

Tobacco and alcohol exposure decreases overall survival, but not recurrence-free survival in oral cavity squamous cell carcinoma

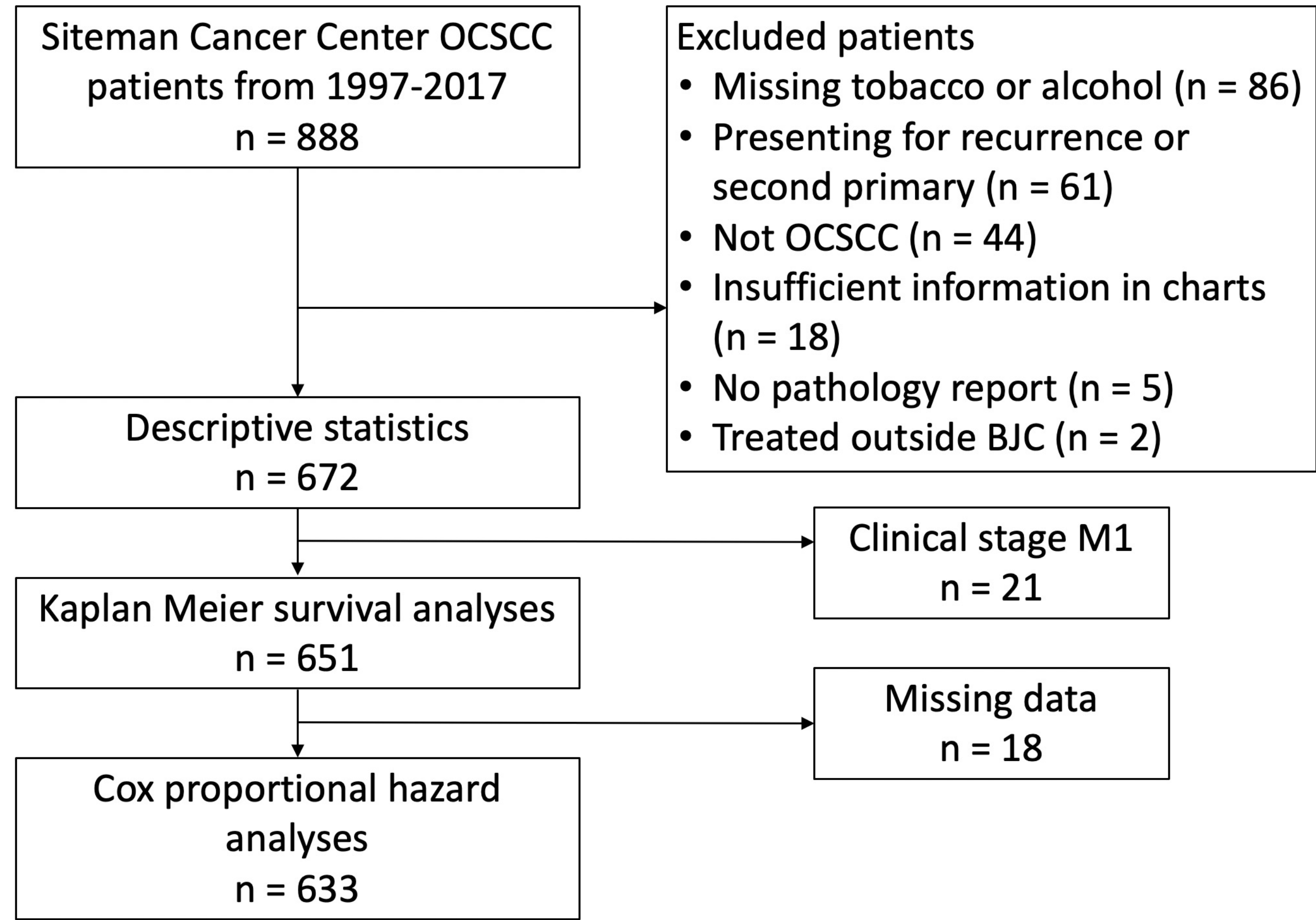
Demographic characteristics and outcomes in never-tobacco, never-alcohol users with oral cavity squamous cell carcinoma

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INTRODUCTION

- Tobacco and alcohol are considered causative exposures in head and neck squamous cell carcinoma (HNSCC). Despite this, 25% of cases occur in patients who report neither tobacco nor alcohol use
- The relationship between tobacco and alcohol use and risk of death or recurrence remains poorly defined in never-smoker never-drinker (NSND) oral cavity squamous cell carcinoma (OCSCC) patients.

