NEW OPTIONS IN HCV THERAPY:

UPDATE FROM AASLD 2014

Case 2: A 71-year-old man with cirrhosis

- JM, 71-year-old African American male with known cirrhosis
- Asymptomatic apart from fatigue
- No prior history of decompensation
- Past history:
  - Diabetes for 11 years
  - Hypertension
  - Glaucoma
  - Obesity and hyperlipidemia
  - GERD
- Medications:
  - Protonix 40 mg bid
  - Lipitor 20 mg
  - Metformin 1 gm/day

- Social history:
  - Alcohol 1 – 2 units per week
  - History of IVDU 35 years ago
  - Nonsmoker for 35 years
- Physical exam:
  - BP 140/86; BMI 37
  - 3-finger hepatomegaly
  - Spider nevi on chest
  - Spleen tip palpable
- Investigations:
  - CBC: WBC 3.8/µL, neutrophils 1.2/µL
  - Hgb 12.9 g/dL
  - Platelets 73,000×10^3/µL
  - Albumin 3.4g/dL, INR 1.2, bilirubin 0.9 mg/dL
  - Creatinine 1.1 mg/dL

- Investigations:
  - Ultrasound shows coarse liver and enlarged spleen 13.8 cm
  - FibroScan 19.7 kPa
  - Endoscopy Grade 1 varices
- HCV history:
  - Genotype 1a, HCV RNA 1.265 million IU
  - 2003: PEG/RBV Nonresponder
  - 2011: IL28b TT
  - 2012: PEG/RBV/Telaprevir: Full course completed, with documented relapse. Severe anemia, fatigue, and thrombocytopenia on treatment.

Questions

1. Does the patient meet the current criteria for prioritization for treatment?
2. What about his age? Are there any contraindications to treating a 71-year-old?
3. Are there any baseline predictors for response?

Patients meeting "highest" or "high" priority criteria for HCV Treatment in the CHeCS

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Patients staged by biopsy or FIB4 score and without decompensation cirrhosis, by CHeCS study sites					
Hierarchy of care	**A (n=2,084)**	**B (n=929)**	**C (n=3,188)**	**D (n=2,303)**	**All sites (N=8,504)**
Highest priority	**35.3%**	**40.5%**	**38.2%**	**20.4%**	**32.9%**
F3 or higher by biopsy or FIB4 score ≥2.5	33.1%	37.6%	33.5%	19.2%	30.0%
<F3 with chronic kidney disease (ICD-9 codes)	2.2%	2.9%	4.7%	1.2%	2.9%
High priority	**36.3%**	**31.2%**	**29.3%**	**20.8%**	**28.9%**
F2 by biopsy or 1.6≤FIB4 score <2.5	29.0%	23.9%	22.9%	16.2%	22.7%
<F2 with HIV co-infection	0.3%	0.4%	1.4%	0.3%	0.7%
<F2 with HBV co-infection	0.2%	0	0.2%	0.3%	0.2%
<F2 with NASH (ICD-9 codes)	0.3%	0.9%	0.3%	0.4%	0.4%
<F2 with diabetes (ICD-9 codes)	6.5%	6.0%	4.5%	3.6%	4.9%
Not meeting "highest" or "high" priority criteria	**28.4%**	**28.3%**	**32.5%**	**58.8%**	**38.2%**

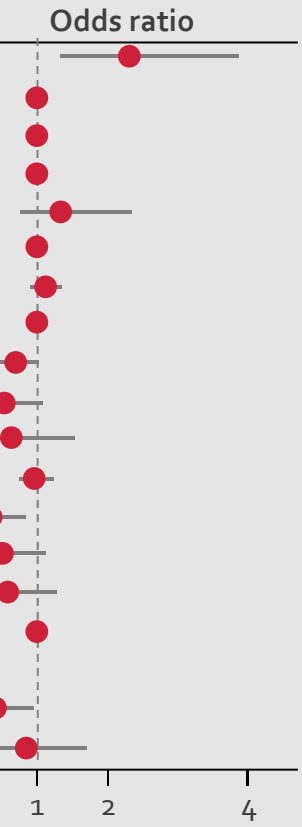
Xu F, et al. AASLD 2014, Boston. #LB-29

Safety and efficacy of SOF-containing regimens: Real-world experience in a diverse, longitudinal observational cohort

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Minimally adjusted logistic regression analysis: Predictors of SVR4 for SOF/SMV±RBV

Predictor	OR
BL ALB	2.3 (1.3, 3.9)
BL ALT	1.0 (1.0, 1.0)
BL AST	1.0 (1.0, 1.0)
BL **Cr/Cl**	1.0 (1.0, 1.0)
BL CRE	1.3 (0.8, 2.3)
BL HCV	1.0 (1.0, 1.0)
BL **HgB**	1.1 (0.9, 1.3)
BL PLT	1.0 (1.0, 1.0)
BL TBIL	0.7 (0.5, 1.0)
Male	0.5 (0.2, 1.1)
Race white	0.6 (0.3, 1.5)
Ethnicity	0.9 (0.7, 1.2)
G1a	0.3 (0.1, 1.3)
Cirrhotic	0.5 (0.2, 1.1)
Previous treatment	0.6 (0.3, 1.3)
Age	1.0 (1.0, 1.1)
Prior decomp	0.2 (0.1, 0.3)
Triple failure	0.4 (0.2, 0.9)
PegIFN	0.8 (0.4, 1.7)



Adjusted for age, sex, and genotype

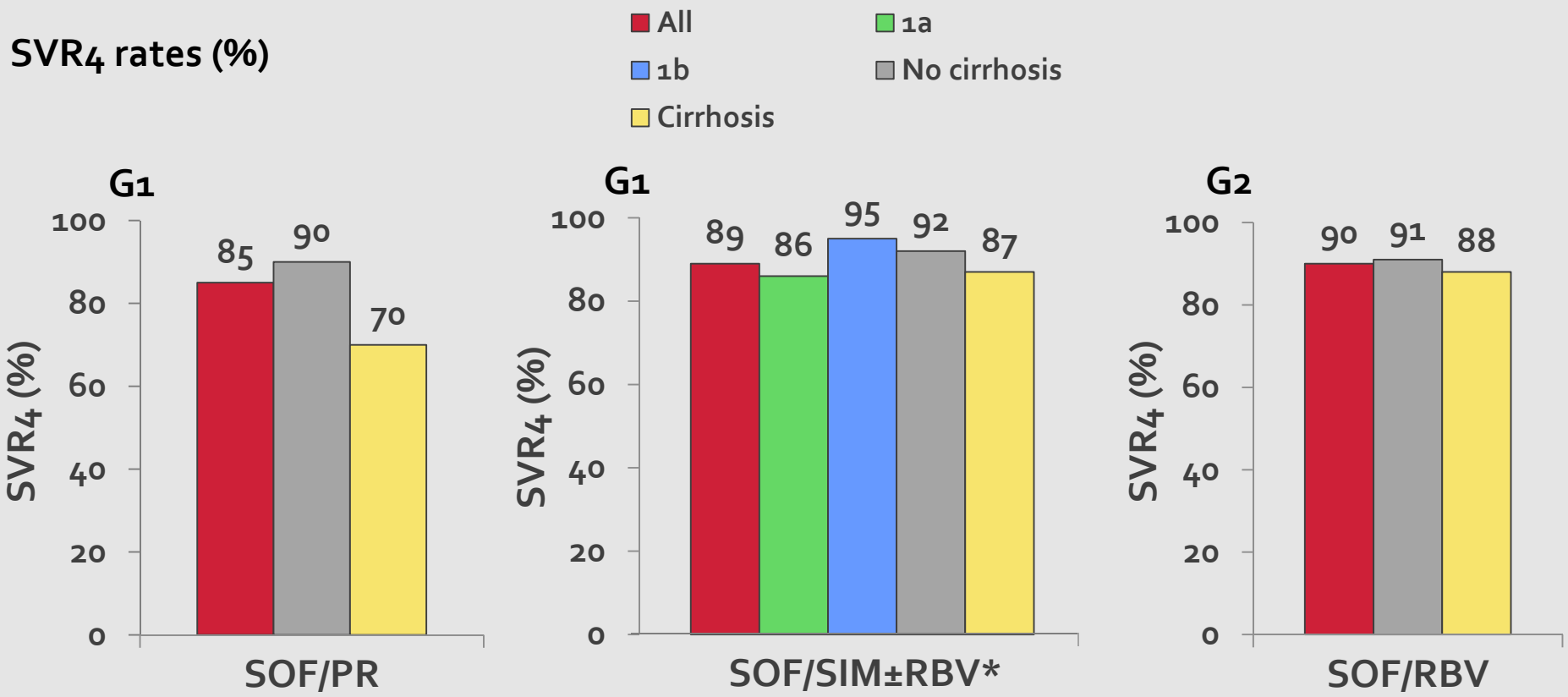
Jensen DM, et al. AASLD 2014, Boston. #45

