**Supplementary Information**

**Supplementary Materials and Methods**

Rash-related dermatologic events (composite MedDRA term) includedallergic dermatitis, vasculitic rash, eczema, purpura, petechiae, dermatitis acneiform, ecchymosis, gingival disorder, cheilitis, pemphigoid, acute generalized exanthematous pustulosis, dermatitis, bullous dermatitis, exfoliative dermatitis, generalized exfoliative dermatitis, drug eruption, drug rash with eosinophilia and systemic symptoms, erythema multiforme, exfoliative rash, fixed eruption, genital rash, hemorrhagic urticaria, idiopathic urticaria, mucocutaneous rash, oral mucosal eruption, rash, erythematous rash, follicular rash, urticaria, generalized rash, macular rash, maculo-papular rash, maculovesicular rash, morbilliform rash, papular rash, papulosquamous rash, pruritic rash, pustular rash, vesicular rash, septic rash, Stevens-Johnson syndrome, tongue eruption, toxic epidermal necrolysis, toxic skin eruption, and popular urticaria.

**Supplementary Results**

*On-treatment safety in GT1-infected patients*

Related SAEs in the DCV group included cellulitis (n = 2), pneumonia (n = 2), lung infection (n = 1), pneumococcal sepsis (n = 1), DRESS syndrome (n = 1), rash (n = 1), generalized rash (n = 1), bipolar disorder (n = 1), panic attack (n = 1), hemolytic anemia (n = 1), cholelithiasis (n = 1), overdose (n = 1), and lung infiltration (n = 1).

Related SAEs in the TVR group included anemia (n = 5), acute renal failure (n = 2), infectious proctitis (n = 1), DRESS syndrome (n = 1), drug eruption (n = 1), depression (n = 2), panic disorder (n = 1), psychotic disorder (n = 1), suicidal ideation (n = 1), intentional overdose (n = 1), palpitations (n = 1), gastrointestinal hemorrhage (n = 1), vomiting (n = 1), hypokalemia (n = 1), convulsion (n = 1), headache (n = 1), syncope (n = 1), circulatory collapse (n = 1), and venous thrombosis (n = 1).

AEs leading to discontinuation of any study drug in the DCV group included psychiatric disorders (n = 6), skin disorders (n = 6), blood and lymphatic system disorders (n = 5), gastrointestinal disorders (n = 3), infections and infestations (n = 3), nervous system disorders (n = 3), tinnitus (n = 2), retinal exudates (n = 2), general disorders (n = 2), respiratory disorders (n = 2), coronary artery disease (n = 1), autoimmune hepatitis (n = 1), postoperative anemia (n = 1), back pain (n = 1), and lung adenocarcinoma (n = 1).

AEs leading to discontinuation of any study drug in the TVR group included skin disorders (n = 18), blood and lymphatic system disorders (n = 9), fatigue (n = 5), gastrointestinal disorders (n = 4), psychiatric disorders (n = 3), infections and infestations (n = 3), nervous system disorders (n = 3), retinal exudates (n = 1), asthenia (n = 1), atrial fibrillation (n = 1), intentional overdose (n = 1), decreased appetite (n = 1), and acute renal failure (n = 2).

