FINAL SYNOPTIC CLINICAL STUDY REPORT

Study Title:	A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Investigate the Efficacy and Safety of Sofosbuvir/GS-5816 Fixed Dose Combination for 12 Weeks in Subjects with Chronic HCV
Name of Test Drug:	Sofosbuvir (SOF)/velpatasvir (VEL, GS-5816) Fixed-Dose Combination (FDC)
Dose and Formulation:	Sofosbuvir/velpatasvir FDC (400/100 mg) tablet
Indication:	Hepatitis C virus infection
Sponsor:	Gilead Sciences, Inc. 333 Lakeside Drive Foster City, CA 94404, USA
Study No.:	GS-US-342-1138 (ASTRAL-1)
Phase of Development:	Phase 3
IND No.: **EudraCT No.:**	118605 2014-001683-35
ClinicalTrials.gov Identifier:	NCT02201940
Study Start Date:	18 July 2014 (First Subject Screened)
Study End Date:	23 September 2015 (Last Subject Observation)
Principal or Coordinating Investigator:	Name: Stefan Zeuzem, MD Affiliation: PPD PPD
Gilead Responsible Medical Monitor:	Name: Anu Osinusi, MD Telephone: PPD Fax: PPD
Report Date:	11 February 2016
Previous Report Date(s):	08 September 2015 (Interim Clinical Study Report)

STUDY SYNOPSIS

Study GS-US-342-1138
Gilead Sciences, Inc.
333 Lakeside Drive
Foster City, CA 94404
USA

Title of Study: A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Investigate the Efficacy and Safety of Sofosbuvir/GS-5816 Fixed Dose Combination for 12 Weeks in Subjects with Chronic HCV

Investigators: This was a multicenter study.

Study Centers: Subjects were enrolled across 81 study sites in the United States, Canada, Europe, and Asia

Publications:

Asselah T, Charlton M, Feld J, Foster GR, Mcnally J, Brainard DM, et al. The ASTRAL Studies: Evaluation of SOF/GS-5816 Single Tablet Regimen for the Treatment of Genotype 1-6 HCV Infection [Poster P1332]. J Hepatol 2015;62:S855-S6.

Feld JJ, Jacobson IM, Hezode, C, Assehah T, Ruane PJ, Gruener N, et al. Sofosbuvir and Velpatasvir for HCV Genotype 1, 2, 4, 5, and 6 Infection. N Engl J Med 2015;373:2599-2607.

Feld JJ, Agarwal K, Hezode C, Asselah T, Ruane PJ, Gruener N, et al. A Phase 3 Double-Blind Placebo-Controlled Evaluation of Sofosbuvir/Velpatasvir Fixed Dose Combination for 12 Weeks in Naive and Experienced Genotype 1, 2, 4, 5, 6 HCV Infected Patients with and without Cirrhosis: Results of the ASTRAL-1 Study. J Hepatol 2015;62(6) Suppl:1379A-1380A.

Study Period:

18 July 2014 (First Subject Screened)
17 June 2015 (Last Subject Observation for the Primary Endpoint)
23 September 2015 (Last Subject Observation)

Phase of Development: Phase 3

Objectives:

The primary objectives of this study were as follows:

- To evaluate the efficacy of treatment with sofosbuvir (SOF)/velpatasvir (VEL, GS-5816) fixed-dose combination (FDC) for 12 weeks in subjects with chronic hepatitis C virus (HCV) infection as measured by the proportion of subjects with sustained virologic response (SVR) 12 weeks after cessation of treatment (SVR12)
- To evaluate the safety and tolerability of treatment with SOF/VEL for 12 weeks

The secondary objectives of this study were as follows:

- To determine the proportion of subjects who attained SVR at 4 and 24 weeks after cessation of treatment (SVR4 and SVR24)
- To evaluate the proportion of subjects with virologic failure
- To evaluate the kinetics of circulating HCV RNA during treatment and after cessation of treatment
- To evaluate the emergence of viral resistance to SOF and VEL during treatment and after cessation of treatment
- To characterize steady-state pharmacokinetics (PK) of study drugs

The exploratory objectives of this study were as follows:

- To identify or validate genetic markers that may be predictive of the natural history of disease, response to therapy and/or tolerability of medical therapies through genetic discovery research (eg, pharmacogenomics), in subjects who provide their separate and specific consent
- To assess the effect of treatment on health-related quality of life

Methodology: This Phase 3, randomized, double-blind, placebo-controlled, multicenter, international study assessed the antiviral efficacy, safety, and tolerability of 12 weeks of SOF/VEL treatment compared with 12 weeks of placebo treatment in subjects with chronic genotype 1, 2, 4, 5, or 6 HCV infection.