METHODS



RESULTS

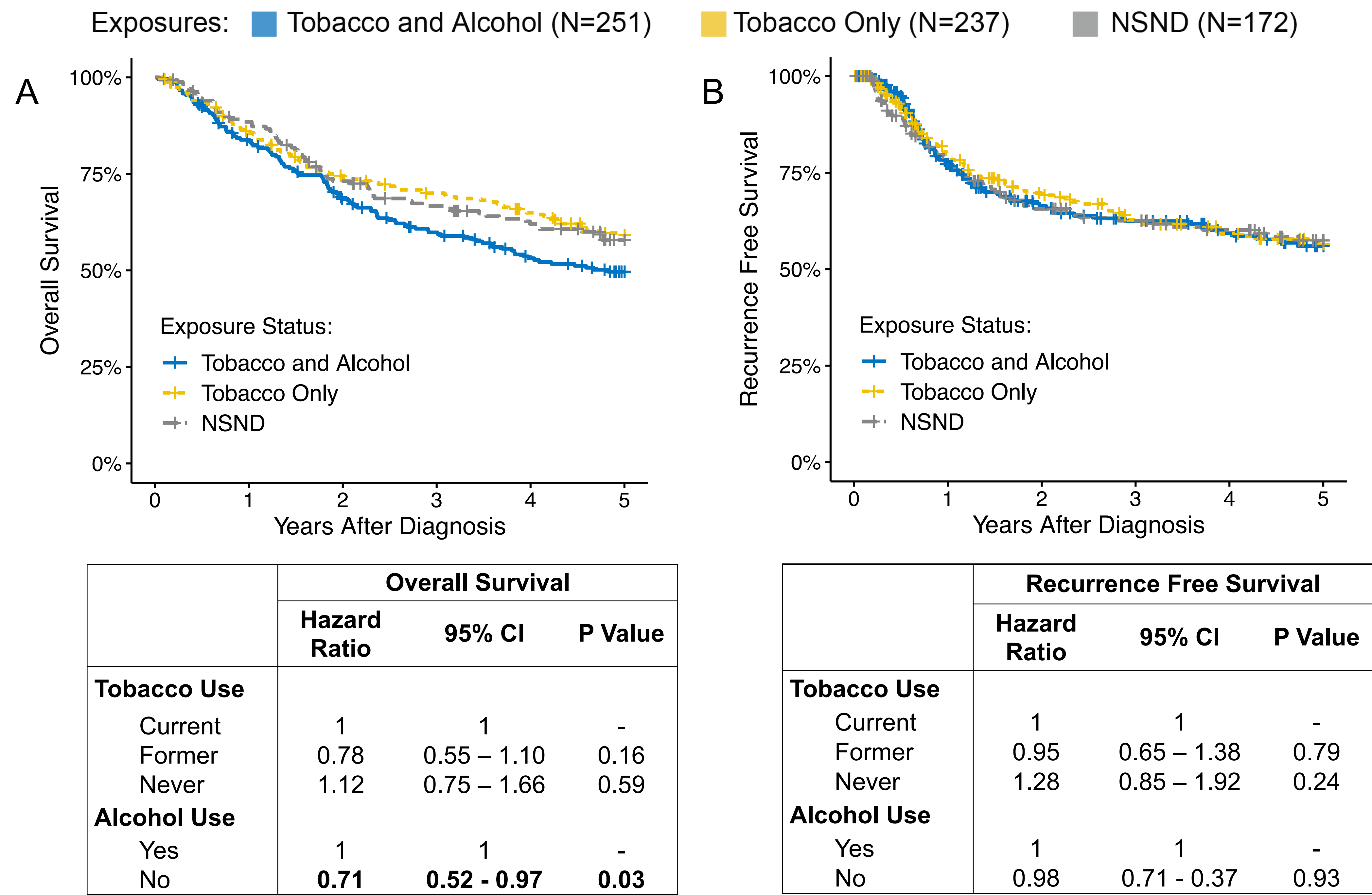


Figure 1. Clinical outcomes related to tobacco and alcohol exposure in OCSCC. **(A)** OS in tobacco and alcohol users diverged from NSND and tobacco-only users starting two years after diagnosis ($P = 0.09$). **(B)** RFS was similar across all timepoints regardless of exposure group ($P = 0.99$).

