

245P - Age-adjusted trends of pulmonary large cell neuroendocrine carcinoma

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Introduction

Pulmonary large cell neuroendocrine carcinoma is a rare high grade lung cancer. It shows mixed features of both small cell and non-small cell lung cancer which explains the poor prognosis it carries. Due its scarcity, there are limited data regarding incidence rates and trends and in turn, lead to underdeveloped understanding of its pattern and guidelines for screening and treating it.

Methods

- Sample No. = 11029
- Population: 2000 US Std Population from Surveillance, Epidemiological, and End Results (SEER) database diagnosed from 2000-2020
- Rates: Per 100,000
- Percent changes (PC): calculated using 1 year for each end point
- Annual percent changes (APC): calculated using weighted least squares method

Overall Results

- 5-year relative survival: 20.8%.
- incidence : 0.36
- PC = 2,474.23
- APC = 1.66 (95%CI 0.11 to 3.24)y

Conclusion

Overall:

- Poor survival outcomes
- High incidence rate
- Incidence rates increases through out the years

Gender:

- Both males and females show high incidence rates but males are slightly more than females
- Both males and females show a rise in their incidence rate with males showing more rise

Age:

- Before age 35, there are no cases
- Age group 35-44 show a decline in their incidence rate
- From age 45 to 84, incidence rates were increasing
- The highest incidence rate were among age groups 65-74 and 75-84
- Age groups 65-74 and 75-84 showed the most increase in incidence rates
- PC and APC of age group 85+ was missing due relatively small incidence rate with some years showing no incidence

Race:

- Black and White showed the highest incidence rates
- White show an increase in its incidence rate
- PCs and APCs for Black, American and Asians were missing as there were no incidence in year 2000

Recommendations:

- Screening guidelines should be developed to combat the poor prognosis and overall high incidence rate
- Males and females are to be included for screening with slightly more focus on males
- Screening guidelines should start from age 45 until 85 with more follow up in ages from 65-85
- White and black should be prioritized for screening
- More intra-depth studies are needed to assess race as most of races data were missing

Results Based on Demographic Characteristics

Males

PC= 3,203.5
APC= 1.6 (95%CI -0.04 – 3.2)

Females

PC= 1,887.6
APC= 1.6 (95%CI 0.01 – 3.2)

35-44

PC= 530.8
APC= -0.9 (95%CI -3.5 – 1.9)

65-74

PC= 2,564.1
APC= 1.6 (95%CI -0.1 – 3.3)

45-54

PC= 2837.9
APC= 0.6 (95%CI -1.7 – 2.8)

75-84

PC= 5,210.4
APC= 2.7 (95%CI 0.9 – 4.4)

55-64

PC= 1,527.6
APC= 1.6 (95%CI 0.2 – 2.9)

85+

PC= Missing
APC= Missing

White

PC= 2,079.9
APC= 1.6(95%CI -0.2 – 3.3)

