

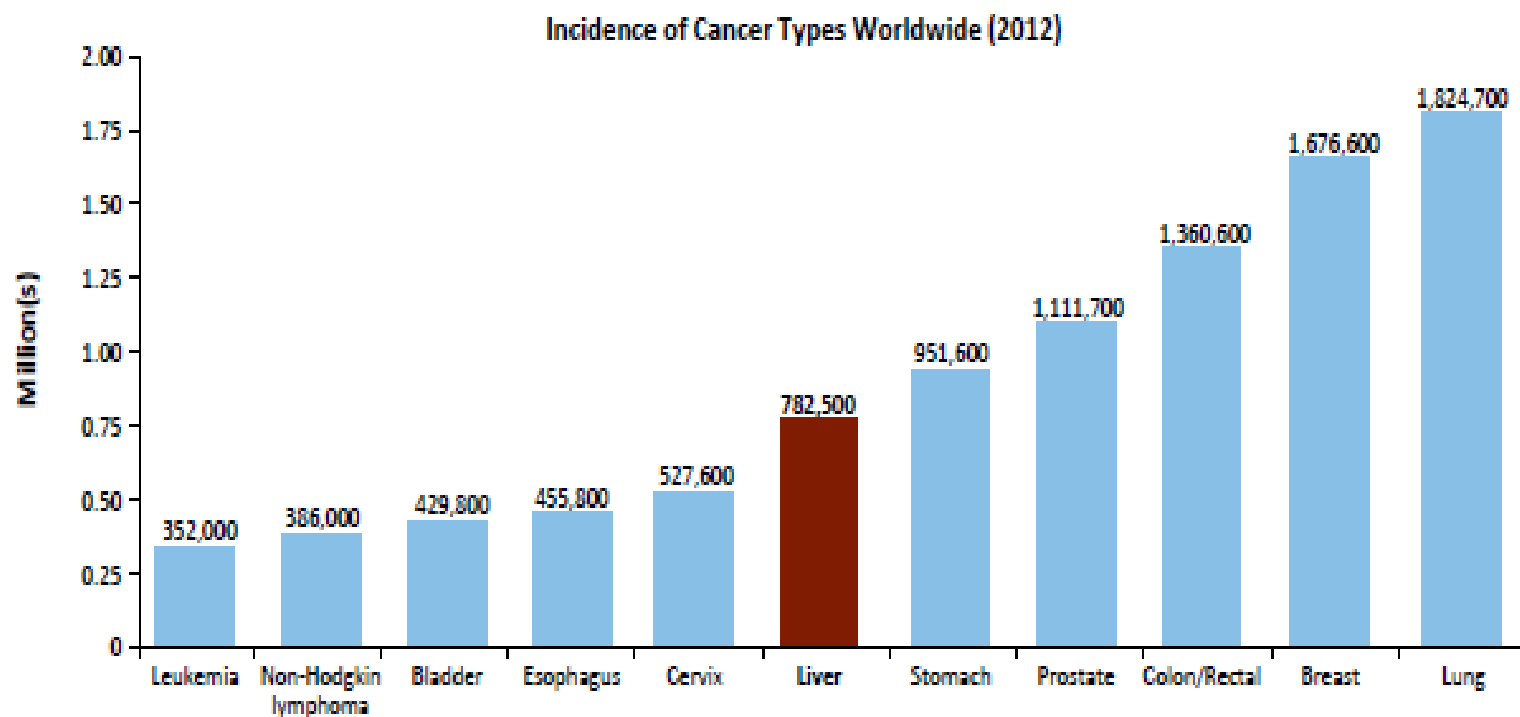


# Epidemiology of hepatocellular carcinoma in East Europe, Middle East and Caucasia: a population – based study.

An OncoBridge Project  
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# Liver Cancer Is the World's 6th Most Common Cancer<sup>1</sup>

