Glecaprevir-Pibrentasvir in Patients with HIV-HCV Coinfection

EXPEDITION-2

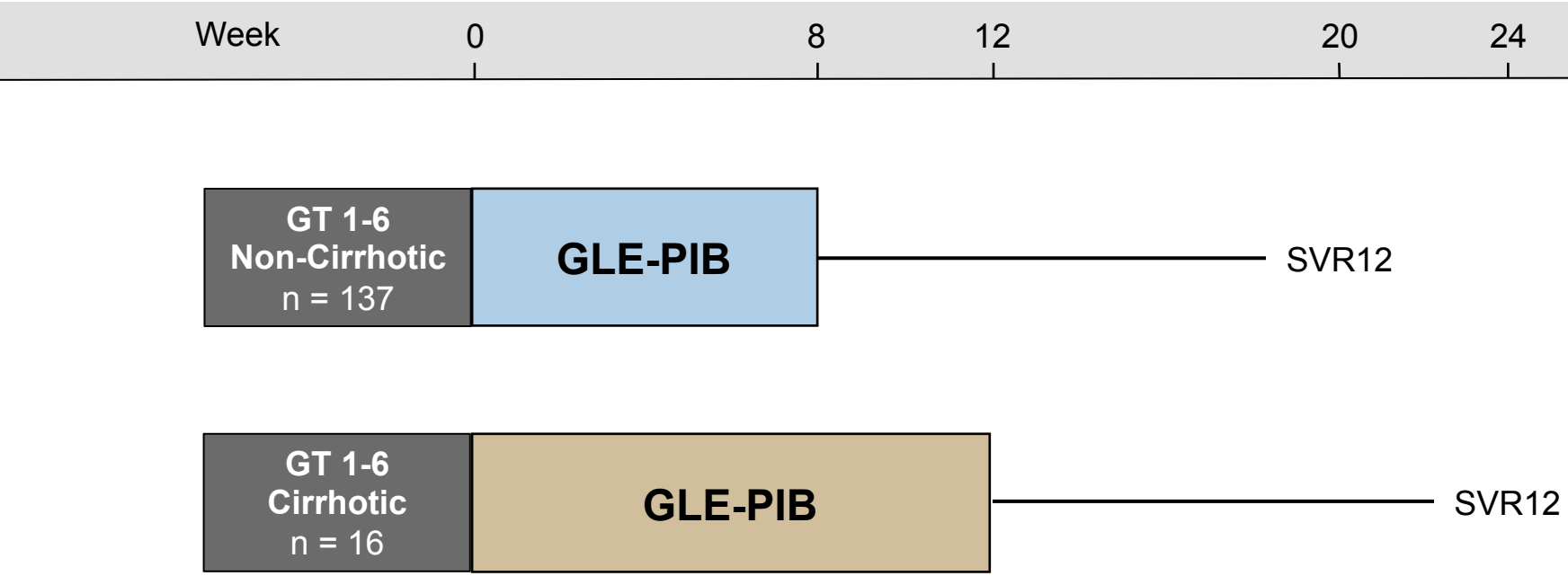
Glecaprevir-Pibrentasvir in HIV-HCV Coinfected Patients
EXPEDITION-2: Study Features

EXPEDITION-2 Trial

- **Design**: Open-label, phase 3 trial to evaluate the safety and efficacy of the fixed-dose combination of glecaprevir-pibrentasvir for 8 or 12 weeks in persons with HIV-HCV coinfection, without or with compensated cirrhosis
- **Setting:** Australia, Europe, Russian Federation, UK, US
- **Key Eligibility Criteria**
  - Adults with chronic HCV GT 1, 2, 3, 4, 5, or 6
  - HCV RNA ≥1,000 IU/mL at screening
  - Naïve or treated with peginterferon +/- ribavirin (PR) or PR +/- sofosbuvir
  - Compensated cirrhosis allowed
  - On ART or ART-naïve with CD4 ≥500 cells/mm^3 or CD4 percentage ≥29%
- **Primary End-Point**: SVR12

Source: Rockstroh JK, et al. Clin Infect Dis. 2018 Mar 16. [Epub ahead of print]

Glecaprevir-Pibrentasvir in HIV-HCV Coinfected Patients
EXPEDITION-2: Study Design



Abbreviations: GLE-PIB= Glecaprevir-pibrentasvir

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

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Glecaprevir-Pibrentasvir in HIV-HCV Coinfected Patients
EXPEDITION-2: Baseline Characteristics

