

Evidence for Deprescribing

ASPIRIN VITAMINS

General:

For patients with no prior MI or CVA history, the ACC/AHA does not recommend aspirin for primary cardiac prevention in patients older than 70 years or with high bleeding risk

Bleeding risk increases with age, comorbid conditions, and organ failure

In elderly hospice patients (>75 years) with prior MI or CVA, the risk of disabling or fatal bleeding likely exceeds the benefits of additional cardiac and stroke prevention (secondary prevention)

Aspirin should not be used with warfarin, LMWH, or NOAC due to profoundly increased bleeding risks

*** Would not discontinue in patients with (DES) stent placement in the past 6 months or MI/CVA in the past 3 months

ACC/AHA, American College of Cardiology/American Heart Association; CVA, cerebrovascular accident; DES, drugeluting stent; LMWH, low-molecular-weight heparin; MI, myocardial infarction; NOAC, novel oral anticoagulant No proven effectiveness of vitamins or herbal supplements at the end of life Do not prevent or treat cardiovascular disease

Cause constipation, nausea, and (if crushed) unpleasant taste

Vitamin D:

ViDA study showed no beneficial effect of Vitamin D on cardiovascular disease, falls, nonvertebral fractures or cancer

Herbal medications:

Often interact with and potentiate adverse reactions of other medications Can cause gastrointestinal distress May increase bleeding risks: fish oil, ginger, garlic, *Ginkgo*, vitamin E Kava: liver damage and significantly interacts with other medications Licorice and ginseng: increases blood pressure

St. John's wort: significant medication interactions and photodermatitis

Low total cholesterol is associated with higher mortality in patients >80 years

STATINS

Statins carry a high risk of myopathy and weakness/fatigue

Statins do not provide benefit at the end of life. When statins are discontinued, there is no increased risk of cardiovascular events or increased death in patients >75 years

When statins are discontinued, patients have improved quality of life

Resources:

Kutner J, Blatchford P, Taylor D, et al. Safety and Benefit of Discontinuing Statin Therapy in the setting of Advanced, Life-Limiting Illness: A Randomized Clinical Trial. *JAMA Intern Med* 2015; 175(5): 691-700.

Holmes, H, Kaiser K, Jackson S, McPherson M. Soliciting an Herbal Medicine and Supplement Use History at Hospice Admission. *J Palliat Med.* 2010; 13(6): 685-94.

McNeil J, Wolfe B, Woods R, et al. Effect of Aspirin on Cardiovascular Events and Bleeding in the Healthy Elderly. N Engl J Med. 2018; 379(16): 1509-1518.

Scragg R. Overview of results from the Vitamin D Assessment (ViDA) study. *J Endocrinology Invest*. 2019 May 23. Doi:10.1007/s40618-019-01056-z.

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Linxin L, Geraghy O, Mehta Z, Rothwell P. Age-specific risks, severity, time course, and outcome of bleeding on long term antiplatelet treatment after vascular events: a population-based cohort study. *Lancet.* 2017;390: 490-99.

Arnett B, Blumenthal R, Albert M, et al. 2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease. 2019. J Am Coll Cardiol. 2019; 74 (10): e177-252.

Felton M, Tannenbaum C, McPherson M, Pruskowski J. Communication Techniques for Deprescribing Conversations #369. *J Palliat Med.* 2019; 22(3): 335-336.

Tran N, et al. Discontinuation of Statins at the End of Life #322. J Palliat Med. 2017; 20:199-200.

https://www.deprescribing.org.