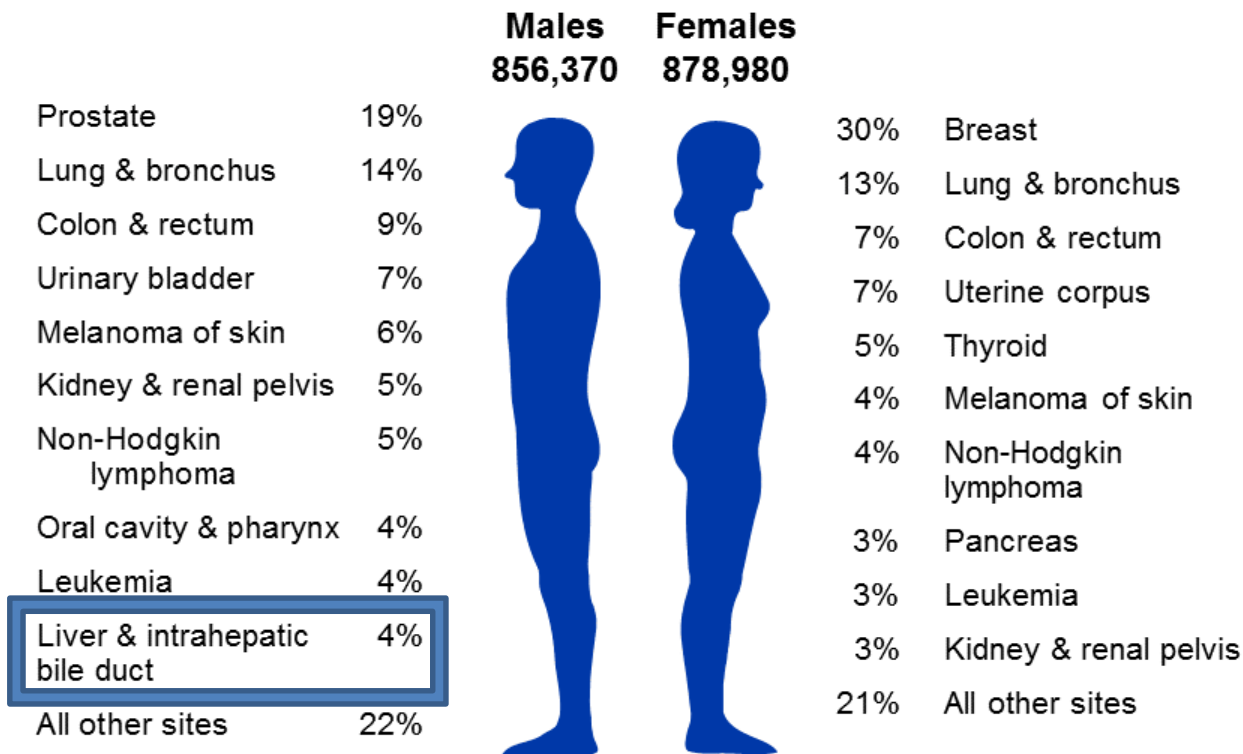
*HCC is the most common primary liver malignancy*



Source: Ferlay J, et al. *Int J Cancer*. 2015;136(5):E359-E386.