Approximately 600 subjects were enrolled in a 5:1 ratio in a double-blind manner to 1 of the following 2 treatment groups:

- **SOF/VEL 12 Week group (Group 1):** SOF/VEL FDC (400/100 mg) tablet once daily for 12 weeks
- **Placebo 12 Week group (Group 2):** SOF/VEL placebo tablet once daily for 12 weeks

Randomization was stratified by HCV genotype (1, 2, 4, 6, and indeterminate) infection and the presence or absence of cirrhosis at screening. Subjects with genotype 5 HCV infection were not randomized but were enrolled into the SOF/VEL 12 Week group. Approximately 20% of subjects may have been treatment experienced, and approximately 20% of subjects may have had cirrhosis. The target enrollments for subjects with genotype 1, 2, 4, 5, and 6 HCV infections were 360, 120, 60, 20, and 40 subjects, respectively. It was expected that a small number of subjects whose HCV genotype could not be determined by LiPA (HCV genotype indeterminate) would also have enrolled.

All subjects were to complete the posttreatment Week 4 and 12 visits regardless of their treatment duration. Subjects who had HCV RNA less than the lower limit of quantitation (LLOQ) at the posttreatment Week 12 visit were also to complete the posttreatment Week 24 visit unless a confirmed viral relapse occurred.

All subjects were eligible to participate in the PK substudy if consent was obtained. An intensive 24-hour PK sample collection was performed at the on-treatment Week 2 or Week 4 visit to determine the steady-state PK of SOF, SOF metabolites GS-566500 and GS-331007, and VEL.

Subjects providing separate and specific consent were eligible for participation in the pharmacogenomics substudy. A blood sample was drawn at the baseline/Day 1 visit or at any time during the study.

After completing all required study visits, subjects in the SOF/VEL 12 Week group could enroll into an SVR Registry Study if SVR was achieved or into the Sequence Registry Study if SVR was not achieved.

Subjects in the Placebo 12 Week group with HCV RNA ≥ LLOQ at the posttreatment Week 12 visit (or posttreatment Week 24 visit) were offered the option to participate in the deferred treatment study.

This final synoptic clinical study report (CSR) summarizes the results of the final analysis of data collected throughout the course of the study, after all subjects had completed the posttreatment Week 24 visit or had prematurely discontinued from the study. Analysis of data collected for the primary efficacy endpoint (SVR12) was also reported in the interim CSR (08 September 2015).

Number of Subjects (Planned and Analyzed):
Planned: Approximately 600 subjects
Analyzed:

- All Randomized/Enrolled Analysis Set: 741 subjects
- Full Analysis Set: 740 subjects
- Safety Analysis Set: 740 subjects
- PK Analysis Set: 623 subjects
- PK Substudy Analysis Set: 70 subjects

Diagnosis and Main Criteria for Inclusion: Eligible subjects were males or nonpregnant/nonlactating females of ≥ 18 years of age, with chronic HCV genotype 1, 2, 4, 5, 6, or indeterminate infection, were HCV treatment naive or treatment experienced, and had documentation of the presence or absence of cirrhosis.

Duration of Treatment: Treatment duration was 12 weeks, with up to 24 weeks of posttreatment follow-up.

Test Product, Dose, Mode of Administration, and Batch No.:

- SOF/VEL FDC tablets were administered orally to subjects in the SOF/VEL 12 Week group at a dose of 400/100 mg (1 FDC tablet once daily).

The batch numbers of SOF/VEL administered in this study were DU1402B1 and DU1404B1.

Reference Therapy, Dose, Mode of Administration, and Batch No.:

- SOF/VEL Placebo tablets matched the SOF/VEL FDC (400/100 mg) tablets and were administered orally to subjects in the Placebo 12 Week group (1 tablet once daily).

The batch number of SOF/VEL placebo administered in this study was DU1401B1.

Criteria for Evaluation:

Efficacy: The interim CSR (08 September 2015) describes details of the efficacy analyses. The COBAS® AmpliPrep/COBAS® TaqMan® HCV Quantitative Test, v2.0 was used to quantify HCV RNA in this study. The LLOQ of the assay was 15 IU/mL.

