

SEX DIFFERENCES IN INCIDENCE AND SURVIVAL OF LUNG CANCER IN SOUTHEASTERN SPAIN

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INTRODUCTION

Worldwide, lung cancer is the most frequent in men and the second in women. Recently variations in incidence have been observed, with important differences by gender and histology. The objective of this study is to analyze the incidence and survival of lung cancer in Murcia Region.

METHODS

Data come from Murcia Cancer Registry, population based. Period 1983-2018. Number of cases, incidence and age-standardized incidence rates to European population per 100,000 are calculated by sex. Joinpoint regression was used to detect changes in incidence trend with the annual percent change (APC). Age-standardized incidence rate by histological group (WHO 2021) was obtained for 1983-1990, 1991-2000, 2001-2010 and 2011-2018, and adjusted Net survival (NS) at 5 years from diagnosis for 2000-2007 and 2008-2015

RESULTS

In 1983-2018, 15691 cases in men and 2311 in women were diagnosed. Annual percent change (APC) in men was 1.04% in 1983-2004 and -1.06% in 2004-2018, and in women of 4.34% in 1983-2018. In 1983-2018 the most histological group diagnosed in men was squamous cell carcinomas (30%), followed by adenocarcinomas (23%) and lung neuroendocrine neoplasms (17%), and in women adenocarcinomas (47%), lung neuroendocrine neoplasms (16%) and squamous cell carcinomas (11%). The age-standardized incidence rate of adenocarcinomas raised from 8.0 in 1983-1990 to 23.8 in 2011-2018 in men, from 1.4 to 8.2 in women, and lung neuroendocrine neoplasms in women from 0.2 to 3.4. Net survival at 5 years increased from 2000-2007 to 2008-2015 from 11.7% to 17.1% in men and from 15.1% to 24.8% in women.

Figure 1. Annual percent change (APC) in lung cancer age-standardized incidence rate by sex. Region of Murcia, 1983-2018

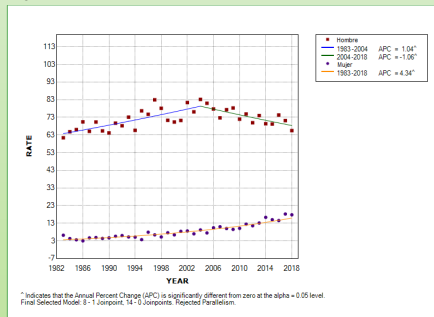


Figure 4. Specific incidence rate by age group per 100,000, biennial average, of lung cancer, by sex. Region of Murcia, 1983-2018.

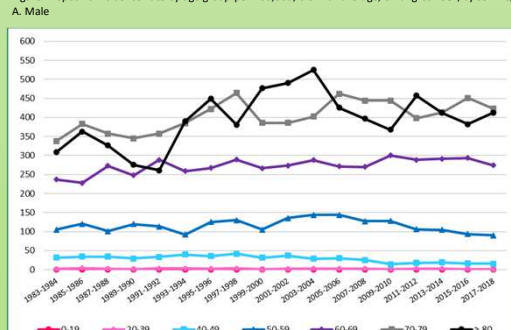


Figure 2. Number of cases of lung cancer, by sex. Region of Murcia, 1983-2018

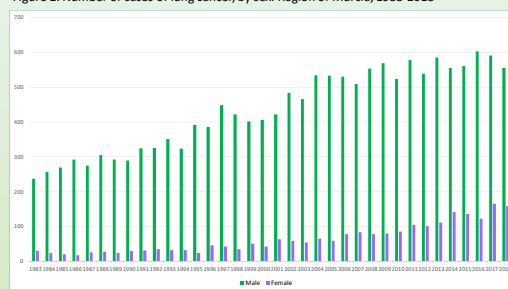


Figure 3. Age-standardized incidence rate per 100,000 of lung cancer by sex. Region of Murcia, 1983-2018

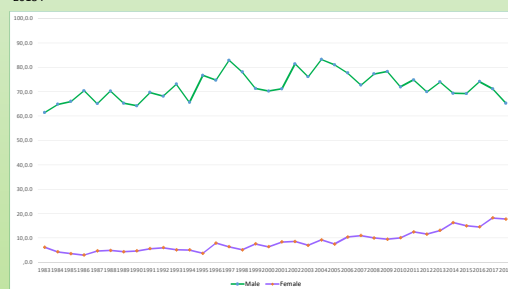


Figure 5. Number of cases of lung cancer by histological group and sex. Region of Murcia, 1983-2018.

