

Treatment Naïve or Experienced

Glecaprevir-Pibrentasvir in Non-Cirrhotic Genotype 2 ENDURANCE-2

Source: Asselah T, et al. Clin Gastroenterol Hepatol. 2018;16:417-26.

Glecaprevir-Pibrentasvir in Non-Cirrhotic GT 2

*ENDURANCE-2: Study Features

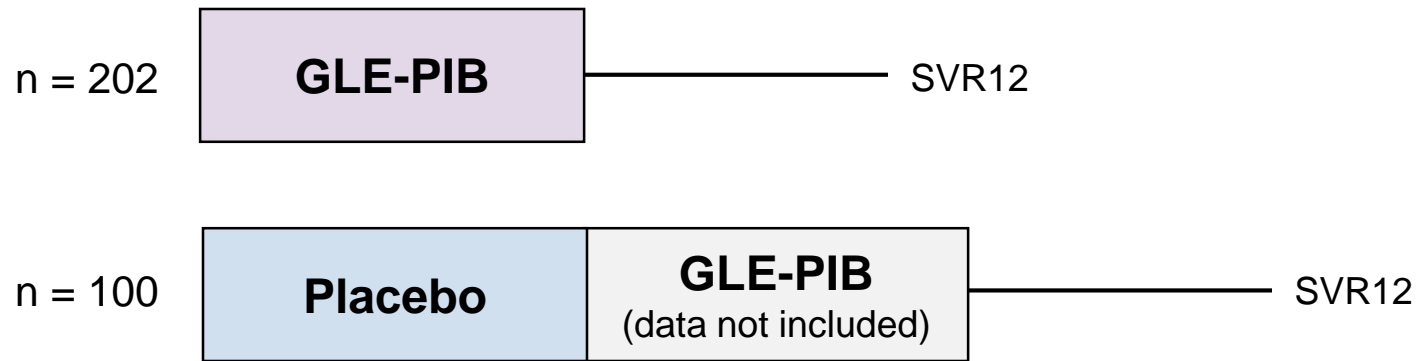
ENDURANCE-2 Trial

- **Design:** Randomized, double-blind, placebo-controlled phase 3 trial to evaluate the safety and efficacy of the fixed-dose combination of glecaprevir-pibrentasvir for 12 weeks in treatment-naïve or treatment-experienced adults with GT 2 chronic HCV infection without cirrhosis.
- **Setting:** Multiple centers in US, Europe and Asia
- **Key Eligibility Criteria**
 - Chronic HCV genotype 2
 - Age ≥ 18 years
 - HCV RNA $\geq 1,000$ IU/mL at screening
 - Naïve or treated with (1) PEG (or IFN) +/- RBV or (2) SOF + RBV +/- PEG
 - Absence of cirrhosis
 - HIV or HBV coinfection excluded
- **Primary End-Point:** SVR12

***Note:** ENDURANCE-2 was published in conjunction with ENDURANCE-4 and SURVEYOR-II (Part 4)

Glecaprevir-Pibrentasvir in Non-Cirrhotic GT 2 ENDURANCE-2: Study Design

Week 0 12 24 36



Note: Four patients enrolled in GT2 arm later determined to be infected with GT1 by phylogenetic analysis

Abbreviations: GLE-PIB= Glecaprevir-pibrentasvir

Drug Dosing

Glecaprevir-pibrentasvir (100/40 mg) fixed-dose combination: three pills (300/120 mg) once daily

Glecaprevir-Pibrentasvir in Non-Cirrhotic GT 2 ENDURANCE-2: Baseline Characteristics

Baseline Characteristic	GLE-PIB (n = 202)	Placebo (n = 100)
Age, mean \pm SD, years	57 \pm 12.8	58 \pm 12.0
Male, n (%)	98 (49)	45 (45)
Race, n (%)		
White	121 (60)	60 (60)
Black	7 (3)	7 (7)
Asian	69 (34)	32 (32)
BMI, mean, \pm SD kg/m ²	25.8 \pm 4.7	26.4 \pm 4.1
HCV RNA, median (range), log ₁₀ IU/mL	6.25 (2.5-7.3)	6.39 (3.4-7.2)
IL28B non-CC, n (%)	111 (55)	50 (50)
Former IDU, n (%)	32 (16)	18 (18)

*One patient in active arm with subtype 2i.

