

## Statin Medicines

### Introduction on Chronic Kidney Disease

- Certain common health conditions can damage the kidneys permanently. For example, high blood pressure, diabetes, and related conditions can damage the kidneys.<sup>1</sup>
- Some people call damaged kidneys “weak kidneys.” Doctors call damaged kidneys chronic kidney disease.
- Chronic kidney disease can be hard to recognize because there are no clear signs or symptoms in the early stages.
- Chronic kidney disease can range from mild to severe.
- We can prevent mild chronic kidney disease from getting worse by protecting the kidneys from further damage.
- Certain medicines can help protect people with chronic kidney disease and their kidneys.
- Chronic kidney disease increases a person’s chance of having a heart attack or stroke.<sup>2</sup>
- Chronic kidney disease increases a person’s chance of needing dialysis or a kidney transplant.<sup>2</sup>

### Statins and People with Chronic Kidney Disease

- People with chronic kidney disease are at increased risk of having a heart attack or stroke.
- Doctors think this increased risk relates to damage at the body’s blood vessels.
- Statin medicines reduce cholesterol levels in the body. They can also reduce damage to the body’s blood vessels.
- Statins reduce the risk of heart attack, stroke, and death in high-risk people, including people with chronic kidney disease.<sup>3</sup>
- Medical guidelines now recommend that many people with chronic kidney disease take a statin.<sup>4,5</sup>



University of California  
San Francisco

### **Names of Common Statins<sup>6</sup>**

- Atorvastatin (Lipitor<sup>®</sup>)
- Simvastatin (Zocor<sup>®</sup>)
- Pravastatin (Pravachol<sup>®</sup>)
- Lovastatin (Altoprev<sup>®</sup> or Mevacor<sup>®</sup>)
- Fluvastatin (Lescol<sup>®</sup>)
- Rosuvastatin (Crestor<sup>®</sup>)
- Pitavastatin (Livalo<sup>®</sup>)

### **Potential Side Effects of Statins**

- Most people do not experience side effects when they take a statin.<sup>7</sup>
- But some people have muscle aches or other new symptoms. These side effects are most likely to happen when the person first starts the medicine. The symptoms often go away with a change in dose or to a different kind of statin.
- Doctors may want to monitor their patients to see how they respond to starting a statin.

### **Medical References That Your Doctor Might Want to Read**

1. Centers for Disease Control and Prevention (CDC). Prevalence of chronic kidney disease and associated risk factors--United States, 1999-2004. MMWR Morb Mortal Wkly Rep. 2007 Mar 2;56(8):161-5.2.
2. Sarnak MJ, Levey AS, Schoolwerth AC, et al. Kidney disease as a risk factor for development of cardiovascular disease: A statement from the American Heart Association councils on kidney in cardiovascular disease, high blood pressure research, clinical cardiology, and epidemiology and prevention. Circulation. 2003;108(17):2154-2169.
3. Palmer SC, Navaneethan SD, Craig JC, Johnson DW, Perkovic V, Hegbrant J, Strippoli GFM. HMG CoA reductase inhibitors (statins) for people with chronic kidney disease not requiring dialysis (Review). Cochrane Database of Systematic Reviews 2014, Issue 5. Art. No.: CD007784. DOI: 10.1002/14651858.CD007784.pub2
4. Stone NJ, et al. 2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. Circulation 2013. doi: 10.1161/01.cir.[0000437738.63853.7a](https://doi.org/10.1161/01.cir.0000437738.63853.7a)



University of California  
San Francisco

5. US Preventative Task Force. Statin use for the primary prevention of cardiovascular disease in adults: US preventive services task force recommendation statement. JAMA. 2016;316(19):1997-2007.
6. LPH House Drugs Manual. Lexicomp. URL: [http://online.lexi.com.laneproxy.stanford.edu/lco/action/search/pharmacat/patch\\_f?q=Statin](http://online.lexi.com.laneproxy.stanford.edu/lco/action/search/pharmacat/patch_f?q=Statin).
7. Palmer SC, et al. Benefits and harms of statin therapy for persons with chronic kidney disease: a systematic review and meta-analysis. Ann Intern Med. 2012 Aug 21;157(4):263-75. doi: 10.7326/[0003-4819-157-4-201208210-00007](https://doi.org/10.7326/0003-4819-157-4-201208210-00007).

**Information Provided as Part of a UCSF Study:**

Care For Your Kidneys

<http://ckdstudy.ucsf.edu/statin-medicines>

**Principal Investigator:**

Veronica Yank, MD

[veronica.yank@ucsf.edu](mailto:veronica.yank@ucsf.edu)

(415)476-9654