Summary of Monash Business Breakfast, ASPREE: A window into Ageing

6th September 2012

ASPREE (ASPirin in Reducing Events in the Elderly) is an international collaborative project (USD $50M) drawing together scientific research strengths from several Universities, and includes Australian general practitioners (GPs) at the coalface of primary care, healthy older people who want to contribute to meaningful research and the community in which we all live.

The major aim of the ASPREE study is to determine if aspirin can prevent or delay the onset of heart attack, stroke, dementia and cancer in healthy people aged 70 plus. In a world-first, the study will weigh the potential benefits of daily low dose aspirin for primary prevention against potential risks, such as bleeding.

However, the ASPREE study is far more; it addresses the issue of quality of life within an ageing population. Furthermore, it has far-reaching consequences for medical science, both clinical and basic research, developing true translational research capacity within Monash University that also encompasses other Universities, governments and GPs.

Current health guidelines about recommendations for aspirin use for primary prevention in the elderly are not evidence based. Other primary prevention studies focus on a younger population, none have weighed the risks as well as the benefits, nor studied dementia or cancer outcomes as key endpoints and none have included older people with diabetes. Despite all the potential benefits from which older people arguably have the most to gain older people are also at the greatest risk from aspirin’s side effect of promoting bleeding.

The ASPREE study has an impressive assessment of participants’ cognition, or thinking and memory, before they start on study medication and then regularly throughout the study making it the first study of its kind for prevention of dementia and cognitive decline. Cancer and aspirin as a preventive is of such recent focus and importance that another of the Institutes in the USA, the National Cancer Institute, is very keen to support follow up samples for the ASPREE Healthy Ageing Biobank.

ASPREE is conducted across South-Eastern Australia, most notably in Victoria. With financial support from the Victorian Cancer Agency we have established research centres across Victoria – Ballarat, Bendigo, Geelong, Shepparton, Traralgon, Warrnambool and Wodonga. Tasmania is one of the original ASPREE sites with ongoing involvement since the pilot study. In addition, we operate in Canberra through the Canberra Hospital Clinical Trials centre and most recently in Adelaide in collaboration with the Discipline of General Practice at the University of Adelaide.

Our regional centres are a key component of the study where healthy older people living in regional areas are being offered the opportunity for the first time to engage in medical research. They are enthusiastic and have a higher participant per GP ratio, likely a reflection of the good standing of GPs in the local community.

The scope of the ASPREE study had led it to become a platform for additional sub-studies, adding considerable value to the project.

The ASPREE Healthy Ageing Biobank aims to collect and store biospecimens from 10,000 ASPREE volunteers. The high quality clinical data that compliments each biospecimen will provide an
unmatched resource for applied health sciences and epidemiology for many years to come.

http://www.aspree.org/AUS/aspree-content/aspree-sub-studies/biobank.aspx

**ENVIS-ion** is a neuroimaging study aimed at providing anatomical evidence for the potential benefit of aspirin to reduce cognitive decline through a possible action on micro vessels in the brain. This will be measured with brain MRI at baseline and then after three years, along with photographs of the blood vessels in the retina which may be a surrogate for what’s happening in the brain.

http://www.aspree.org/AUS/aspree-content/aspree-sub-studies/envision.aspx

**SNORE-ASA** will determine whether aspirin delays cognitive decline in older persons with sleep apnoea. People with sleep apnoea (those who stop breathing during sleep, related to snoring) are at greater risk of cognitive or mental function decline; thought to be due to small vessel disease in the brain. We know the prevalence of sleep apnoea increases with age.

http://www.aspree.org/AUS/aspree-content/aspree-sub-studies/SNOREASA.aspx

**ALSOP – the ASPREE Longitudinal Study of Older Persons** may rival other major international Cohort studies that have had a major influence in understanding factors involved in disease processes, from blood borne biomarkers to environmental issues. ALSOP provides the infrastructure for epidemiology research with plans to continue the data capture well past the end of the clinical trial. Almost 90% of ASPREE participants volunteered to complete these questionnaires. Preliminary findings already show us modes of transportation use in the elderly.

http://www.aspree.org/AUS/aspree-content/aspree-sub-studies/ALSOP.aspx

The opportunity for further studies leveraging off the main ASPREE study extends to proposals in the pipeline, awaiting funding. Many will address aspirin questions and others will take advantage of the rich dataset in elderly people that will be available – the type of information that this whole project will provide has a depth and breadth unparalleled in Australia.

More than 8,000 healthy Australians aged 70 plus are enrolled in ASPREE, with the majority from Victoria. With 10,000 people enrolled across Australia and the USA, we are more than half way to our recruitment target of 19,000 participants.

The ASPREE study is primarily funded by the peak research funding bodies in the USA (NIH) and Australia (NHMRC). http://www.aspree.org/AUS/aspree-content/funding-collaborations/funding.aspx

The success of the ASPREE study is dependent on GP participation and raising community awareness of the study across all cultural backgrounds.

Eligible participants for the ASPREE study are:

- Aged 70 or more and able-bodied
- Have not had a heart attack or stroke
- Are able to take 100mg of aspirin or a placebo tablet daily
- Are able to undergo annual health assessments for an average of five years

For more information about the ASPREE study call 1800 728 745, E: aspree@monash.edu
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