**Supplementary Table 1.** Univariate predictors of incident cirrhosis[1], adjusted for baseline FIB-4 score

| Variable† | HR | 95% CI | p-value |
|---|---|---|---|
| Age, per 10 year increase | 1.03 | 0.95,1.11 | 0.48 |
| Race | | | |
| • White (comparator) | 1 | | |
| • Black | 1.13 | 1,1.29 | 0.05 |
| • Hispanic | 1.07 | 0.87,1.31 | 0.52 |
| • Other | 0.97 | 0.82,1.14 | 0.68 |
| Male sex | 1.28 | 0.96,1.72 | 0.1 |
| HCV RNA, per $\log_{10}$ increase | 1.09 | 1.06,1.12 | <.0001 |
| HCV genotype | | | |
| · 1a | 1 | | |
| · 1b | 0.9 | 0.73,1.1 | 0.28 |
| · 1ns | 0.89 | 0.67,1.17 | 0.41 |
| · 2 | 0.75 | 0.61,0.93 | 0.01 |
| · 3 | 0.92 | 0.74,1.16 | 0.49 |
| · 4-6 | 0.86 | 0.39,1.94 | 0.72 |
| · Unknown | 0.67 | 0.59,0.76 | <.0001 |
| Body mass index, per unit increase | 1 | 0.99,1.01 | 0.59 |
| Dyslipidemia, baseline | 1.07 | 0.97,1.18 | 0.19 |
| Diabetes | 1.19 | 1.05,1.34 | 0.01 |
| NAFLD | 1.16 | 0.96,1.39 | 0.12 |
| Alcohol abuse or dependence | 1.32 | 1.2,1.46 | <.0001 |
| Smoking history (any vs. none) | 1.4 | 1.16,1.7 | 0.0006 |
| Daily caffeine intake (any vs. none) | 1.84 | 1.22,2.78 | 0.004 |
| Prior HCV treatment | | | |
| • IFN/RBV only | 1 | | |
| • IFN/RBV/BOC | 0.94 | 0.76,1.15 | 0.53 |
| • IFN/RBV/TPV | 1.44 | 0.95,2.2 | 0.09 |
| Treatment naïve (vs. experienced) | 0.87 | 0.66,1.15 | 0.34 |
| Attainment of SVR (vs. no SVR) | 0.49 | 0.44,0.54 | <.0001 |
| **Medication use[3]** | | | |
| Statins | 0.66 | 0.6,0.73 | <.0001 |
| Angiotensin converting enzyme (ACE) inhibitors | 0.99 | 0.89,1.09 | 0.78 |
| Metformin | 1.04 | 0.93,1.16 | 0.53 |
| Other lipid-lowering agent[4] | 0.83 | 0.7,0.99 | 0.04 |
| Non-steroidal anti-inflammatory (NSAID) | 1.12 | 0.95,1.32 | 0.19 |

†Variables were included if present at any time during study period, unless noted otherwise
[1]Cirrhosis defined as FIB-4 score > 3.5
[2]NAFLD, Non-alcoholic fatty liver disease, as defined by ICD-9 code
[3]Medication use included use of any listed medications, at any time during study period, vs. non-use

[4] Other lipid-lowering agents include: fibrates (clofibrate, fenofibrate, gemfibrozil), niacin, ezetimibe, bile acid sequestrants (cholestyramine, colesevelam, colestipol)

**Supplementary Table 2A and 2B**

Hazard Ratio (HR) of statin use and reduction of (A) fibrosis progression, and (B) hepatocellular carcinoma (HCC), after exclusion of subjects who attained SVR

2A.

| Model | Statin use[1] | | | | | |
|---|---|---|---|---|---|---|
| | 28 to 89 cDDDs[2] | | 90 to 180 cDDDs | | >180 cDDDs | |
| | HR (95% CI) | p-value | HR (95% CI) | p-value | HR (95% CI) | p-value |
| Adjusted HR[†] | 0.82 (0.41,1.64) | 0.58 | 0.48 (0.24,0.96) | 0.04 | 0.56 (0.38,0.83) | 0.004 |

