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## Introduction

Cancer is the second cause of death in Brazil (SIM, 2013) corresponding to 16.3% of deaths. Cancers of the breast, prostate, lung, stomach, colorectal and cervical are the most frequent cancer related deaths. The aim of this study was to estimate mortality rates of these tumours according to sex, race / color and region.

## Methods

Population-based study using data from the Mortality Information System (SIM) and demographic data from the 2010 Census.

We selected all deaths from lung, prostate, stomach, colorectal, breast, and cervical cancer occurred in Brazil in 2010. The mortality rates for each cancer, by sex, race and region, were calculated and adjusted by age, using the world population as reference.

Mortality rates ratios were calculated for whites and non-whites (black, yellow, brown and indigenous) by type of cancer, sex and region with 95% confidence interval.

## Results

In the North, the highest mortality rates were observed for cervical (9.3/100,000) and stomach tumors in women (4.6 /100,000). Mortality rates for breast, colorectal and lung cancer were higher among whites than among non-whites. Mortality from cervical, prostate, and stomach cancer (except in the Southern region for stomach cancer) was higher among non-whites. Men presented higher mortality rates for lung, stomach and colorectal cancer compared to women (except in the North and Midwest for colorectal cancer).

### Men - ASR (per 100,00)

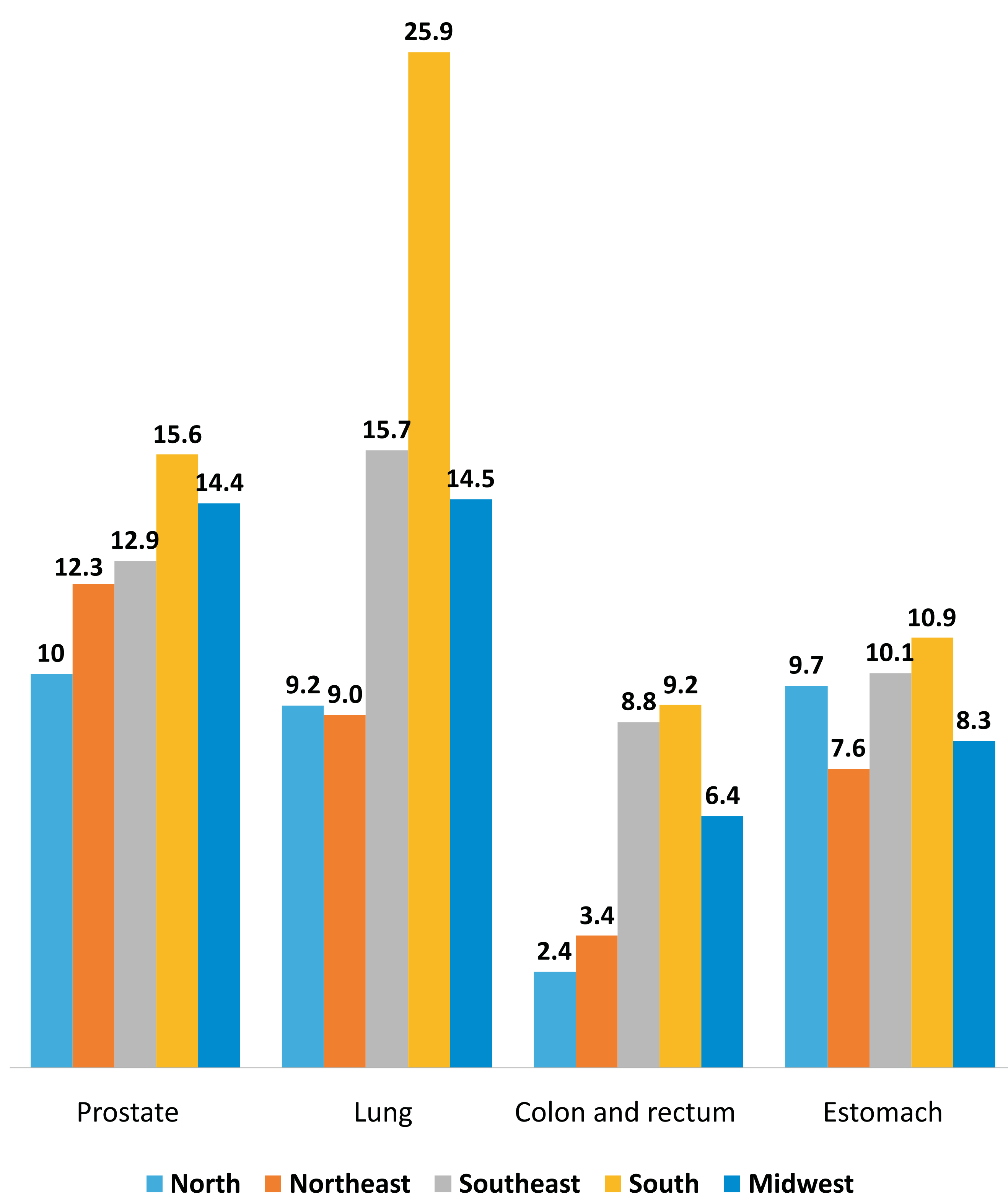


Figure 1: Mortality rates by region and cancer in Brazilian men (2010)

