

Statins (Cholesterol lowering)

LDL (“bad/genetic” cholesterol) is produced by the liver, released into the bloodstream, and circulates through the body until it reaches the liver again. All excess LDL is then absorbed by the liver and metabolized (broken down). Unfortunately, in patients with high cholesterol this absorptive mechanism is defective, and the excess LDL keeps circulating in the blood, forming cholesterol plaques, and clogging the arteries.

As mentioned above, LDL is strongly associated with cholesterol plaque build-up in arteries and cardiovascular disease. Decreasing LDL levels significantly decrease the risk of cardiovascular disease. Statins are medications designed to decrease LDL levels (cholesterol) in blood. Their action is on the liver, increasing the absorption and metabolism of LDL, thereby preventing cholesterol build-up in arteries.

Statins have been shown in multiple randomized, blinded dummy-controlled trials to reduce the risk for a 1st cardiac event by 30% and in patients who already have cardiovascular disease the risk of a 2nd event by 35%. The data is robust and undisputable.

Unfortunately, statins have come under massive criticism by social media and “popular press” and for their side-effects. Allegations of dementia, cancer etc. have all been proven to be false in subsequent research trials. Approximately 1 in 10 patients may experience generalized muscle pains or joint pains. The statin may then be stopped to assess whether the symptoms disappear, and then restarted to confirm whether the symptoms recur. In those patients it is recommended to contact the doctor for a dose reduction or alternate statin.

Liver enzymes may increase mildly, due to the action of the statin on the liver where it increases the breakdown of LDL. Approximately 1/1 000 000 patients, nearly always alcoholics, may develop severe liver disease.

In conclusion, statins are very effective medication which decreases the “bad” cholesterol and reduces your risk for cardiovascular disease.

Certain target LDL levels should be achieved in order to minimize risk. Your doctor will know these targets and up-titrate the statin dose to reach these levels.