

# Epidemiology and Treatment of Advanced Prostate Cancer in South America

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#### Disclosure

Honoraria: Pfizer, BMS, Novartis, Astellas
Scientific Advisory Board: Janssen, Novartis
Research Grant: Janssen; AstraZeneca, Sanofi-Aventis



- Latin America and the Caribbean characteristics:
- 600 million inhabitants
- 10% of the world's population
- Highest overall <u>Human Development Index</u> rating
- Major Inequalities
- Significant reductions in fertility
- Significant reductions in infant mortality
- Highest life expectancies among developing regions

#### **Overall Cancer Burden in LA**

- Incidence: 1.1M new cancer/year (7.8% world cases)
- Deaths/year: 600.000 cases
- Cancer mortality rates are relatively high
- Contributing factors to inferior outcomes:
- Advanced stage at diagnosis
- Limited access to effective treatment : 54% no health-care coverage
- A sharp rise in cost (currently ~\$ 4billion annually)
- Inequitable Distribution of Cancer Resources



# Public vs. Private Coverage

Population covered by sector

Expenditures by sector

Private 25% Public

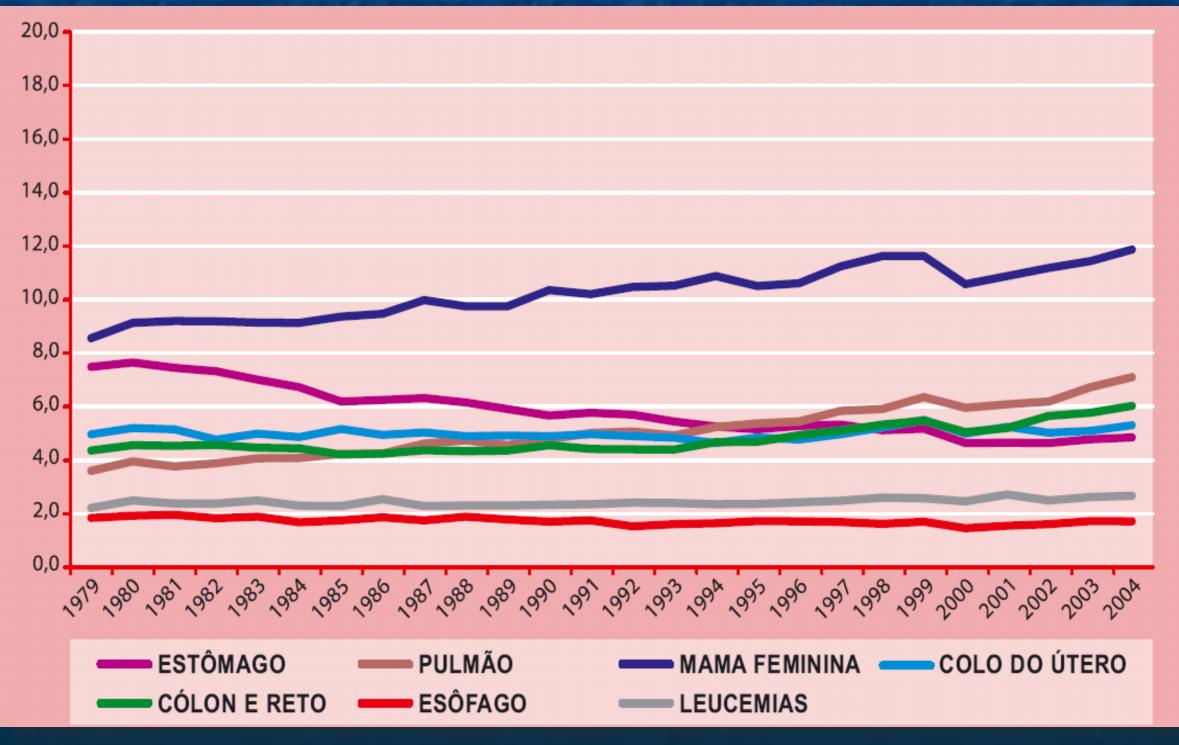
75%

Public 40%

> Private 60%

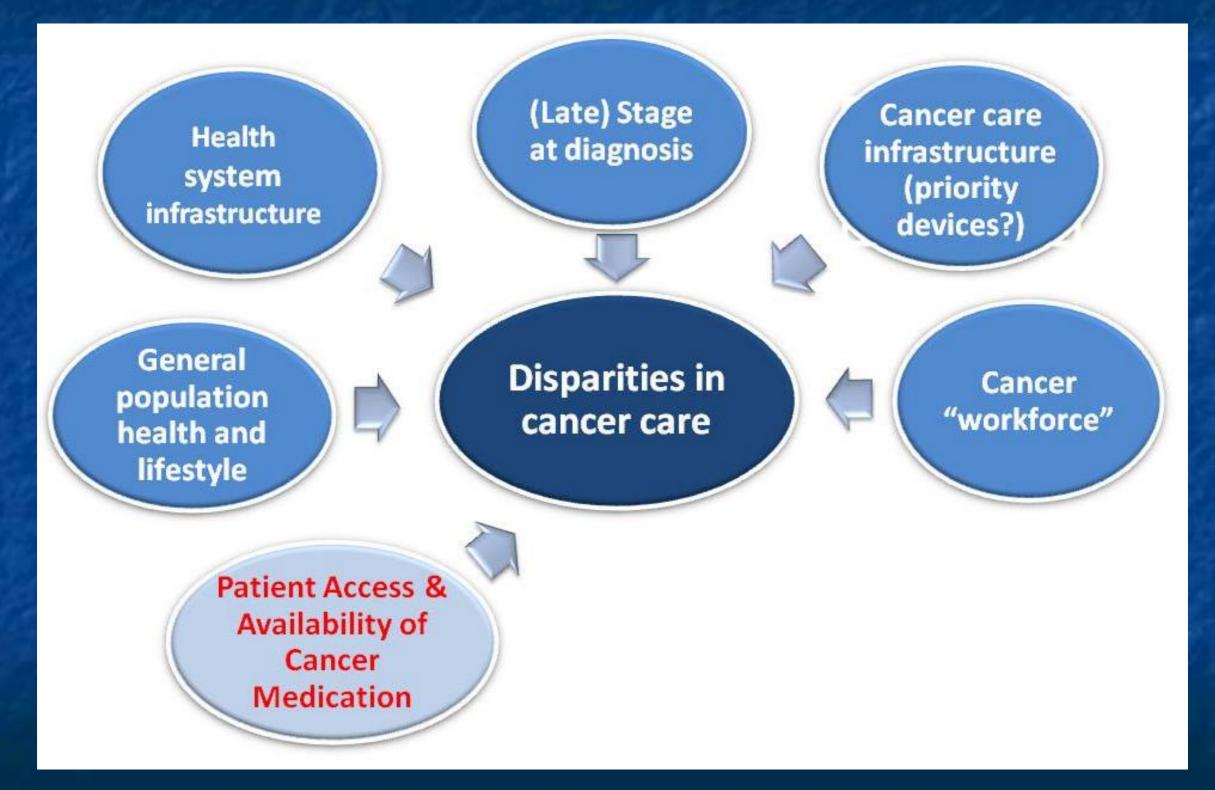
Salud Publica Mex. 2009; 51 (supl 2): 263-269