Pharmacokinetics: The interim CSR (08 September 2015) describes details on the collection of blood samples for the PK analyses.

Safety: The interim CSR (08 September 2015) provides analyses of adverse events (AEs) and concomitant medications, clinical laboratory analyses, vital sign measurements, electrocardiograms (ECGs), and physical examinations. This final synoptic CSR summarizes any new treatment-emergent AEs or changes to previously reported AEs between the data cuts for the interim CSR and the final CSR. Additionally, all serious adverse events (SAEs) collected after the data cutoff for the interim CSR to the end of the study (posttreatment Week 24) are summarized. Serious adverse events occurring > 30 days after the last dose of study drug were considered nontreatment emergent.

Quality of Life: The interim CSR (08 September 2015) provides analyses of the quality of life questionnaires (Short Form Health Survey [SF-36], Chronic Liver Disease Questionnaire [CLDQ]-HCV, Functional Assessment of Chronic Illness Therapy-Fatigue [FACIT-F], and Work Productivity and Activity Impairment [WPAI]: Hepatitis C) to assess the effect of treatment on health-related quality of life. This final CSR summarizes additional data at posttreatment Weeks 12 and 24 and any changes to data that were previously reported in the interim between the data cut offs for the interim CSR and the final CSR.

Statistical Methods:

All tables, figures, and listings produced for this study are provided in Section 15.1 and Appendix 16.2. Documentation of statistical methods is provided in Appendix 16.1.9 of this report and described in detail in Section 7.7 of the interim CSR (08 September 2015).

Efficacy: The primary efficacy endpoint was the proportion of subjects with HCV RNA < LLOQ 12 weeks after discontinuation of the study drug (SVR12) for the Full Analysis Set. The SVR12 rate in the SOF/VEL 12 Week group was compared with the performance goal of 85% by using the 2-sided exact 1-sample binomial test at the 0.05 significance level. The null (H0) and alternative (H1) hypotheses used to assess the superiority of SOF/VEL relative to the performance goal of 85% were as follows:

H0: SVR12 rate = 85%

H1: SVR12 rate ≠ 85%

The point estimate and the 2-sided 95% exact CIs for SVR12 rate based on the Clopper-Pearson method were provided for the SOF/VEL 12 Week and Placebo 12 Week groups, respectively.

Secondary efficacy endpoints included SVR4, SVR24, proportion of subjects with HCV RNA < LLOQ by study visit, HCV RNA absolute values and changes from baseline through end of treatment (EOT), and proportion of subjects with virologic failure.

All continuous endpoints were summarized using descriptive statistics (sample size, mean, SD, median, first quartile, third quartile, minimum, and maximum) by treatment group and stratification within group (as appropriate). All categorical endpoints were summarized by number and percentage of subjects who met the endpoint definition.

SVR24 rates were calculated using the same method as described for SVR12. If a subject achieved SVR12 and had no further HCV RNA measurement, the subject was counted as a success for SVR24 due to the high correlation between these 2 endpoints {Chen et al 2013}. In addition, an analysis to assess the concordance of SVR12 with SVR24 was performed for subjects with an observed HCV RNA within both the posttreatment Week 12 and posttreatment Week 24 visit windows.

Pharmacokinetics: Steady-state PK over a 24-hour dosing interval was determined in subjects who participated in the PK substudy at the on-treatment Week 2 or 4 visit. Results for all PK analyses are presented in the interim CSR. In addition, a population PK model was developed to characterize the PK of VEL, SOF, and SOF's major metabolite, GS-331007. Results for all PK analyses are presented in separate population PK reports.

Safety: All subjects who received at least 1 dose of study drug were included in the Safety Analysis Set. Safety assessments included monitoring of AEs and concomitant medications, clinical laboratory analyses, vital signs measurements, ECGs, and physical examinations. Safety data were analyzed by treatment group and included all data collected on or after the first dose of any study drug up to the date of the last dose of study drug plus 30 days. Adverse events were coded using the Medical Dictionary for Regulatory Activities (MedDRA), Version 18.0.

