

EPIDEMIOLOGY OF HEAD AND NECK CANCER AND SURVIVAL IN HONG KONG BETWEEN 2005 AND 2017

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INTRODUCTION

Head and neck squamous cell carcinoma (HNSCC) is a leading global malignancy, with locally advanced cases (LAHNSCC, stages III–IVb) representing over 60% of diagnoses and exhibiting poor survival rates (<50% at 5 years globally). In Hong Kong, HNSCC accounts for 3–5% of cancers, driven by tobacco, alcohol use, and rising HPV-associated oropharyngeal cases. Despite its burden, LAHNSCC-specific epidemiological and survival trends remain understudied, overshadowed by regional focus on nasopharyngeal carcinoma.

This 12-year retrospective analysis (2006–2017) leverages data from four major hospitals (QMH, QEH, TMH, PMH), excluding non-squamous malignancies, to evaluate incidence, resectability, second-line treatment needs, and survival outcomes stratified by age, sex, and stage. By addressing critical evidence gaps, this study aims to inform tailored clinical protocols and public health strategies to mitigate disparities and improve survival in Hong Kong's high-risk population.

OBJECTIVE

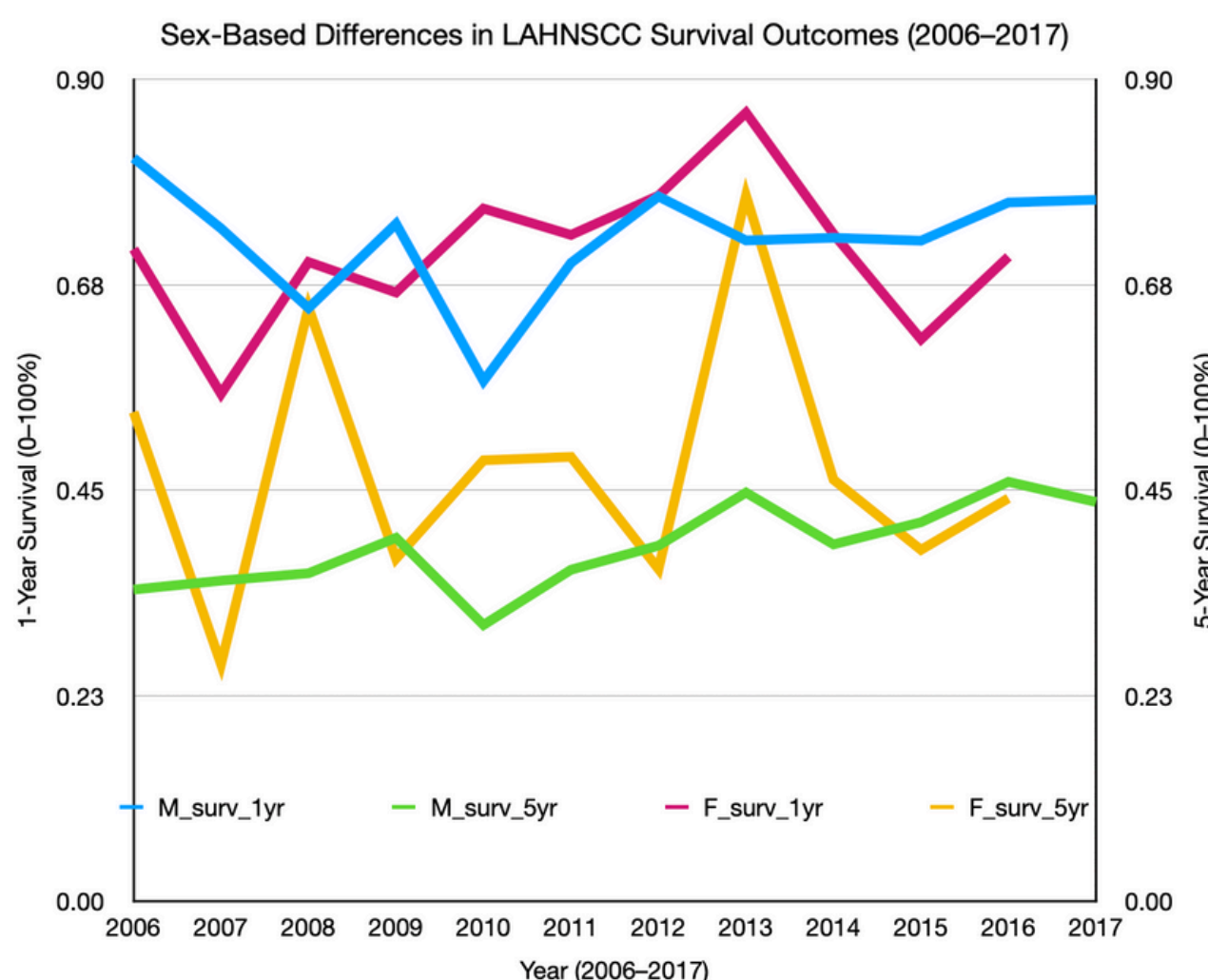
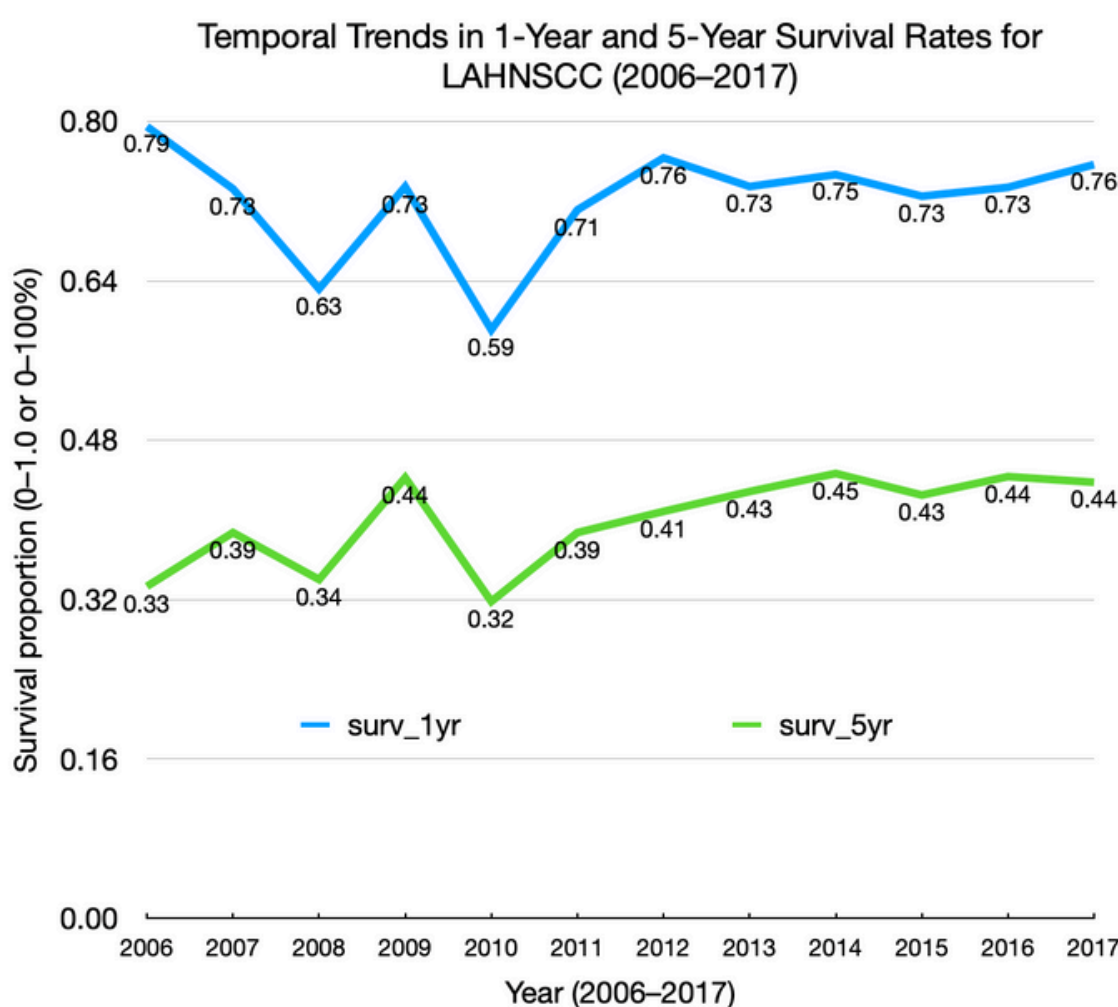
To evaluate incidence, resectability, treatment patterns, and survival outcomes of LAHNSCC in Hong Kong, stratified by age, sex, and stage.

