

Sofosbuvir-Velpatasvir-Voxilaprevir in GT 3 and Cirrhosis POLARIS-3

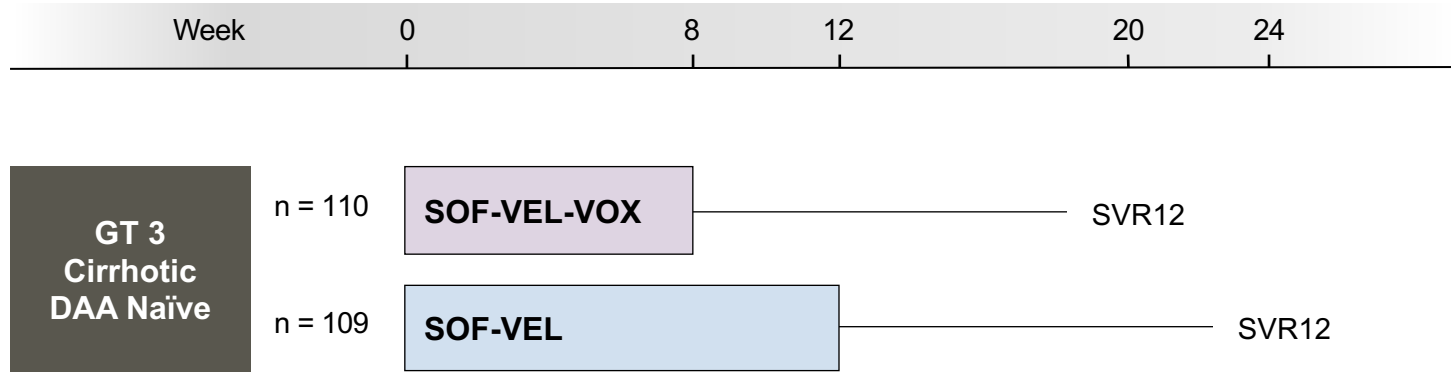
Sofosbuvir-Velpatasvir-Voxilaprevir in GT 3 and Cirrhosis

POLARIS-3: Study Features

- **Design:** Open-label, randomized, phase 3 trial to compare efficacy of a fixed-dose combination of sofosbuvir-velpatasvir-voxilaprevir (SOF-VEL-VOX) for 8 weeks versus sofosbuvir-velpatasvir (SOF-VEL) for 12 weeks in patients with HCV genotype 3 and cirrhosis who were DAA-naïve
- **Setting:** 84 sites in United States, Canada, New Zealand, Australia, France, Germany, and United Kingdom
- **Entry Criteria**
 - Age ≥ 18 years
 - Chronic HCV GT 3 with compensated cirrhosis
 - HCV RNA $\geq 10,000$ IU/mL at screening
 - No prior treatment with DAA; prior peginterferon plus ribavirin allowed
- **Primary End Point:** SVR12

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POLARIS-3: Study Design



Abbreviations: SOF, sofosbuvir; VEL, velpatasvir; VOX, voxilaprevir

Drug Dosing

SOF-VEL-VOX (400/100/100 mg): fixed dose combination; one pill once daily

SOF-VEL (400/100 mg): fixed dose combination; one pill once daily

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POLARIS-3: Baseline Characteristics

Baseline Characteristic	SOF-VEL-VOX x 8 weeks (n = 110)	SOF-VEL x 12 weeks (n = 109)
Age, mean (range)	54 (25-75)	55 (31-69)
Male, n (%)	74 (67)	100 (92)
White, n (%)	100 (91)	97 (89)
Cirrhosis Features		
Platelets <100 x 10 ³ /μL, n (%)	30 (29)	21 (19)
Mean FibroScan (range), kPa	23 (13-75)	22 (13-75)
Body mass index, mean, kg/m ² (range)	28 (20-50)	27 (18-46)
Mean HCV RNA, log ₁₀ IU/mL (range)	6.0 (1.6-7.6)	6.3 (4.1-7.5)
IL28B CC, n (%)	41 (37)	52 (48)