### Women - ASR (per 100,00)

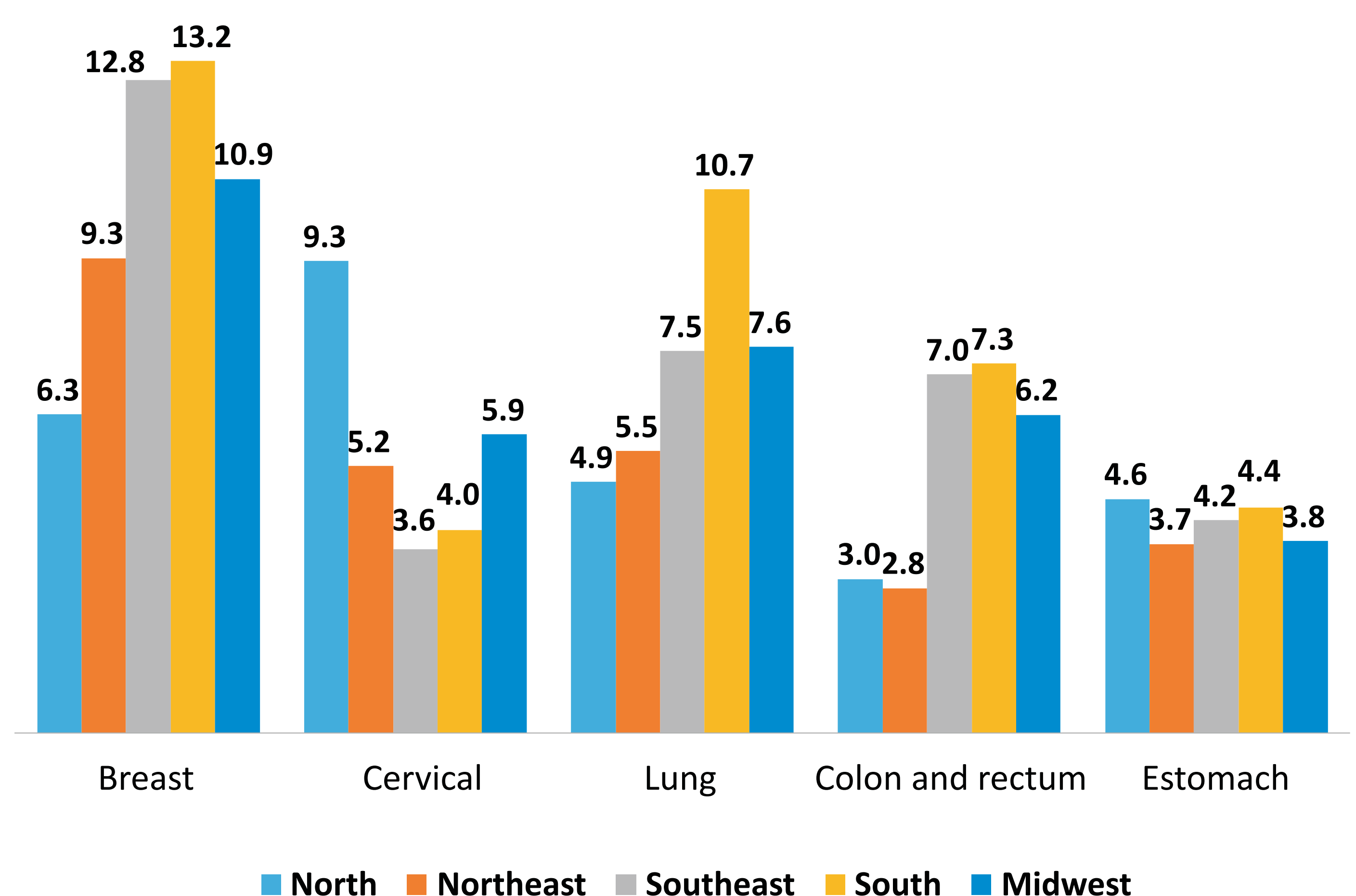


Figure 2: Mortality rate by types of cancer and regions of Brazil in women (2010)

Table 1: Mortality rate ratios –(non white/white) among men, by Brazilian region (2010).

	Prostate	Lung	Stomach	Colorectal
<b>Region</b>	<b>Non white/white</b>			
North	1.2	1.0	1.5	0.8
Northeast	1.0	1.0	1.3	0.5
Southeast	0.8	0.7	1.1	0.7
South	0.6	0.4	0.7	0.6
Midwest	0.7	0.9	1.1	0.8

Table 2: Mortality rate ratios –(non white/white) among women, by Brazilian region (2010).

	Breast	Cervical	Lung	Stomach	Colorectal
<b>Region</b>	<b>Non white/white</b>				
North	0.9	1.8	1.0	1.7	1.0
Northeast	1.0	1.6	1.1	1.1	0.8
Southeast	0.8	1.3	0.8	1.2	0.7
South	0.6	0.7	0.6	0.9	0.6
Midwest	0.7	1.0	0.9	1.0	0.7

## Conclusion

The observed differences between mortality rates show social and regional inequalities present in Brazil and the differences of life styles between men and women. The contribution of incidence and of access to health care in the observed differences needs to be quantified in order to define measures to improve cancer outcomes in the country.