#### Age-adjusted Mortality Rates, Women. Brazil (1979-2004)



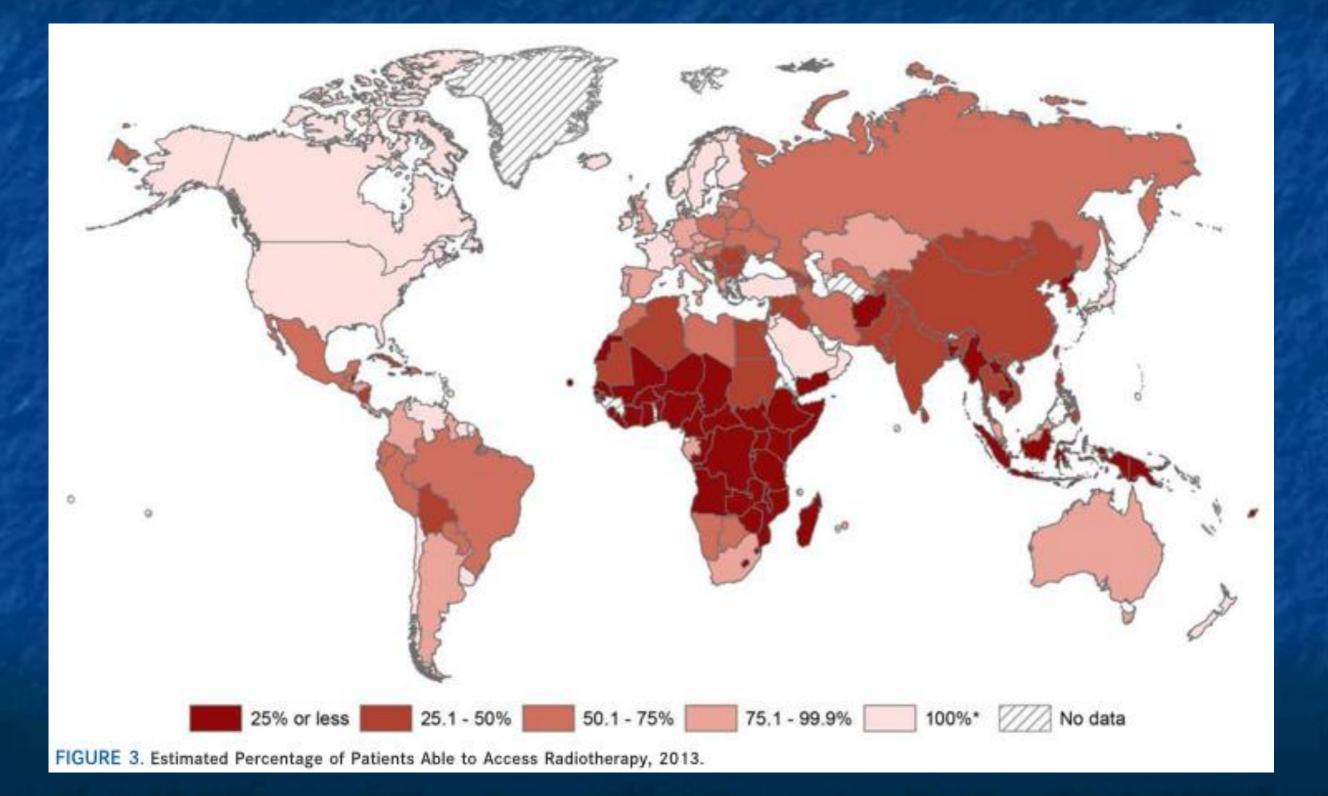
Source, INCA, MS, Brazil

#### **Factors Accounting for Cancer Outcomes Disparities**

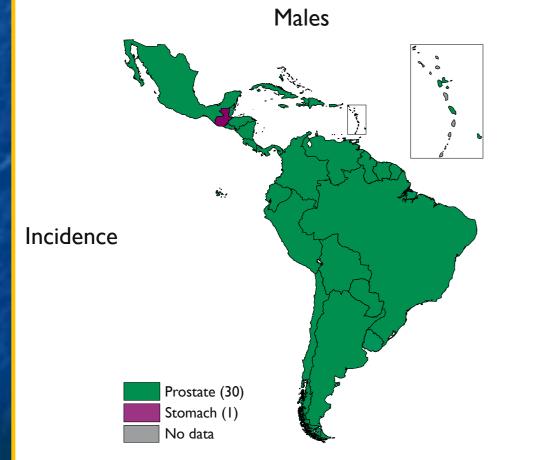


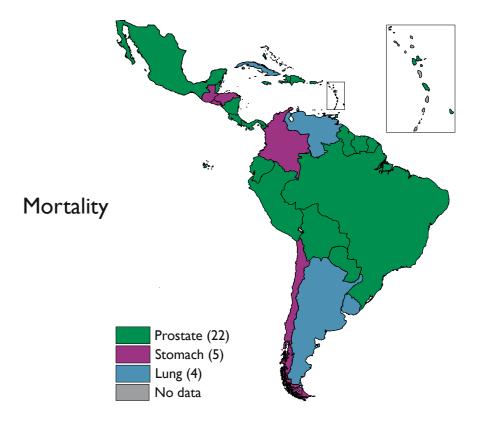
Presented By Alexandru Eniu at 2015 ASCO Annual Meeting

#### Access to Radiotherapy, 2013



# Overall Prostate Cancer Burden in LA 1' 2012 2030 New cases 134,000 249,000 43,000 86,000

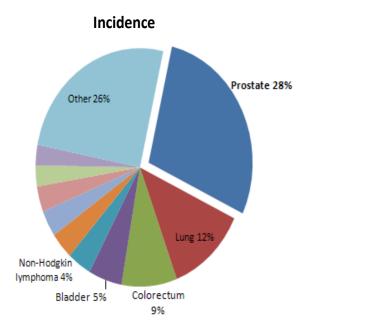


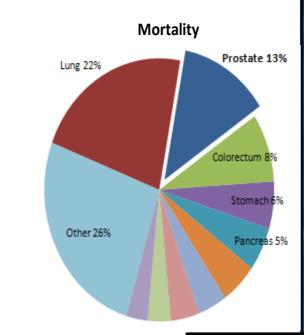


Ferlay J et al. GLOBOCAN 2012 v1.0. http://globocan.iarc.fr.