**Supplementary Table 1.** Outcomes in GT1a-Infected Patients

|  |  |  |
| --- | --- | --- |
| Outcome, n/N (%) | DCV + pegIFN/RBV(N = 134) | TVR + pegIFN/RBV (N = 66) |
| Efficacy and safety endpointsa |
| SVR12 (HCV-RNA <LLOQ at PT week 12)b | 87/134 (64.9)  | 46/66 (69.7)  |
| SVR12 on or after PT week 12c | 87/134 (64.9)  | 47/66 (71.2)  |
| Hemoglobin <10 g/dL through week 12 | 17/133 (12.8)  | 22/65 (33.8)  |
| Rash-related events through week 12  | 0/134 (0)  | 7/66 (10.6)  |
| RVR (HCV-RNA undetectable at week 4) | 80/134 (59.7)  | 41/66 (62.1)  |
| eRVR (HCV-RNA undetectable at weeks 4 and 12) | 72/134 (53.7)  | 36/66 (54.5)  |
| cEVR (HCV-RNA undetectable at week 12) | 95/134 (70.9)  | 49/66 (74.2)  |
| EOTR (HCV-RNA undetectable at EOT) | 102/134 (76.1) | 53/66 (80.3) |
| SVR24 (<LLOQ at PT week 24) | 85/134 (63.4)  | 44/66 (66.7)  |
| SVR12 by subgroupsa |
| Age |  |  |
|  <65 years | 85/131 (64.9)  | 42/62 (67.7)  |
|  ≥65 years | 2/3 (66.7)  | 4/4 (100.0)  |
| Sex |  |  |
|  Male | 60/98 (61.2)  | 35/47 (74.5)  |
|  Female | 27/36 (75.0)  | 11/19 (57.9)  |
| Cirrhosis |  |  |
|  Absent | 78/118 (66.1)  | 41/57 (71.9)  |
|  Present | 9/16 (56.3)  | 5/9 (55.6)  |
| HCV-RNA |  |  |
|  <800,000 IU/mL | 24/30 (80.0)  | 13/15 (86.7)  |
|  ≥800,000 IU/mL | 63/104 (60.6)  | 33/51 (64.7)  |
| *IL28B* genotype |  |  |
|  CC | 37/42 (88.1)  | 17/20 (85.0)  |
|  CT | 40/73 (54.8)  | 25/37) (67.6)  |
|  TT | 10/19 (52.6)  | 4/9 (44.4)  |
| On-treatment failures and relapse  |
| Non-SVR12 | 47/134 (35.1)  | 20/66 (30.3)  |
| On-treatment failures | 29/134 (21.6) | 10/66 (15.2) |
| Virologic breakthrough | 11/134 (8.2) | NAd |
| Treatment futility other than virologic breakthrough | 4/134 (3.0)  | 3/66 (4.5)  |
| HCV-RNA missing or detectable at EOT | 14/134 10.4)  | 7/66 (10.6)  |
| Posttreatment relapsee | 9/102 (8.8)  | 3/53 (5.7)  |
| HCV-RNA undetectable at EOT but missing PT week 12 data | 9/102 (8.8)  | 7/53 (13.2)  |

cEVR, undetectable HCV-RNA at week 12; DCV, daclatasvir; EOT, end of treatment; EOTR, HCV-RNA undetectable at EOT; eRVR, undetectable HCV-RNA at weeks 4 and 12; GT, genotype; HCV, hepatitis C virus; LLOQ, lower limit of quantitation; NA, not applicable; pegIFN, peginterferon alfa-2a; PT, posttreatment; RBV, ribavirin; RVR, undetectable HCV-RNA at week 4; SVR12, sustained virologic response (HCV-RNA < LLOQ) at posttreatment week 12; SVR24, sustained virologic response at posttreatment week 24; TVR, telaprevir.

aAll data shown as mITT unless stated otherwise.

bSecondary endpoint. Difference, −3.5%; 95% CI, −15.9% to 8.9%.

cPatients with missing data at follow-up week 12 were considered responders if the next available HCV-RNA value was <LLOQ. dNot included in TVR futility criteria per prescribing information. eAssessed in patients with undetectable HCV-RNA at EOT.

