**Supplementary Table 1. International Classification of Diseases, versions 9 and 10 (ICD-9-CM, ICD-10-CM) codes used to identify type 2 diabetes and conditions used in propensity score calculations.**

|  |  |
| --- | --- |
| **Condition** | **Related diagnosis codes** |
| Diabetes mellitus type 2 | ICD-9-CM 250.00, 250.02, 250.10, 250.12, 250.20, 250.22, 250.30, 250.32, 250.40, 250.42, 250.50, 250.52, 250.60, 250.62, 250.70, 250.72, 250.80, 250.82, 250.90, 250.92; ICD-10-CM E11 |
| Hypertension | ICD-9-CM 401 ~ 405; ICD-10-CM I10, I11.0, I11.9, I12.0, I12.9, I13.10, I13.11, I13.2 |
| Hyperlipidemia | ICD-9-CM 272.0 ~ 272.3; ICD-10-CM E78 |

**Supplementary Table 2: Differences in exposures and treatment at index date for 1:1 matched cohort using propensity scores in patients undergoing DAA therapy.**

| **Variable** | **Response** | **Untreated(N= 73)** | **Treated(N= 73)** | **p-value** |
| --- | --- | --- | --- | --- |
| **Age**  |  | 59.7 ± 9.7 | 59.1 ± 8.6 | 0.699 |
| **Study site**  | GHS | 12 (16%) | 10 (14%) | 0.961 |
|  | HFHS | 5 (7%) | 6 (8%) |  |
|  | KPHI | 34 (47%) | 34 (47%) |  |
|  | KPNW | 22 (30%) | 23 (32%) |  |
| **Sex** | Female | 24 (33%) | 30 (41%) | 0.304 |
|  | Male | 49 (67%) | 43 (59%) |  |
| **Race** | African American | 5 (7%) | 5 (7%) | 0.790 |
|  | White | 35 (48%) | 31 (42%) |  |
|  | Other/Unknown | 33 (45%) | 37 (51%) |  |
| **FIB4** | ≤1.21 | 11 (15%) | 12 (16%) | 0.829 |
|  | 1.21≤5.88 | 46 (63%) | 43 (59%) |  |
|  | >5.88 | 11 (15%) | 10 (14%) |  |
|  | Unknown | 5 (7%) | 8 (11%) |  |
| **Insurance** | Medicaid | 12 (16%) | 12 (16%) | 0.673 |
|  | Medicare | 8 (11%) | 7 (10%) |  |
|  | Private | 21 (29%) | 20 (27%) |  |
|  | None or unknown | 30 (41%) | 34 (47%) |  |
| **Weighted Charlson-Deyo Comorbidity Score**  | 0 | 3 (4%) | 2 (3%) | 0.624 |
| 1 | 19 (26%) | 24 (33%) |  |
| ≥2 | 51 (70%) | 47 (64%) |  |
| **Cirrhosis** | No | 57 (78%) | 61 (84%) | 0.400 |
|  | Yes | 16 (22%) | 12 (16%) |  |
| **HCV Genotype** | 1 | 55 (75%) | 53 (73%) | 0.411 |
|  | 2 | 3 (4%) | 7 (10%) |  |
|  | Other /Unknown | 15 (21%) | 13 (18%) |  |
| **Hypertension** | Yes | 27 (37%) | 22 (30%) | 0.381 |
| **Hyperlipidemia** | Yes | 16 (22%) | 22 (30%) | 0.258 |
| **Statin use, ever** | Yes | 40 (55%) | 40 (55%) | 1.000 |
| **HbA1ca** |  | 8.0 ± 2.1 | 7.8 ± 1.8 | 0.681 |

*a Logscale was used for the propensity score calculation. Original scale is presented for ease of interpretation.*

*b Type III analysis using Wald Chi-square test from multiple variable logistic regression.*

*GHS: Geisinger Health System; HFHS: Henry Ford Health System; KPHI: Kaiser Permanente Hawai’I; Kaiser Permanente Northwest; FIB4: Fibrosis-4 index; Hba1c: hemoglobin A1c;*

**Supplementary Table 3.** **Glycosolated hemoglobin (HbA1c): Estimated percentage change by treatment status and response in patients undergoing treatment with direct-acting antiviral therapy.**

|  |  |  |
| --- | --- | --- |
|  | **Phase I: 0–6 months** **post-index** | **Phase II: 6–15 months** **post-index** |
|  | **change (95%CI)** | **p** | **change (95%CI)** | **p** |
| **SVR** | -5.7% (-8.3%, -3.0%) | <.001 | 3.9% (0.6%, 7.3%) | 0.019 |
| **TF** | 0.2% (-10.9%, 12.8%) | 0.968 | 6.8% (-6.5%, 22.1%) | 0.330 |
| **Untreated** | -0.8% (-3.9%, 2.5%) | 0.637 | -0.0% (-3.0%, 3.1%) | 0.992 |

*\* CI: confidence interval; SVR: sustained virological response; TF: treatment failure.*

Supplemental Figure 1. Predicted mean of longitudinal trajectory of glycosolated hemoglobin in log scale (logHbA1c) by treatment status and response in patients undergoing treatment with direct acting antivirals. (Shaded area: 95% confidence band)