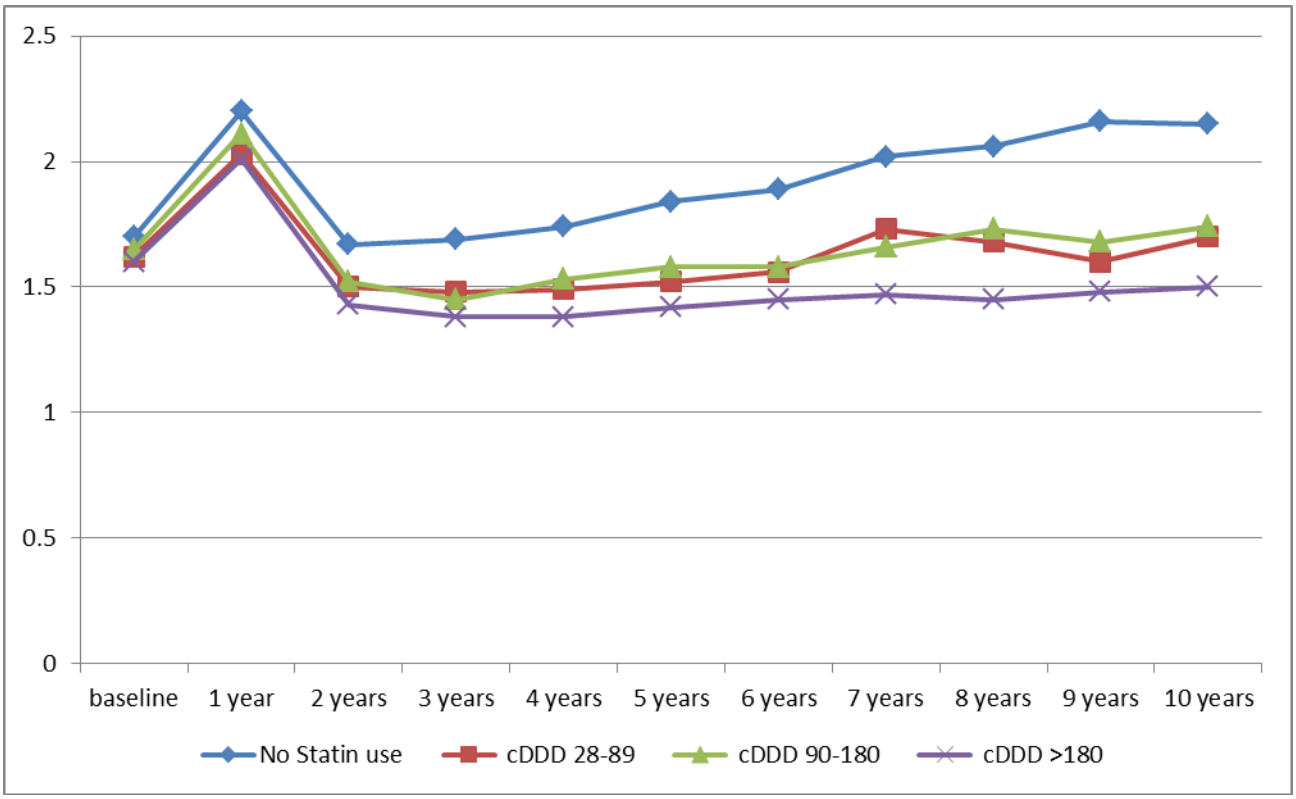
[†]*Adjusted model created after exclusion of subjects who attained SVR. Model adjusted for age, sex, race, smoking history, alcohol abuse history, caffeine intake, BMI, Diabetes, baseline FIB-4 score, Metformin use, Angiotensin converting enzyme inhibitor use, other lipid-lowering agent use, NSAID use and prior completed HCV treatment
[1]Statin use defined as ≥ 28 cumulative defined daily doses (cDDDs) of statin medications, over study observation period
[2]cDDDs, cumulative defined daily doses

2B.

| | | **Unadjusted HR** | | | **Adjusted HR*** | | |
|---|---|---|---|---|---|---|---|
| Variable, N | Fibrosis progression[1] N (%) | β coefficient | HR (95% CI) | *P*-value | β coefficient | HR (95% CI) | *P*-value |
| Statin use[1], 1870 | | | | | | | |
| cDDD 28-89, 257 | 52 (20.23%) | -0.48 | 0.62(0.47,0.82) | 0.0009 | -0.34 | 0.71(0.54,0.95) | 0.02 |
| cDDD 90-180, 364 | 79(21.7%) | -0.40 | 0.67(0.53,0.85) | 0.0008 | -0.28 | 0.76(0.6,0.96) | 0.02 |
| cDDD >180, 1249 | 212 (16.97%) | -0.71 | 0.49(0.42,0.57) | <.0001 | -0.68 | 0.51(0.43,0.6) | <.0001 |
| No Statin use; 2608 | 770 (29.52%) | | 1 | | | 1 | |

*Adjusted model created after exclusion of subjects who attained SVR. Model adjusted for age, sex, race, smoking history, alcohol abuse history, caffeine intake, BMI, Diabetes, baseline FIB-4 score, Metformin use, Angiotensin converting enzyme inhibitor use, other lipid-lowering agent use, NSAID use and prior completed HCV treatment
[1]Statin use defined as ≥ 28 cumulative defined daily doses (cDDDs) of statin medications, over study observation period
[2]cDDDs, cumulative defined daily doses

**Supplementary Figure 1.**
Mean FIB-4 scores of included subjects (n=9135) over time, according to statin cumulative defined daily dose (cDDD)†




†Using ANOVA test, all p-values for each of the four cDDD groups are <0.0001, at each time point during the 13-year study observation period