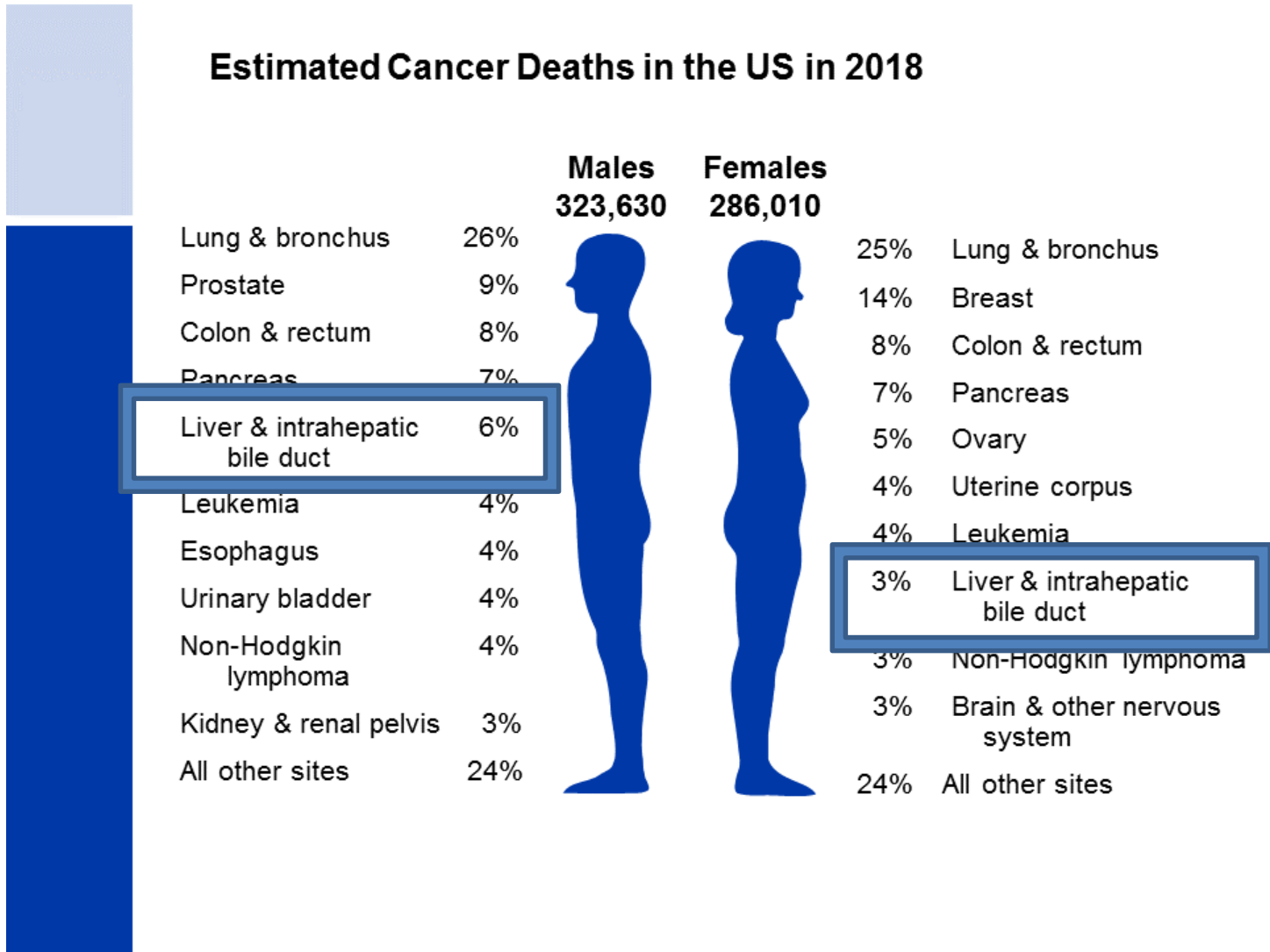
Estimated new cases of cancer for 2012. Incidence data derived from population-based registries collected for 184 countries and territories worldwide. Definitions for cancer types or cancer sites were based on International Classification of Diseases 10th Edition (ICD-10) definitions.