**Supplementary Table 2.** Safety in GT1-Infected Patients With and Without Cirrhosis

| Event, n (%) | With cirrhosis | Without cirrhosis |
| --- | --- | --- |
| DCV + pegIFN/RBV(N = 42) | TVR + pegIFN/RBV (N = 24) | DCV + pegIFN/RBV (N = 360) | TVR + pegIFN/RBV(N = 176) |
| Death | 1 (2.4) | 1 (4.2) | 0 | 0 |
| SAEs | 3 (7.1) | 4 (16.7) | 23 (6.4) | 16 (9.1) |
| AEs leading to discontinuation of any study drug | 2 (4.8) | 5 (20.8) | 26 (7.2) | 32 (18.2) |
| Most frequent AEs (>20%) |  |  |  |  |
| Fatigue | 16 (38.1) | 12 (50.0) | 124 (34.4) | 69 (39.2) |
| Headache | 12 (28.6) | 5 (20.8) | 125 (34.7) | 52 (29.5) |
| Asthenia | 9 (21.4) | 8 (33.3) | 100 (27.8) | 45 (25.6) |
| Pruritus | 10 (23.8) | 7 (29.2) | 97 (26.9) | 68 (38.6) |
| Anemia | 14 (33.3) | 14 (58.3) | 82 (22.8) | 85 (48.3) |
| Rash | 9 (21.4) | 10 (41.7) | 84 (23.3) | 59 (33.5) |
| Nausea | 5 (11.9) | 9 (37.5) | 83 (23.1) | 65 (36.9) |
| Neutropenia | 11 (26.2) | 4 (16.7) | 76 (21.1) | 23 (13.1) |
| Alopecia | 7 (16.7) | 3 (12.5) | 79 (21.9) | 29 (16.5) |
| Influenza-like illness | 8 (19.0) | 2 (8.3) | 77 (21.4) | 36 (20.5) |
| Dry skin | 6 (14.3) | 4 (16.7) | 78 (21.7) | 30 (17.0) |
| Pyrexia | 8 (19.0) | 5 (20.8) | 72 (20.0) | 37 (21.0) |
| Diarrhea | 7 (16.7) | 5 (20.8) | 56 (15.6) | 30 (17.0) |
| Insomnia | 11 (26.2) | 5 (20.8) | 60 (16.7) | 30 (17.0) |
| Grade 3 or 4 emergent laboratory abnormalities |
| Hemoglobin | 6 (14.3) | 7 (29.2) | 20 (5.6) | 34 (19.5) |
| Absolute neutrophil count | 11 (26.2) | 6 (25.0) | 93 (25.9) | 35 (20.1) |
| Elevated lymphocytes | 8 (19.0) | 5 (20.8) | 59 (16.4) | 39 (22.4) |
| Platelet count | 9 (21.4) | 4 (16.7) | 6 (1.7) | 4 (2.3) |
| ALT | 1 (2.4) | 1 (4.2) | 2 (1.6) | 2 (1.1) |
| AST | 2 (4.8) | 1 (4.2) | 4 (1.1) | 0 |
| Total bilirubin | 2 (4.8) | 4 (16.7) | 2 (0.6) | 2 (1.1) |

AE, adverse event; ALT, alanine aminotransferase; AST, aspartate aminotransferase; DCV, daclatasvir; GT, genotype; pegIFN, peginterferon alfa-2a; RBV, ribavirin; SAE, serious adverse event; TVR, telaprevir.

**Supplementary Table 3.** Multivariate Logistic Regression Analysis for SVR12 in GT1b-Infected Patients

|  |  |  |  |
| --- | --- | --- | --- |
| Prognostic factors | Odds ratio | 95% CI | *P* |
| Treatment (DCV + pegIFN/RBV vs TVR + pegIFN/RBV) | 1.35 | 0.76-2.38 | .308 |
| Cirrhosis (absent vs present) | 2.35 | 1.08-5.13 | .031 |
| Baseline HCV-RNA (<800,000 IU/mL vs ≥800,000 IU/mL) | 2.45 | 1.18-5.06 | .016 |
| Race (black/Asian/other vs white) | 0.68 | 0.26-1.79 | .429 |
| *IL28B* rs12979860 genotype (CC vs non-CC) | 3.25 | 1.31-8.03 | .011 |
| Age (<65 vs ≥65 years) | 1.23 | 0.38-3.93 | .728 |
| Sex (male vs female) | 1.16 | 0.67-2.01 | .607 |

DCV, daclatasvir; HCV, hepatitis C virus; GT, genotype; SVR12, sustained virologic response (HCV-RNA < LLOQ) at posttreatment week 12; TVR, telaprevir.

aAll data shown as modified intent-to treat unless stated otherwise.