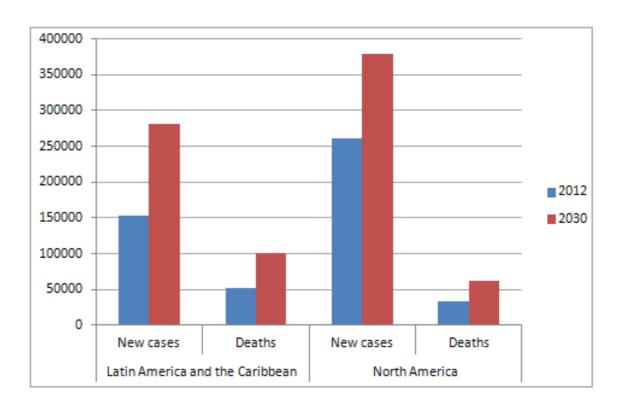
# **Overall Prostate Cancer Burden in LA 2'**

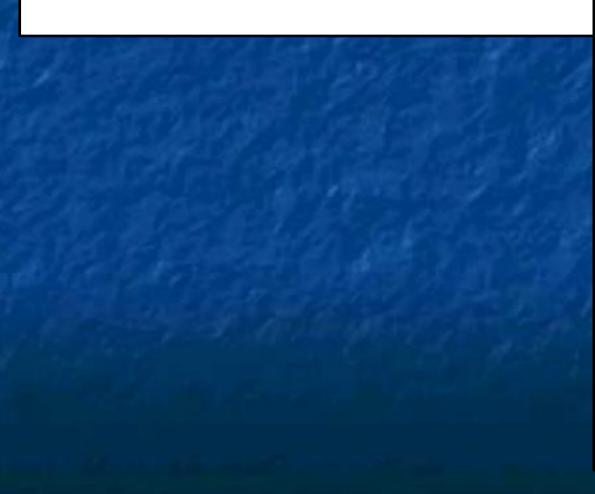
Proportion of new cases and deaths from prostate cancer in the Americas





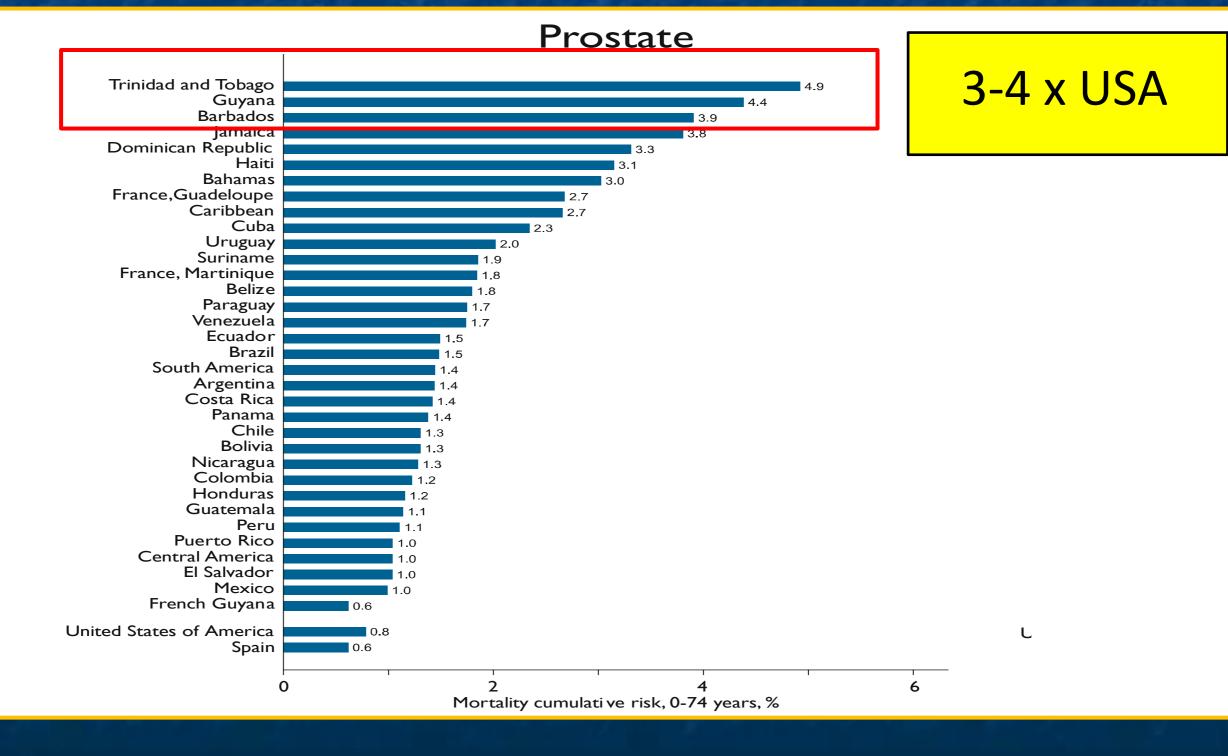
Number of new cases and deaths from prostate cancer in 2012 and 2030





