Phase 3

Treatment Naïve and Treatment Experienced

Compensated Cirrhosis

Ombitasvir-Paritaprevir-Ritonavir and Dasabuvir + RBV in GT1

TURQUOISE-II

Poordad F, et al. N Engl J Med. 2014;370:1973-82.

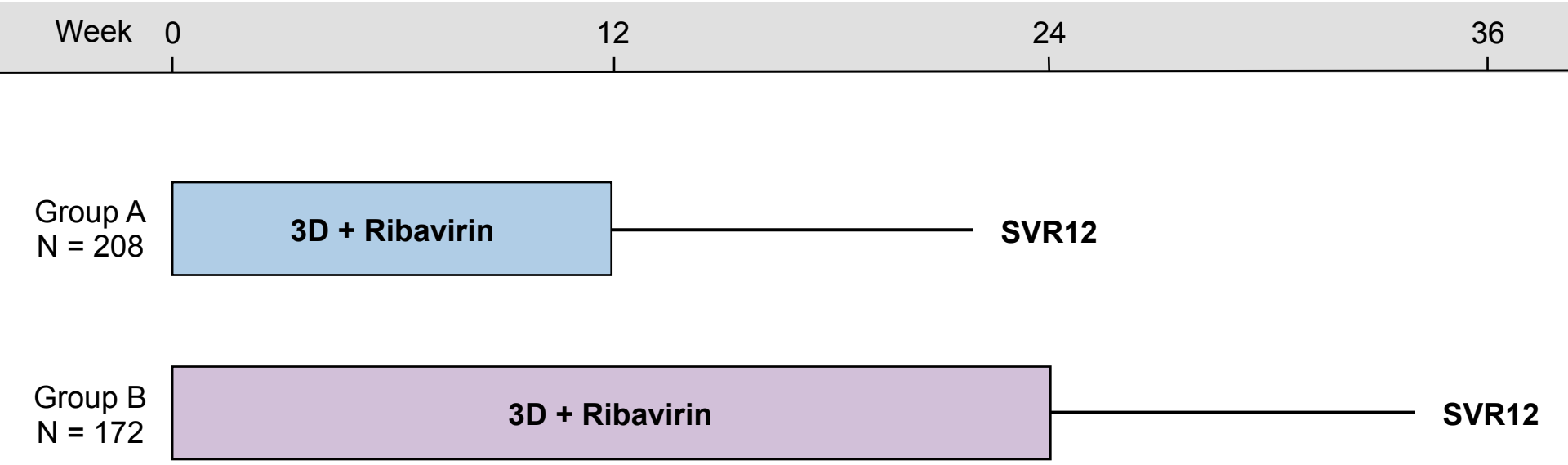
3D + Ribavirin in GT1 and Compensated Cirrhosis
TURQUOISE-II: Study Design

TURQUOISE-II: Features

- **Design**: Phase 3, randomized, open-label trial evaluating safety and efficacy of 3D (ombitasvir-paritaprevir-ritonavir & dasabuvir) + ribavirin for 12 or 24 weeks in treatment-naïve and experienced patients with chronic HCV GT 1 and compensated cirrhosis
- **Setting:** 78 sites in North America and Europe
- **Entry Criteria**
  - Chronic HCV infection with genotype 1
  - Treatment-naïve or previously treated with peginterferon + RBV
  - Age 18-70
  - Plasma HCV RNA greater than 10,000 IU/mL
  - Cirrhosis (Metavir >3, Ishak score >4 or Fibroscan ≥14.6 kPa)
  - Cirrhosis is compensated (Child-Pugh score <7 at screening)
  - Absence of coinfection with HBV or HIV
- **Primary End-Point**: SVR12

Source: Poordad F, et al. N Engl J Med. 2014;370:1973-82.

