

## **High-dose statins should be administered in all patients with acute large artery atherosclerotic stroke:yes**

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Taking statins before stroke may improve early outcomes including early neurologic deterioration, mortality, and disability in patients with acute ischemic stroke (AIS). In a recent meta-analysis, statin pretreatment was found to reduce mortality risk, while increasing good functional outcome at 3 months after stroke onset. In another systematic review, the beneficial effect of statin pretreatment in AIS was more profound in patients with high vascular risk and in patients with ideal low-density lipoprotein levels. Large artery atherosclerotic (LAA) stroke carries the highest risk of early recurrent stroke in comparison to other AIS subtypes. Our group and other investigators have shown that the potential beneficial effect of statin pretreatment and treatment during the first days of ictus is accentuated in patients with AIS due to LAA. The potential underlying mechanisms are related to improvement in cerebral blood flow due to the vasodilatory and pleiotropic effects of statins and to reduction of micro-embolism and artery-to-artery embolism due to statin-induced atherosclerotic plaque stabilization.