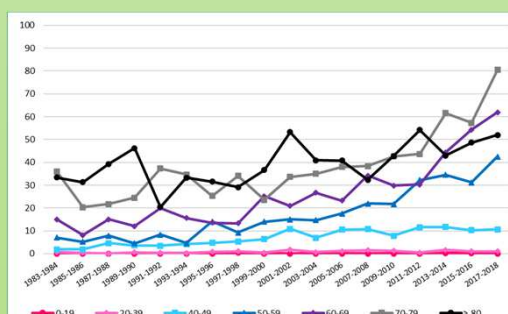


Figure 6. Age-standardized incidence rate per 100,000 of lung cancer by histological group, sex and time period. Region of Murcia, 1983-2018.

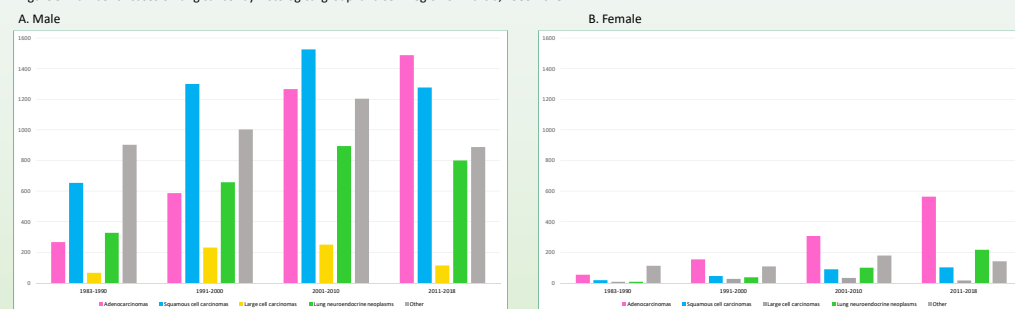


Figure 7. Percentage of lung cancer cases by histological group and sex. Region of Murcia, 1983-2018.

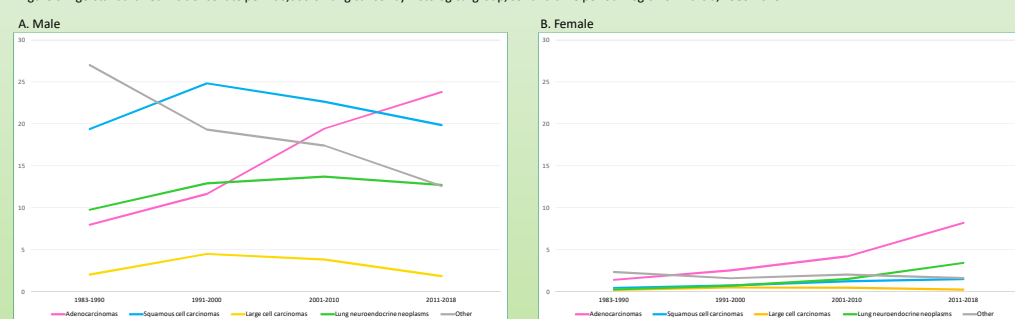
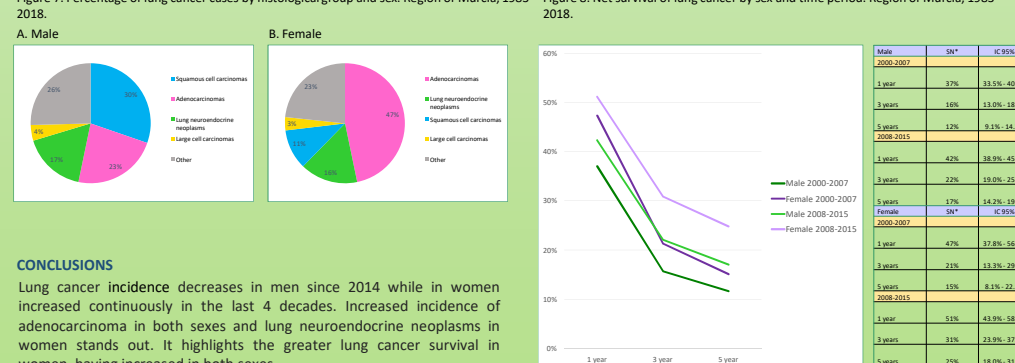


Figure 8. Net survival of lung cancer by sex and time period. Region of Murcia, 1983-2018.



CONCLUSIONS

Lung cancer incidence decreases in men since 2014 while in women increased continuously in the last 4 decades. Increased incidence of adenocarcinoma in both sexes and lung neuroendocrine neoplasms in women stands out. It highlights the greater lung cancer survival in women, having increased in both sexes. Further efforts are needed to promote smoking cessation in the population, with special attention to young people and women