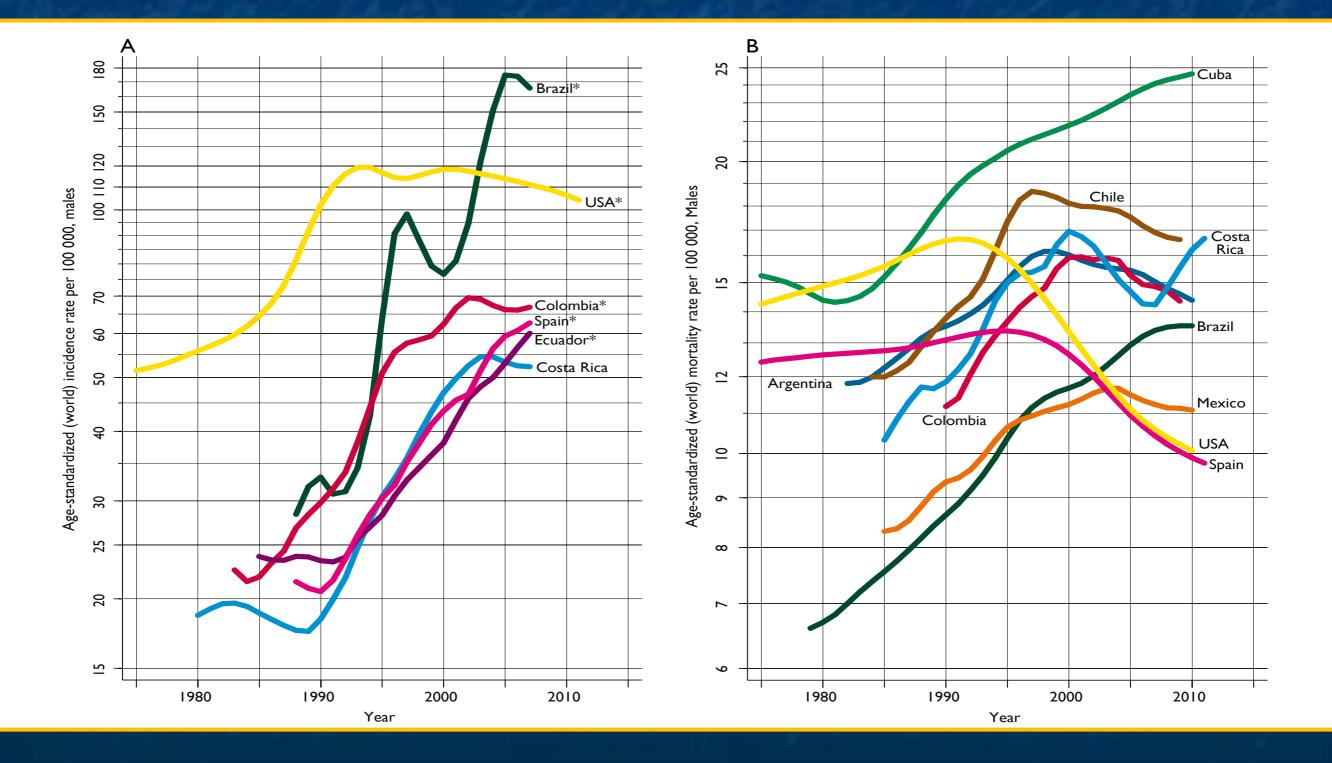
#### GLOBOCAN 2012 v1.0. http://globocan.iarc.fr.