## Estimated New Cancer Cases\* in the US in 2018

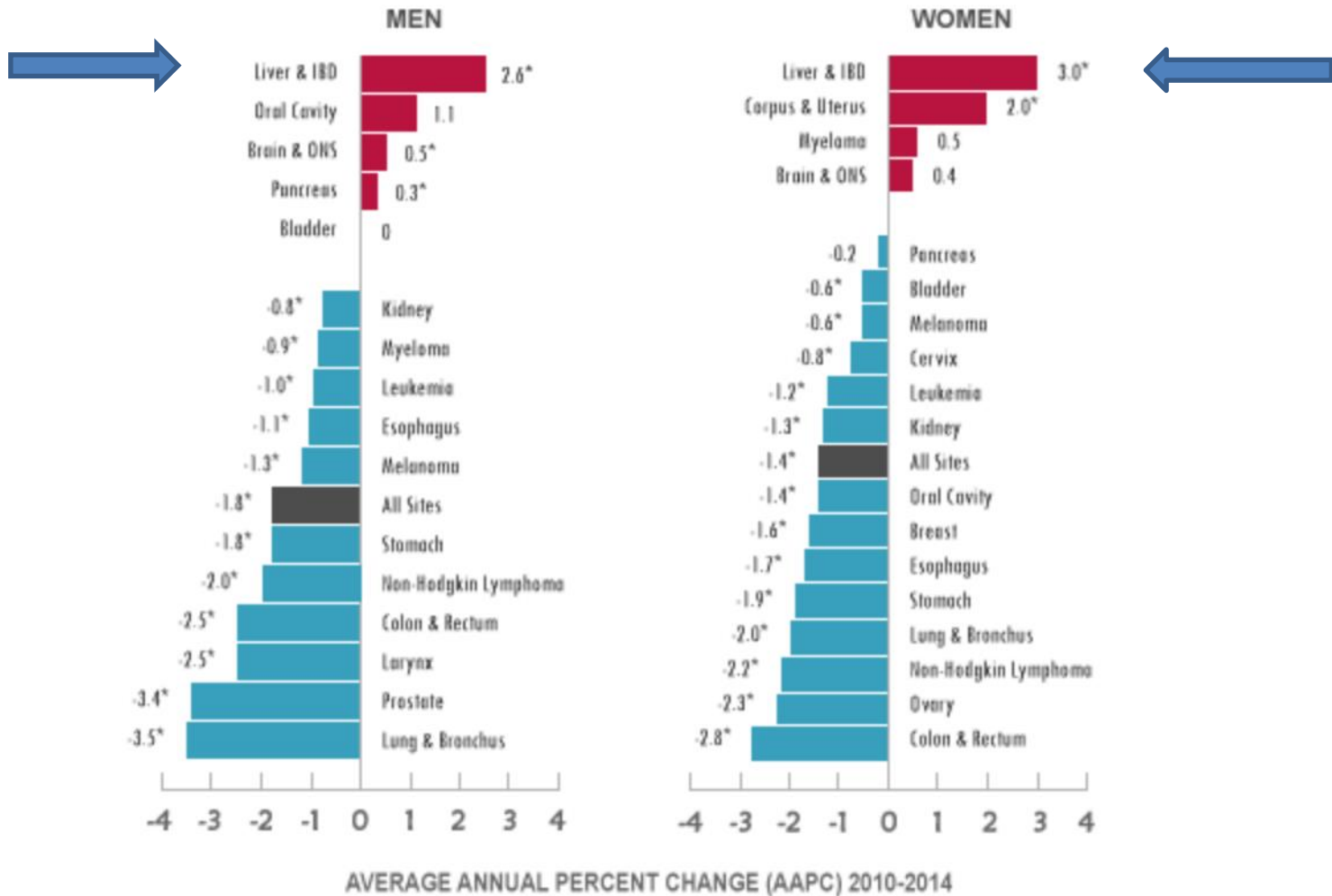


\*Excludes basal cell and squamous cell skin cancers and in situ carcinoma except urinary bladder.