3D + Ribavirin in GT1 and Compensated Cirrhosis
TURQUOISE-II: Regimens



3D = Ombitasvir-Paritaprevir-Ritonavir and Dasabuvir

Drug Dosing

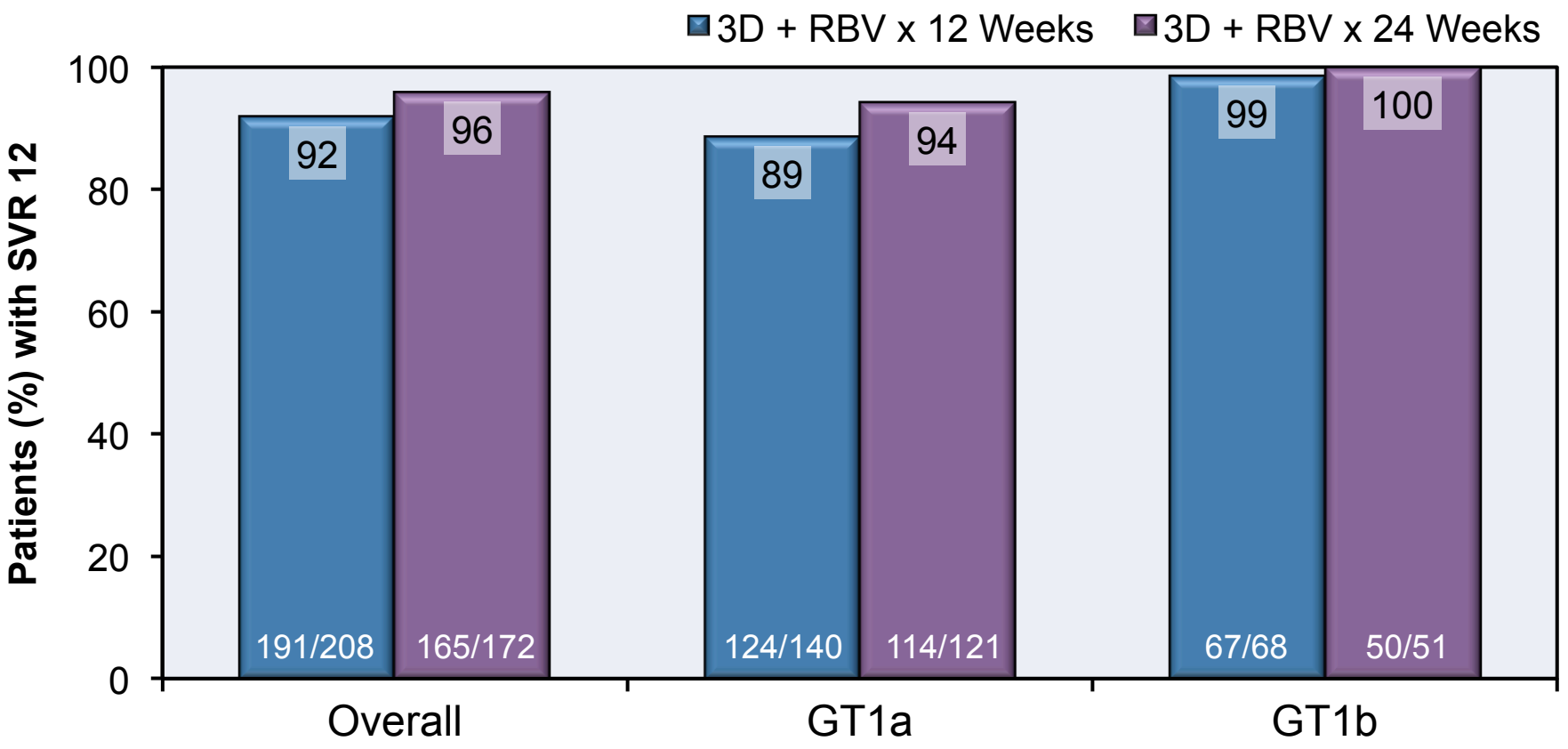
Ombitasvir-Paritaprevir-Ritonavir (25/150/100 mg once daily) + Dasabuvir: 250 mg twice daily

Ribavirin (RBV): weight-based and divided bid (1000 mg/day if < 75kg or 1200 mg/day if ≥ 75kg)

Source: Poordad F, et al. N Engl J Med. 2014;370:1973-82.

