

Treatment-Naïve and Treatment-Experienced

Glecaprevir-Pibrentasvir in Cirrhotic Genotype 1, 2, 4, 5, and 6 EXPEDITION-1

Source: Forns X, et al. Lancet Infect Dis. 2017;17:1062-8.

Glecaprevir-Pibrentasvir in Cirrhotic Genotype 1, 2, 4, 5, and 6 EXPEDITION-1: Study Features

EXPEDITION-1 Trial

- **Design:** Open-label, single-arm, phase 3 trial to evaluate the safety and efficacy of the fixed-dose combination of glecaprevir-pibrentasvir for 12 weeks in treatment-naïve and treatment-experienced adults with GT 1, 2, 4, 5, or 6 chronic HCV infection and compensated cirrhosis
- **Setting:** US, Belgium, Canada, Germany, South Africa, and Spain
- **Key Eligibility Criteria**
 - Chronic HCV GT 1, 2, 4, 5, or 6
 - Age ≥ 18 years
 - HCV RNA $\geq 1,000$ IU/mL at screening
 - Naïve or treated with peginterferon +/- ribavirin (PR) or PR +/- sofosbuvir
 - Compensated cirrhosis
 - HIV or chronic HBV coinfection excluded
- **Primary End-Point:** SVR12

Glecaprevir-Pibrentasvir in Cirrhotic Genotype 1, 2, 4, 5, and 6 EXPEDITION-1: Study Design

Week

0

12

24

**Genotypes
1, 2, 4, 5, 6**

**Glecaprevir-Pibrentasvir
(n = 146)**

SVR12

Drug Dosing

Glecaprevir-pibrentasvir (100/40 mg) fixed dose combination; three pills once daily

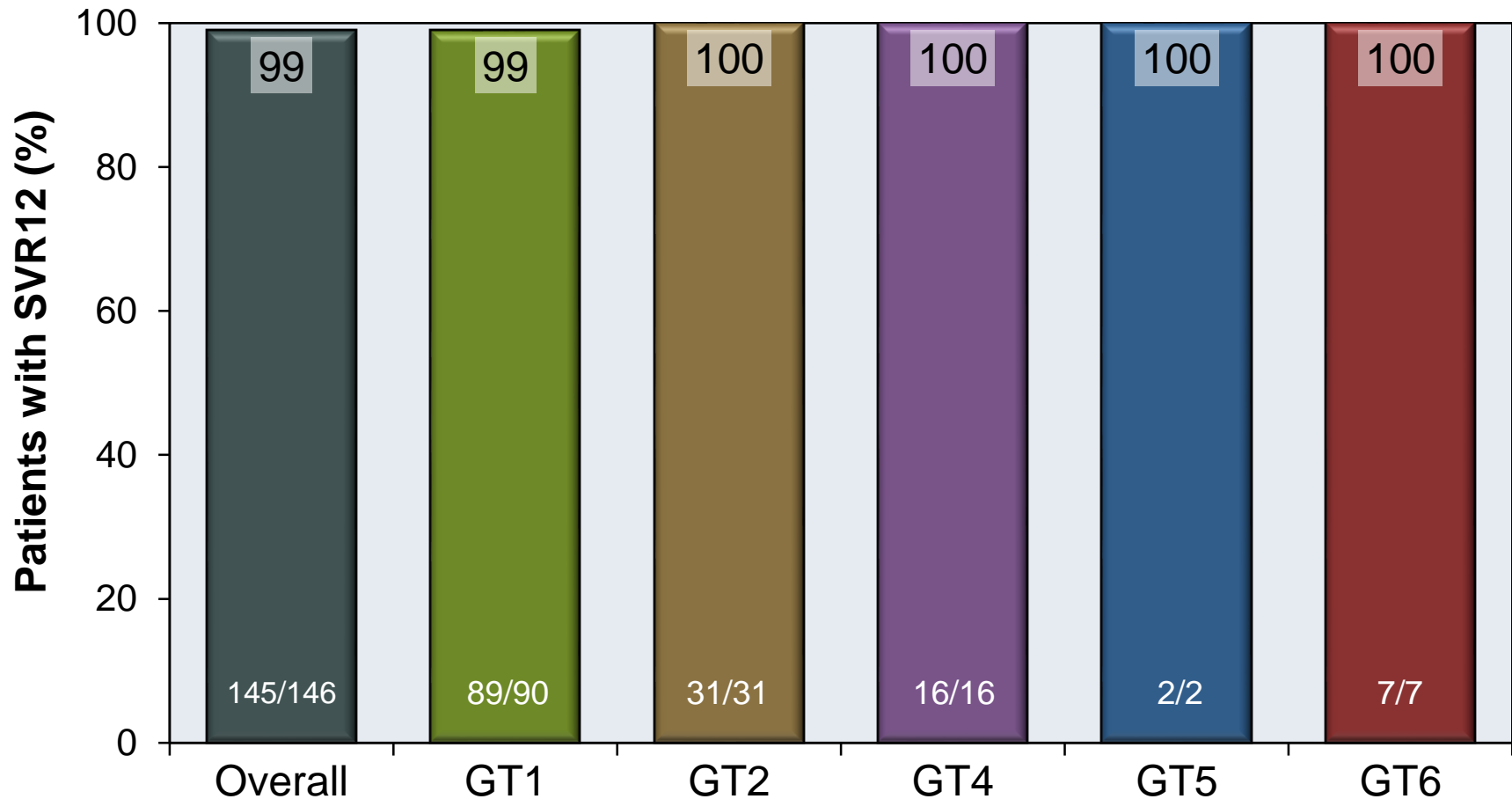
Glecaprevir-Pibrentasvir in Cirrhotic Genotype 1, 2, 4, 5, and 6 EXPEDITION-1: Baseline Characteristics