Baseline Characteristic	**GLE-PIB** 8 weeks (n = 137)	**GLE-PIB** 12 weeks (n= 16)
Age, mean (range), years	45 (23-74)	50 (35-62)
Male, n (%)	113 (82)	15 (94)
White, n (%) Black, n (%)	106 (77) 24 (18)	15 (94) 1 (6)
Genotype, n (%) 1a 1b 2 3 4 6	 66 (48) 21 (15) 9 (7) 22 (16) 16 (12) 3 (2)	 5 (31) 5 (31) 1 (6) 4 (25) 1 (6) 0
Body mass index, median kg/m^2 (range)	25 (18-41)	28 (22-38)
Median HCV RNA, $\log_{10}$ IU/mL (range)	6.2 (4.0-7.4)	6.1 (4.4-7.0)
Fibrosis Stage, n (%) F0-F1 F2 F3 F4	 122 (88) 2 (1) 15 (11) 0	 0 0 0 16 (100)

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EXPEDITION-2: Baseline Characteristics

Baseline Characteristic	**GLE-PIB** 8 weeks (n = 137)	**GLE-PIB** 12 weeks (n = 16)
Treatment-experienced, n (%) IFN-based, n/N (%) SOF-based, n/N (%)	26 (19) 23 (17) 3 (2)	2 (13) 2 (13) 0
IDU within 12 months, n (%) On opiate substitution therapy, n (%)	12 (9) 11 (8)	1 (6) 2 (13)
N(t)RTI backbone, n (%) Tenofovir disoproxil fumarate Tenofovir alafenamide Abacavir	 74 (54) 6 (4) 49 (36)	 13 (81) 0 3 (19)
Antiretroviral Anchor Agent, n (%) Raltegravir Dolutegravir Rilpivirine Elvitegravir/cobicistat	 39 (28) 62 (45) 27 (20) 1 (1)	 6 (38) 5 (31) 5 (31) 0
Antiretroviral Therapy Naïve, n (%)	9 (7)	0
CD4 cell count ≥500 cells/mm^3	92 (67)	9 (56)

Source: Rockstroh JK, et al. Clin Infect Dis. 2018 Mar 16. [Epub ahead of print]

Glecaprevir-Pibrentasvir in HIV-HCV Coinfected Patients
EXPEDITION-2: Baseline Polymorphisms

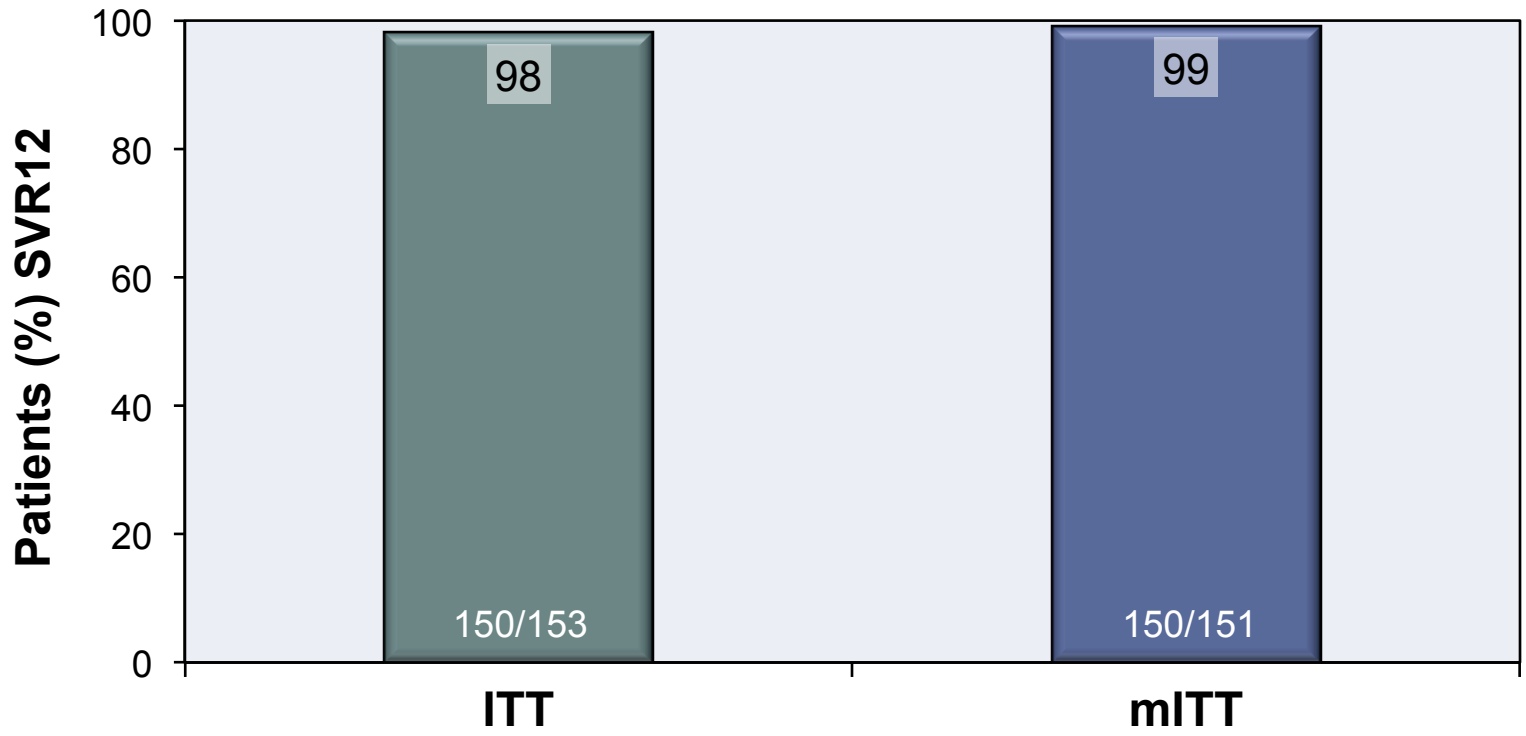
Baseline Polymorphisms*	**GLE-PIB** 8 weeks (n = 130)	**GLE-PIB** 12 weeks (n =16)
None, n (%)	92 (71)	9 (56)
NS3 only, n (%)	1 (1)	1 (6)
NS5A only, n (%)	36 (28)	6 (38)
NS3 and NS5A, n (%)	1 (1)	0

