malignancies (OR 1.38, 95% CI 1.12 to 1.69). Risk of colorectal cancer was significantly decreased (OR 0.76, 95% CI 0.63 to 0.92) for COX2 inhibitor usage of more than a year. There were no other significant associations.

**Conclusion** In this large population-based case-control study, prolonged use of COX2 inhibitors was associated with increased risk of breast and haematological cancers and decreased risk of colorectal cancer. These findings need to be confirmed using other data sources.

### 4.5 PREVENTING CHRONIC DISEASE LOCALLY AND GLOBALLY: DELIVERY OF PREVENTION INTERVENTION VIA THE SUPERCOURSE

**Chair:** Prof. Ronald LaPorte, USA

**Objective** To investigate the role of medical history (skin warts / verrucae; *Candida albicans* / thrush; herpetic lesions / cold sores; heartburn; regurgitation) and medication (for heartburn; for regurgitation; aspirin) use in UADT cancer risk.

**Methods** A case-control study conducted in 10 European countries.

**Results** There were 1779 cases of UADT cancer (all SCC) and 1993 controls. Having had warts / verrucae and history of *Candida* / thrush infection protective for UADT cancers (OR 0.80, 95% CI (0.68 to 0.94) and 0.75 (0.60 to 0.89), respectively) but there was no association with herpetic lesions.

Neither symptoms of gastro-oesophageal reflux (heartburn or regurgitation) nor medication for associated symptoms were associated with risk of UADT cancer. When considered by sub-site, regurgitation was associated with a non-significant increased risk for cancer of the oesophagus (1.47; 0.98 to 2.21).

Regular aspirin use (at least once a week for a year) was not associated with risk of UADT cancer. When considered by sub-site, it had protective effect for cancer of oesophagus (0.51; 0.28 to 0.96) and non-significant protective effect for cancers of hypopharynx (0.53; 0.28 to 1.02) and larynx (0.74; 0.54 to 1.01).

**Conclusion** There is conflicting evidence regarding association between medical history and medication use and UADT cancer risk.

### 4.4-5 ASSOCIATIONS OF ANGIOTENSIN-II RECEPTOR BLOCKERS AND ACE INHIBITORS WITH ALZHEIMER’S DISEASE: A NESTED CASE-CONTROL STUDY WITHIN THE UK GENERAL PRACTICE RESEARCH DATABASE

**Objectives** To investigate whether angiotensin II receptor blockers (ARBs) and ACE inhibitors (ACE-Is) are more strongly associated with Alzheimer’s disease (AD) than other anti-hypertensive drugs.

**Methods** Nested case-control analysis within the UK general practice research database (n=10 million), with prospectively recorded anti-hypertensive prescribing data. Cases aged ≥60 years and diagnosed between 1997 and 2008 (5797 with AD, 2186 with other dementia) were matched to up to four controls by age, general practice and gender. We computed ORs and dose response effects for AD, vascular and unspecified / other dementia, comparing those prescribed ARBs or ACE-Is for at least 6 months with patients prescribed other anti-hypertensives. We controlled for matching factors, co-morbidities, smoking status, an area measure of socio-economic status, consultation rate and blood pressure and accounted for reverse causality by introducing time-lags of up to 8 years prior to diagnosis / index date.

**Results** Patients diagnosed with AD, vascular and unspecified / other dementia had fewer prescriptions for ARBs and ACE-Is. Inverse associations with AD were stronger for ARBs (OR 0.47, 95% CI 0.37 to 0.58) compared with ACE-Is (OR 0.29, 95% CI 0.28 to 1.02) and larynx (0.74; 0.54 to 1.01).

There were inverse dose-response relationships between ARBs and ACE-Is with AD (both p trend <0.01). The inverse association of ACE-Is with AD diminished when using longer time lags but the ARB-AD association persisted.

**Conclusions** Patients with AD were around half as likely to be prescribed ARBs. Further randomised controlled trial evidence is required to rigorously test these findings.

### 4.4-6 ROLE OF MEDICAL FACTORS IN THE AETIOLOGY OF UPPER AERODIGESTIVE TRACT CANCERS IN EUROPE: THE ARCAGE STUDY

**Background** Cancer of the upper aerodigestive tract (UADT) (oral cavity, pharynx, larynx and oesophagus) is, globally, the fourth most common cancer and cause of cancer mortality. In addition to established risk factors such as tobacco and alcohol consumption, other risk factors were suggested, including human papillomavirus infection.

**Objective** To investigate the role of medical history (skin warts / verrucae; *Candida albicans* / thrush; herpetic lesions / cold sores; heartburn; regurgitation) and medication (for heartburn; for regurgitation; aspirin) use in UADT cancer risk.

**Methods** A case-control study conducted in 10 European countries.

**Results** There were 1779 cases of UADT cancer (all SCC) and 1993 controls. Having had warts / verrucae and history of *Candida* / thrush infection protective for UADT cancers (OR 0.80, 95% CI (0.68 to 0.94) and 0.75 (0.60 to 0.89), respectively) but there was no association with herpetic lesions.

Neither symptoms of gastro-oesophageal reflux (heartburn or regurgitation) nor medication for associated symptoms were associated with risk of UADT cancer. When considered by sub-site, regurgitation was associated with a non-significant increased risk for cancer of the oesophagus (1.47; 0.98 to 2.21).

Regular aspirin use (at least once a week for a year) was not associated with risk of UADT cancer. When considered by sub-site, it had protective effect for cancer of oesophagus (0.51; 0.28 to 0.96) and non-significant protective effect for cancers of hypopharynx (0.53; 0.28 to 1.02) and larynx (0.74; 0.54 to 1.01).

**Conclusion** There is conflicting evidence regarding association between medical history and medication use and UADT cancer risk.