

中文題目：Pitavastatin、atorvastatin 及 rosuvastatin 對新發生糖尿病的風險分析：
一個單一中心世代研究

英文題目：Effects of pitavastatin, atorvastatin, and rosuvastatin on the risk of
new-onset diabetes mellitus: A single-center cohort study

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Background: Statins constitute the mainstay treatment for atherosclerotic cardiovascular disease, which is associated with the risk of new-onset diabetes mellitus (NODM). However, the effects of individual statins on the risk of NODM and the underlying mechanisms remain unclear.

Methods: A total of 48,941 patients taking one of the 3 interested statins in a tertiary hospital between 2006 and 2018 were recruited. Among them, 8337 non-diabetic patients taking moderate-intensity statins (2 mg/day pitavastatin, 10 mg/day atorvastatin, and 10 mg/day rosuvastatin) were included. We compared the incidence and hazard ratio (HR) of NODM among the included statins.

Results: The NODM incidence rate was lower in pitavastatin group (12.7%) than in atorvastatin (18.3%) and rosuvastatin (21.6%) groups ($p < 0.001$). The pitavastatin group had a higher probability of being NODM-free than the atorvastatin and rosuvastatin groups during the 4-year follow-up (log-rank test: $p = 0.038$). A subgroup analysis revealed that rosuvastatin was associated with a significantly higher risk of NODM than pitavastatin among patients with coronary artery disease (CAD) (adjusted HR [aHR], 1.47, 95% confidence interval [CI], 1.05–2.05, $p = 0.025$), hypertension (aHR, 1.26, 95% CI, 1.00–1.59, $p = 0.047$), or chronic obstructive pulmonary disease (COPD) (aHR, 1.74, 95% CI, 1.02–2.94, $p = 0.04$).

Conclusions: Compared with rosuvastatin, reduced diabetogenic effects of pitavastatin were observed among patients treated with moderate-intensity statin who

had hypertension, COPD, or CAD. Additional studies are required to prove the effects of different statins on the risk of NODM.