Other: The health-related quality of life questionnaires (SF-36, CLDQ-HCV, FACIT-F, and WPAI: Hep C) were completed at baseline/Day 1, Weeks 4, 8, and 12, early termination (if applicable), and posttreatment Weeks 4, 12, and 24 (if applicable). A Wilcoxon signed rank test explored within-treatment group changes from baseline to each of the time points, and from EOT to each posttreatment time point. A Wilcoxon rank sum test explored between-treatment group differences in change from baseline to each of the time points.

SUMMARY OF RESULTS:

Subject Disposition and Demographics:

A total of 740 randomized subjects received treatment in this study and were included in the Full Analysis Set and Safety Analysis Set (Table 15.8.1.3). Full details on subject disposition, demographics, and baseline disease characteristics are reported in Section 8 of the interim CSR (08 September 2015), and final subject disposition is summarized in Table 15.8.1.3.

No notable differences in demographic or baseline disease characteristics were observed between the interim analyses and the final analyses (Table 15.8.3.1, and Listings 16.2.4.1 and 16.2.4.2.1). There were a small number of additions and changes to concomitant medications that did not change the interpretation of the study results (Table 15.11.7.4 and Listing 16.2.4.4). Analyses related to disposition, demographics, and exposure are presented in Tables 15.8.1.1 to 15.8.4 and 15.11.1, Figure 15.8.1, and Listings 16.2.1.1 to 16.2.5.2. In addition, an updated Important Protocol Deviations Log for the study is provided in Appendix 16.2.2.

Efficacy Results:

Primary Endpoint:

The SOF/VEL 12 Week group met the primary endpoint of an SVR12 rate that was statistically superior relative to the prespecified performance goal of 85% ($p < 0.001$). The SVR12 rate was as follows:

- SOF/VEL 12 Week group: 99.0% (95% CI: 97.9% to 99.6%) of subjects (618 of 624) achieved SVR12.

No subjects in the Placebo group achieved SVR12.

High SVR12 rates were achieved across all HCV genotypes and subtypes, with SVR12 rates of 99.2% (120 of 121 subjects) among subjects with cirrhosis, 99.5% (200 of 201 subjects) among subjects with prior treatment failure, and 99.2% (255 of 257 subjects) among subjects with baseline nonstructural protein 5A (NS5A) resistance-associated variants (RAVs).

The results of the primary efficacy analysis presented in this report are the same as the results presented in the interim report.

Virologic Outcomes:

Six of 624 subjects (1.0%) who received SOF/VEL did not achieve SVR12 as reported in Section 9 of the interim CSR (08 September 2015). None of these subjects had posttreatment Week 24 assessments. Two subjects relapsed at posttreatment Week 4; one treatment-naive subject with genotype 1a HCV infection without cirrhosis and one treatment-experienced subject with genotype 1b infection and cirrhosis (Listing 16.2.6.2). Four additional subjects (3 subjects with genotype 1 HCV infection and 1 subject with genotype 5 HCV infection) did not achieve SVR12 (1 subject withdrew consent, 2 subjects did not return for the posttreatment Week 12 visit, and 1 subject died prior to the posttreatment Week 4 visit) (Listing 16.2.6.3). No subjects relapsed between posttreatment Weeks 12 and 24 (Listing 16.2.6.4). There were no on-treatment virologic failures.

No changes in virologic outcomes occurred between the Week 12 and 24 visits. The low number of virologic failures in the study precluded meaningful subgroup analysis of SVR.

Comparison of SVR4, SVR12, and SVR24:

The proportion of subjects with SVR4, SVR12, and SVR24 is presented in the table below. The SVR rates reported in the interim analysis were maintained in the SVR24 analysis with no additional relapses. Both treatment groups maintained the same SVR12 and SVR24 rates (Tables 15.9.1.1, 15.9.2.2, and Listing 16.2.6.1).

		SOF/VEL 12 Weeks			
	Placebo 12 Weeks (N = 116)	**Total (All Genotypes) (N = 624)**	**Genotype 1a (N = 210)**	**Genotype 1b (N = 118)**	**Genotype 1 Total (N = 328)**
SVR4	0/116	619/624 (99.2%)	207/210 (98.6%)	117/118 (99.2%)	324/328 (98.8%)
95% CI	0.0% to 3.1%	98.1% to 99.7%	95.9% to 99.7%	95.4% to 100.0%	96.9% to 99.7%
SVR12	0/116	618/624 (99.0%)	206/210 (98.1%)	117/118 (99.2%)	323/328 (98.5%)
95% CI	0.0% to 3.1%	97.9% to 99.6%	95.2% to 99.5%	95.4% to 100.0%	96.5% to 99.5%
SVR24	0/116	618/624 (99.0%)	206/210 (98.1%)	117/118 (99.2%)	323/328 (98.5%)
95% CI	0.0% to 3.1%	97.9% to 99.6%	95.2% to 99.5%	95.4% to 100.0%	96.5% to 99.5%

