

Chapman University

Chapman University Digital Commons

Pharmacy Faculty Articles and Research

School of Pharmacy

10-16-2020

What's the Big Deal about Statins?

Albert Bach

Chapman University, abach@chapman.edu

Jelena Lewis

Chapman University, jelewis@chapman.edu

Susie Yoo

Follow this and additional works at: https://digitalcommons.chapman.edu/pharmacy_articles



Part of the [Other Pharmacy and Pharmaceutical Sciences Commons](#)

Recommended Citation

Bach A, Lewis J, Yoo S. What's the big deal about statins? *Inter Valley Health Plan blog*.

<https://blogs.ivhp.com/2020/10/16/whats-the-big-deal-about-statins/>. Published October 16, 2020.

This Article is brought to you for free and open access by the School of Pharmacy at Chapman University Digital Commons. It has been accepted for inclusion in Pharmacy Faculty Articles and Research by an authorized administrator of Chapman University Digital Commons. For more information, please contact laughtin@chapman.edu.

What's the Big Deal about Statins?

Comments

This article was originally published on the *Irvine Valley Health Plan blog* in October 2020.

What's the Big Deal about Statins?

By: Albert Bach, PharmD, APh; Jelena Lewis, PharmD, BCACP, APh; and Susie Yoo, PharmD, APh, CDE, BCGP



What are statins?

Statins are a group of cholesterol-lowering medications that have been shown evidence to be beneficial for tens of millions of Americans. Some examples of statin medications you may have heard of include: atorvastatin (Lipitor), rosuvastatin (Crestor), simvastatin (Zocor), pravastatin (Pravachol) and lovastatin (Mevacor). Statins are one of the most commonly prescribed medications in the United States. One in four adults over the age of 45 years old are currently taking a statin for its many benefits. See below for more information about its use.

Why should I take a statin?

Patients with diabetes carry a very high risk for complications of diabetes such as a heart attack, stroke, or peripheral vascular disease (blockage of arteries in the extremities). In fact, the most common cause of death amongst patients with diabetes is cardiovascular diseases of the heart and blood vessels. The American Diabetes Association **strongly** recommends that patients with diabetes between the ages of 40 and 75 take a statin medication to reduce their risk of heart attack, stroke, or peripheral vascular disease.

For patients with diabetes who have never had a heart attack, stroke or complications of peripheral vascular disease, taking a statin daily can significantly reduce the chance of experiencing these events.

In one research study called the Heart Protection Study, approximately 20,000 patients with diabetes were split into two groups. One group received a statin called simvastatin and the other group received a placebo (a fake pill). These 20,000 people were followed by the researchers for 5 years. After the 5 years, they found that the group taking the simvastatin had much better results that included:

- (1) A 13% lower rate of death from any type of cause
- (2) A 25% reduction in strokes
- (3) A 27% reduction in heart attacks

Several other studies with different statins have also shown similar significant benefits. It is not just for those with diabetes. If you have already suffered from a heart attack, stroke or problems with circulation in your extremities, the benefits of taking a daily statin is even greater!

What do statins do?

Statins can lower levels of bad cholesterol and improve your good cholesterol levels. But even if your cholesterol levels are considered “normal”, they also have additional benefits such as:

- (1) Stabilizing existing cholesterol deposits in your arteries called “plaque” so that they don’t break open as easily or separate, potentially causing a heart attack or stroke.
- (2) Improving the relaxation of blood vessels which allows blood to flow better
- (3) Acting as an antioxidant to remove harmful chemicals
- (4) Reducing signs of inflammation in the blood vessels
- (5) Reducing platelet adherence or “stickiness” which reduces the risk of a blood clot forming in your arteries

When talking with your clinician, don’t get too focused on just the cholesterol “number”. Instead, ask about your risk for developing complications like a heart attack, stroke, or problems with circulation in your extremities.

What are some things to expect with statins?

There are few things in life without some risk. When you drive in a car there is always a potential for an accident or injury. The same is true about medications. There are virtually no medications without a potential for side effects.

The good news is that statins provide *much more benefit* than risk!

The most common side-effect reported is joint pain occurring in about 11.7% of patients and muscle pain in about 8.4% of patients. Some patients may also experience diarrhea and/or stomach upset. These side effects are usually reversible by either reducing the statin dose, changing to a different statin, or taking the medication on alternate days. In some instances, patients may need to discontinue the medication and these side-effects will go away.

Statins have shown to slightly increase the risk of diabetes. This is usually the case when a person’s sugar levels are already higher than normal which would be the case for someone who has pre-diabetes. The benefit that statins provide of reducing the risk for heart and stroke likely outweigh the risk of statins mildly increasing blood sugar. The use of statins in patients with diabetes is so promising that the American Diabetes Association, American College of Cardiology, and American Heart Association recommend that patients *with* diabetes between the ages of 40 and 75 take a statin medication.

Additionally, some studies have shown that there may be a potential for statins to cause memory loss or confusion; however, the evidence regarding this is not very strong. In fact, there are some studies that report statins to be beneficial for brain function. If you do experience these problems, they are not permanent and are reversible upon discontinuation of the drug. The Food and Drug Administration continues to believe that the cardiovascular benefits of statins outweigh these small increased risks.

A serious, but very rare, side effect which may occur when taking a statin is the breakdown of damaged skeletal muscle (also called rhabdomyolysis). This side effect occurs in less than 0.1% of patients taking a statin. If you have severe muscle pain, brown or tea-colored urine or severe muscle weakness, stop taking the statin and call your health care provider immediately.

If you are worried about potential for side-effects, please speak with the health care provider who prescribed the medication before you decide to discontinue the statin.

How long will I need to be on a statin?

Statins are usually needed long term so you may be on the medication for the rest of your life. If you have questions about statins, please speak with your health care provider.

How should I take a statin? Your health care provider will determine the optimal statin dose that is right for you, what time of day to take it (some statins work better in the evening) and how often to take it. Make sure that you follow your health care provider's instructions and do not stop taking the medication or change the dose or timing of the medication without your health care provider's approval. If you are having trouble filling your medication at a local pharmacy, consider signing up for mail order which may be cheaper and more convenient. And remember, statins are usually covered by your insurance plan.