Treatment Naïve and Treatment Experienced

Sofosbuvir-Ledipasvir +/- Ribavirin in GT-1
LONESTAR Trial

Source: Lawitz E, et al. Lancet. 2014:383:515-23.

Ledipasvir-Sofosbuvir +/- Ribavirin in Naïve & Experienced GT1
LONESTAR Trial: Features

LONESTAR Trial

- **Design**: Open-label, phase 2, using fixed dose combination of ledipasvir-sofosbuvir +/- ribavirin in treatment-naïve and treatment-experienced GT 1
- **Setting**: one center in USA (San Antonio, Texas)
- **Entry Criteria**
  - Chronic HCV Genotype 1
  - Cohort A: Treatment-naïve
  - Cohort B: Prior virologic failure with protease inhibitor regimen
- **Patient Characteristics (range in different treatment arms)**
  - n = 100 adult patients
  - Treatment-Naive: none with cirrhosis
  - Previously Treated: approximately 55% with cirrhosis
  - Previously Treated: approximately 2/3 non-responders and 1/3 relapsers
  - IL28B Genotype: non-CC (range of 67-95%)
- **End-Points**: Primary = SVR12; safety and tolerability

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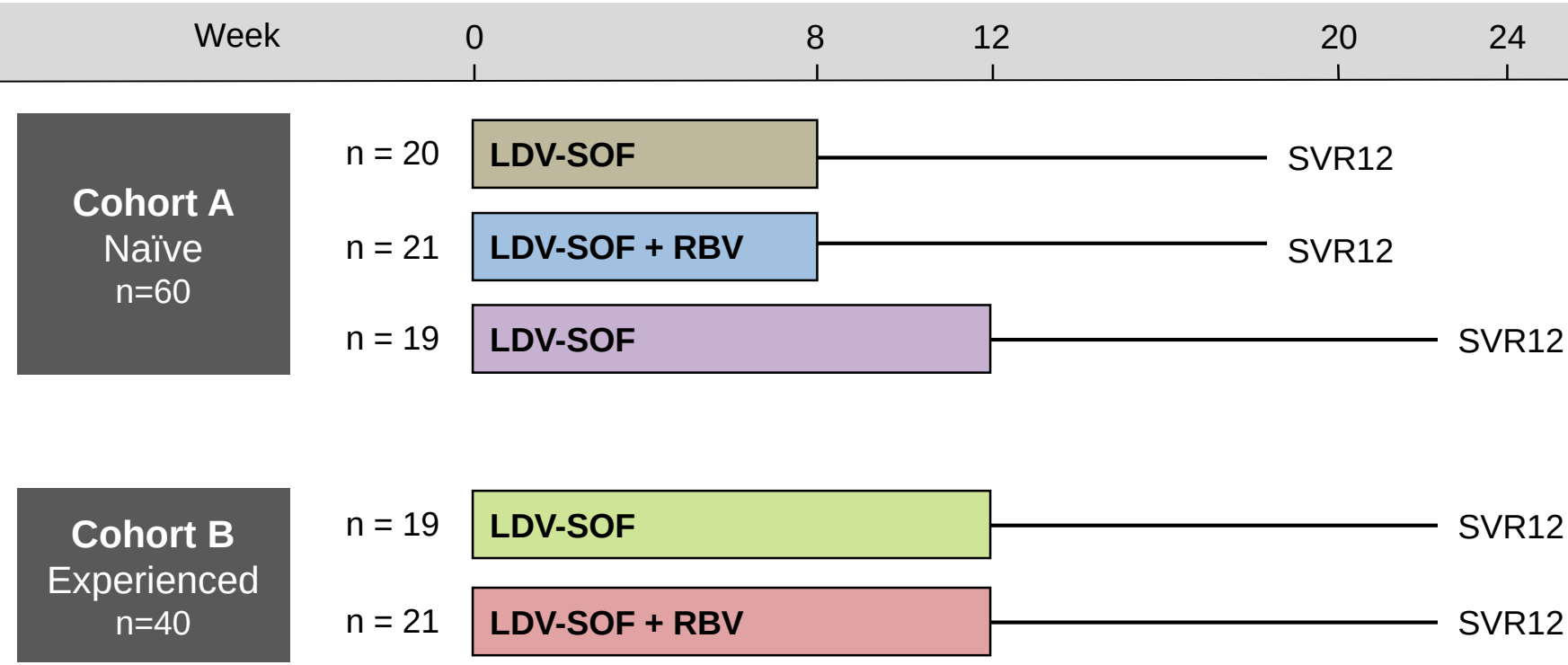
Ledipasvir-Sofosbuvir +/- Ribavirin in Naïve & Experienced GT1 LONESTAR: Study Design