Questions

1. What regimens could be used?
2. What success rates can be expected?

Safety and efficacy of SOF-containing regimens: Real-world experience in a diverse, longitudinal observational cohort (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014



*PI failures excluded

Jensen DM, et al. AASLD 2014, Boston. #45

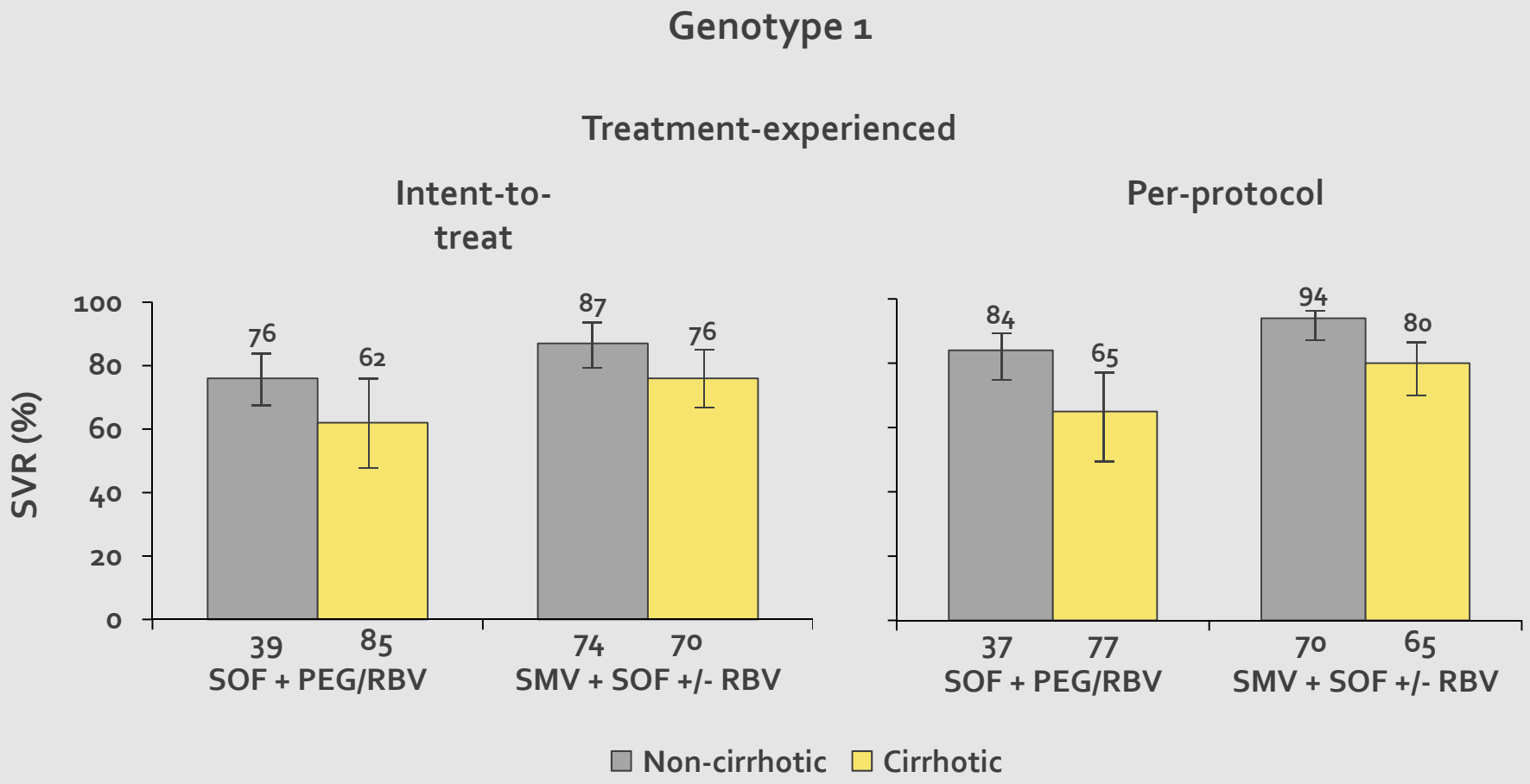
Evaluation of SOF and SMV-based regimens in the TRIO network: Academic and community treatment of a real-world, heterogeneous population

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

- TRIO network of 231 providers (35% academic) with data on 1,211 patients
- 955 treated with a 12-week regimen (133 pending SVR); SVR12 data on 822
  - ITT 79% (652/822)
  - Per-protocol 88% (652/743)

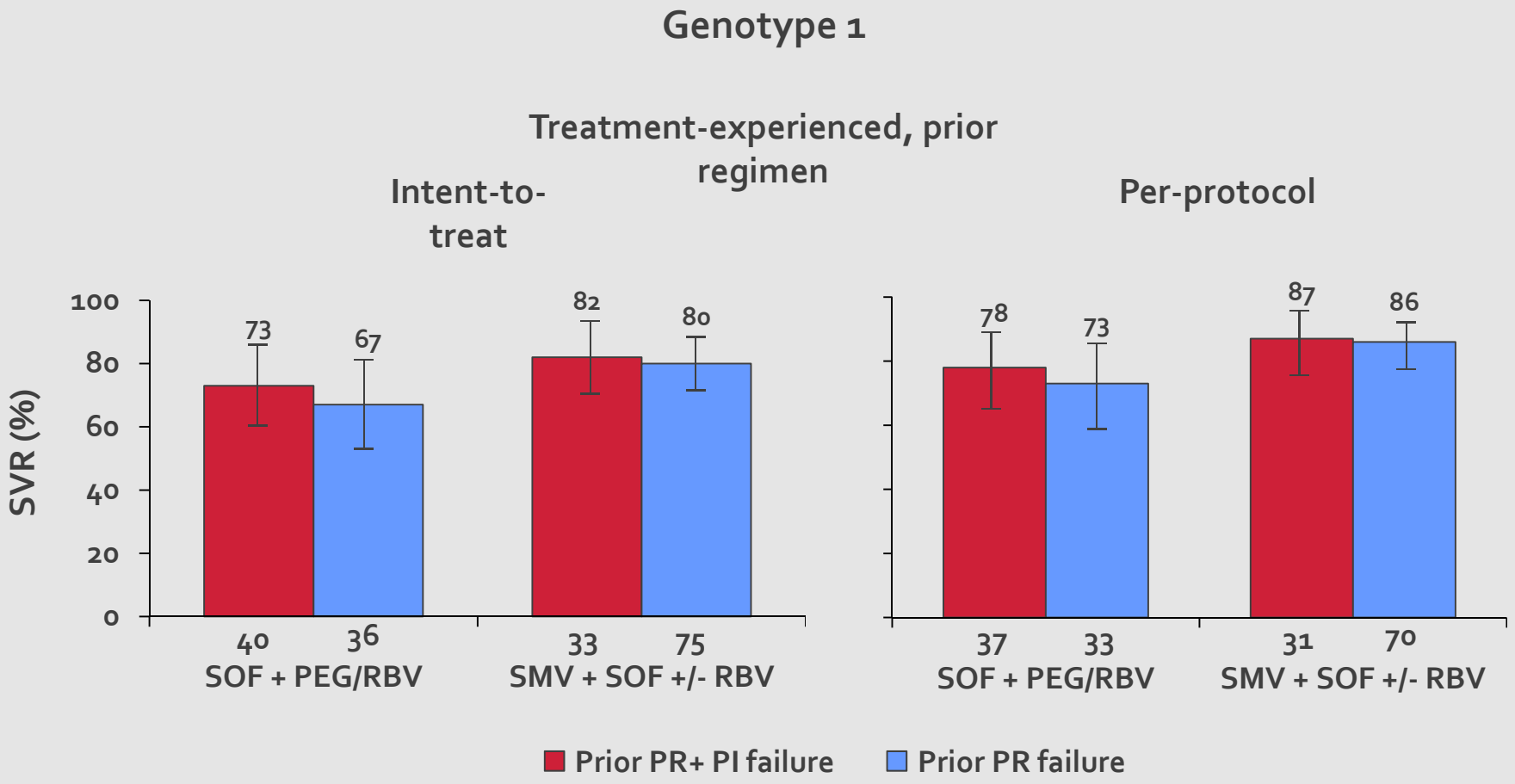
Dieterich D, et al. AASLD 2014, Boston. #46

Evaluation of SOF and SMV-based regimens in the TRIO network: Academic and community treatment of a real-world, heterogeneous population (cont)



Dieterich D, et al. AASLD 2014, Boston. #46

Evaluation of SOF and SMV-based regimens in the TRIO network: Academic and community treatment of a real-world, heterogeneous population (cont)



Dieterich D, et al. AASLD 2014, Boston. #46

Evaluation of SOF and SMV-based regimens in the TRIO network: Academic and community treatment of a real-world, heterogeneous population (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