## Estimated Cancer Deaths in the US in 2018



# NATIONAL MORTALITY TRENDS

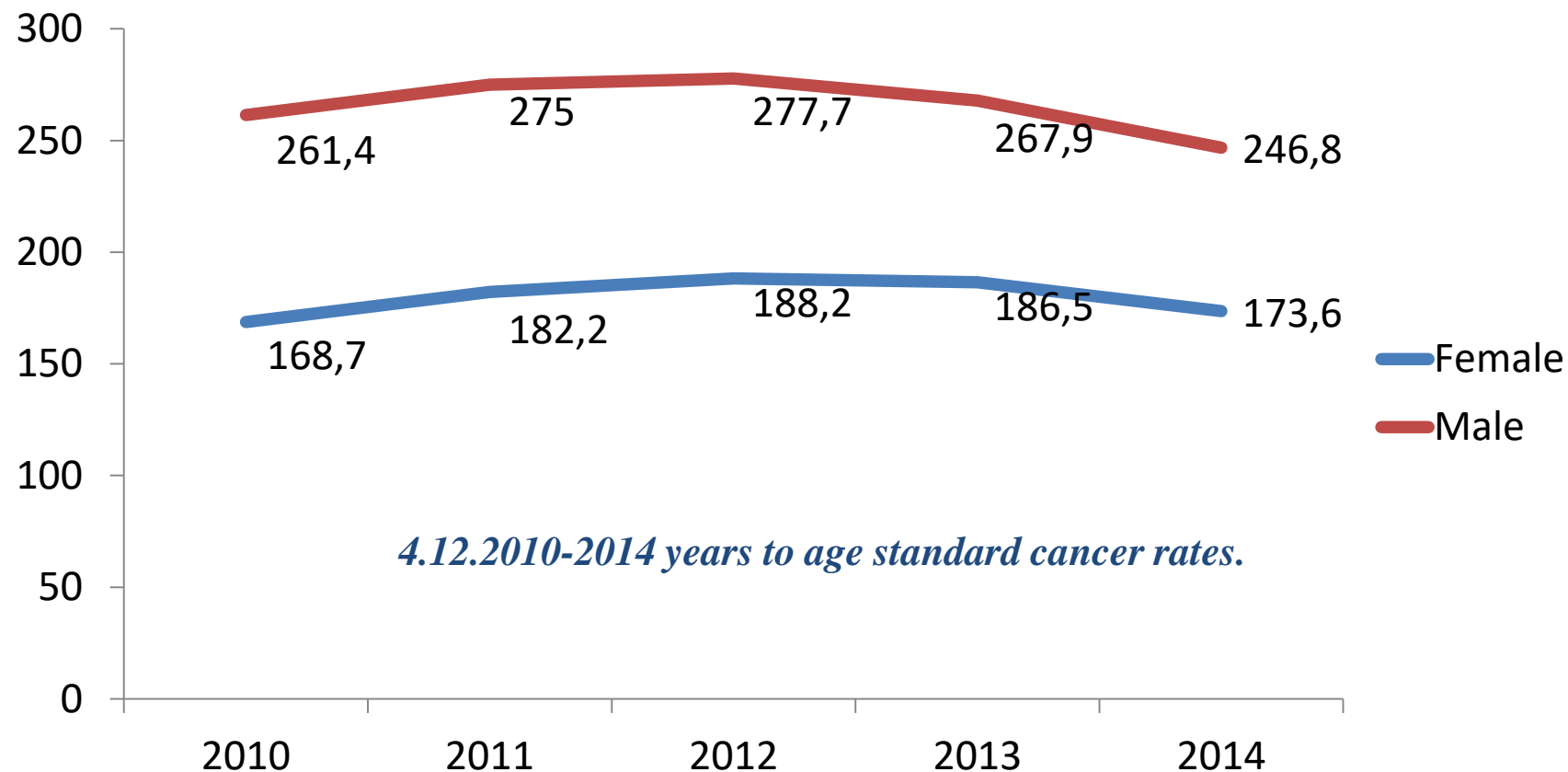


# Cancer Incidence in Comparison to the World

	Male*	Female*
World	204,9	165,2
IARC (24 Members Countries)	235,4	192,1
European Union (28 countries)	311,3	241,4
United States Of America	347,0	297,4
Turkey**	220,3	156,8