3D + Ribavirin in GT1 and Compensated Cirrhosis
TURQUOISE-II: Results

TURQUOISE II: SVR12 by Genotype 1 Subtype

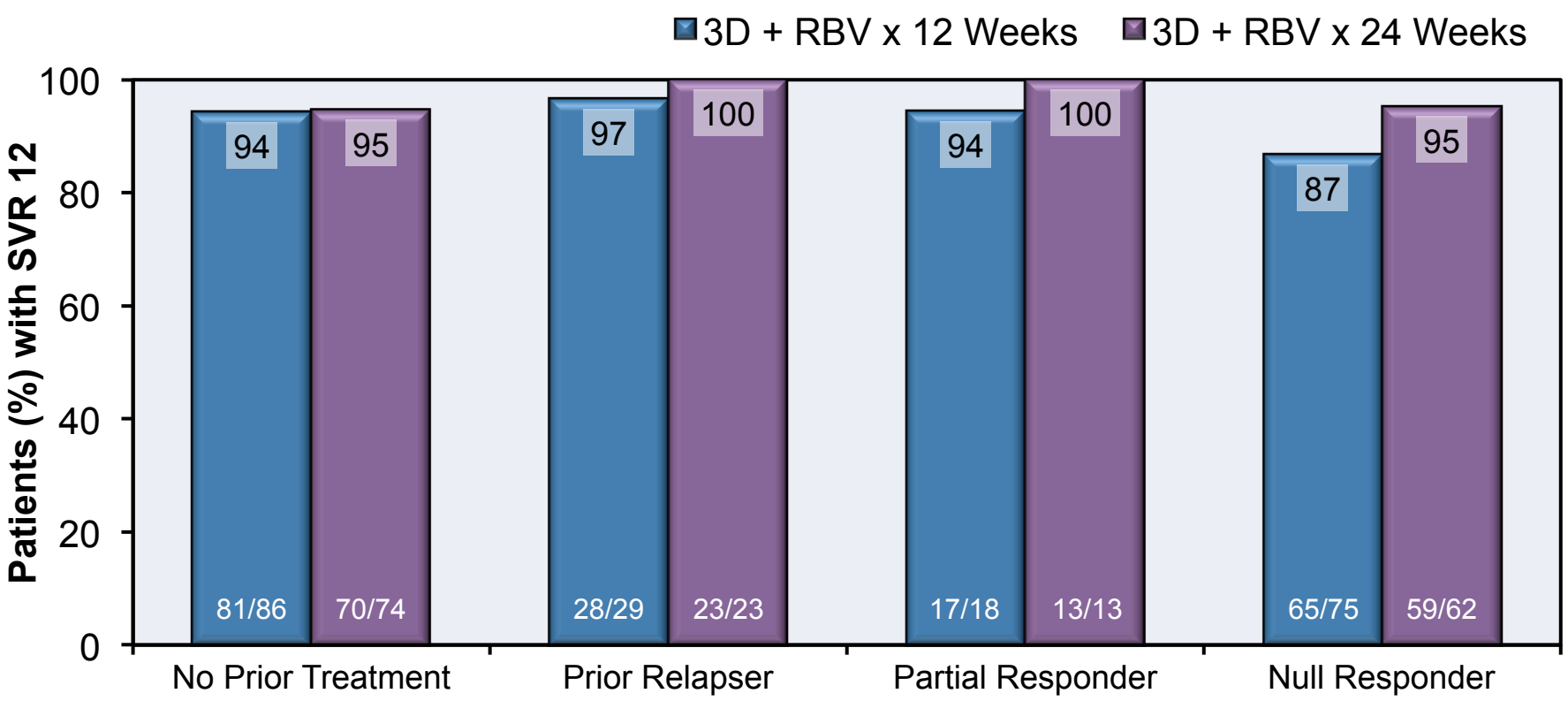


3D = Ombitasvir-Paritaprevir-Ritonavir and Dasabuvir; **RBV** = ribavirin

Source: Poordad F, et al. N Engl J Med. 2014;370:1973-82.