# **Overall Prostate Cancer Burden in LA**



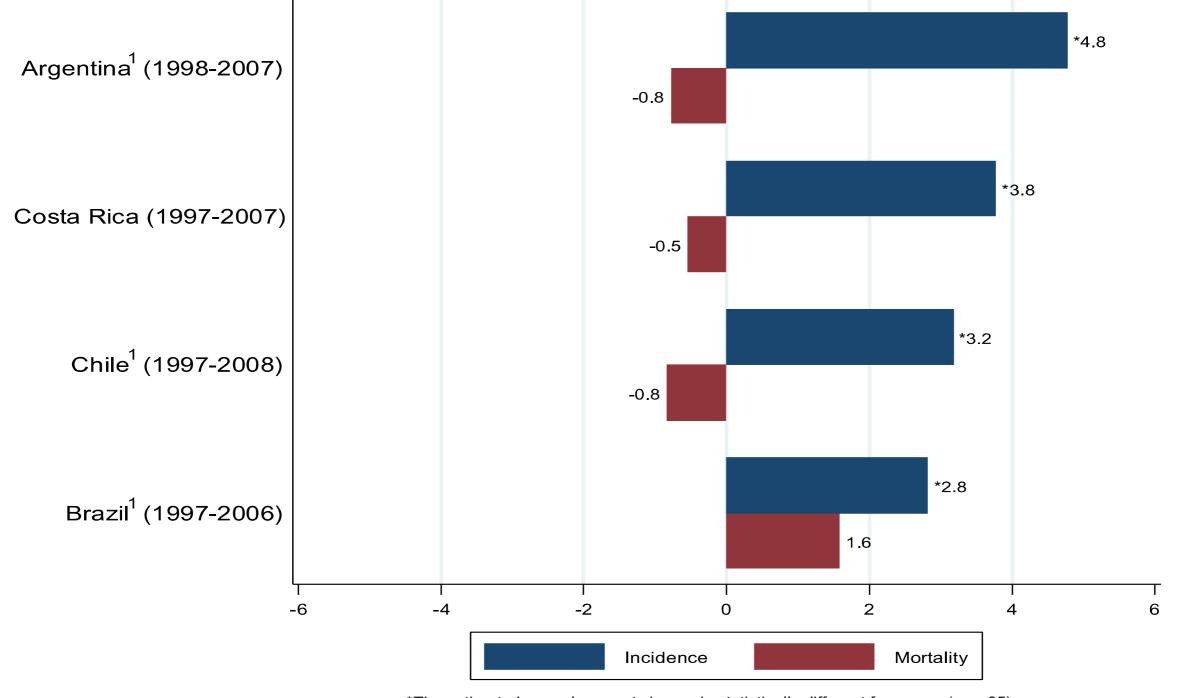
#### Data Source: GLOBOCAN 2012

#### **Trends in Prostate Cancer Incidence**



Data Source: IARC WHO Mortality Cancer Database

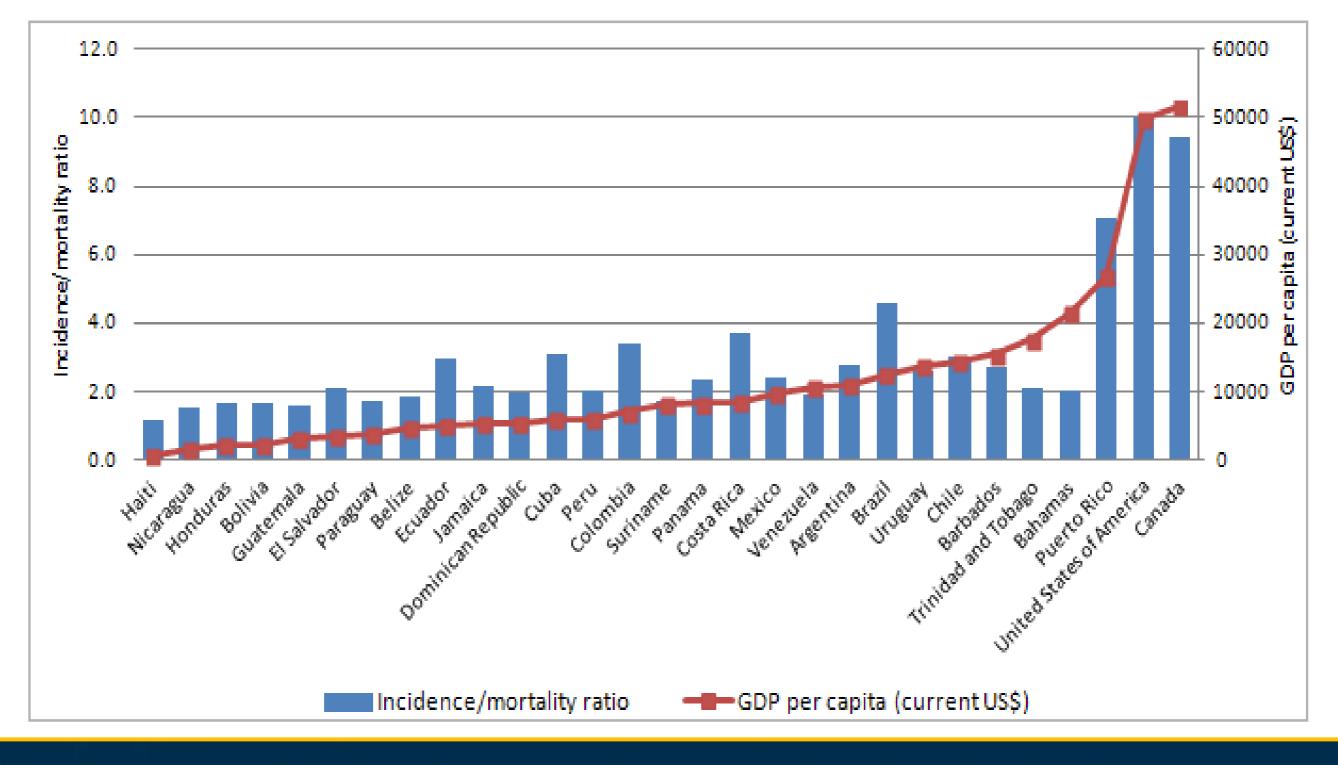
## Trends in Prostate Cancer Incidence and Mortality (all ages per 100.000)