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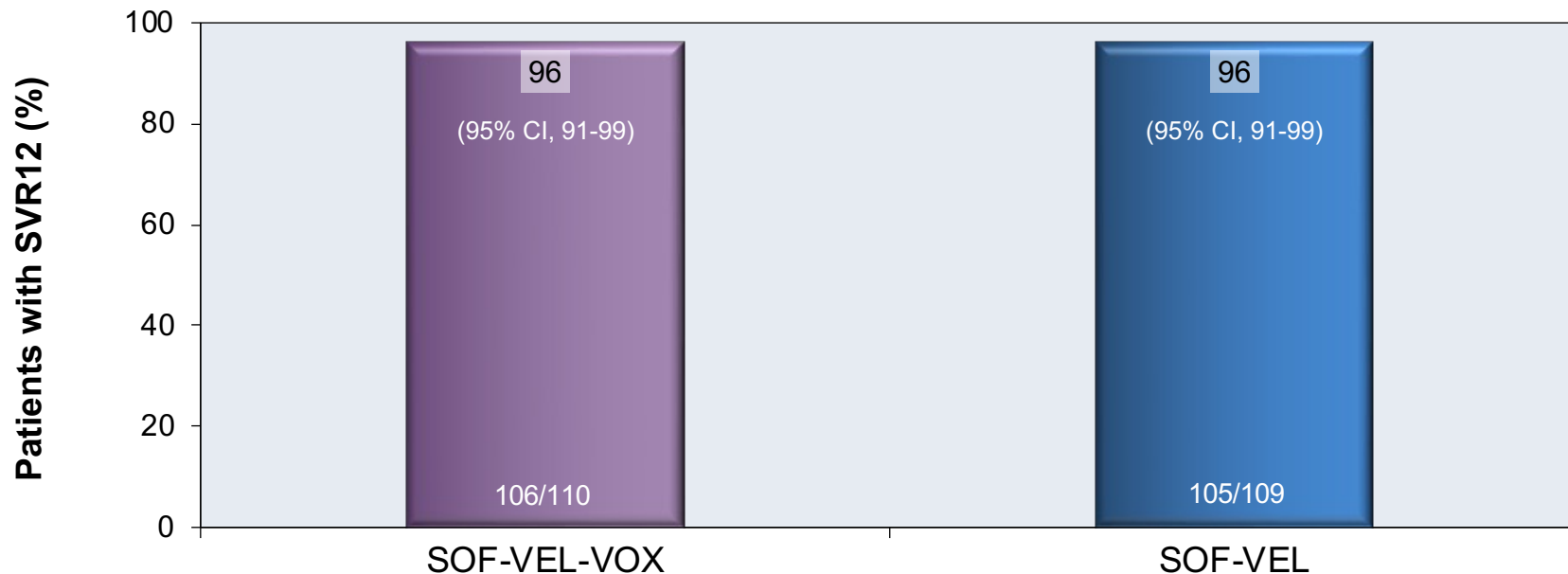
POLARIS-3: Baseline Characteristics

Information on Prior Treatment	SOF-VEL-VOX x 8 weeks (n = 110)	SOF-VEL x 12 weeks (n = 109)
Treatment-Naïve	75 (68)	77 (71)
Treatment-Experienced	35 (32)	32 (29)
Peginterferon + Ribavirin	31 (89)	30 (94)
Other	4 (11)	2 (6)
Most Recent Treatment Response		
Nonresponder	16 (46)	8 (25)
Relapse	16 (46)	20 (63)
Other	3 (9)	4 (13)