D/C rates by reason	G1, SOF + PEG/RBV	G1, SMV + SOF ± RBV	G2, SOF + RBV
Adverse events	2.0% (6)	1.4% (4)	0%
Non-adherence	4.1% (12)	1.8% (5)	2.2% (4)
Financial	0%	0.4% (1)	0%
Total	**6.1% (18)**	**3.6% (10)**	**2.2% (4)**

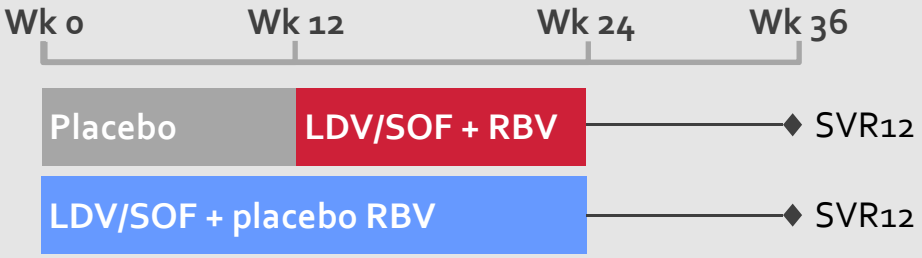
- Large real-life experience similar to clinical trial data
- Cirrhosis largest predictor of response
- Community discontinuation rates are low

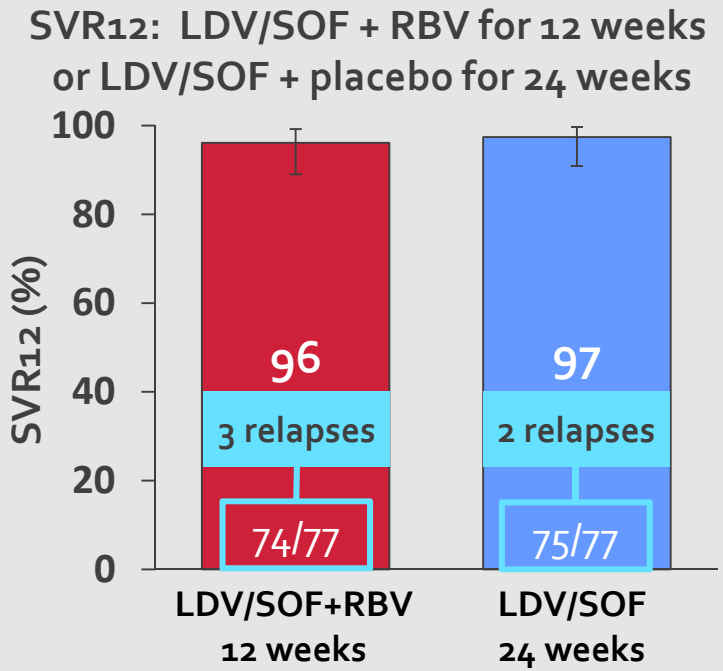
Dieterich D, et al. AASLD 2014, Boston. #46

LDV/SOF FDC is safe and efficacious in cirrhotic patients who have previously failed PI-based triple therapy

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

- Double-blinded, randomized-controlled trial of LDV/SOF for 12 weeks (RBV) or 24 weeks (placebo)
- Treatment-experienced patients with compensated cirrhosis who did not achieve SVR following sequential PEG + RBV and PI + PegIFN + RBV regimens





Bourlière M, et al. AASLD 2014, Boston. #LB-6

LDV/SOF FDC is safe and efficacious in cirrhotic patients who have previously failed PI-based triple therapy (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Clinical characteristics and demographics	Placebo 12 weeks → LDV/SOF+RBV 12 weeks n=77	LDV/SOF + placebo RBV 24 weeks n=78	Total N=155
Mean age, y (range)	56 (39–74)	57 (23–77)	56 (23–77)
Men, n (%)	58 (75)	56 (72)	114 (74)
White, n (%)	76 (99)	75 (96)	151 (97)
IL28B non-CC, n (%)	73 (95)	72 (92)	145 (94)
Mean MELD (range)	7 (6–16)	7 (6–12)	7 (6–16)
Varices, n (%)	16 (21)	25 (32)	41 (26)
Platelets <100 x 10^3 µL	14 (18)	13 (17)	27 (17)
Albumin <3.5 g/dL, n (%)	6 (8)	14 (17)	20 (13)
Mean bilirubin (range)	0.8 (0.3–2.5)	0.8 (0.3–1.8)	0.8 (0.3–2.5)
G1a, n (%)	48 (62)	50 (64)	98 (63)
Prior PI, n (%)			
Telaprevir	43 (56)	49 (63)	92 (59)
Boceprevir	30 (39)	27 (35)	57 (37)

Bourlière M, et al. AASLD 2014, Boston. #LB-6

LDV/SOF FDC is safe and efficacious in cirrhotic patients who have previously failed PI-based triple therapy (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Safety Patients, n (%)		Placebo 12 weeks → LDV/SOF + RBV 12 weeks			LDV/SOF 24 weeks	
		Placebo 12 wk n=77	LDV/SOF+RBV 12 wk n=76	Overall period n=77	First 12 wk n=78	Overall period n=78
Overall safety	AEs, n (%)	63 (82)	66 (87)	74 (96)	66 (85)	68 (87)
	Grade 3–4 AEs, n (%)	1 (1)	5 (7)	6 (8)	2 (3)	10 (13)
	SAEs, n (%)	1 (1)	3 (4)	4 (5)	3 (4)	8 (10)
	Treatment-related SAEs, n (%)	0	0	0	1 (1)	1 (1)
	Treatment D/C due to AEs, n (%)	1 (1)	0	1 (1)	0	0
	Death, n	0	0	0	0	0
	Grade 3–4 lab abnormalities, n (%)	18 (23)	8 (11)	24 (31)	15 (19)	11 (14)
	Hb <10 g/dL, n (%)	1 (1)	1 (1)	2 (3)	0	1 (1)
	Hb <8.5 g/dL, n (%)	1 (1)	1 (1)	2 (3)	0	0

Related event was anemia attributed to study treatment
Treatment D/C due to AEs: bacterial arthritis; decompensated cirrhosis (placebo period)

- 12 weeks of LDV/SOF + RBV may be equivalent to 24 weeks LDV/SOF
  - RBV continues to have a role
- Impact on prescribing end use of the 24-week regimen in the US and other regions?

Bourlière M, et al. AASLD 2014, Boston. #LB-6

UNITY-2 Phase 3 SVR12 results: All-oral FDC therapy with DCV/ASV/BMS -91325, ± RBV, for patients with chronic HCV G1 infection and compensated cirrhosis

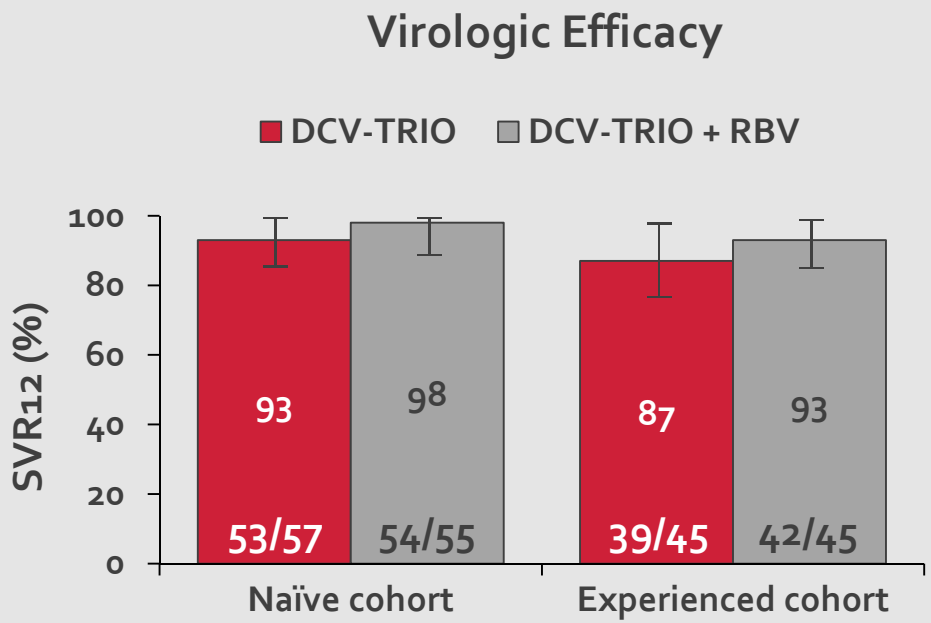
NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Parameter		Treatment-naive		Treatment-experienced	
		DCV TRIO n=57	DCV TRIO/RBV n=55	DCV TRIO n=45	DCV TRIO/RBV n=45
Age, median years (range)		58 (25–75)	59 (35–73)	59 (19–76)	60 (48–73)
Male, n (%)		39 (68)	35 (64)	32 (71)	27 (60)
Race, n (%) White		49 (86)	51 (93)	41 (91)	37 (82)
Black/African American		6 (11)	6 (11)	2 (4)	6 (13)
Other		2 (4)	3 (5)	2 (4)	2 (4)
HCV RNA ≥800K IU/mL, n (%)		47 (82)	41 (75)	43 (96)	41 (91)
HCV G	1a	40 (70)	39 (71)	35 (78)	35 (78)
n (%)	1b	17 (30)	15 (27)	10 (22)	10 (22)
	6	0	1 (2)	0	0
IL28B genotype, n (%)	CC	13 (23)	18 (33)	15 (33)	9 (20)
(rs 12979860)	CT	30 (53)	35 (64)	20 (44)	27 (60)
	TT	13 (23)	2 (4)	10 (22)	9 (20)
	Not reported	1 (2)	0	0	0