\*The estimated annual percent change is statistically different from zero (p<=.05) <sup>1</sup> Incidence rates were estimated using data from regional cancer registries

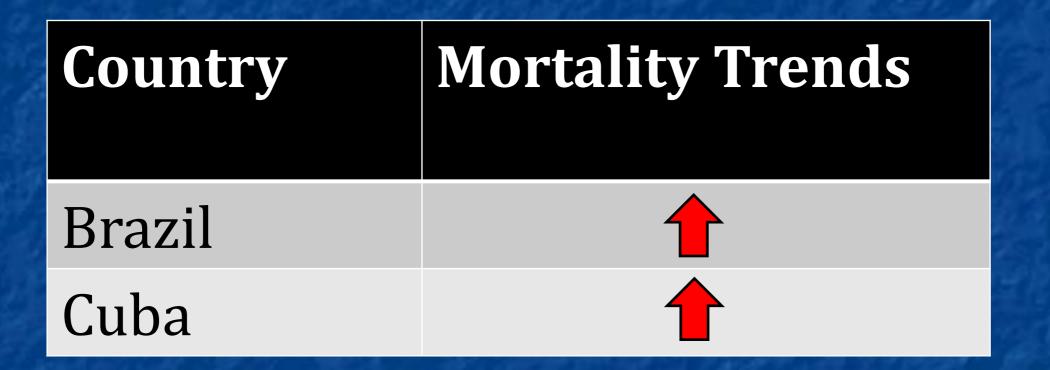
#### Sierra et al. Cancer Epidemiology 44: 131–140, 2016

## Incidence/Mortality Ratio of Prostate Cancer vs GDP per capita



PAHO 2014 2016

# Mortality Trends versus Country



#### Data Source: GLOBOCAN 2012

# Actions to Improve Prostate Cancer Oucomes

- Increase financial resources for cancer control
- Restructure health-care systems
- Optimise oncology workforce to meet regional needs
- Improve technical resources and services for cancer prevention and treatment
- Invest in research and evidence-based cancer care relevant to the region
- Invest in education

*Lancet Oncol* 2015; 16: 1405–38

#### Prostate Cancer Control Programmes

 Countries have recently made PC a priority in their national cancer plans and have developed guidelines for the detection, diagnosis, treatment, and f/u