Baseline Characteristic	Glecaprevir-Pibrentasvir (n = 146)
Age, median (range)	60 (26-88)
Male, n (%)	90 (62)
White race, n (%)	120 (82)
Body Mass Index (BMI) ≥ 30 kg/m ² , n (%)	29 (18-55)
HCV Genotypes	
1a, n (%)	48 (33)
1b, n (%)	39 (27)
2, n (%)	34 (23)
4 / 5 / 6, n (%)	16 (11) / 2 (1) / 7 (5)
Treatment experienced, n (%)	36 (25)
Interferon-based, n/N (%)	25/36 (69)
Sofosbuvir-based, n/N (%)	11/36 (31)
Baseline HCV RNA	
Median log ₁₀ IU/ml (range)	6.1 (3.1-7.4)

Glecaprevir-Pibrentasvir in Cirrhotic Genotype 1, 2, 4, 5, and 6 EXPEDITION-1: Baseline Characteristics

Baseline Characteristic	Glecaprevir-Pibrentasvir (n = 146)
Child-Pugh score at screening, n (%)	
5	133 (91)
6	13 (9)
Laboratory values, n (%)	
Platelet count < 100,000 x 10 ⁹ /L	29 (20)
INR < 1.7	144 (99)
Total bilirubin ≥2 mg/dL	5 (3)
Albumin ≥ lower limit of normal	145 (99)
Baseline Polymorphisms*, n (%)	(n=133)
None	76 (57)
NS3 only	2 (2)
NS5A only	53 (40)
NS3 + NS5A	2 (2)
*Detected at baseline by next-generation sequencing with 15% detection cutoff in samples with sequences available at the following amino acid positions for both targets:	
- NS3 positions 155, 156, 168	
- NS5 positions 24, 28, 30, 31, 58, 92, 93	

Glecaprevir-Pibrentasvir in Cirrhotic Genotype 1, 2, 4, 5, and 6 EXPEDITION-1: Results



SVR12 by intent-to-treat analysis. One patient with GT1a experienced viral relapse at week 8 post-treatment and the patient had Y93N detected at baseline and at time of viral relapse.

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Glecaprevir-Pibrentasvir in Cirrhotic Genotype 1, 2, 4, 5, and 6 EXPEDITION-1: Adverse Events

Adverse Event (AE), n (%)	Glecaprevir-Pibrentasvir (n = 146)
Any serious AE	11 (8)
AE leading to treatment discontinuation	0
Death	1 (0.7)*
Common AEs	
Fatigue	28 (19)
Headache	20 (14)
Pruritus	14 (10)
Nausea	13 (9)
Diarrhea	12 (8)
Urinary tract infection	9 (6)
Laboratory AEs	
Grade 3 hemoglobin (< 8 mg/dL)	1 (0.7)
Grade ≥ 3 ALT or AST (> 5 x ULN)	0
Grade 3 platelet count (<50-25 x 10 ⁹ /L)	2 (1)
Grade ≥ 3 total bilirubin (>3 x ULN)	0
Grade 3 neutrophil count (< 1.0-0.5 x 10 ⁹ /L)	0

Glecaprevir-Pibrentasvir in Cirrhotic Genotype 1, 2, 4, 5, and 6 EXPEDITION-1: Conclusions

Conclusion: “Our results show that 99% of patients treated with once-daily glecaprevir plus pibrentasvir achieved a sustained virological response at 12 weeks. Furthermore, this drug regimen had a favourable safety profile in previously treated or untreated patients with chronic HCV genotype 1, 2, 4, 5, or 6 infection and compensated cirrhosis. These findings could help simplify treatment algorithms and reduce treatment burden.”

This slide deck is from the University of Washington's *Hepatitis C Online* and *Hepatitis Web Study* projects.

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www.hepatitisc.uw.edu

Hepatitis Web Study
<http://depts.washington.edu/hepstudy/>

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