Muir A, et al. AASLD 2014, Boston. #LB-2

UNITY-2 Phase 3 SVR12 results: All-oral FDC therapy with DCV/ASV/BMS -91325, ± RBV, for patients with chronic HCV G1 infection and compensated cirrhosis (cont)

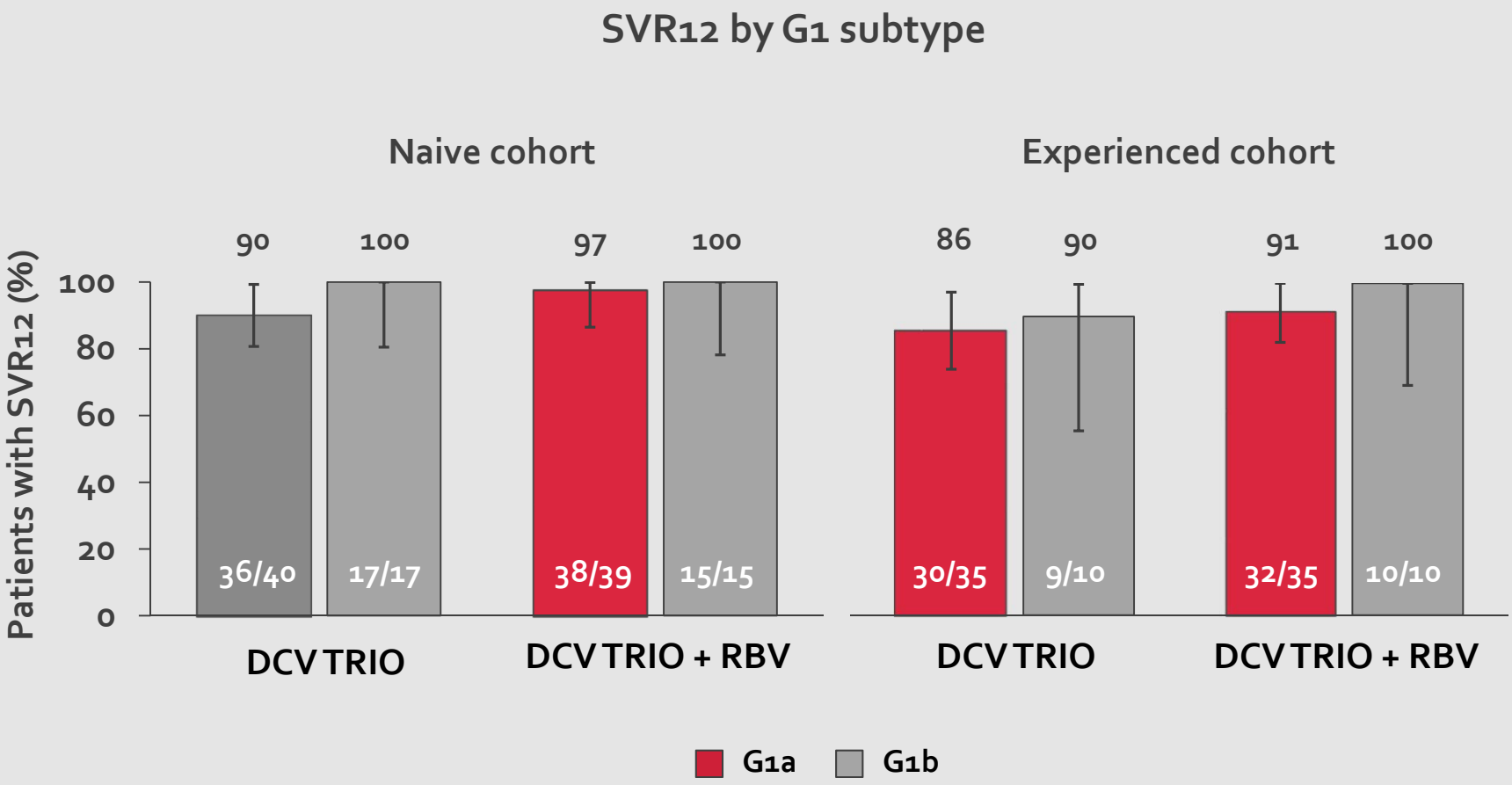
NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014



- Low incidence of treatment-emergent laboratory abnormalities
  - RBV had no effect on Grade 3/4 abnormalities except anemia (Hb <9.0 g/dL: 0 vs 5 in no RBV vs RBV, respectively)

Muir A, et al. AASLD 2014, Boston. #LB-2

UNITY-2 Phase 3 SVR12 results: All-oral FDC therapy with DCV/ASV/BMS -91325, ± RBV, for patients with chronic HCV G1 infection and compensated cirrhosis (cont)



Muir A, et al. AASLD 2014, Boston. #LB-2

UNITY-2 Phase 3 SVR12 results: All-oral FDC therapy with DCV/ASV/BMS -91325, ± RBV, for patients with chronic HCV G1 infection and compensated cirrhosis (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Emergent RAVs in virologic failures

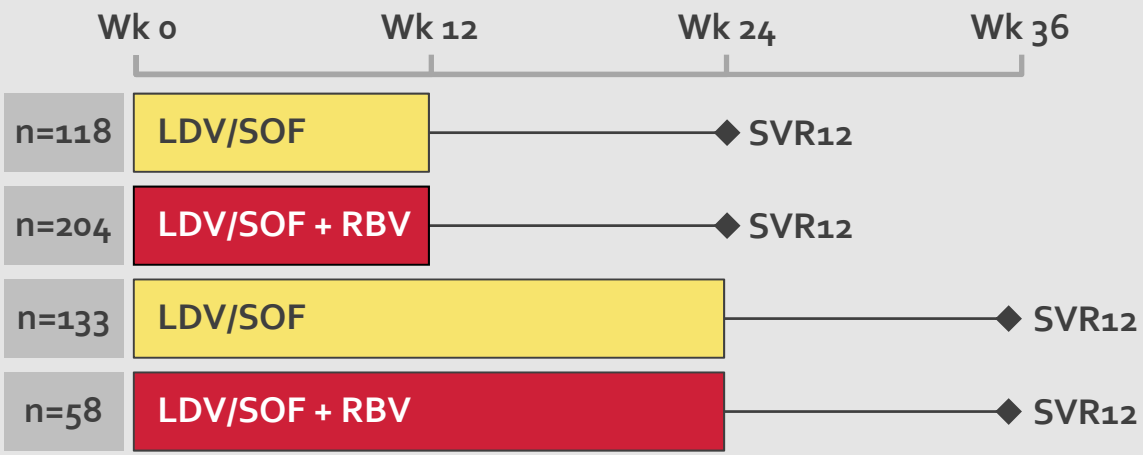
- Sequencing data currently available for 8/13 virologic failures

Patient	G	Outcome	NS5A	NS3	NS5B
1	1a	On-treatment failure	Q30R/H	None	None
2	1a	On-treatment failure	Q30E	R155K	P495P/L
3	1a	On-treatment failure	Q30E	R155K	P4955
4	1a	Relapse	None	None	None
5	1a	Relapse	Q30H	R155K	None
6	1a	Relapse	Y39N	R155K	None
7	1a	Relapse	Q30R, L31M/I	R155K/R, D168D/E	A421V
8	1b	Relapse	Y93H	None	None

- SVR rates in TRIO + RBV in treatment-naïve and treatment-experienced patients with 12 weeks treatment
- RBV definitely necessary for G1a
- Baseline RAVs do not appear to impact response
- ALT (combined data with UNITY-1 non-cirrhotic) may be an issue

Muir A, et al. AASLD 2014, Boston. #LB-2

An integrated safety and efficacy analysis of >500 patients with compensated cirrhosis treated with LDV/SOF ± RBV



- 513 patients with HCV G1, compensated cirrhosis
- Pooled data from Phase 2 and 3 LDV/SOF ± RBV studies
  - LONESTAR, ELECTRON, ELECTRON-2, 337-0113, ION-1, ION-2, SIRIUS
- Primary efficacy endpoint: SVR12

Bourlière M, et al. AASLD 2014, Boston. #82

An integrated safety and efficacy analysis of >500 patients with compensated cirrhosis treated with LDV/SOF ± RBV (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

