Efficacy of high-dose atorvastatin or rosuvastatin loading in patients with acute coronary syndrome (ACS) undergoing percutaneous coronary intervention (PCI): a meta-analysis of randomized controlled trials with GRADE qualification of available evidence

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- In this meta-analysis, high-dose atorvastatin or rosuvastatin compared with no or low-dose statin administered before planned PCI in statin-naive patients with ACS.
- High-dose statin loading was associated with 43% relative risk reduction in major adverse cardiovascular and cerebrovascular events (MACCE) at 30 days in all ACS patients. This effect was primarily driven by the 39% reduction in the occurrence of myocardial infarction – MI.
- In the setting of ST-elevation myocardial infarction (STEMI), atorvastatin loading was associated with a 33% reduction in MACCE.
- In non-ST-elevation myocardial infarction ACS (NSTE-ACS), rosuvastatin loading was associated with 52% reduction in MACCE at 30 days.

A high-dose loading of statins before PCI in patients with ACS reduces MACCE and reduces the risk of MI. Atorvastatin reduces MACCE in STEMI while rosuvastatin reduces MACCE in NSTE-ACS at 30 days.