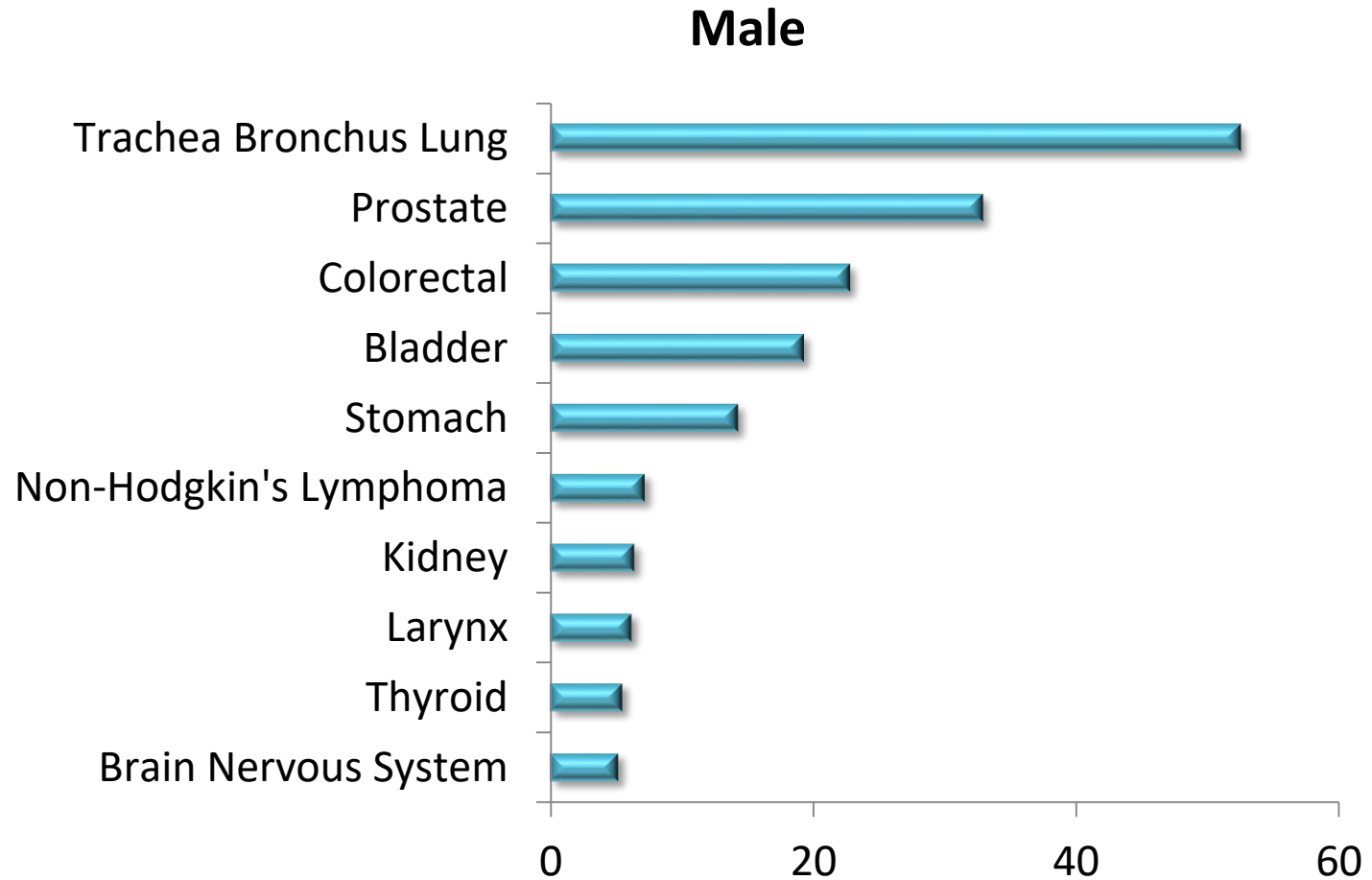


# Age Standardized Cancer Incidence in Turkey 2010-2014



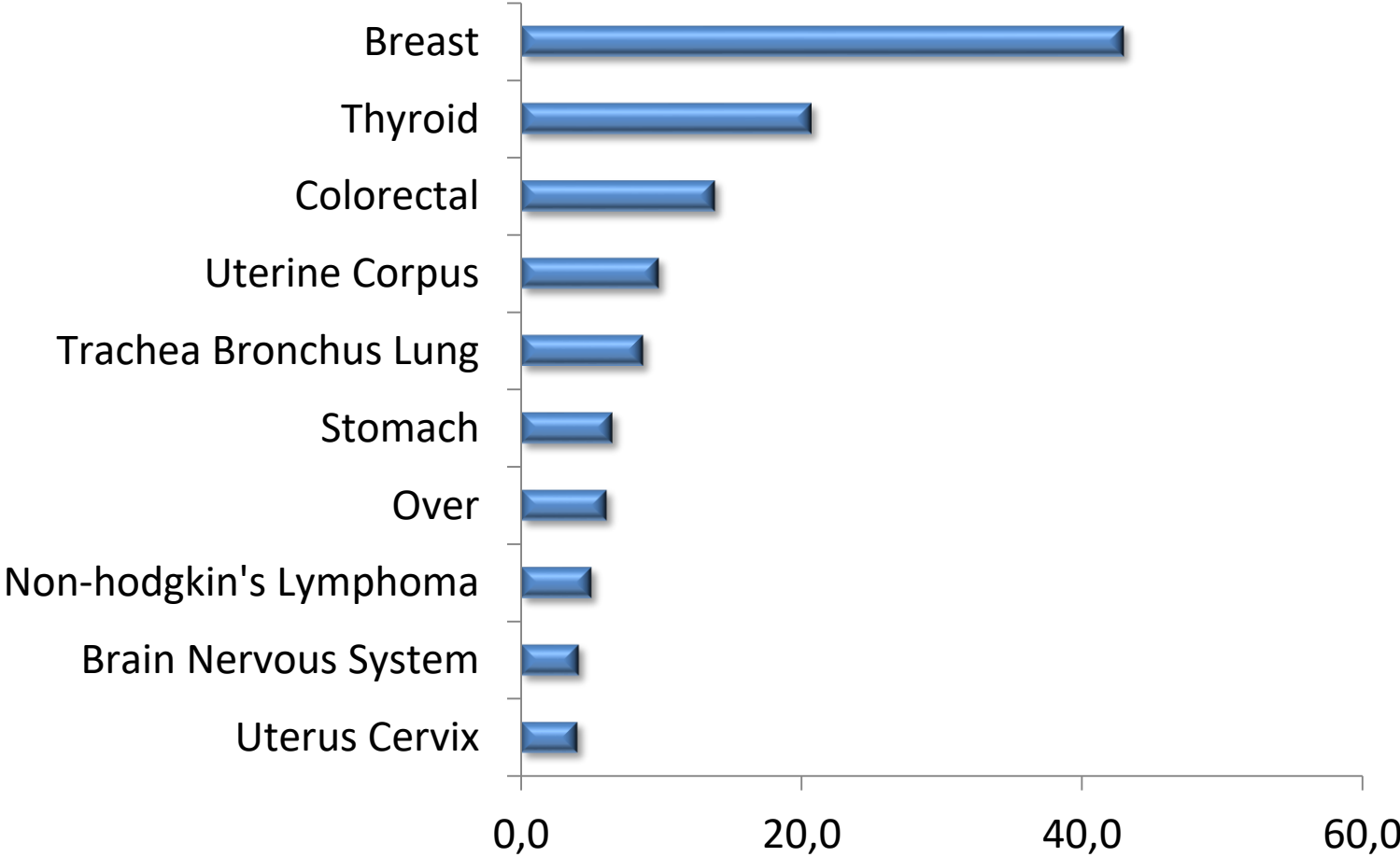
*All cancer incidence standardized incidence rates are declining between 2010-2014 according to sex (turkey unified database, 2010-2014) (world standard population, 100.00 people)*