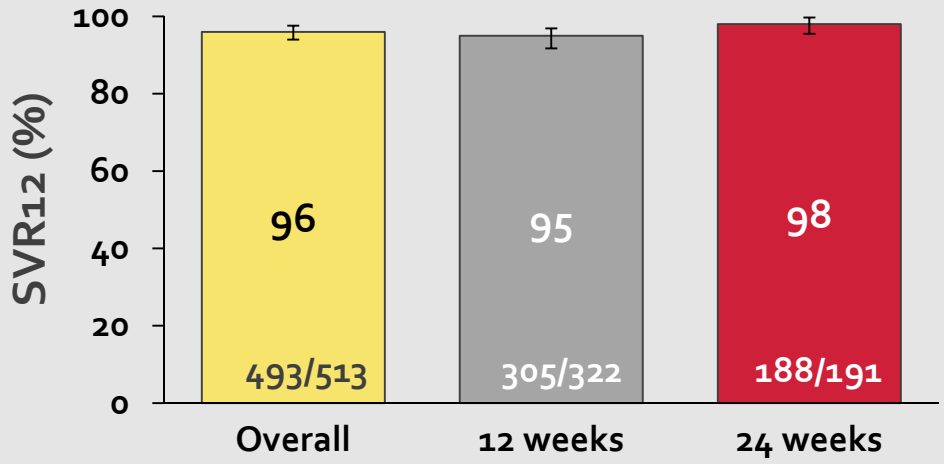
Demographics	Treatment-naïve n=161	Treatment-experienced n=352	Total N=513
Mean age, y (range)	58 (35–77)	57 (23–77)	58 (23–77)
Male, n (%)	101 (63)	241 (68)	342 (67)
Black, n (%)	13 (8)	13 (4)	26 (5)
Asian, n (%)	27 (17)	52 (15)	79 (15)
Mean BMI, kg/m^2 (range)	27 (18–44)	28 (17–50)	28 (17–50)
IL28B CC, n (%)	57 (35)	52 (15)	109 (21)
GT 1a, n (%)	86 (53)	220 (63)	306 (60)
Mean HCV RNA, $\log_{10}$ IU/mL (range)	6.4 (4.5–7.6)	6.5 (3.9–7.7)	6.4 (3.9–7.7)
Prior PI failure	N/A	240 (68)	240 (47)
Region			
US	81 (50)	110 (31)	191 (37)
International	80 (50)	242 (69)	322 (63)

Bourlière M, et al. AASLD 2014, Boston. #82

An integrated safety and efficacy analysis of >500 patients with compensated cirrhosis treated with LDV/SOF ± RBV (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

SVR overall and by treatment duration



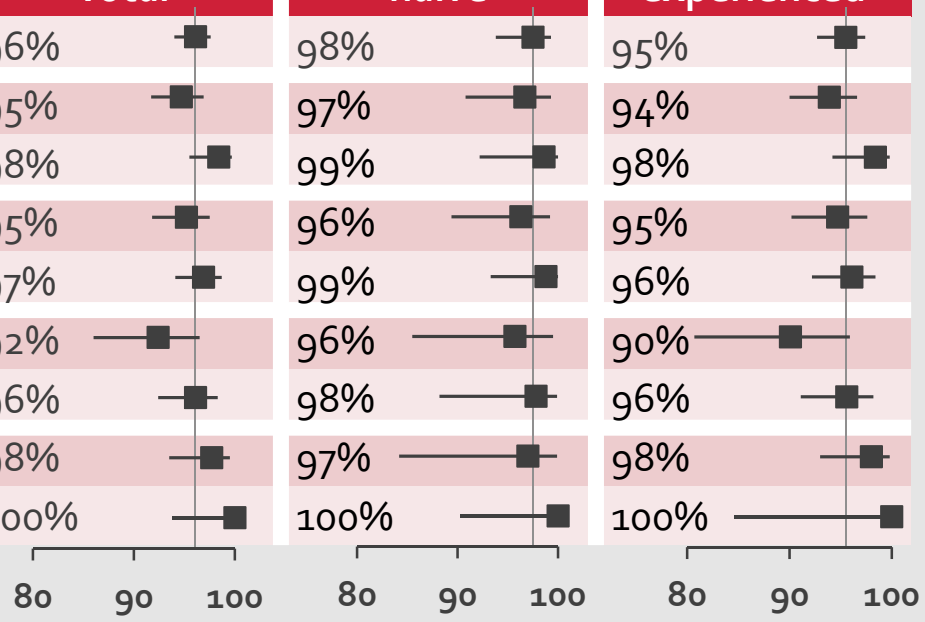
- 20 of 513 patients failed to achieve SVR12
  - 18 relapsed
  - 1 LTFU, 1 death (presumed gastrointestinal infection)

Bourlière M, et al. AASLD 2014, Boston. #82

An integrated safety and efficacy analysis of >500 patients with compensated cirrhosis treated with LDV/SOF ± RBV (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

SVR12 by treatment regimen		Total	Treatment - naïve	Treatment - experienced
Overall SVR12		96%	98%	95%
Duration	12 wk	95%	97%	94%
	24 wk	98%	99%	98%
Regimen	LDV/SOF	95%	96%	95%
	LDV/SOF + RBV	97%	99%	96%
Duration/ ± RBV	LDV/SOF 12 wk	92%	96%	90%
	LDV/SOF + RBV 12 wk	96%	98%	96%
	LDV/SOF 24 wk	98%	97%	98%
	LDV/SOF + RBV 24 wk	100%	100%	100%



Bourlière M, et al. AASLD 2014, Boston. #82

An integrated safety and efficacy analysis of >500 patients with compensated cirrhosis treated with LDV/SOF ± RBV (cont)

Safety summary Patients	LDV/SOF 12 and 24 wk (n=251)	LDV/SOF + RBV 12 and 24 wk (n=262)	TOTAL N=513
AEs, n (%)	190 (76)	225 (86)	415 (81)
Treatment-related AEs, n (%)	118 (47)	196 (75)	314 (61)
Grade ≥3 AEs, n (%)	19 (8)	20 (8)	39 (8)
SAEs, n (%)	15 (6)	9 (3)	24 (5)
Treatment-related SAEs, n (%)	1 (<1)	4 (2)	5 (1)
AEs leading to study drug modification/interruption, n (%)	3 (1)	38 (15)	41 (8)
Treatment D/C due to AEs , n (%)	0	1 (<1)	1 (<1)
Death, n (%)	0	1 (<1)	1 (<1)
Grade 3–4 lab abnormalities, n (%)	39 (16)	35 (13)	74 (14)
Hemoglobin <10 g/dL, n (%)	1 (<1)	26 (10)	27 (5)
Hemoglobin <8.5 g/dL, n (%)	0	3 (1)	3 (<1)

Bourlière M, et al. AASLD 2014, Boston. #82

An integrated safety and efficacy analysis of >500 patients with compensated cirrhosis treated with LDV/SOF ± RBV (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

- 96% of this group of 513 patients with compensated cirrhosis achieved an SVR
- High rates of SVR were observed in all subgroups
- Among treatment-experienced patients, 12 weeks of LDV/SOF resulted in a 90% SVR rate
  - Adding RBV or extending treatment duration increased this rate to ≥96%
- Platelet count <75 $\times 10^3/\mu L$ associated with lower SVR rate among treatment-experienced patients with cirrhosis
  - Observation based on 28 patients
- LDV/SOF was safe and well-tolerated in patients with cirrhosis
  - Use of RBV resulted in more frequent AEs and HgB decline

Bourlière M, et al. AASLD 2014, Boston. #82

High rates of SVR in patients with G1 HCV infection and cirrhosis after treatment with LDV/SOF + RBV or LDV/SOF + GS-9669 for 8 weeks