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POLARIS-3: Results

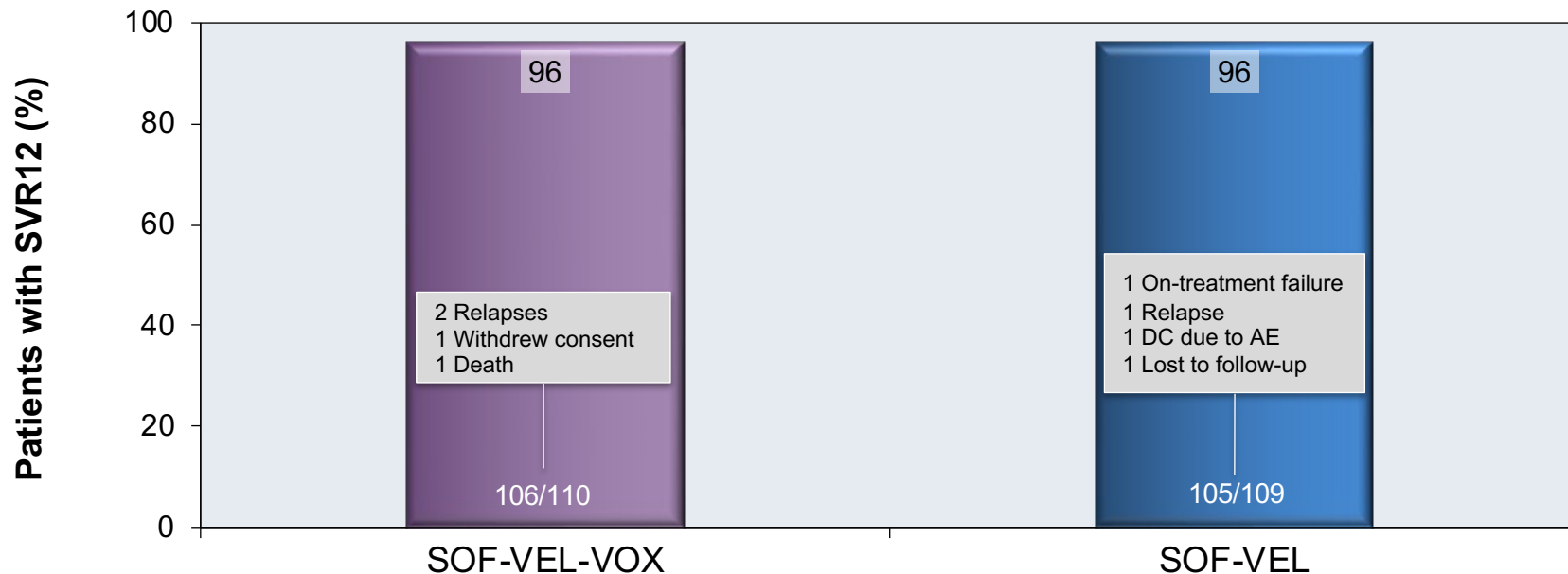
POLARIS-3: Overall SVR12 by Treatment Arm



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POLARIS-3: Results

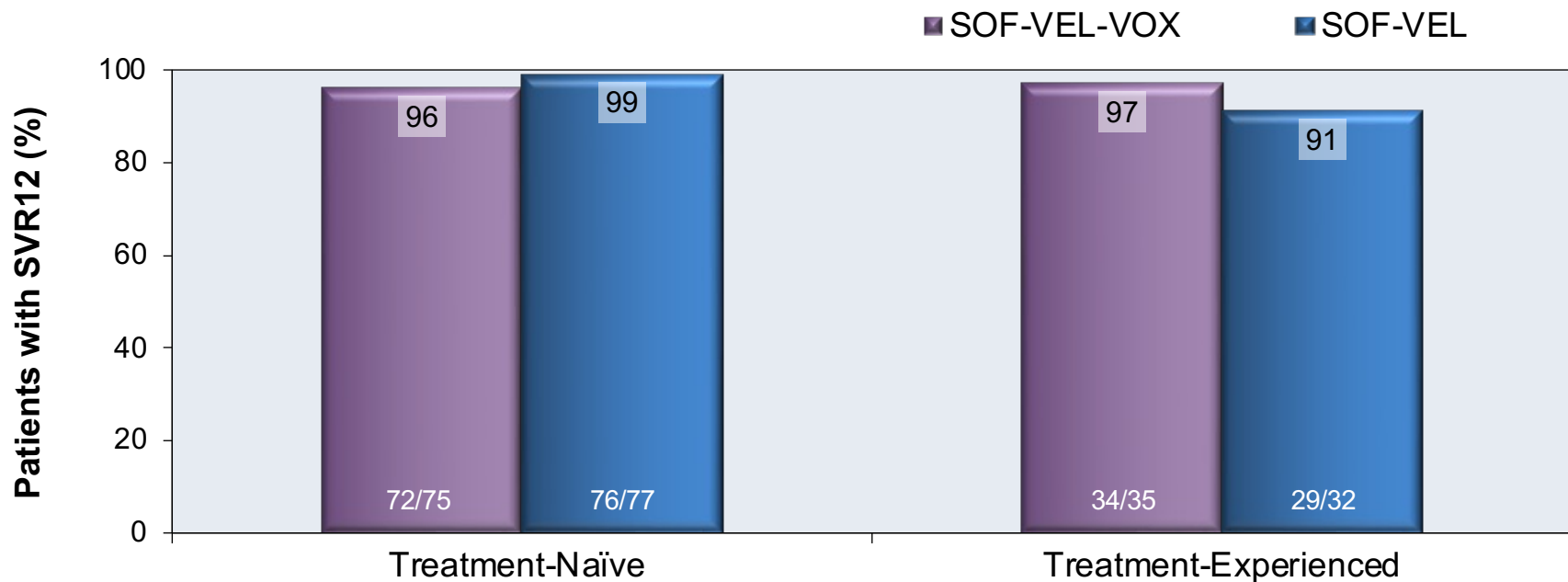
POLARIS-3: Overall SVR12 by Treatment Arm