3D + Ribavirin in GT1 and Compensated Cirrhosis
TURQUOISE-II: Results

TURQUOISE II: SVR12 Based on Prior Treatment

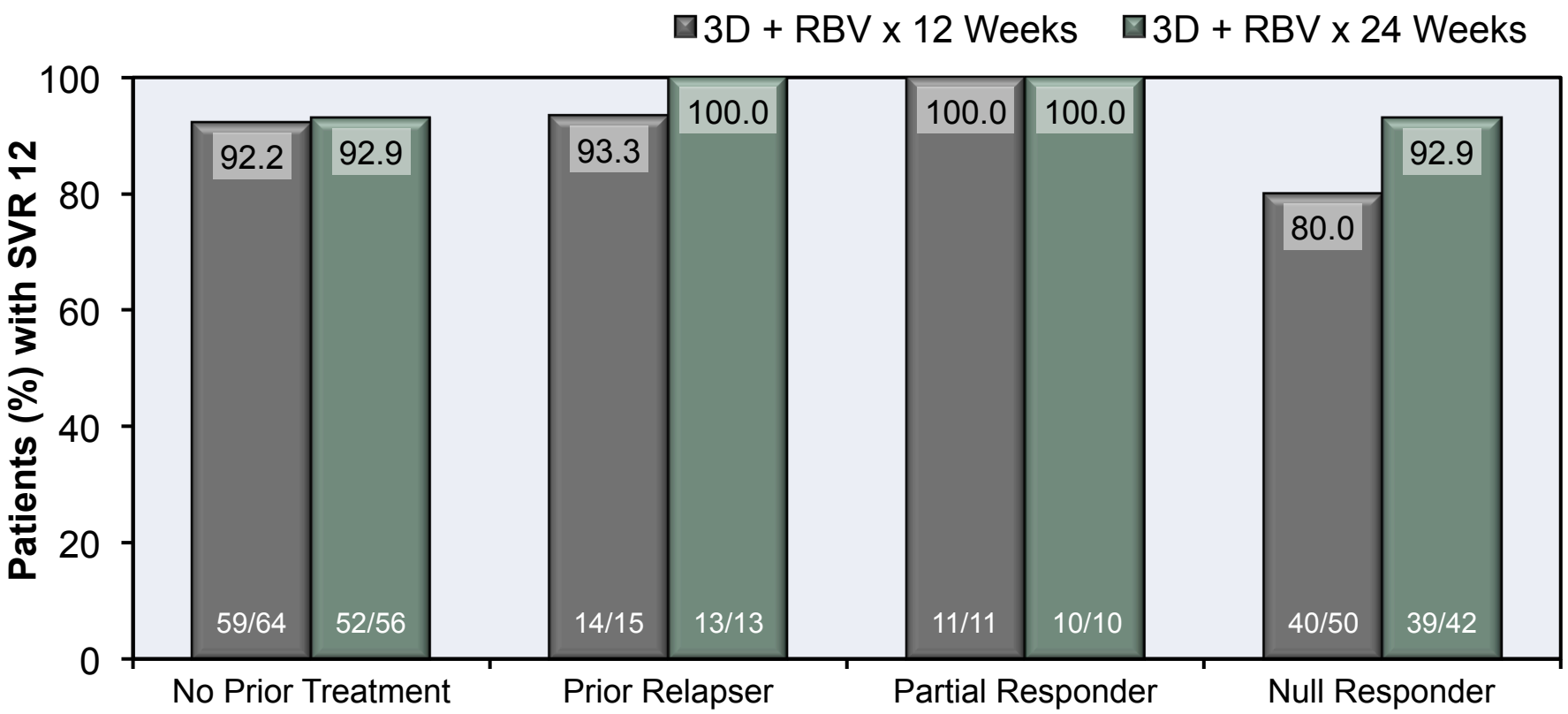


3D = Ombitasvir-Paritaprevir-Ritonavir and Dasabuvir; **RBV** = ribavirin

Source: Poordad F, et al. N Engl J Med. 2014;370:1973-82.

