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.

**04.4.5 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**

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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, comparing those 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 0.76, 95% CI 0.69 to 0.84) (p difference <0.001). Associations of ARBs with AD were stronger than for vascular dementia (p difference=0.01) and unspecified / other dementia (p difference=0.25). 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.

**04.4.6 ROLE OF MEDICAL FACTORS IN THE AETIOLOGY OF UPPER AERODIGESTIVE TRACT CANCERS IN EUROPE: THE ARCADE STUDY**

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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.

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

Chair: Prof. Ronald LaPorte, USA

**04.5.1 TELEPREVENTIVE MEDICINE AS THE FUTURE OF EPIDEMIOLOGY AND DISEASE PREVENTION**

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The problem of chronic disease around the world can be improved only through the means of prevention. Effective prevention of chronic disease cannot be achieved without what we call “Telepreventive Medicine.” The fundamental underlying concept is that information about disease prevention should be distributed using inexpensive Internet pathways. The birth of the discipline started a few years ago and has been recognised in the The British Medical Journal article. In the global public health arena, the concept of telepreventive medicine is an integral part of the Global Health Network Supercourse project, a global online library of nearly 5000 lectures and a network of 48 000 individuals in 174 countries. Telepreventive medicine has a great potential to improve global health, in both communicable and non-communicable diseases. For example, utilising the power of the Supercourse network and telepreventive medicine, Supercourse team was able to distribute information about H1N1 infection even before it made it to news media. We must differentiate telepreventive medicine from telemedicine. Telemedicine is designed to “cure” and it is expensive (like “telesurgery”), it is unlikely that telemedicine can have any effect on global health as it does not reach too many people. In contrast with telepreventive medicine we can reach millions with the prevention message. Through the Supercourse, telepreventive medicine epidemiology and new mobile global health approaches, information can be shared more rapidly with all students through their instructors.