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

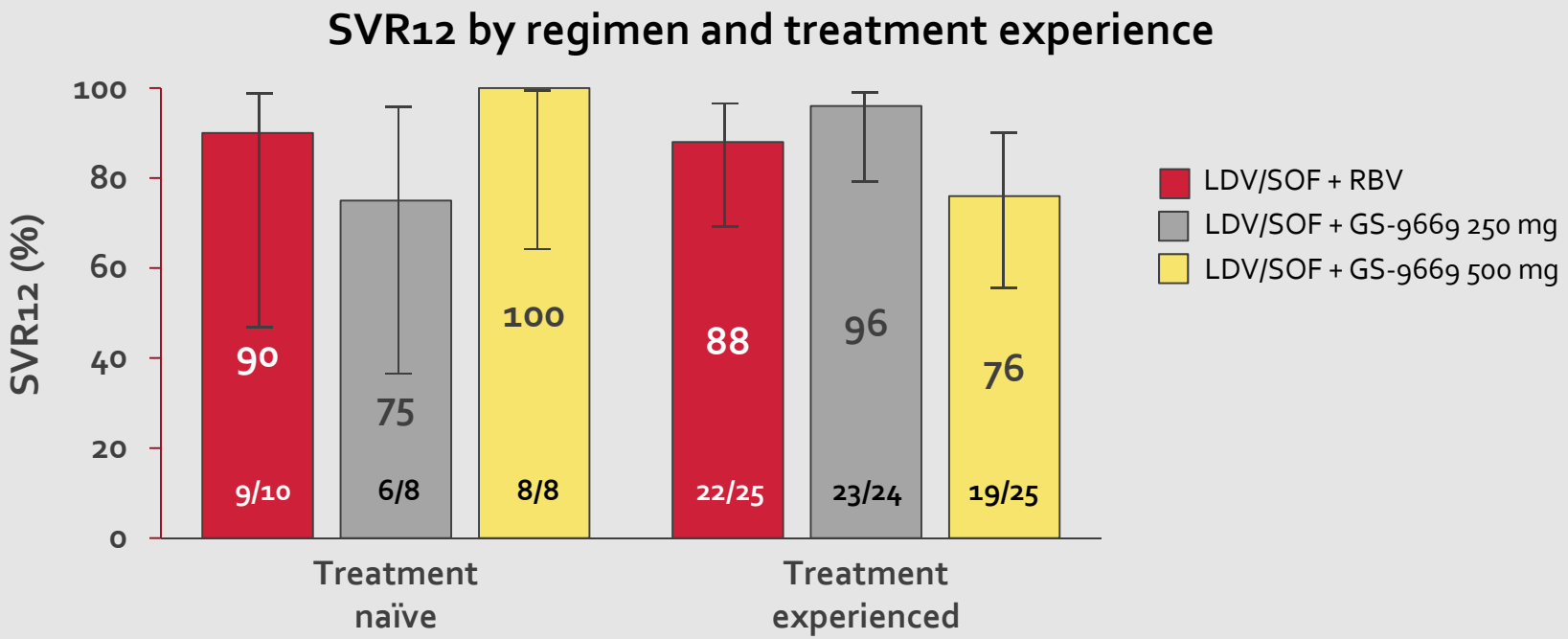
Baseline characteristics	LDV/SOF + RBV (n=35)	LDV/SOF + GS-9669 250 mg (n=32)	LDV/SOF + GS-9669 500 mg (n=33)
Mean age, y (range)	58 (36–71)	57 (44–75)	57 (32–77)
Men, n (%)	20 (57)	24 (75)	21 (64)
White, n (%)	32 (91)	32 (100)	28 (85)
Mean BMI, kg/m^2 (range)	31 (19–48)	29 (19–43)	30 (20–42)
IL28B CC, n (%)	5 (14)	6 (19)	7 (21)
Cirrhosis, n (%)	35 (100)	32 (100)	33 (100)
HCV G, n (%)			
1a	21 (60)	20 (62)	21 (64)
1b	14 (40)	12 (38)	12 (36)
Mean HCV RNA, $\log_{10}$ IU/mL (range)	6.0 (4.8–6.8)	6.1 (4.2–7.1)	6.0 (3.8–6.9)
Treatment-naïve, n (%)	10 (29)	8 (25)	8 (24)
Treatment-experienced, n (%)	25 (71)	24 (75)	25 (76)
Previous treatment with PI + PEG/RBV, n %)	10 (29)	8 (25)	7 (21)

AEs in >10% of pts in any treatment arm	LDV/SOF + RBV (n=35)	LDV/SOF + GS-9669 250 mg (n=32)	LDV/SOF + GS-9669 500 mg (n=33)
Headache	5 (14)	2 (6)	7 (21)
Diarrhea	4 (11)	5 (16)	3 (9)
Nausea	3 (9)	2 (6)	7 (21)
Upper respiratory tract infection	5 (14)	2 (6)	3 (9)

Lawitz E, et al. AASLD 2014, Boston. #1948

High rates of SVR in patients with G1 HCV infection and cirrhosis after treatment with LDV/SOF + RBV or LDV/SOF + GS-9669 for 8 weeks (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014



- 13 patients experienced treatment failure
  - Only factor black race?

- LDV/SOF FDC ± RBV or GS-9669 effective
- Co-administration of GS-9669 did not appear to provide additional efficacy
- All regimens were safe and well-tolerated

Lawitz E, et al. AASLD 2014, Boston. #1948

Time to viral suppression is not related to achievement of SVR12 in GT1-infected patients treated with ABT-450/r/ombitasvir and dasabuvir ± RBV

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

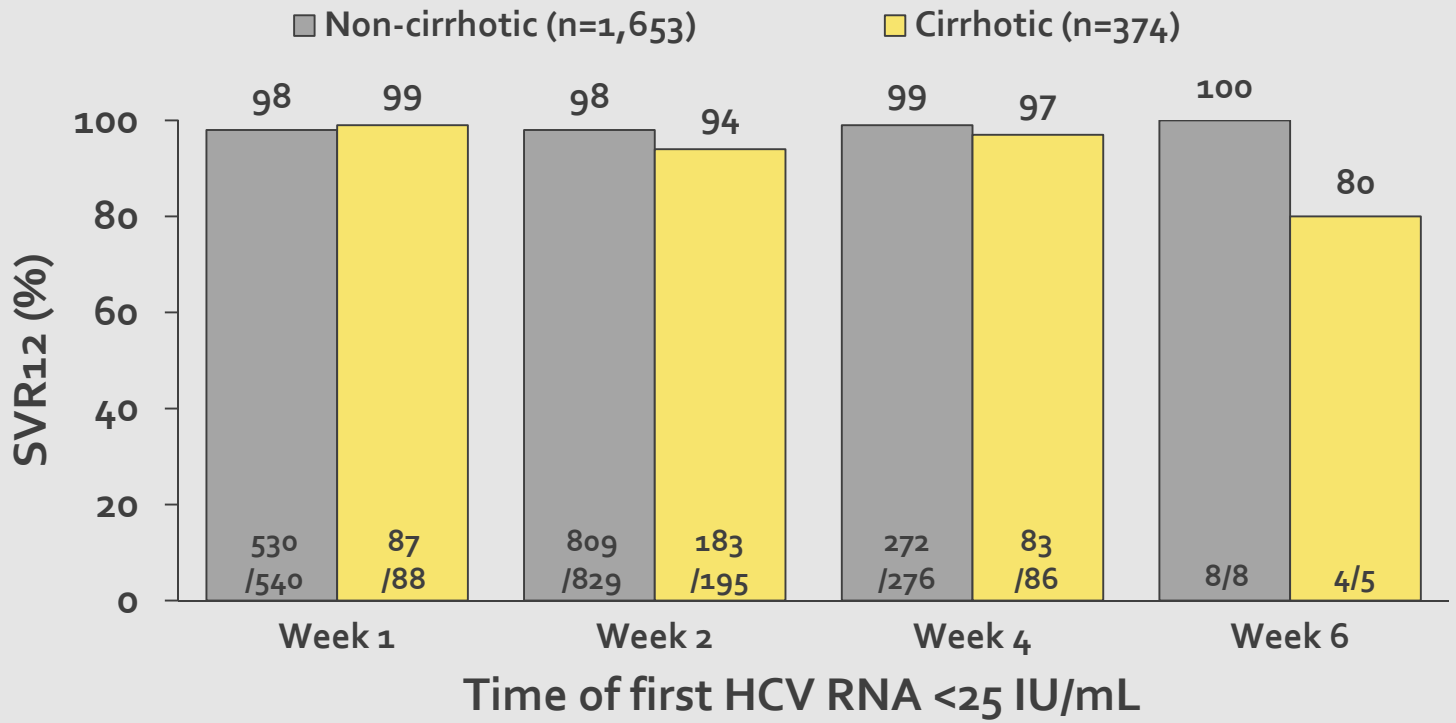
- Pooled analysis of all non-cirrhotic and cirrhotic G1 patients who had received the 3D regimen ± RBV during 6 Phase 3 clinical trials:
  - SAPPHIRE-I, SAPPHIRE-II, PEARL-II, PEARL-III, PEARL-IV, and TURQUOISE-II
- Objective of this study:
  - Is time of first viral suppression of HCV RNA measurement <LLOQ in cirrhotic and non-cirrhotic patients associated with achievement of SVR12?

Sulkowski MS, et al. AASLD 2014, Boston. #1950

Time to viral suppression is not related to achievement of SVR12 in GT1-infected patients treated with ABT-450/r/ombitasvir and dasabuvir ± RBV (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

SVR12 by time of HCV RNA suppression <25 IU/mL (N=2,027)*



*Among 375 patients not demonstrating HCV RNA <LLOQ by Wk 2, most (n=362) achieved suppression at Wk 4, while 13 patients (8 non-cirrhotic, 5 cirrhotic) achieved suppression for the first time at Wk 8. All except 1 cirrhotic patient ultimately achieved SVR12.