# Male Cancer Incidence in Turkey





# Female Cancer Incidence in Turkey



# Study Purpose

- Identifying the change of incidence of HCC along the years in the member states.
  - 2008-2018
- Identifying the differences in the course of HCC among the member states.
- To identify the differences of surveillance protocol for HCC in patients with liver cirrhosis among the member states and thus to present a new opinion about screening strategies.

- ***Study Design***

- This will be a multinational, retrospective registry study.

- ***Key Eligibility Criteria***

- HCC diagnosed patients (in-between 2009-2019)

- \* biopsy proven or

- \* if not-biopsied; according to The European Association for the Study of the Liver (EASL) guideline

- ***Primary Objective***

- To analyze the parameters affecting epidemiology and risk factors and efficacy of Sorafenib among the countries involved in the Onco-bridge project.

- ***Secondary Objective***

- Overall Survival
- The differences in the disease course
- Surveillance of high-risk patients for HCC
- Prognostic factors

# Epidemiology Questions

- Country
- The etiology of HCC
  - Hepatitis (B or C)
  - Fatty liver disease (nonalcoholic or alcoholic)
  - Other (Iron overload, alpha-1 antitrypsin deficiency...)
- Gender
- Age

# Risk Factor Questions

- Past history of
  - Diabetes
    - Treatment (OAD, Insulin)
  - Metabolic syndromes
  - Gall stones
  - Cholecystectomy
  - Cirrhosis

# Risk Factor Questions

- Presence of Esophageal varices
- Etoh exposure
- Smoking
- Obesity
- Exposure to Aflatoxin
- Drug use (Statin, aspirin)
- Vit E use
- Family history of HCC

# Laboratory Parameters to be Recorded

- ALT
- Alkalen phosphatase
- Blood group
- Alfa feto protein
- For Child's stage (albumine, INR & Total bil)
- Neutrophil, lymphocyte and CRP (inflammation markers)
- HBV DNA level (at least two levels)
- HBV genotype
- Hbe Ag positivity



# Methodology

- All new radiologically or pathologically proven HCC cases in between the 2008-2018

# HCC diagnosis

- Pathologically &/or
- Radiologically ( European Association for the Study of the Liver guideline)
  - For nodules between 1 and 2 cm
    - 4-phase CT scan and/or dynamic contrast-enhanced MR (radiologic hallmarks of HCC )
    - For excellence centers → only one imaging study
    - Otherwise → bothy imaging study
  - For nodules >2 cm
    - 4-phase CT scan or dynamic contrast-enhanced MR (radiologic hallmarks of HCC )

# Ethics


- This study was approved by the local ethics committee of the University of Manisa Celal Bayar
- Other countries will get approval from their ethics committees

# Centers agreed to share data up to now

- Izmir Katip Celebi University ; Turkey
- Necmettin Erbakan University; Turkey
- Dr Marina Sekacheva; Russia
- Manisa Celal Bayar University; Turkey
- Anatolia Medical Center, Turkey
- Dr Archil Aladashvili, Georgia

Wider participation in the trial

Conclusion

A hand holding a white marker is shown underlining the word "Conclusion". The hand is positioned at the bottom right of the word, with the marker tip touching the underline. The word "Conclusion" is written in a black, sans-serif font and is underlined with a solid black line.



TURKISH ACADEMY OF SCIENCES



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*In pursuit of science for life...*

**Thank You**