Abbreviations: LDV-SOF= ledipasvir-sofosbuvir; RBV = ribavirin

Drug Dosing

Ledipasvir-Sofosbuvir: 90/400 mg fixed dose combination one pill once daily

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

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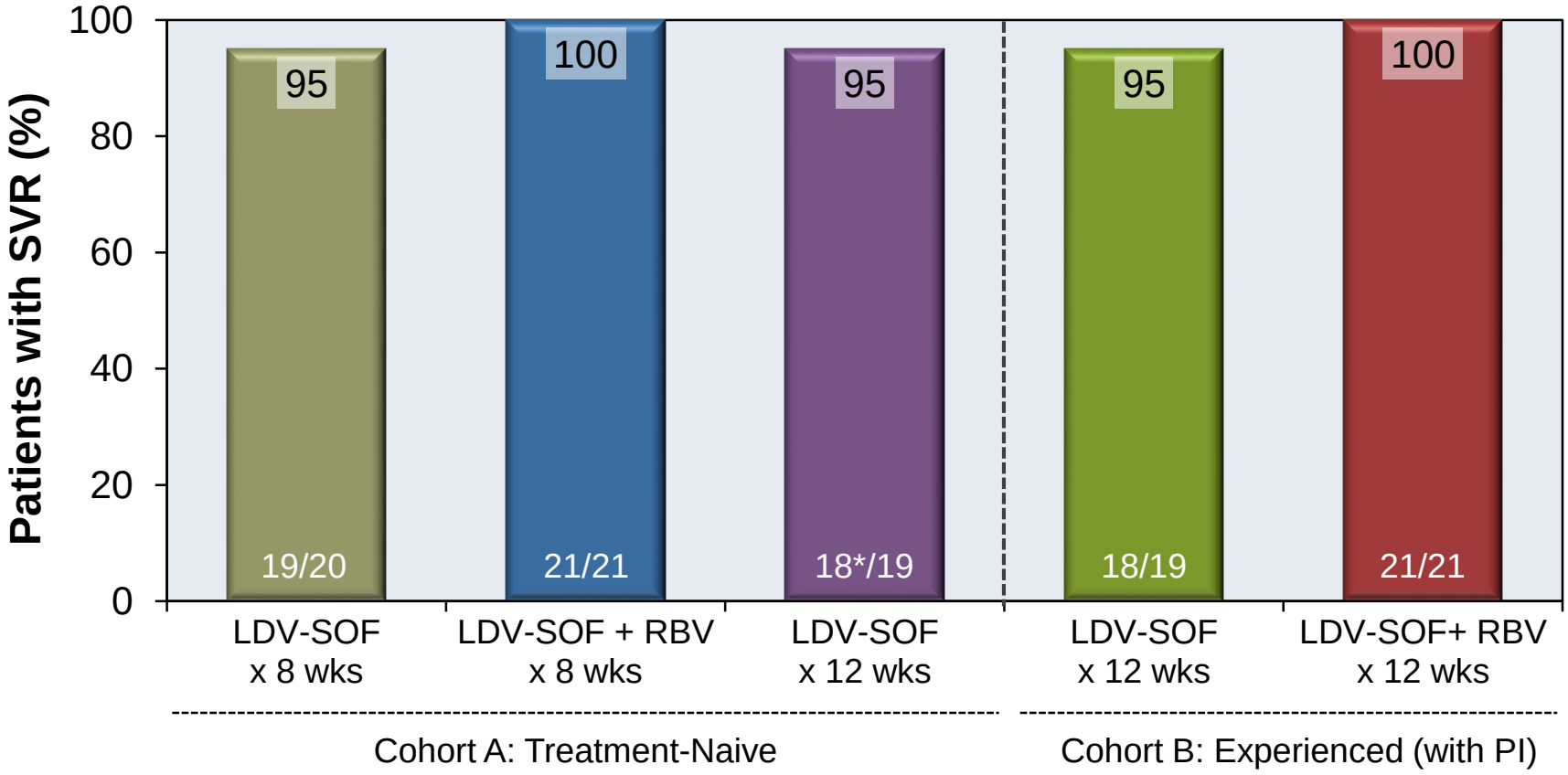
Ledipasvir-Sofosbuvir +/- Ribavirin in Naïve & Experienced GT1 LONESTAR Trial: Results

LONESTAR: SVR 12, by Cohort and Treatment Regimen



*One patient lost to follow-up; LDV-SOF = ledipasvir-sofosbuvir; RBV = ribavirin; PI = protease inhibitor

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Ledipasvir-Sofosbuvir +/- Ribavirin in Naïve & Experienced GT1
LONESTAR Trial: Adverse Events

Adverse Event (AE)	Cohort A			Cohort B	
	LDV-SOF x 8 weeks (n = 20)	LDV-SOF + RBV x 8 weeks (n = 21)	LDV-SOF x 12 weeks (n = 19)	LDV-SOF x 12 weeks (n = 19)	LDV-SOF + RBV x 12 weeks (n = 21)
Serious AE	0 (0%)	1 (5%)	1 (5%)	1 (5%)	1 (5%)
Nausea	2 (10%)	2 (10%)	1 (5%)	0 (0%)	4 (19%)
Anemia	0 (0%)	2 (10%)	0 (0%)	0 (0%)	6 (29%)
Upper RTI	2 (10%)	0 (0%)	1 (5%)	1 (5%)	4 (19%)
Headache	2 (10%)	3 (14%)	0 (0%)	1 (5%)	1 (5%)
Abdominal pain	1 (5%)	1 (5%)	1 (5%)	0 (0%)	1 (5%)
Bronchitis	1 (5%)	1 (5%)	0 (0%)	1 (5%)	1 (5%)
Back pain	1 (5%)	1 (5%)	1 (5%)	1 (5%)	0 (0%)
Decreased appetite	0 (0%)	2 (10%)	0 (0%)	1 (5%)	0 (0%)
Dermatitis	1 (5%)	0 (0%)	0 (0%)	0 (0%)	2 (10%)
Muscle spasms	1 (5%)	0 (0%)	0 (0%)	0 (0%)	2 (10%)

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Ledipasvir-Sofosbuvir +/- Ribavirin in Naïve & Experienced GT1 LONESTAR Trial: Conclusion

Interpretation: “These findings suggest that the fixed-dose combination of sofosbuvir-ledipasvir alone or with ribavirin has the potential to cure most patients with genotype-1 HCV, irrespective of treatment history or the presence of compensated cirrhosis. Further clinical trials are needed to establish the best treatment duration and to further assess the contribution of ribavirin.”

Source: Lawitz E, et al. Lancet. 2014:383:515-23.