	Genotype 2 (N = 104)	Genotype 4 (N = 116)	Genotype 5 (N = 35)	Genotype 6 (N = 41)
SVR4	104/104 (100.0%)	116/116 (100.0%)	34/35 (97.1%)	41/41 (100.0%)
95% CI	96.5% to 100.0%	96.9% to 100.0%	85.1% to 99.9%	91.4% to 100.0%
SVR12	104/104 (100.0%)	116/116 (100.0%)	34/35 (97.1%)	41/41 (100.0%)
95% CI	96.5% to 100.0%	96.9% to 100.0%	85.1% to 99.9%	91.4% to 100.0%
SVR24	104/104 (100.0%)	116/116 (100.0%)	34/35 (97.1%)	41/41 (100.0%)
95% CI	96.5% to 100.0%	96.9% to 100.0%	85.1% to 99.9%	91.4% to 100.0%

HCV RNA was analyzed using COBAS AmpliPrep/COBAS TaqMan HCV Quantitative Test v2.0 with an LLOQ of 15 IU/mL.
SVRx was sustained virologic response (HCV RNA < LLOQ) x weeks after stopping study treatment.
A missing SVR value was imputed as a success if it was bracketed by values that were termed successes (ie, '< LLOQ TND' or '< LLOQ detected'); otherwise, the missing SVR value was imputed as a failure. TND = target not detected.
A missing SVR24 was imputed as a success if SVR12 was achieved with no follow-up values or by bracketed success.
The exact 95% CI for the proportion within treatment group was based on the Clopper-Pearson method.
Source: Table 15.9.2.2

Concordance between SVR12 and SVR24:

A total of 610 subjects treated with SOF/VEL for 12 weeks had HCV RNA assessed at both posttreatment Weeks 12 and 24 with 100% concordance between SVR12 and SVR24.

	SOF/VEL 12 Weeks SVR24							
	Total (All Genotypes)		Genotype 1a		Genotype 1b		Genotype 1 Total	
	Yes (N = 610	No (N = 0)	Yes (N = 205)	No (N = 0)	Yes (N = 115)	No (N = 0)	Yes (N = 320)	No (N = 0)
SVR12								
Yes	610	0	205	0	115	0	320	0
No	0	0	0	0	0	0	0	0
Positive Predictive Value	100%	0	100%	0	100%	0	100%	0

	Genotype 2		Genotype 4		Genotype 5		Genotype 6	
	Yes (N = 100	No (N = 0)	Yes (N = 115)	No (N = 0)	Yes (N = 34)	No (N = 0)	Yes (N = 41)	No (N = 0)
SVR12								
Yes	100	0	115	0	34	0	41	0
No	0	0	0	0	0	0	0	0
Positive Predictive Value	100%	0	100%	0	100%	0	100%	0

HCV RNA was analyzed using COBAS AmpliPrep/COBAS TaqMan HCV Quantitative Test v2.0 with an LLOQ of 15 IU/mL.
Only subjects that had both posttreatment Week 12 and posttreatment Week 24 data were included in the analysis.
Source: Table 15.9.2.3

All efficacy analyses are provided in Tables 15.9.2.1.1 to 15.9.2.5 and Listings 16.2.6.1 to 16.2.6.4.

Full details on the resistance analysis are reported in Section 9.3.1 of the interim CSR (08 September 2015). No additional resistance analyses were performed since no subjects relapsed between posttreatment Week 12 and posttreatment Week 24.

Pharmacokinetic Results:

Full details on the PK substudy analysis are reported in Section 10 of the interim CSR (08 September 2015). Results for all population PK analyses are presented in a separate Population PK Report.

Safety Results:

All AEs and laboratory abnormalities discussed in this CSR were treatment emergent and are referred to as AEs and laboratory abnormalities in this report, unless otherwise specified. Evaluations of safety data through 30 days after the last dose of study drugs were summarized in Section 11 of the interim CSR (08 September 2015).