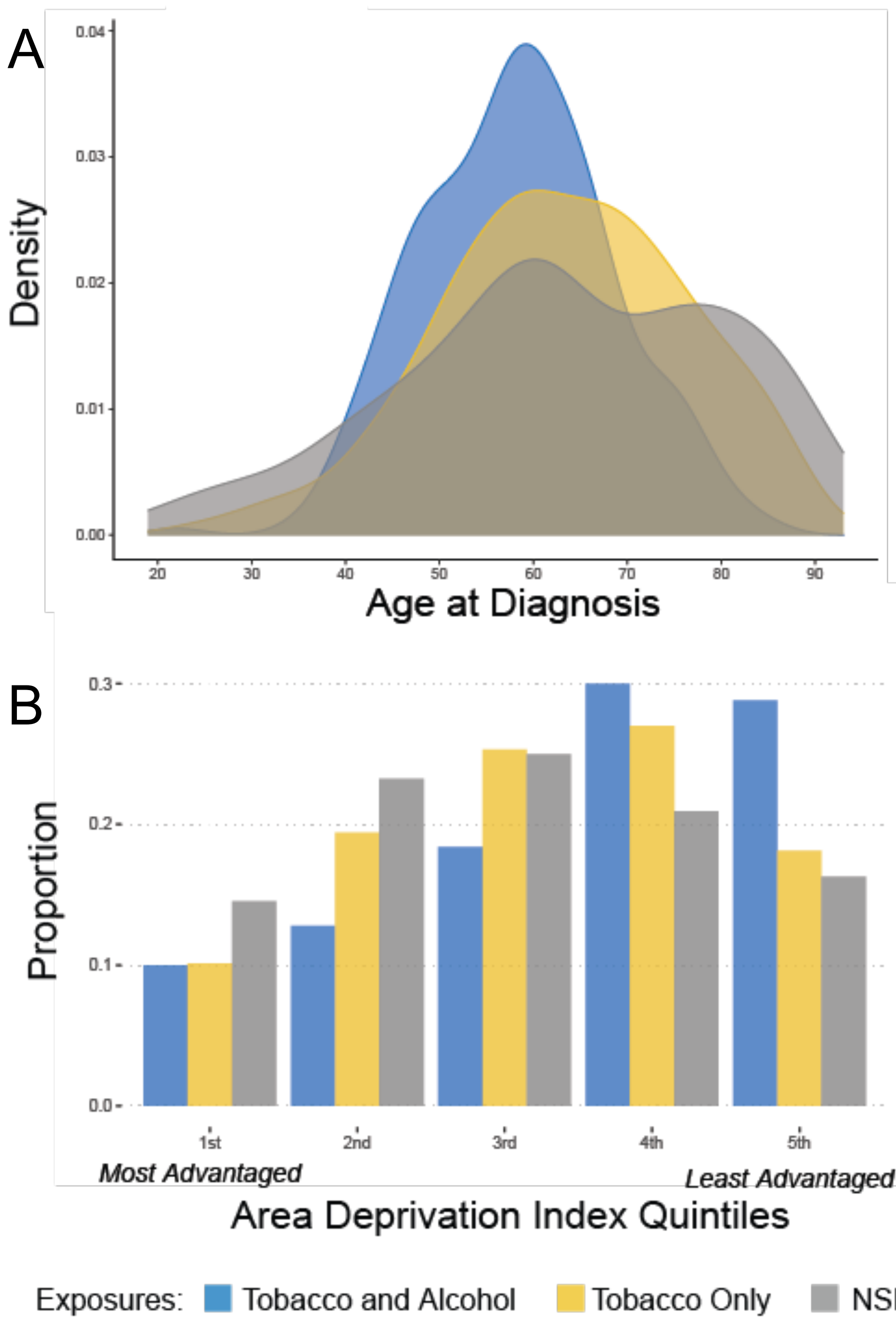


Figure 2. Selected demographic differences between NSND and tobacco or alcohol exposed patients.

(A) Density plot of age of diagnosis for the entire cohort. NSND patients showed a bimodal distribution, with 39.5% if NSND patients diagnosed after age 70 years of age.

(B) Area Deprivation Index (ADI) is significantly lower in NSND compared to tobacco or alcohol exposed patients, reflective of a greater proportion of this population living in highly advantaged areas.

CONCLUSIONS

- NSND with OCSCC are older, more female, and more economically advantaged than patients with tobacco or alcohol use
- Tobacco and alcohol exposure represents an independent risk factor for OS, but not RFS in OCSCC, suggesting that the behavior of OCSCC is similar among tobacco and/or alcohol exposed patients and NSND patients and that OS differences may be related to competing causes of mortality.