3D + Ribavirin in GT1 and Compensated Cirrhosis
TURQUOISE-II: Results for GT1a

TURQUOISE II: **Genotype 1a** SVR12 Based on Prior Treatment

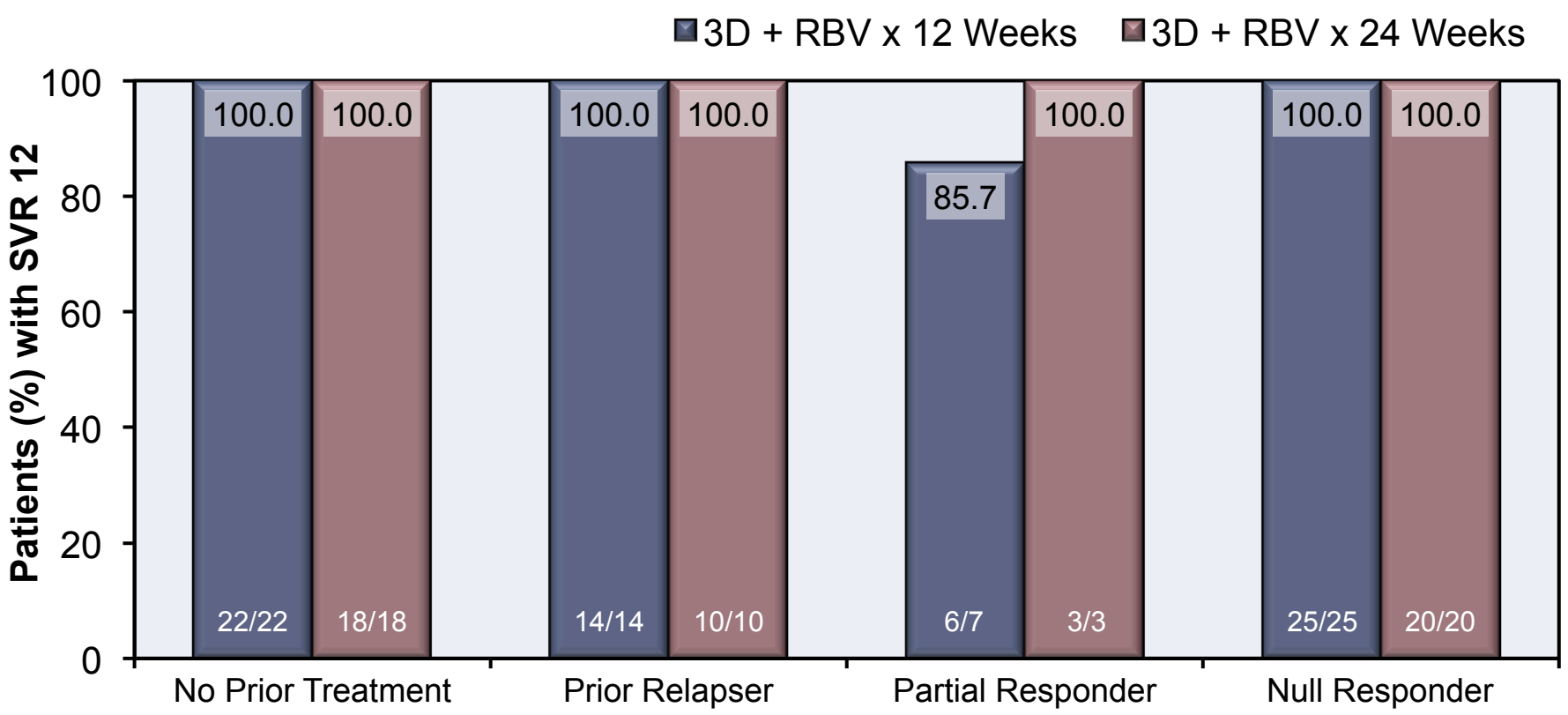


3D = Ombitasvir-Paritaprevir-Ritonavir and Dasabuvir; **RBV** = ribavirin

Source: Poordad F, et al. N Engl J Med. 2014;370:1973-82.

3D + Ribavirin in GT1 and Compensated Cirrhosis
TURQUOISE-II: Results for GT1b

TURQUOISE II: **Genotype 1b** SVR12 Based on Prior Treatment



3D = Ombitasvir-Paritaprevir-Ritonavir and Dasabuvir; **RBV** = ribavirin

Source: Poordad F, et al. N Engl J Med. 2014;370:1973-82.

Hepatitis web study

3D + Ribavirin in GT1 and Compensated Cirrhosis
TURQUOISE-II: Adverse Effects

Event	3D + RBV x 12 weeks (n=208)	3D + RBV x 24 weeks (n=172)
Any adverse event (%)	91.8	90.7
Adverse event leading to stopping study drug (%)	1.9	2.3
Any serious adverse event	6.2	4.7
Most common adverse event		
Fatigue (%)	32.7	46.5
Headache (%)	27.9	30.8
Nausea (%)	17.8	20.3
Pruritis (%)	18.3	19.2
Insomnia (%)	15.4	18.0
Diarrhea (%)	14.4	16.9
Asthenia (%)	13.9	12.8
Rash (%)	11.1	14.5
Irritability (%)	7.2	12.2
Anemia (%)	7.7	10.5
Dyspnea (%)	5.8	12.2

3D = Ombitasvir-Paritaprevir-Ritonavir and Dasabuvir; **RBV** = ribavirin

