Epidemiological and Clinical Profile of Oral Cancer in Portugal: A Decade of Cases at a National Reference Centre

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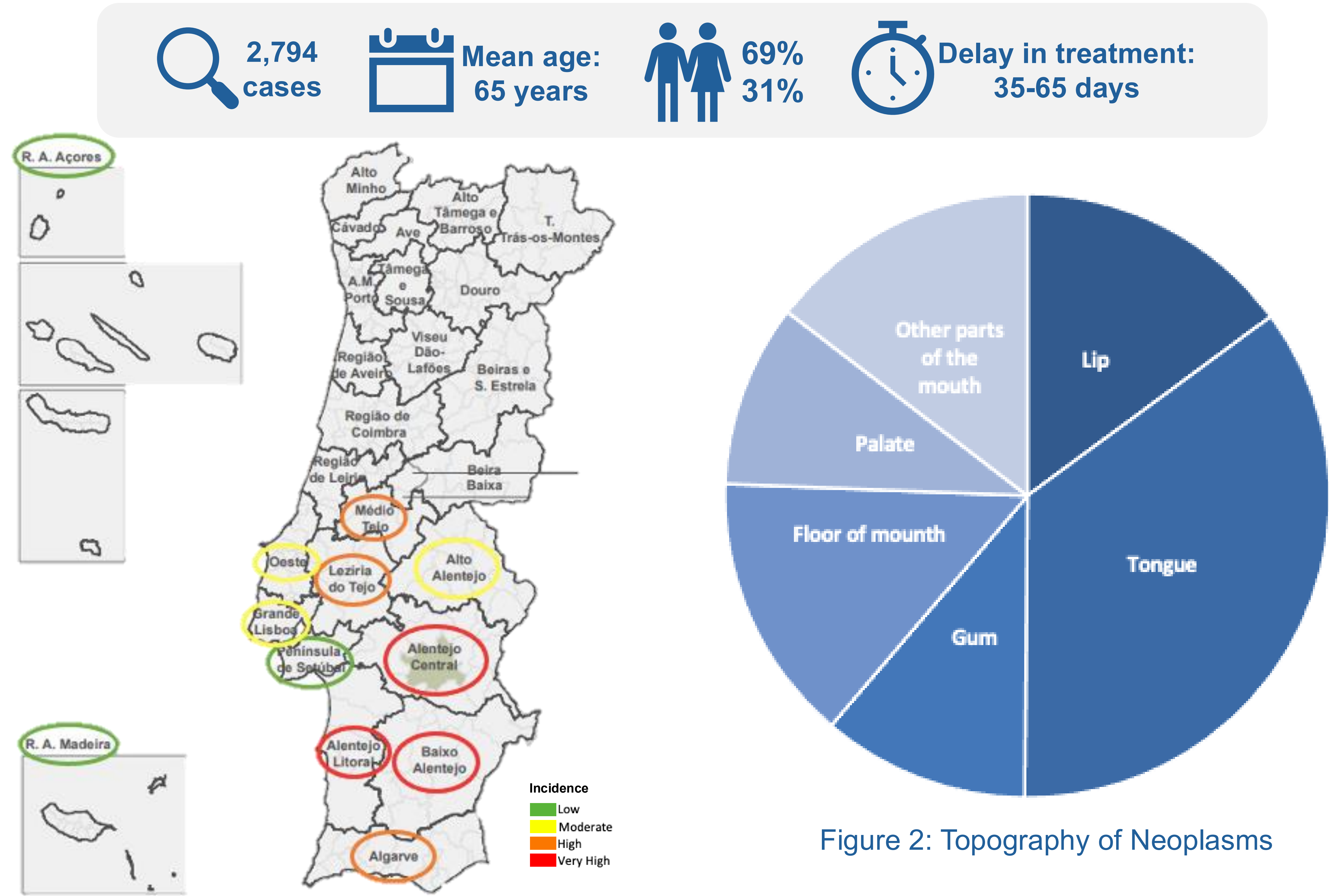[2] Morphology Lab, Egas Moniz School of Health & Science, Almada, Portugal.