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POLARIS-3: Results

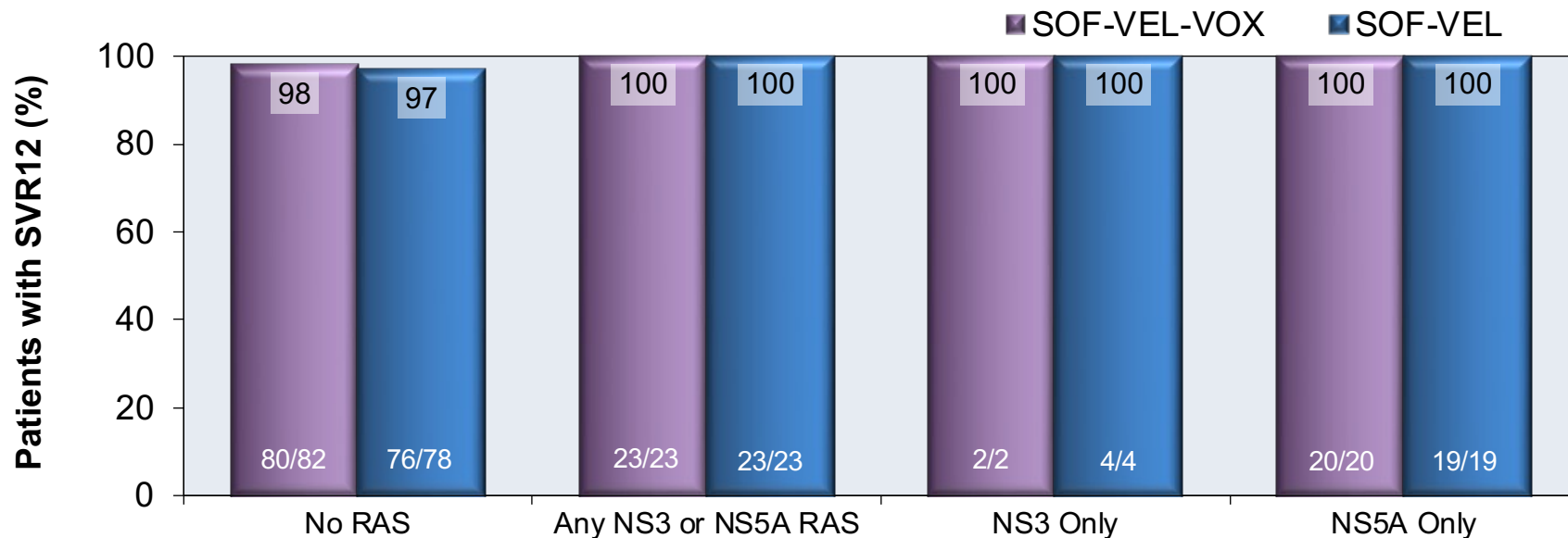
POLARIS-3: SVR12 by Treatment Experience



Sofosbuvir-Velpatasvir-Voxilaprevir in GT 3 and Cirrhosis

POLARIS-3: Results

POLARIS-3: SVR12 by Baseline RAS



Y93H: 6 patients in SOF-VEL-VOX group and 4 in SOF-VEL group; all achieved SVR.

No treatment-emergent RASs in SOF-VEL-VOX group. Both virologic failures in SOF-VEL group had Y93H.

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POLARIS-3: Adverse Events

Adverse Event (AE), n (%)	SOF-VEL-VOX x 8 weeks (n = 110)	SOF-VEL x 12 weeks (n = 109)
Discontinuation due to AE	0	1 (1)
Serious AE	2 (2)	3 (3)
Serious Related AE	0	0
Deaths	1 (1) [§]	0
Common AE		
Headache	27 (25)	32 (29)
Fatigue	28 (25)	31 (28)
Nausea	23 (21)	10 (9)
Diarrhea	17 (15)	5 (5)
Laboratory AEs (Grade 3-4)	14 (13)	9 (8)

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POLARIS-3: Conclusions

Conclusions: “In phase 3 trials of patients with HCV infection, we did not establish that sofosbuvir-velpatasvir-voxilaprevir for 8 weeks was noninferior to sofosbuvir-velpatasvir for 12 weeks, but the 2 regimens had similar rates of SVR in patients with HCV genotype 3 and cirrhosis. Mild gastrointestinal adverse events were associated with treatment regimens that included voxilaprevir.”

Acknowledgments

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