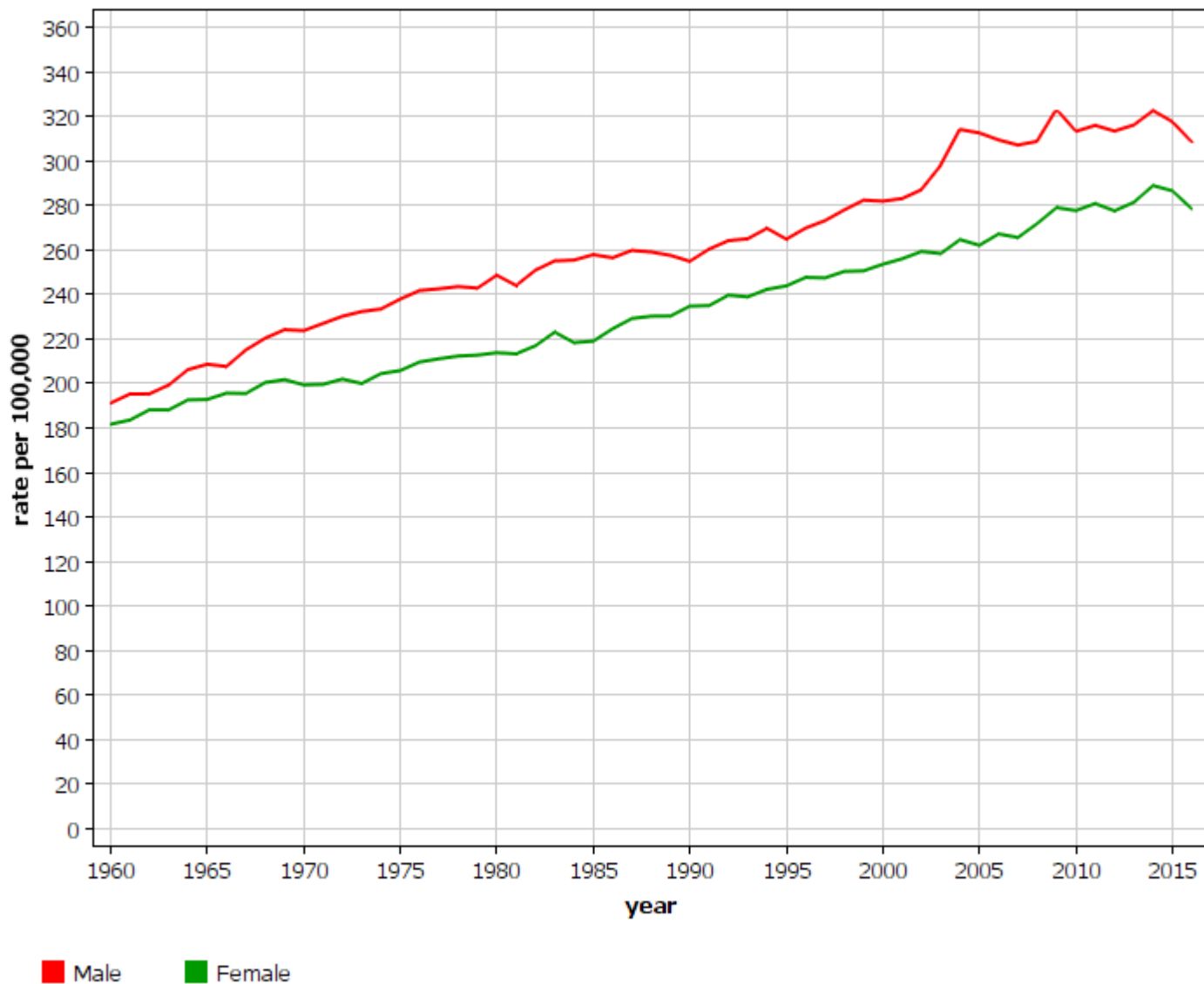


Nordcan on the web

Version 8.2

Updated March 2019

Nordic countries  
All sites but non-melanoma skin cancer  
Incidence: ASR (World) age 0-85+





## Short Communication

## New data tells us more about cancer incidence in North Africa

Roberto Zanetti <sup>a,\*</sup>, Mohammed Adhane Tazi <sup>b</sup>, Stefano Rosso <sup>a</sup>**Table 1a – Incidence rates (per 100,000, age-standardised on world population) of selected cancers in North African Countries, <sup>a–c</sup> compared with the pool of European Registries. <sup>13</sup>**