INTRODUCTION

Oral cancer is a significant global public health concern, ranking among the ten most common cancers worldwide [1]. In 2022, the World Health Organization (WHO) estimated more than 389,000 new cases and 188,000 deaths from oral cancer [2]. In Portugal, 1293 new cases and 428 deaths were reported. The WHO predicts a 14.4% increase in new cases of oral cancer in Europe and a 7.6% increase in Portugal by the year 2040 [3].
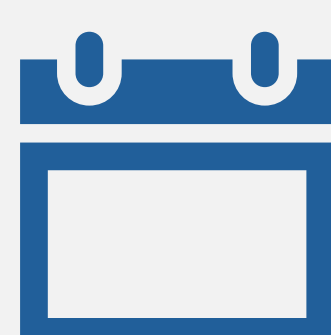
AIM

This study aimed to characterise the epidemiological and clinical profile of oral cancer cases diagnosed at the Portuguese Oncology Institute of Lisbon (IPO Lisboa) between 2012 and 2022, contributing to a more comprehensive understanding of disease distribution, patient outcomes, and regional disparities.
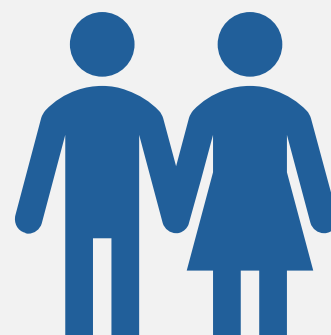
MATERIALS AND METHODS

This retrospective study included a total of 2,794 cases. The variables analysed comprised gender, age at diagnosis, municipality of residence, tumour topography and morphology, TNM staging, date of diagnosis, treatment initiation, and, where applicable, date of death. The study was approved by the Ethics Committee of the Portuguese Oncology Institute of Lisbon, and all data were processed in anonymised form, in accordance with applicable ethical principles. Derived metrics, such as time from diagnosis to treatment and overall survival, were calculated and statistically assessed. Data analysis was conducted using IBM SPSS Statistics v.29.0 (IBM Corp., Armonk, NY, USA).
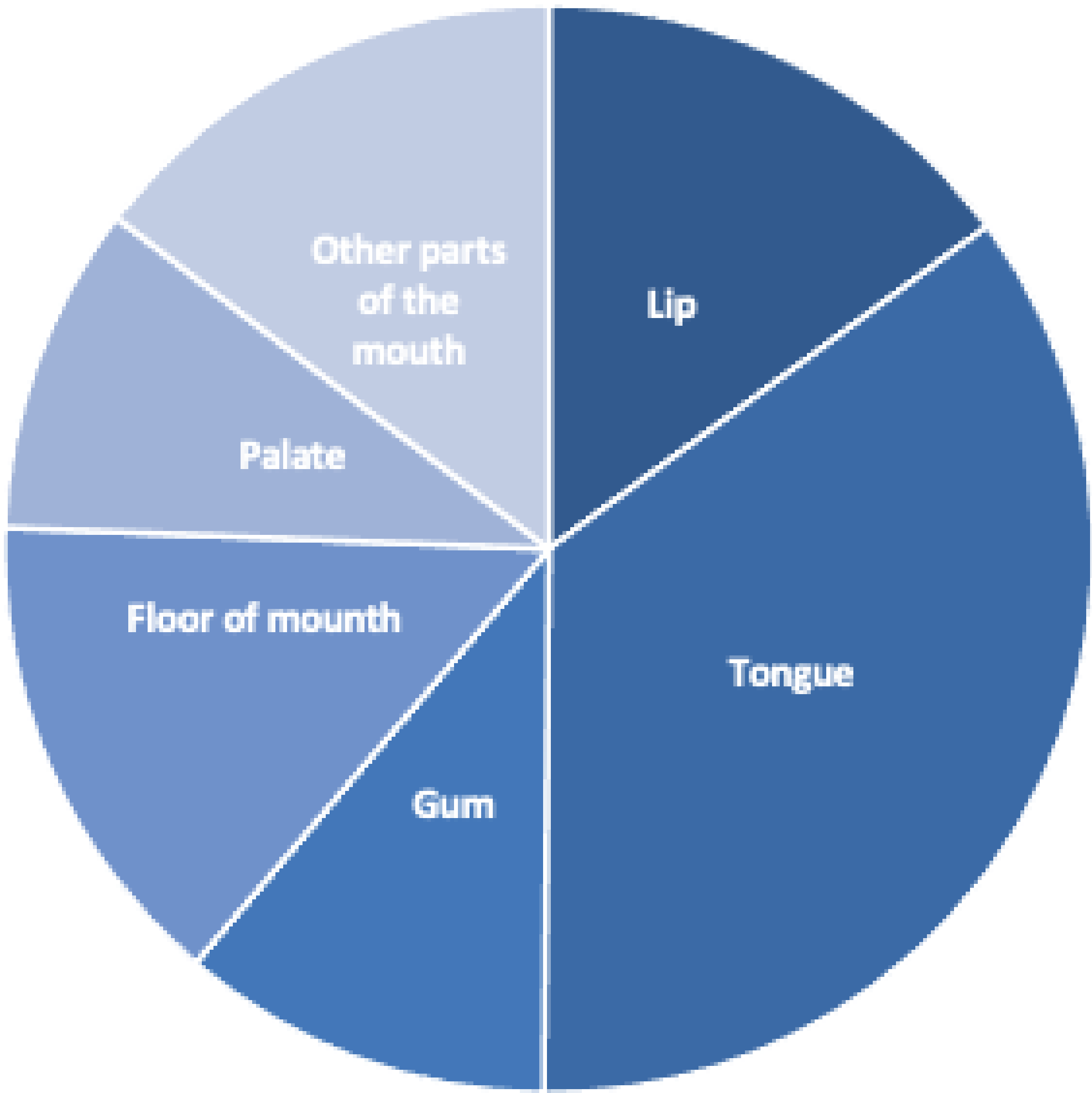
2,794 cases | Mean age: 65 years | 69% 31% | Delay in treatment: 35-65 days