Sulkowski MS, et al. AASLD 2014, Boston. #1950

Time to viral suppression is not related to achievement of SVR12 in GT1-infected patients treated with ABT-450/r/ombitasvir and dasabuvir ± RBV (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

- Higher BL HCV RNA level, older age, G1b subtype, and presence of cirrhosis were associated with a longer time to initial viral suppression <25 IU/mL, but the magnitude of the effect was small and time to suppression did not affect achievement of SVR12
- Gender, race, HOMA-IR, or IL28B genotype had no effect on time to viral suppression

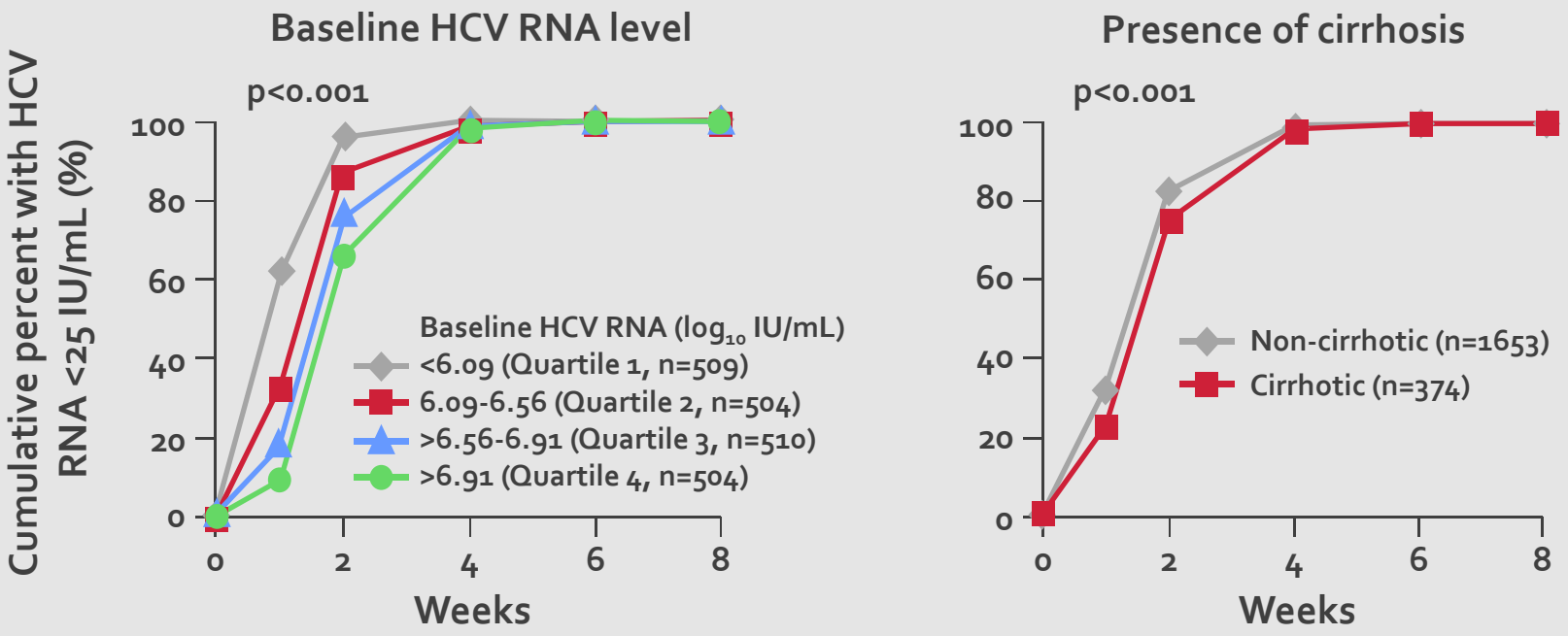
Data shown on next slides

Sulkowski MS, et al. AASLD 2014, Boston. #1950

Time to viral suppression is not related to achievement of SVR12 in GT1-infected patients treated with ABT-450/r/ombitasvir and dasabuvir ± RBV (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Baseline characteristics significantly associated with time to suppression of HCV RNA levels <25 IU/mL

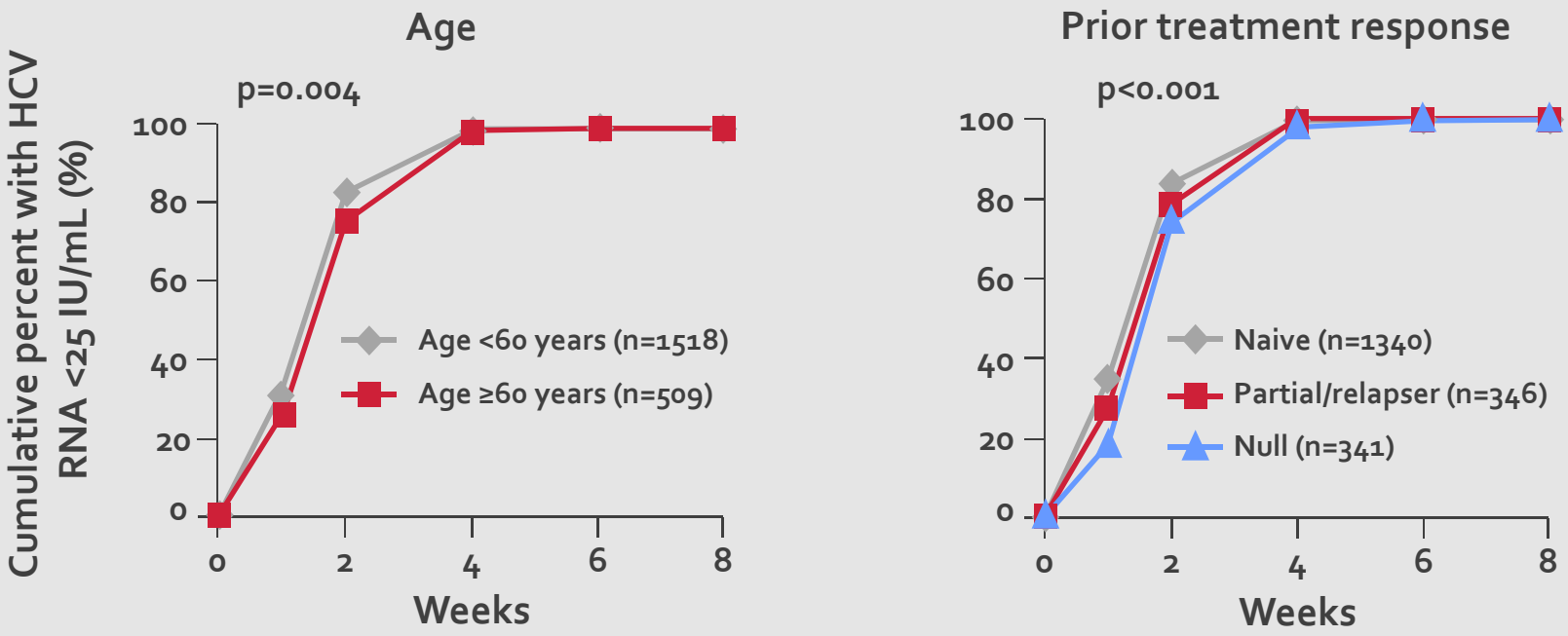


Sulkowski MS, et al. AASLD 2014, Boston. #1950

Time to viral suppression is not related to achievement of SVR12 in GT1-infected patients treated with ABT-450/r/ombitasvir and dasabuvir ± RBV (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Baseline characteristics significantly associated with time to suppression of HCV RNA levels <25 IU/mL

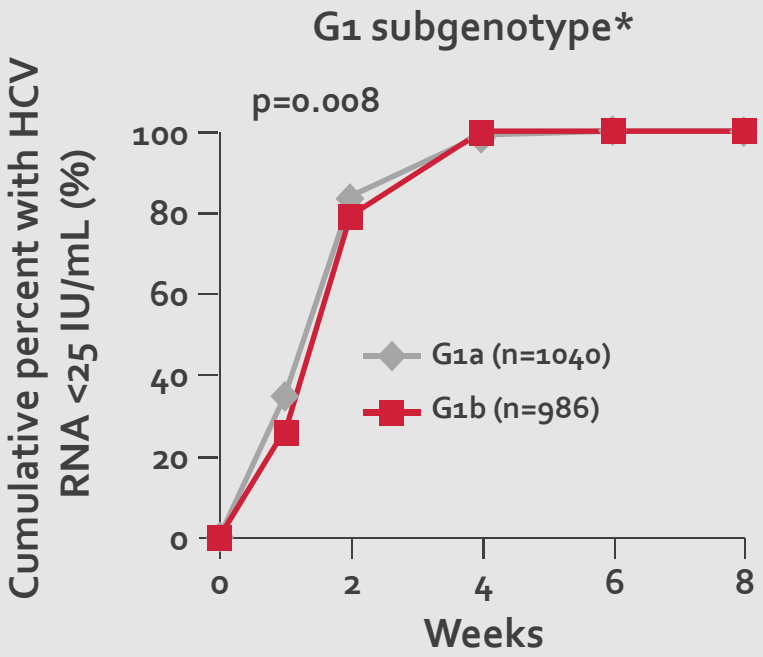


Sulkowski MS, et al. AASLD 2014, Boston. #1950

Time to viral suppression is not related to achievement of SVR12 in GT1-infected patients treated with ABT-450/r/ombitasvir and dasabuvir ± RBV (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Baseline characteristics significantly associated with time to suppression of HCV RNA levels <25 IU/mL



- Early virologic suppression of HCV RNA is nearly universal at Wk 4 with 3D ± RBV
- Determination at Wk 4 is not useful for clinical decision making
- Monitoring HCV RNA levels at Wk 4 may be useful to determine adherence

*Data missing for 1 patient.

