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# **Managing Statin Intolerance to Maximize Cardiovascular Benefits**

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More than 40 million adults in the United States take statins (HMG-CoA reductase inhibitors), the most commonly prescribed drug class that includes generic, lower-cost medications. When used as directed, statins can significantly lower a person's risk of heart attack or stroke.<sup>1,2</sup> Clinical guidelines outline the criteria for prescribing statins based on heart disease risk. 1,2

Though statins are generally well tolerated, statin intolerance is reported by 5% to 30% of patients.3 Muscle symptoms, such as myalgia, myositis/myopathy, and rhabdomyolysis, are reported most frequently.<sup>3,4</sup> Myalgias may be precipitated by vitamin D deficiency, hypothyroidism, or drug interactions. Other adverse events



are rare and include hepatic injury, and diabetes. Some have raised concerns about statins causing cognitive impairment but thus far data do not support this. The American College of Cardiology Statin Intolerance Tool can help clinicians assess whether the muscle symptoms indicate a true statin intolerance.

The majority of patients who experience adverse effects while on a statin can tolerate a statin using an adjusted regimen.<sup>3,5</sup> Regimen adjustment strategies could include the following:<sup>5</sup>

## Lower statin dosage

Use the same agent, but at a lower dosage

### Different statin agent

- Switch to an agent that is metabolized by a different pathway
  - CYP3A4 (atorvastatin, lovastatin, or simvastatin)
  - CYP2C9 (rosuvastatin or fluvastatin)
  - Minimal CYP metabolism (pravastatin or pitavastatin)
- Switch to a hydrophilic statin (rosuvastatin or pravastatin) as opposed to a lipophilic statin (atorvastatin or simvastatin)6

### Different dosing schedule

If the patient is still having symptoms on the lowest available dose (e.g., rosuvastatin 5mg), every other day dosing or once a week dosing may be an option<sup>7,8</sup>

#### Non-statin therapy

- To maximize cardiovascular benefits, try a non-statin agent (e.g., ezetimibe, PCSK-9 inhibitors, or bempedoic acid)
- Can be used in combination with a statin
- Can use alone in patients who have failed statin retrials or decline a statin retrial

For more information, access Cardi-OH's expanded resources on management of lipids, diet guidelines and recommendations to improve cardiovascular health, and exercising to promote heart health.

- American College of Cardiology, Statin Safety Recommendations. https://tools.acc.org/statinintolerance/#!/content/guideline/documents/statinSafety
  National Lipid Association. NLA releases scientific statement on statin intolerance: a new definition and key considerations for ASCVD risk reduction in the statin intolerant patient. https://www.lipid.org/sites/default/files/fileging.is.tatinintolerance\_infographic\_y20f Published June 2022. Accessed October 24, 2026 of Colleging.
  Climent E, Benaiges D, Pedro-Botet J, Hydrophilic or lipophilic statins? Front Cardiovasc Med. 2021;8:687585. doi:10.3389/fcvm.2021.687585.
- Wongwiwatthananukit S, Sansanayudh N, Dhummauppakom R, et al. Efficacy and safety of rosuvastatin every other day compared with once daily in patients with hypercholesterolemia. Ann Pharmacother 2006;40(11):1917-1923. doi: 10.1345/japh.1H124. 1923. doi: 10.1349/арл.14124. ten AJ, Fritz WL, Nolan Jr PE. Review: alternate-day dosing with statins. Am J Med. Feb;126(2);P99-104. doi:10.1016/j.amjmed.2012.08.007.

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