METHODOLOGY

- Data Source: Retrospective review of 2006–2017 records from QMH, QEH, TMH, and PMH.
- Inclusion: LAHNSCC patients (stages III, IVa, IVb).
- Exclusion: Salivary gland, nasopharyngeal, sinonasal, or thyroid malignancies.
- Analysis: Survival rates (1-/5-year), resectability, and stage distribution were computed using annualized data.

RESULTS

- Survival Trends:
 - Overall 5-year survival improved from 33.3% (2006) to 43.8% (2017).
 - Females had higher 5-year survival in certain years (e.g., 77.3% in 2014).
 - Stage III: 66.7% 5-year survival (2013) vs. Stage IVb: 0% (2006, 2013).
- Sex Disparities:
 - Male predominance (70% of cases).
 - Females showed resilience in later years (e.g., 76.9% 1-year survival in 2013).
- Stage-Specific Outcomes:
 - Resectability declined with advancing stage (IVb: 25–30% non-resectable).
 - Second-line treatments increased for Stage IVb (40–60% of cases).



ANALYSIS

The data revealed critical trends in LAHNSCC survival outcomes from 2006–2017. Overall 5-year survival improved modestly (33.3% to 43.8%), peaking in 2014 (44.7%), with 1-year survival consistently higher (59.1–76.8%). Stage III patients demonstrated superior outcomes (5-year survival: ~50%) compared to Stage IVb (<20%), highlighting the prognostic impact of advanced disease. Notably, females exhibited higher long-term survival in select years (e.g., 77.3% vs. males' 39.1% in 2014). These findings emphasize the need for early detection and sex- and stage-tailored therapeutic strategies to address persistent disparities.

CONCLUSION

LAHNSCC survival in Hong Kong remains suboptimal, particularly for advanced stages. Sex-based disparities and stage-dependent outcomes highlight the need for early detection programs and tailored therapies. Future research should explore biological and socioeconomic factors influencing these trends.