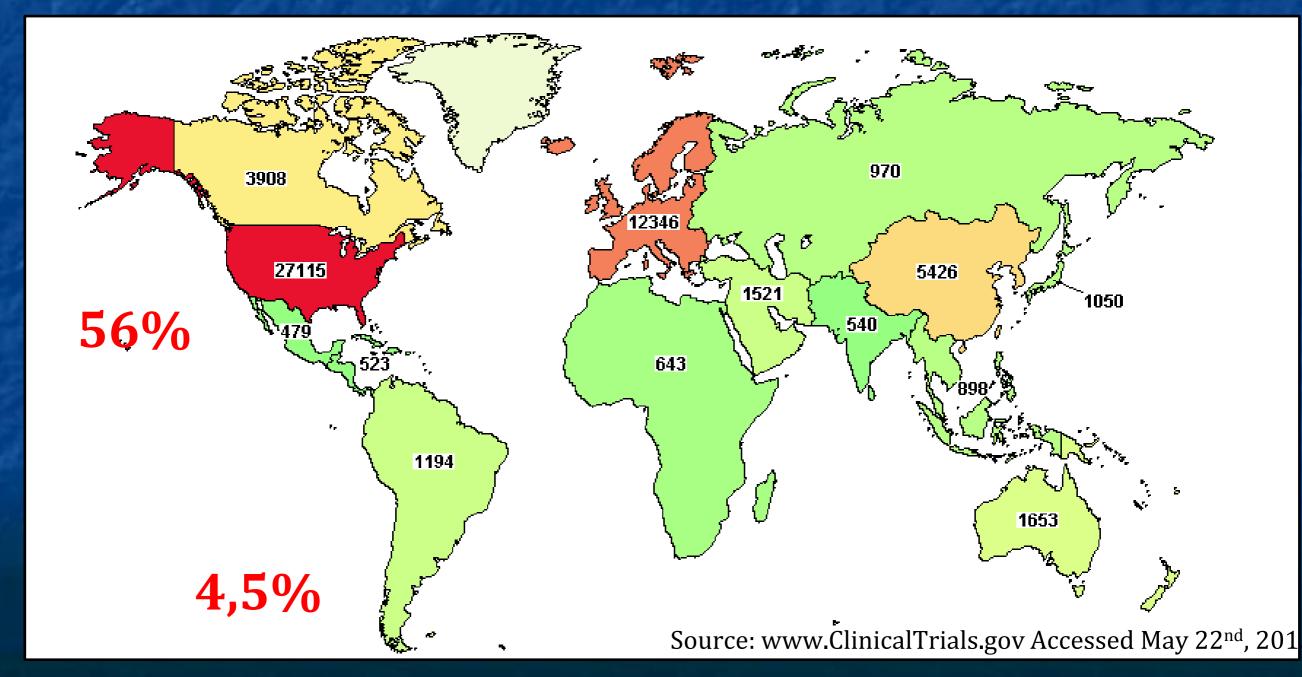
- Brazil (2002),

- Colombia (2013)
- Costa Rica (2011)
- El Salvador (2015)
- Mexico (2010)
- Nicaragua (2010)
- Peru (2010)

Sierra et al. Cancer Epidemiology 44: 131–140, 2016

# CANCER TRIALS (CLINICALTRIALS.GOV)

190,954 studies (190 countries)
48.313 studies in Cancer.



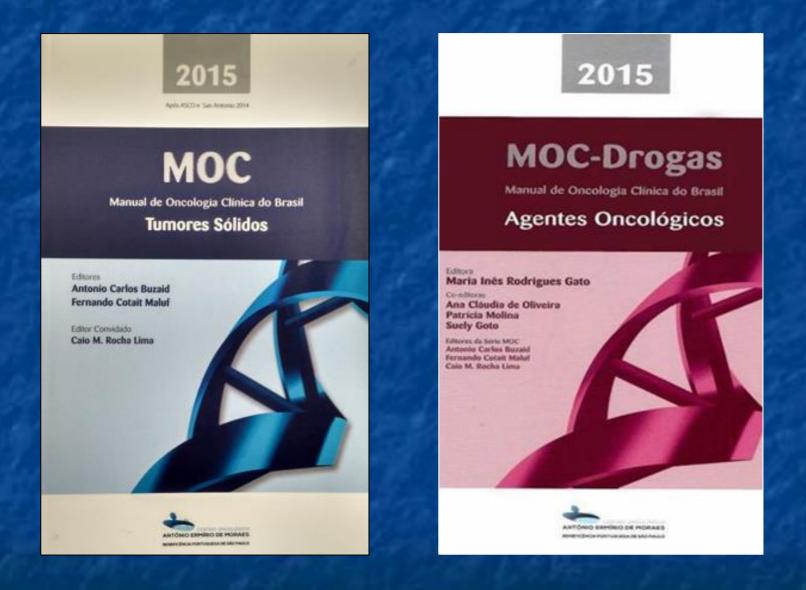


# LATIN AMERICAN COOPERATIVE ONCOLOGY GROUP

#### **Cooperative Groups Worldwide**



#### **Institutional Guidelines**



Manual de Oncologia do Brasil



#### NCCN Prostate Cancer Guideline Version I.2014

#### **Version for Latin America - LACOG Panel of Reviewers**

Meeting 21 February 2014, São Paulo, Brazil



#### NCCN Prostate Cancer Guideline Version 2.2016

#### **Version for Latin America - LACOG Panel of Reviewers**

Meeting 3 March 2016, São Paulo, Brazil



# INSTITUTO VENCER o câncer

#### Beat the Cancer ! Social Institute

www.vencerocancer.com.t

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Comparison</td

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# Thank you