Adverse Events and Serious Adverse Events

A small number of updates were made to previously reported AE data due to the ongoing nature of the study and data reconciliation. These changes were primarily associated with AE resolution dates or minor clarifications to AE terms and newly reported Grade 1 or 2 AEs (Appendix 16.2, Listing 16.2.7.1 and Ad Hoc Listing 7748.1). No additional treatment-emergent Grade 3 or 4 AEs were reported. These changes did not impact the overall interpretation or conclusions of the safety profile of SOF/VEL in this study, as described in the interim CSR (08 September 2015). Ad Hoc Listing 7748.1 provides a detailed listing of any newly reported AEs and AEs that had changes in reported or preferred term, onset date, or action(s) taken between the data cuts taken at the posttreatment Week 12 and posttreatment Week 24 time points.

No additional treatment-emergent SAEs were reported (Listing 16.2.7.4). Narratives for all SAEs, AEs leading to discontinuation of study drug, and deaths from the first dose of study drug through the end of the study (ie, the SVR24 visit) are provided in Section 15.2. No additional deaths were reported (Listing 16.2.7.3). No subject pregnancies were reported in this study (Listing 16.2.8.3).

All AE results are provided in Tables 15.11.2.1.1 to 15.11.5.2 and Listings 16.2.7.1 to 16.2.7.6.

Clinical Laboratory Results

Blood samples for clinical laboratory analyses were not collected at the posttreatment Week 24 visit. Overall, no clinically meaningful changes in the clinical laboratory results were observed (Tables 15.11.6.1.1 to 15.11.6.3, and Listings 16.2.8.1.4 to 16.2.8.1.9.

All laboratory results are provided in Tables 15.11.6.1.1 to 15.11.6.3 and Figures 15.11.6.1 to 15.11.6.10, Listing 16.2.8.1.3.1, and Listings 16.2.8.1.4 to 16.2.8.1.9.

Vital Sign Measurements and ECGs

Vital sign measurements (diastolic and systolic blood pressure, pulse, respiratory rate, and temperature) were collected at the posttreatment Week 24 visit. No notable changes were observed (Tables 15.11.7.1 to 15.11.7.3 and Listing 16.2.8.2.1).

All vital sign measurements and ECG results are provided in Tables 15.11.7.1 to 15.11.7.3 and 15.11.9, and Listings 16.2.8.2.1 and 16.2.8.2.3.1 to 16.2.8.2.3.2.

Quality of Life:

Full details on the quality of life questionnaires (SF-36, CLDQ-HCV, FACIT-F, and WPAI: Hepatitis C) through posttreatment Week 12 are reported in Section 12 of the interim CSR. All quality-of-life analyses are provided in Tables 15.12.1 to 15.12.4, Figures 15.12.1 to 15.12.4, and Listings 16.2.6.5 to 16.2.6.8.

Overall, results from the quality-of-life surveys remained consistent between posttreatment Week 12 and posttreatment Week 24 (Tables 15.12.1 to 15.12.4, Figures 15.12.1 to 15.12.4, and Listings 16.2.6.5 to 16.2.6.8). These results indicated that in the SOF/VEL 12 Week group, there were statistically significant ($p < 0.05$) improvements in health-related quality of life. The mean scores for all scales improved from end-of-treatment to 24 weeks after the end-of-treatment. These results should be interpreted with caution as multiple endpoints were tested, and the study was not powered to test these exploratory endpoints.

CONCLUSIONS:

The overall conclusions from this study are as follows:

- The study met its primary efficacy endpoint demonstrating that the SVR12 rate of 99.0% (95% CI: 97.9% to 99.6%) in genotype 1, 2, 4, 5, and 6 HCV-infected subjects treated for 12 weeks with SOF/VEL was statistically superior to the prespecified SVR12 performance goal of 85% ($p<0.001$).
- High SVR12 rates were achieved across all HCV genotypes and subgroups
  - Among subjects with cirrhosis, the SVR12 rate was 99.2%
  - Among subjects with prior treatment failure, the SVR12 rate was 99.5%
  - Among subjects with baseline NS5A RAVs, the SVR12 rate was 99.2%
- No subjects relapsed between posttreatment Weeks 12 and 24.
- Treatment with SOF/VEL for 12 Weeks was generally well tolerated with a safety profile similar to that of placebo treatment. There was a low incidence of SAEs and discontinuations due to AEs, and no clinically relevant laboratory abnormalities.