associated with a trend toward increased all cause mortality, driven by cancer deaths (results published NEJM September 2018). After the LDA intervention was halted in June 2017, ASPREE was extended as an observational cohort follow-on study, ASPREE-XT, to measure potential delayed LDA effects on ASPREE outcomes. The ASPREE study primary results will be summarized, and the rationale for and performance of the novel DFS geriatric outcome discussed. New results of the analysis of dementia as a secondary outcome will also be presented (both for overall dementia and Alzheimer's disease). We will also examine the unexpected increased all-cause mortality attributed to cancer deaths, despite no significant difference between groups for all incident cancer, and effects of LDA on incident metastatic disease. The important implications of the ASPREE results for prescribing LDA for primary prevention in health elderly will be discussed, and the ASPREE-XT study design and progress described. Lastly, the breadth of the ASPREE sub-studies including the Biobank, Brain Imaging studies and Genomics, and opportunities to access the rich ASPREE data and collaborate with ASPREE investigators will be reviewed.

RATIONALE FOR ASPREE DISABILITY-FREE SURVIVAL PRIMARY OUTCOME AND OVERVIEW OF PRIMARY OUTCOME RESULTS

John McNeil[1], *1. Department of Epidemiology & Preventive Medicine, Monash University, Melbourne VIC, Australia, Melbourne VIC, Australia, Australia*

Disability-free survival (DFS), defined as survival free of disability and dementia was the primary outcome measure of the ASPREE clinical trial. As previously reported, there was no benefit of low dose aspirin on the primary end point of dementia, physical disability or death, but bleeding risks were increased. In total, 1,835 participants reached the primary endpoint, confirmed amongst approximately 3,000 who had triggered for one of the end-points. Dementia was the most labor intensive component of DFS. Several previous primary prevention aspirin studies had identified a reduction of vascular events counterbalanced by an increase in serious bleeding, leaving the question of net outcome to an intuitive decision. DFS was chosen because it balances the positive and negative effects of a preventive drug such as aspirin. It also encapsulates the primary purpose of a preventive drug in older people i.e., to prolong a healthy lifespan rather than prevent a defined disease.

EFFECT OF INITIATING ASPIRIN ON CANCER EVENTS IN THE HEALTHY ELDERLY

Andrew T. Chan,[1] Peter Gibbs,[2] Jessica E. Lockery,[3] Galina Polekhina,[3] Suzanne G. Orchard,[3] Leslie Ford,[4] Asad Umar,[4] and john J. McNeil[3], *1. Clinical and Translational Epidemiology Unit, Massachusetts General Hospital, Boston, Massachusetts, United States, 2. The Walter & Eliza Hall Institute of Medical Research, Parkville VIC, Victoria, Australia, 3. Department of Epidemiology & Preventive Medicine, Monash University, Clayton VIC, Victoria, Australia, 4. Division of Cancer Prevention, National Cancer Institute, Bethesda, Maryland, United States*

In ASPREE, we previously reported a surprising increase in cancer-related deaths associated with initiating aspirin. We now report primary incident cancer events. Aspirin was not associated with risk of incident cancer (HR=1.04, 95% CI 0.95-1.14), including non-metastatic cancer (HR=0.99, 95% CI, 0.89-1.11) and colorectal cancer (HR=1.02; 95% CI, 0.81-1.30). However, risk of incident metastatic cancer was elevated with aspirin (HR=1.18; 95% CI,0.96-1.46), although this could be attributable to chance. In ASPREE, the increase in cancer deaths associated with initiation of aspirin was not accompanied by a significant increase in overall incident cancer after 4.7 years. However, there did appear to be an increase in the incidence of advanced cancer in the aspirin arm. These data support the possibility that aspirin may adversely affect short-term outcomes among elderly participants with undiagnosed cancers (e.g. prevalent tumors at enrollment or early incident tumors) and/or may have differential effects according to age.

THE ASPREE STUDY: DEMENTIA DUE TO ALZHEIMER'S DISEASE OUTCOMES

Raj C. Shah[1], *1. Rush University, Chicago, Illinois, United States*

In the ASPREE clinical trial, aspirin 100mg daily in health older adults did not delay onset of dementia, a pre-specified secondary outcome over a period of 5 years. We examine whether low-dose aspirin versus placebo is related to incident dementia due to Alzheimer's disease. Older community-dwelling participants free of dementia, physical disability, and conditions requiring aspirin treatment were recruited (n=19,114). Participants were administered a cognitive test battery during follow-up and participants with suspected dementia underwent a more extensive dementia assessment. An expert international panel adjudicated dementia according to DSM-IV criteria, with sub-classification according to NIA-AA criteria. Over a median 4.7 years, 575 participants had a confirmed dementia diagnosis. In analysis of the 41% of cases classified as dementia probably due to Alzheimer's disease, no difference in the incidence between the treatment arms was found (HR=0.96, 95% CI =0.74, 1.24). Plans for continued assessment of cognition in ASPREE-XT will be presented.

POTENTIAL IMPLICATIONS OF ASPREE ON ASPIRIN PRIMARY PREVENTION GUIDELINES

Anne M. Murray[1], *1. Berman Center for Outcomes and Clinical Research, Minneapolis, Minnesota, United States*

The 2016 USPSTF guidelines for aspirin to prevent CVD and colorectal cancer noted insufficient evidence to assess the balance of benefit and harm in those 70 and older. The long-awaited ASPREE trial, conducted in healthy elderly aged 70 and older (65 for US minorities), evaluated aspirin's effect on disability-free survival, a composite of death, dementia, or persistent physical disability. CVD and cancer were pre-specified secondary endpoints, positioning ASPREE's results to substantially inform the evidence gap noted in the USPSTF guidelines. Low-dose aspirin over 5 years did not lower CVD events or colorectal risk, but significantly increased bleeding. The ASPREE-XT observational follow-up study over the next 5-7 years will observe for potential legacy effects of aspirin on the primary and secondary outcomes of ASPREE, thus adding further evidence to define the risk-benefit profile of aspirin for primary prevention in healthy elderly.