

# Temporal trends of cancer incidence rates for the most frequent cancer sites in Cyprus during 2004-2017

Anastasia Spartiati<sup>1</sup>, Anna Demetriou<sup>2</sup>, Vasos Scoutellas<sup>2</sup>, Costas Christophi<sup>1</sup>, and Konstantinos C. C. Makris<sup>1</sup>

<sup>1</sup>Cyprus University of Technology

<sup>2</sup>Government of the Republic of Cyprus Ministry of Health

July 22, 2023

## Abstract

Cancer is one of the leading causes of morbidity and mortality, worldwide. Little information is available for the temporal trends of cancer in the Mediterranean region, including Cyprus. We aimed to analyze cancer incidence trends overall and by sex for the period 2004-2017 regarding the five most common cancer sites for the population of Cyprus. Data were obtained from the nationwide cancer registry dataset that included 27,017 total cancer cases in Cyprus (2004-2017). We estimated the crude, sex-, and age-specific, as well as age-standardized (ASR) cancer incidence rates and we analyzed the time trends of ASR using the joinpoint regression program. For the general population (0-85+ years of age), the most common cancer sites in descending order, were breast, prostate, lung, colorectal, and thyroid cancer. During the study period, breast and thyroid cancer ASR presented a significantly increasing temporal trend. Lung cancer ASRs seemed to stabilize (no increase or decrease) during the more recent years (2009 onwards) for both sexes; a similar pattern was observed for colorectal cancer in males. The ASRs of prostate cancer in men were in steady decline from 2012 onwards and the same was observed for the female ASRs of colorectal cancer from 2007 onwards. The colorectal cancer ASR temporal patterns overall, during the whole study period appeared unchanged. This temporal analysis would feed into cancer surveillance and control programs that focus on prevention, early detection, and treatment, particularly for cancer sites of higher mortality rates or those with temporally increasing trends.

## Hosted file

main\_ms\_cancersci\_CY2023.docx available at <https://authorea.com/users/642131/articles/656084-temporal-trends-of-cancer-incidence-rates-for-the-most-frequent-cancer-sites-in-cyprus-during-2004-2017>

## Hosted file

Table\_1.docx available at <https://authorea.com/users/642131/articles/656084-temporal-trends-of-cancer-incidence-rates-for-the-most-frequent-cancer-sites-in-cyprus-during-2004-2017>

## Hosted file

Figure 1.docx available at <https://authorea.com/users/642131/articles/656084-temporal-trends-of-cancer-incidence-rates-for-the-most-frequent-cancer-sites-in-cyprus-during-2004-2017>

## Hosted file

Figure 2.docx available at <https://authorea.com/users/642131/articles/656084-temporal-trends-of-cancer-incidence-rates-for-the-most-frequent-cancer-sites-in-cyprus-during-2004-2017>

## Hosted file

Figure 3.docx available at <https://authorea.com/users/642131/articles/656084-temporal-trends-of-cancer-incidence-rates-for-the-most-frequent-cancer-sites-in-cyprus-during-2004-2017>

#### Hosted file

Figure 4.docx available at <https://authorea.com/users/642131/articles/656084-temporal-trends-of-cancer-incidence-rates-for-the-most-frequent-cancer-sites-in-cyprus-during-2004-2017>

#### Hosted file

Figure 5.docx available at <https://authorea.com/users/642131/articles/656084-temporal-trends-of-cancer-incidence-rates-for-the-most-frequent-cancer-sites-in-cyprus-during-2004-2017>