Sulkowski MS, et al. AASLD 2014, Boston. #1950

On treatment HCV RNA as a predictor of virologic response in the LDV/SOF Phase 3 program for HCV G1 infection: Analysis of the ION-1, ION-2, and ION-3 studies

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

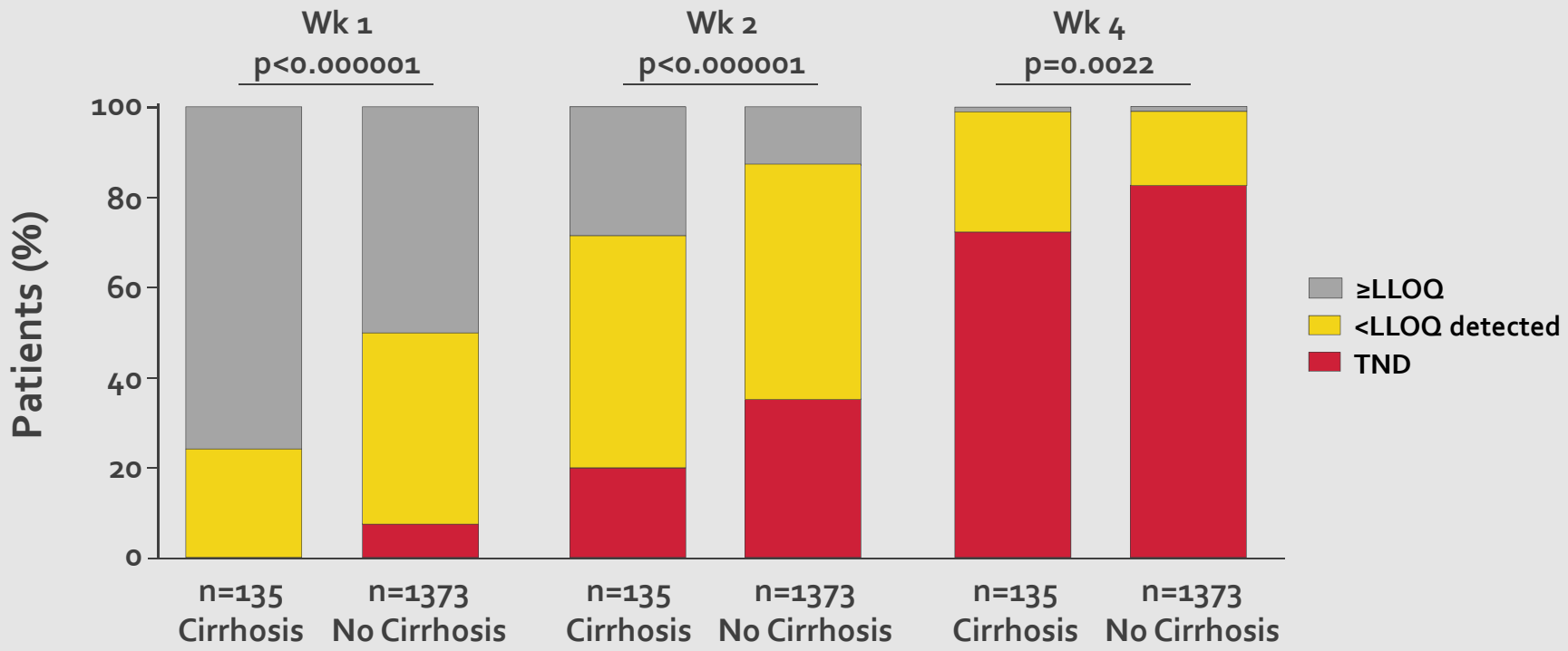
- Utility of HCV RNA quantification at early time points during treatment as predictor of response?
- Retrospective analysis of G1 treatment-naive (ION-1) or treatment-experienced (ION-2) patients with/ without cirrhosis, treated with LDV/SOF ± RBV for 12 or 24 weeks; or the same regimen for 8 or 12 weeks in non-cirrhotic, previously untreated G1 patients (ION-3)

Welzel TM, et al. AASLD 2014, Boston. #1932

On treatment HCV RNA as a predictor of virologic response in the LDV/SOF Phase 3 program for HCV G1 infection: Analysis of the ION-1, ION-2, and ION-3 studies (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Early viral response in treatment-naive patients with/without cirrhosis: ION-1 and ION-3

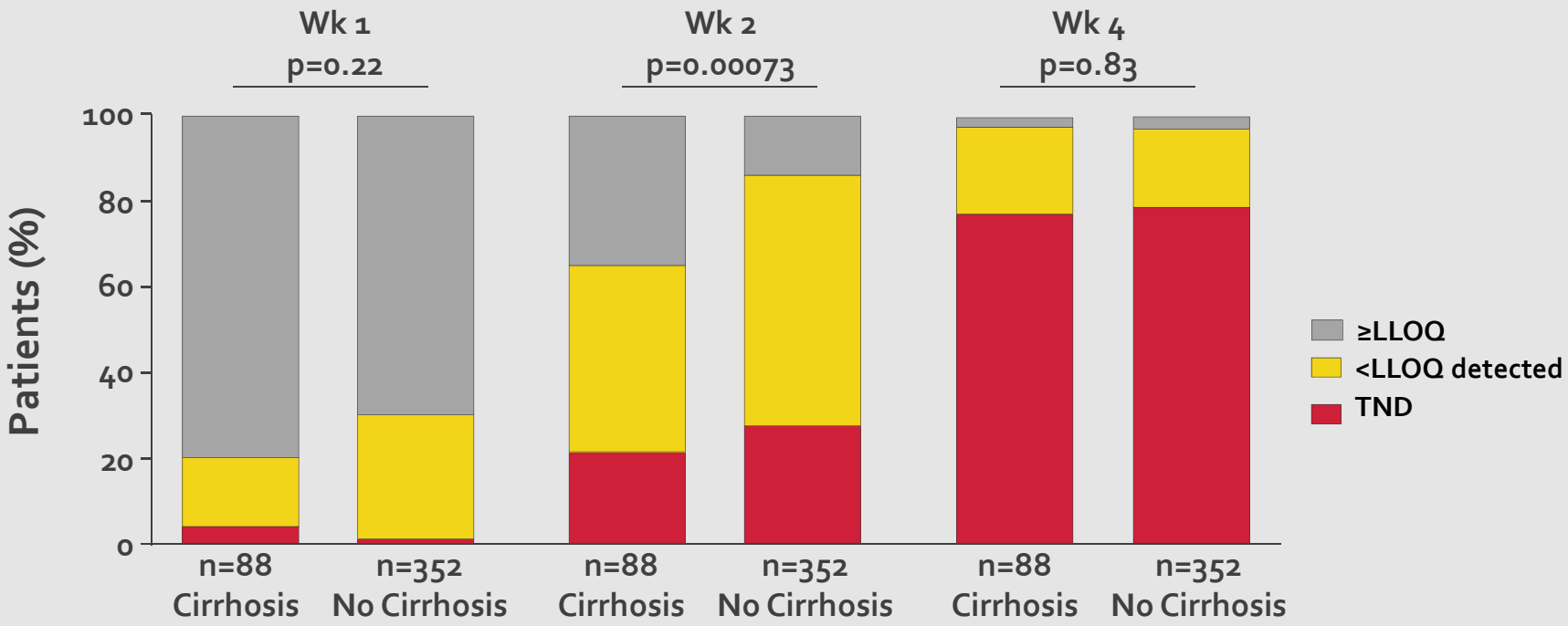


Welzel TM, et al. AASLD 2014, Boston. #1932

On treatment HCV RNA as a predictor of virologic response in the LDV/SOF Phase 3 program for HCV G1 infection: Analysis of the ION-1, ION-2, and ION-3 studies (cont)

NEW OPTIONS IN HCV THERAPY: UPDATE FROM AASLD 2014

Early viral response in treatment-experienced patients with/without cirrhosis: ION-2



- Low number of patients had quantifiable HCV RNA early in treatment across LDV/SOF Phase 3 program
- SVR12 high, even in patients with quantifiable early HCV RNA levels
- HCV RNA quantification at early time points during treatment of G1 with LDV/SOF ± RBV may be considered for further optimization of treatment duration in some subpopulations

Welzel TM, et al. AASLD 2014, Boston. #1932