Figure 1: Oral Cancer Incidence by Region

Incidence
- Low
- Moderate
- High
- Very High

Figure 2: Topography of Neoplasms

RESULTS & DISCUSSION

The majority of cases occurred in male patients, with squamous cell carcinoma being the predominant histological type. The tongue was the most frequently affected anatomical site, followed by the lip. Most tumours were diagnosed at advanced stages, particularly stage IV-A. The mean age at diagnosis was approximately 65 years, with a broader age range from 10 to 99 years, and the average survival time was around five years, slightly higher in women. Notably, delays in treatment initiation were common, with most patients waiting over 65 days post-diagnosis. A statistically significant association was found between clinical stage and treatment delay, with more advanced tumours linked to longer waiting times. Possible contributing factors include the complexity of advanced cases, which often require multidisciplinary team discussions and additional diagnostic procedures with variable waiting periods. A spatial analysis using the NUTS III classification revealed geographical disparities. Regions in Alentejo exhibited high incidence and below-average survival, possibly due to an ageing population and limited healthcare infrastructure. Conversely, the Oeste region performed favourably in terms of incidence, survival, and treatment timeliness. The Autonomous Region of the Azores showed low incidence but concerning delays and reduced survival.

CONCLUSIONS

These findings underscore the impact of socio-demographic and systemic factors on oral cancer outcomes. By identifying patterns of late-stage diagnosis and treatment delays, particularly in more vulnerable regions, this study contributes to the development of targeted strategies aimed at improving early detection, reducing treatment delays, and optimising healthcare service delivery. Such efforts may support the objectives of Sustainable Development Goal 3, which seeks to reduce premature mortality from non-communicable diseases, including oral cancer, by improving access to timely and equitable care.

REFERENCES