*Detected at 15% threshold by next-generation sequencing in samples that had sequences available at a key subset of amino acid positions:
- NS3: 155, 156, 168
- NS5A: 24, 28, 30, 31, 58, 92, 93

Source: Rockstroh J, et al. IAS 2017. Abstract 918.

Glecaprevir-Pibrentasvir in HIV-HCV Coinfected Patients
EXPEDITION-2: Results

EXPEDITION-2: Overall SVR by Analysis

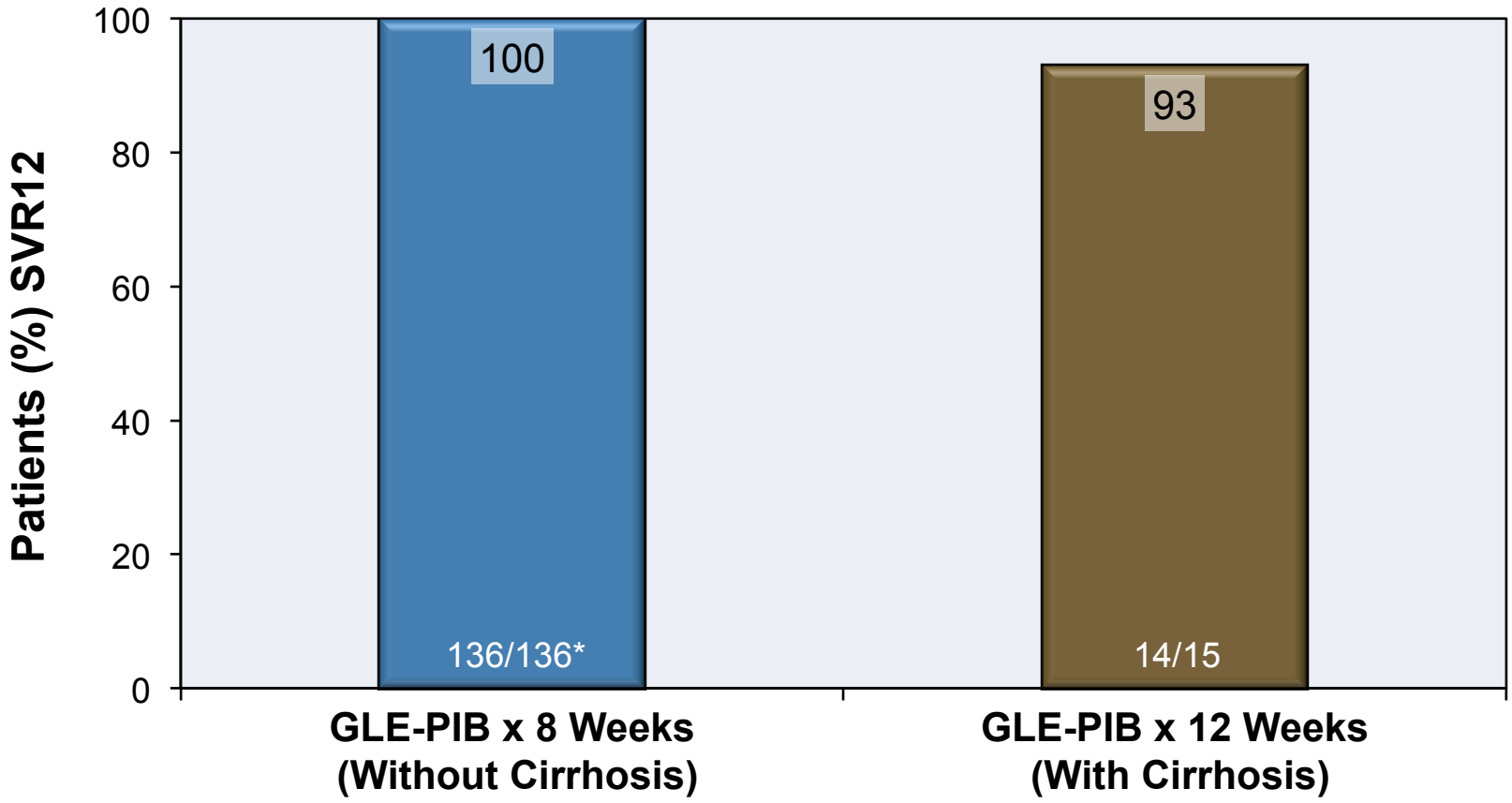


ITT = Intent-to-treat; mITT = modified intent-to-treat
One GT3 patient with cirrhosis and 85% compliance had on-treatment virologic failure

Source: Rockstroh JK, et al. Clin Infect Dis. 2018 Mar 16. [Epub ahead of print]

Glecaprevir-Pibrentasvir in HIV-HCV Coinfected Patients
EXPEDITION-2: Results

EXPEDITION-2: Overall SVR by Treatment Regimen



*Excludes one patient with missing data who achieved SVR24

Source: Rockstroh JK, et al. Clin Infect Dis. 2018 Mar 16. [Epub ahead of print]

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Glecaprevir-Pibrentasvir in HIV-HCV Coinfected Patients
EXPEDITION-2: Adverse Events

Adverse Event (AE), n (%)	**GLE-PIB** 8 weeks (n = 137)	**GLE-PIB** 12 weeks (n = 16)
Discontinuation due to AE	0	1 (6)[§]
Serious AEs	3 (2)*	1 (6)[§]
Any AE in ≥5% of patients		
Fatigue	18 (13)	0
Nausea	12 (9)	1 (6)
Headache	12 (9)	0
