

Editor's Note

Risks of Statin Therapy in Older Adults

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Should adults older than 75 years receive statin therapy for the indication of primary prevention of cardiovascular disease? Last year, the US Preventive Services Task Force concluded that



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the evidence was insufficient to draw a conclusion about the balance of benefits and harms for the primary prevention of cardiovascular events and mortality in this age group. Even so, statins are commonly prescribed to patients over the age of 75 years, and the prevalence of use is increasing. The Medical Expenditure Panel Survey reported that statin use for primary prevention in adults older than 79 years increased more than 3-fold, from 8.8% in 1999-2000 to 34.1% in 2011-2012.

Is there any justification for such widespread use, or is this an instance of overuse unsupported by evidence? Gurwitz et al¹ summarized the limited data on primary prevention in the age category older than 75 years in the PROSPER, JUPITER, and HOPE-3 clinical trials. Taken together, subgroup analyses in the older age groups suggested modest benefit of statin therapy on composite cardiovascular outcomes but no significant benefit on all-cause mortality. The Australian STAREE (Statins in Reducing Events in the Elderly) trial of atorvastatin calcium vs placebo in individuals older than 70 years is now in progress (<http://www.staree.org.au>), and the results are expected in 2020.

In this issue, Han et al² report on a post hoc analysis of outcomes among adults 65 years and older who were randomized to pravastatin sodium treatment or usual care (UC) for primary prevention in the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial-Lipid-Lowering Trial (ALLHAT-LLT). For the primary end point of all-cause mortality during 6 years, among participants aged 65 to 74 years, the mortality rate was 15.5% in the pravastatin group and 14.2% in the UC group (hazard ratio, 1.08; 95% CI, 0.85-1.37; $P = .55$). For adults 75 years and older, there was a nonsignificant increase in mortality rate in the pravastatin group (24.5%) compared with the UC group (18.5%) (hazard ratio, 1.34; 95% CI, 0.98-1.84; $P = .07$).

Statin therapy may be associated with a variety of musculoskeletal disorders, including myopathy, myalgias, muscle weakness, back conditions, injuries, and arthropathies.³ These disorders may be particularly problematic in older people and may contribute to physical deconditioning and frailty. Statins have also been associated with cognitive dysfunction, which may further contribute to reduced functional status, risk of falls, and disability. The combination of these multiple risks and the ALLHAT-LLT data showing that statin therapy in older adults may be associated with an increased mortality rate² should be considered before prescribing or continuing statins for patients in this age category.

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