

Abstract Submission No.: A-1153**Effects of administration and intensity of statin on mortality in patients undergoing hemodialysis**

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Objectives : Few studies have investigated the association between the intensity of statin and patient survival rates in patients undergoing hemodialysis (HD) as primary outcomes. This study aimed to evaluate patient survival rates according to the intensity of statins using a large sample of patients undergoing maintenance HD.

Methods : Data from a national HD quality assessment program were used in this study (n = 53,345). We divided the patients into four groups based on the administration and intensity of statins: Group 1, patients without a prescription of statins (n = 37,944); Group 2, patients with a prescription of a low intensity of statins (n = 700); Group 3, patients with a prescription of a moderate intensity of statins (n = 14,160); Group 4, patients with a prescription of a high intensity of statins (n = 541).

Results : Multivariable Cox regression analyses showed that the patient survival rate was higher for Group 3 than for Group 1. Among the subgroup analyses based on sex, age, presence of diabetes mellitus, and heart disease, most multivariable analyses showed significantly higher patient survival rates in Group 3 than for Group 1. Cox regression analyses using data of weights showed that, on univariate analyses, the HRs were 0.93 (95% CI, 0.91–0.95, P < 0.001) in Group 2 and 0.95 (95% CI, 0.93–0.96, P < 0.001) in Group 3 compared to that in Group 1. Group 4 had a higher mortality rate than Groups 2 or 3. Multivariable Cox regression analyses demonstrated trends consistent with those of the univariate analyses.

Conclusions : Our study found that the administration of low or moderate intensity of statins was associated with improved patient survival rates compared to non-users. However, the survival benefits of statin therapy disappeared at high intensity of statin therapy.