Glecaprevir-Pibrentasvir in Non-Cirrhotic GT 2

ENDURANCE-2: Baseline Characteristics

Baseline Characteristic	GLE-PIB (n = 202)	Placebo (n = 100)
Fibrosis Stage, n (%)		
F0-1	154 (76)	85 (85)
F2	18 (9)	9 (9)
F3	30 (15)	6 (6)
Treatment-naïve, n (%)	141 (70)	71 (71)
Treatment-experienced, n (%)	61 (30)	29 (29)
IFN or PEG ± RBV, n (%)	55 (27)	27 (27)
SOF + RBV ± PEG, n (%)	6 (3)	2 (2)
Concomitant PPI use, n (%)	22 (11)	11 (11)

Glecaprevir-Pibrentasvir in Non-Cirrhotic GT 2

ENDURANCE-2: Baseline Polymorphisms

Prevalence of Baseline Polymorphism*, n (%)*	Genotype 2 (n = 160)
None	28 (18)
NS3 only	0
NS5A only	132 (83)
Both NS3 + NS5A	0

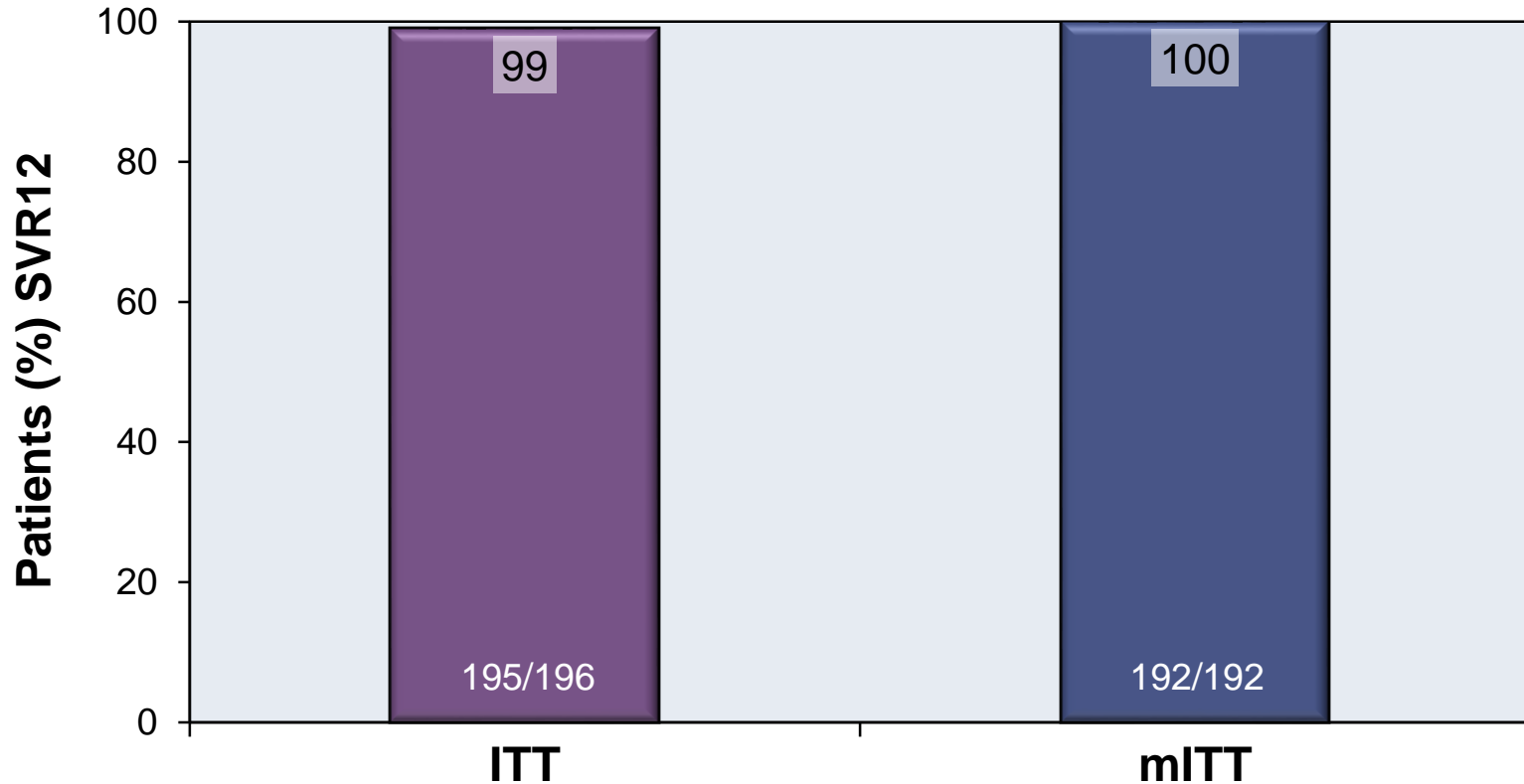
*Baseline polymorphisms detected by next generation sequencing at a 15% threshold in samples that had sequences available for both targets (N) at the following amino acid positions:

- NS3: 155, 156, 168
- NS5A: 24, 28, 30, 31, 58, 92, 93

Glecaprevir-Pibrentasvir in Non-Cirrhotic GT 2

ENDURANCE-2: Results

ENDURANCE-2: Overall SVR12, by Analysis



ITT, intent-to-treat: excludes 6 sofosbuvir-experienced patients, all of whom achieved SVR12

mITT, modified intent-to-treat: excludes patients with non-virologic failure and those with ineligible genotype

Glecaprevir-Pibrentasvir in Non-Cirrhotic GT 2

ENDURANCE-2: Adverse Events

Adverse Event (AE), n (%)	GLE-PIB 12 weeks (n = 202)	Placebo (n = 100)
Discontinuation due to AE	0	0
Serious AEs [§]	3 (1)	1 (1)
Deaths	0	0
Any AE in >10% of patients		
Headache	24 (12)	12 (12)
Fatigue	23 (11)	10 (10)
Laboratory AEs		
AST elevation, grade 3-4 (>5x ULN)	2 (1)	1 (1)
ALT elevation, grade 3-4 (>5x ULN)*	1 (0.5)	2 (2)
Total bilirubin, grade 3 (3-10x ULN) [#]	1 (0.5)	0

AST, aspartate aminotransferase; ALT, alanine aminotransferase; ULN, upper limit normal

[§] No serious AEs were deemed to be DAA-related; no SAEs led to drug discontinuation.

Event occurred with grade 3 AST and grade 3 alkaline phosphatase elevation in context of cholelithiasis.

[#] Indirect hyperbilirubinemia; no associated ALT elevation. Declined with treatment.

Glecaprevir-Pibrentasvir in Non-Cirrhotic GT 2

*ENDURANCE-2: Conclusions

Conclusion: “The SVR12 rate in all genotype 2-infected patients treated for 12 weeks (including those with sofosbuvir experience) was 99.5%, with no virologic failures.”

***Note:** ENDURANCE-2 was published in conjunction with ENDURANCE-4 and SURVEYOR-II (Part 4)

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

Hepatitis C Online

www.hepatitisc.uw.edu

Hepatitis Web Study

<http://depts.washington.edu/hepstudy/>

Funded by a grant from the Centers for Disease Control and Prevention.