Source: Poordad F, et al. N Engl J Med. 2014;370:1973-82.

3D + Ribavirin in GT1 and Compensated Cirrhosis
TURQUOISE-II: Adverse Effects

Lab Abnormalities	3D + RBV x 12 weeks (n=208)	3D + RBV x 24 weeks (n=172)
Alanine aminotransferase, grade 3 or 4	6 (2.9)	0
Aspartate aminotransferase, grade 3 or 4	1 (0.5)	0
Alkaline phosphatase, grade 3 or 4	0	0
Total bilirubin, grade 3 or 4	28 (13.5)	9 (5.2)
Hemoglobin		
Grade 1	103 (49.5)	97 (56.4)
Grade 2	12 (5.8)	18 (10.5)
Grade 3	2 (1.0)	1 (0.6)
Grade 4	1 (0.5)	0

3D = Ombitasvir-Paritaprevir-Ritonavir and Dasabuvir; **RBV** = ribavirin

Source: Poordad F, et al. N Engl J Med. 2014;370:1973-82.

3D + Ribavirin in GT1 and Compensated Cirrhosis
TURQUOISE-II: Conclusions

Conclusions: “In this phase 3 trial of an oral, interferon-free regimen evaluated exclusively in patients with HCV genotype 1 infection and cirrhosis, multitargeted therapy with the use of three new antiviral agents and ribavirin resulted in high rates of sustained virologic response. Drug discontinuations due to adverse events were infrequent.”

Source: Poordad F, et al. N Engl J Med. 2014;370:1973-82.

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.

Hepatitis
web study