	Rabat (Morocco) 2005 <sup>3</sup>	Casablanca (Morocco) 2004 <sup>4</sup>	Sétif (Algeria) 1998–2002 <sup>5</sup>	Algier (Algeria) 2006 <sup>6</sup>	Northern Tunisia 1999–2003 <sup>7</sup>	Sousse (Tunisia) 1998–2002 <sup>8</sup>	Sfax (Tunisia) 2000–2002 <sup>9</sup>	Benghazi (Libya) 2004 <sup>10</sup>	Gharbiah (Egypt) 1999–2002 <sup>11</sup>	Pool Europe 1998–2002 <sup>13</sup>
<b>Men</b>										
Average annual population coverage	305,856	1,782,255	684,636	1,478,947	2,382,720	250,500	417,300	832,346	1,857,618	114,072,386
All sites but skin	128.6	100.3 <sup>*</sup>	86.3	143.0	133.2 <sup>*</sup>	146.1	123.7	126.8	156.1	295.2
Nasopharynx	3.4	3.7	5.4	3.7	3.4	4.6	3.8	4.0	1.2	0.5
Stomach	6.7	4.1	7.1	7.9	6.0	5.1	3.9	4.5	3.3	14.7
Colon	3.3	3.8	3.0	8.5	6.0	6.5	6.7	8.7	4.2	22.0
Rectum	3.9	2.8	3.6 <sup>**</sup>	6.3	4.9 <sup>**</sup>	5.1 <sup>**</sup>	4.8 <sup>**</sup>	5.5 <sup>**</sup>	2.1 <sup>**</sup>	16 <sup>**</sup>
Liver	3.2	0.9	1.1	1.2	n.a.	2.2	1.9	4.9	21.9	5.4
Larynx	4.7	5.6	2.8	6.3	6.7	5.7	4.6	5.3	4.2	6.4
Lung	25.9	25.5	19.9	24.2	30.2	37.1	24.6	26.7	14.0	50.0
Prostate	23.3	9.6	7.5	11.2	9.2	14.1	11.5	9.8	8.5	52.5
Bladder	11.3	5.8	4.5	16.7	12.9	19.0	16.9	12.6	27.9	20.5
NHL	7.2	6.1	5.3	n.a.	6.4	6.7	7.6	6.4	16.9	9.6

n.a. not available in the published sources.  
<sup>\*</sup> All sites including skin.  
<sup>\*\*</sup> Rectum, junction and anus.  
<sup>\*\*\*</sup> Rectum and junction.

**Table 1b – Incidence rates (per 100,000, age-standardised on world population) of selected cancers in North African Countries, <sup>a–c</sup> compared with the pool of European Registries. <sup>13</sup>**

	Rabat (Morocco) 2005 <sup>3</sup>	Casablanca (Morocco) 2004 <sup>4</sup>	Sétif (Algeria) 1998–2002 <sup>5</sup>	Algier (Algeria) 2006 <sup>6</sup>	Northern Tunisia 1999–2003 <sup>7</sup>	Sousse (Tunisia) 1998–2002 <sup>8</sup>	Sfax (Tunisia) 2000–2002 <sup>9</sup>	Benghazi (Libya) 2004 <sup>10</sup>	Gharbiah (Egypt) 1999–2002 <sup>11</sup>	Pool Europe 1998–2002 <sup>13</sup>
<b>Women</b>										
Average annual population coverage	327,145	1,833,648	680,852	1,455,244	2,318,400	244,300	403,300	799,705	1,807,906	120,739,480
All sites but skin	109.3	104.2 <sup>*</sup>	80.3	164.0	101.4 <sup>*</sup>	95.5	89.1	102.4	119.3	227.1
Nasopharynx	1.9	0.9	1.7	1.8	1.6	1.9	0.9	1.4	0.4	0.2
Stomach	3.4	3.0	3.1	7.4	3.6	2.5	3.0	2.1	2.0	7.0
Colon	1.8	2.6	2.8	5.9	5.3	6.1	5.3	8.1	2.7	15.6
Rectum	2.8	3.1	3.8 <sup>**</sup>	5.1	4.0 <sup>**</sup>	2.9 <sup>**</sup>	3.8 <sup>**</sup>	4.1 <sup>**</sup>	1.7 <sup>**</sup>	8.4 <sup>**</sup>
Liver	1.2	0.5	0.8	0.1	n.a.	0.7	0.6	2.5	4.5	2.0
Breast	35.8	35.0	18.8	60.5	29.6	29.8	28.0	23.3	42.5	71.5
Cervix uteri	15.4	13.5	11.6	9.5	5.4	7.1	2.3	3.5	2.1	9.4
Ovary	5.2	5.1	2.1	7.3	3.8	3.3	3.7	3.9	5.1	10.8
Thyroid	4.6	4.8	3.6	8.6	3.7	3.1	3.0	3.9	2.6	5.1
NHL	3.2	4.6	3.8	n.a.	4.0	3.7	4.1	4.5	9.9	6.7

n.a. not available in the published sources.  
<sup>\*</sup> All sites including skin.  
<sup>\*\*</sup> Rectum, junction and anus.  
<sup>\*\*\*</sup> Rectum and junction.



**Grazie per l'attenzione**