Nasopharyngitis	12 (9)	0
Laboratory AEs		
ALT elevation, grade ≥3 (>5 x ULN)	0	0
AST elevation, grade ≥3 (>5 x ULN)	0	0
Total bilirubin, grade ≥3 (3 x ULN)	1 (0.7)	0

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

[§] One GT2 patient with cirrhosis experienced cerebrovascular accident and cerebral hemorrhage.

* Upper GI bleed, obliterating arteriopathy and urolithiasis in one patient each, thought unrelated to G/P.

Source: Rockstroh JK, et al. Clin Infect Dis. 2018 Mar 16. [Epub ahead of print]

Glecaprevir-Pibrentasvir in HIV-HCV Coinfected Patients
EXPEDITION-2: Conclusions

Conclusion: “Glecaprevir/pibrentasvir for 8 weeks in non-cirrhotic and 12 weeks in cirrhotic patients is a highly efficacious and well-tolerated treatment for HCV/HIV-1 co-infection, regardless of baseline HCV viral load or prior treatment with interferon or sofosbuvir.”

Source: Rockstroh JK, et al. Clin Infect Dis. 2018 Mar 16. [Epub ahead of print]

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The content in this slide set does not represent the official views of the U.S. Department of Health and Human Services, Health Resources & Services Administration.

National HIV Curriculum

AETC AIDS Education & Training Center Program
National Coordinating Resource Center