Americans

PC= Missing
APC= Missing

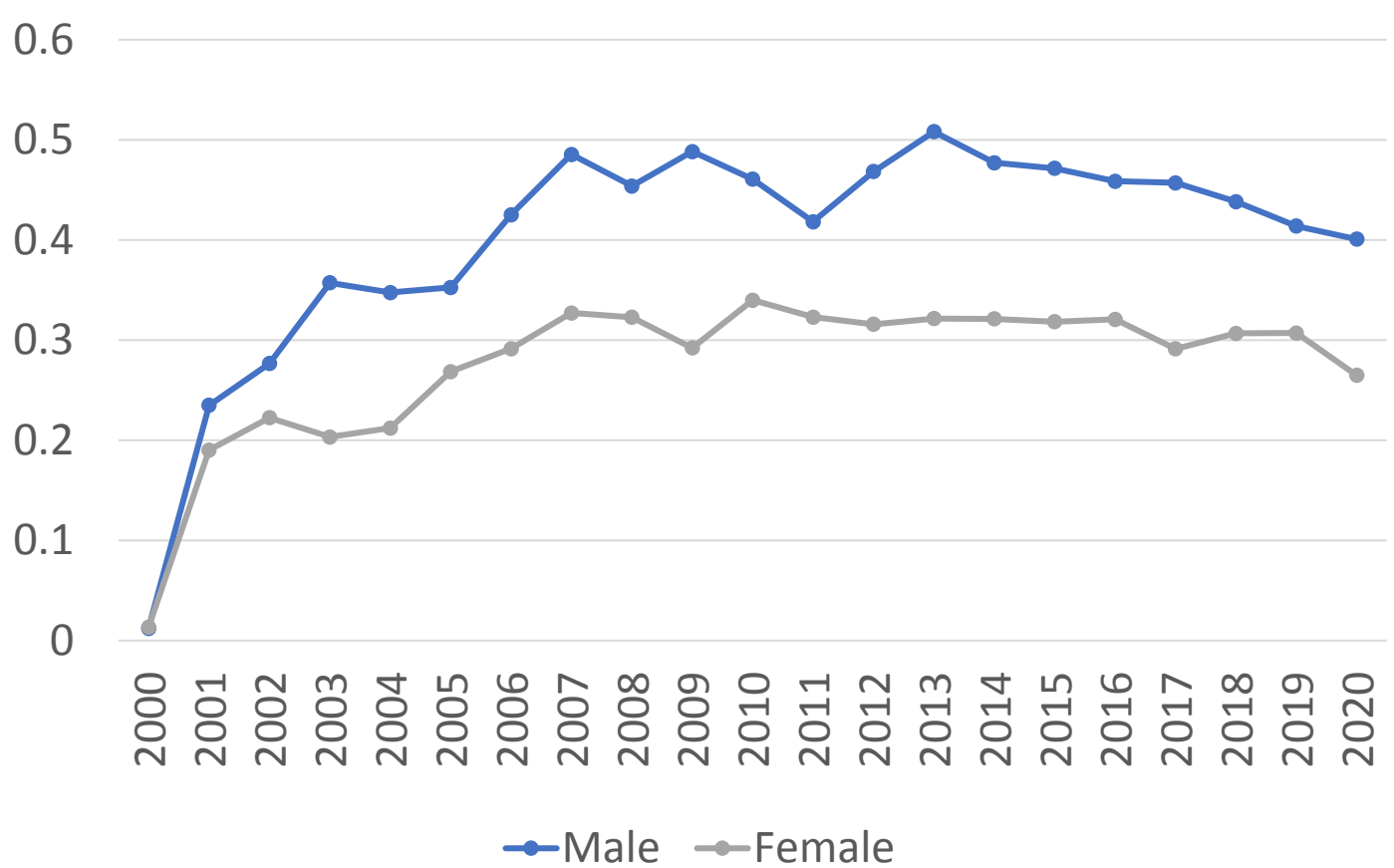
Black

PC= Missing
APC= Missing

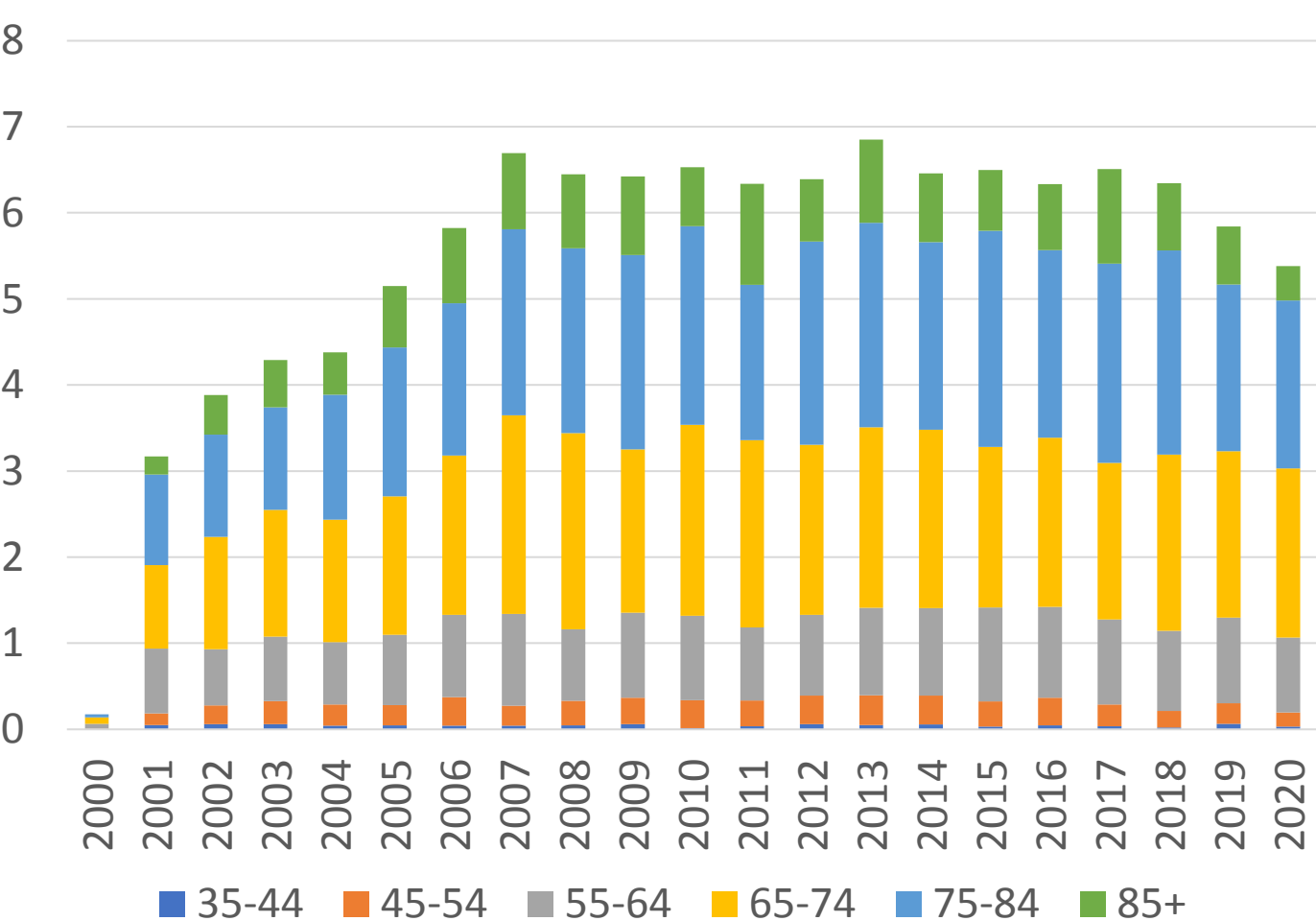
Asians

PC= Missing
APC= Missing

Gender Rates



Age Rates



Race Rates

