

## Statins

Statins are a class of medications used in clinical settings to lower patient cholesterol levels. These medications work by inhibiting the HMG CoA reductase, a rate-limiting enzyme in the cholesterol synthesis pathway. Statins have been shown to increase HDL and decrease LDL and triglycerides, which are proven to reduce the risk of cardiovascular events in high risk patients. Unfortunately, statins are associated with side effects with rhabdomyolysis and hepatotoxicity being two of the most commonly recognized and monitored effects.



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### Rhabdomyolysis

[Rabbit-muscle-lights](#)

Rhabdomyolysis is the breakdown of muscles and is a side effect of Statins.

### Hepatotoxicity

[Liver with Toxic-green-glow](#)

Hepatotoxicity means toxic to the liver. This is another frequently tested side effect of Statins.

### HMG-CoA reductase inhibitors

[Humming-bird with Coin-A-purse and Red-duck Inhibited in cage](#)

HMG CoA reductase is a rate limiting enzyme in the cholesterol synthesis pathway. Inhibition of this enzyme results in decreased cholesterol synthesis, which is the purpose of Statins.

### Decrease LDL

[Down-arrow Ladybug-devil](#)

LDL is generally recognized as the bad cholesterol because high levels of it can lead to increase risks of cardiovascular diseases. Statins decrease LDL in patients. It is important to note that they decrease LDL 3 times as much as they lower triglycerides.

### Decrease Triglycerides

[Down-arrow TAG-triceratops](#)

Statins decreases triglyceride levels as well as LDL.

### Increase HDL

[Up-arrow Hot-dog-angel](#)

HDL is generally recognized as the good cholesterol, and Statins can actually increase HDL levels to further benefit patients.