Statin therapy reduces cardiovascular disease risk in older people

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The study assessed the effects of statins in nearly 187,000 people who had taken part in 28 large clinical trials. Participants were divided into six age groups (under 55 years, 55-60, 60-65, 65-70, 70-75, and over 75 years) in order to assess the effects of statins on major vascular events (heart attacks/strokes/coronary revascularisations), cancer incidence and deaths.

Lead investigator, Professor Anthony Keech, Professor of Medicine, Cardiology and Epidemiology at the University of Sydney, said: 'Statin therapy has been shown to prevent cardiovascular disease in a wide range of people, but there has been uncertainty about its efficacy and safety among older people. Our study summarised all the available evidence from major trials to help clarify this issue. We found that there were significant reductions in major vascular events in each of the six age groups considered, including patients aged over 75 at the start of treatment.'

Statins help lower the level of low-density lipoprotein (LDL) cholesterol in the blood and are

prescribed to millions of people globally. Having a high level of LDL cholesterol can lead to hardening and narrowing of the arteries and cardiovascular disease. The researchers found that, overall, statin treatment reduced the risk of a major vascular event by about a quarter for each millimole per litre reduction in LDL cholesterol, even in older people. In addition, the new study found that statin therapy did not increase the risk of deaths from non-cardiovascular disease, or the risk of cancer, at any age.

Cardiovascular risk reductions were observed, irrespective of age, in people with or without known vascular disease at the start of the trials. The evidence was less extensive in people aged over 75 who did not already have evidence of vascular disease (those who were prescribed statin therapy for the 'primary prevention' of heart attacks and strokes). New randomised trials are now studying the effects of statins in more depth in apparently healthy older people.

Co-investigator, Dr. Jordan Fulcher from the University of Sydney, explained: 'Statin therapy appears to be just as effective in people aged over 75 years as it is in younger people. We have definitive evidence that statins benefit older people who have suffered a heart attack or stroke. Fewer healthy older people were represented in these trials, so more information in this group of people would help confirm the same benefits that we see in our overall trials population. A new randomised trial in Australia, called STAREE1, is specifically exploring whether statin treatment can prolong survival free of disability in a healthy elderly population.'

Co-investigator Professor Colin Baigent, Director of the Medical Research Council Population Health Research Unit at the University of Oxford, added: 'The risk of heart attacks and strokes increases markedly with age, and yet statins are not utilised as widely in older people as they should be. Since

the risk of heart attack and stroke increases with age, the potential benefits are likely to be even greater for [older people](#).

'Therefore, there is a need to ensure that patients at risk of cardiovascular disease due to their age are offered statin therapy where there is good reason to believe that it will be beneficial. Anyone with concerns about whether [statin](#) therapy is suitable for them should discuss this with their GP.'

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