

Sofosbuvir in HCV-HIV Coinfection & HCV GT 1,2,3 PHOTON-1 Trial

Sulkowski MS, et al. JAMA. 2014;312:353-61.

Sofosbuvir and Ribavirin for HCV-HIV Coinfection

PHOTON-1 Trial: Study Features

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- **Design:** Open-label, nonrandomized, uncontrolled, phase 3 trial using sofosbuvir + ribavirin in HCV-HIV coinfection and HCV GT 1, 2, or 3
- **Setting:** 34 treatment centers in United States and Puerto Rico
- **Entry Criteria**
 - HIV coinfection; HCV Genotype 1, 2, or 3
 - Treatment naïve (GT 1,2,3) or treatment experienced (GT 2,3)
 - On antiretroviral therapy with HIV RNA \leq 50 copies/ml and CD4 \geq 200 or not on antiretroviral therapy and CD4 \geq 500
 - Compensated cirrhosis permitted (<20% total patients)
- **Patient Characteristics**
 - N = 223 HCV-HIV coinfecting patients
 - On ARV Rx: GT1 (98%); GT 2/3 naïve (90%); GT 2/3 experienced (95%)
- **Primary End-Points**
 - Efficacy (SVR12), safety, and impact on HIV

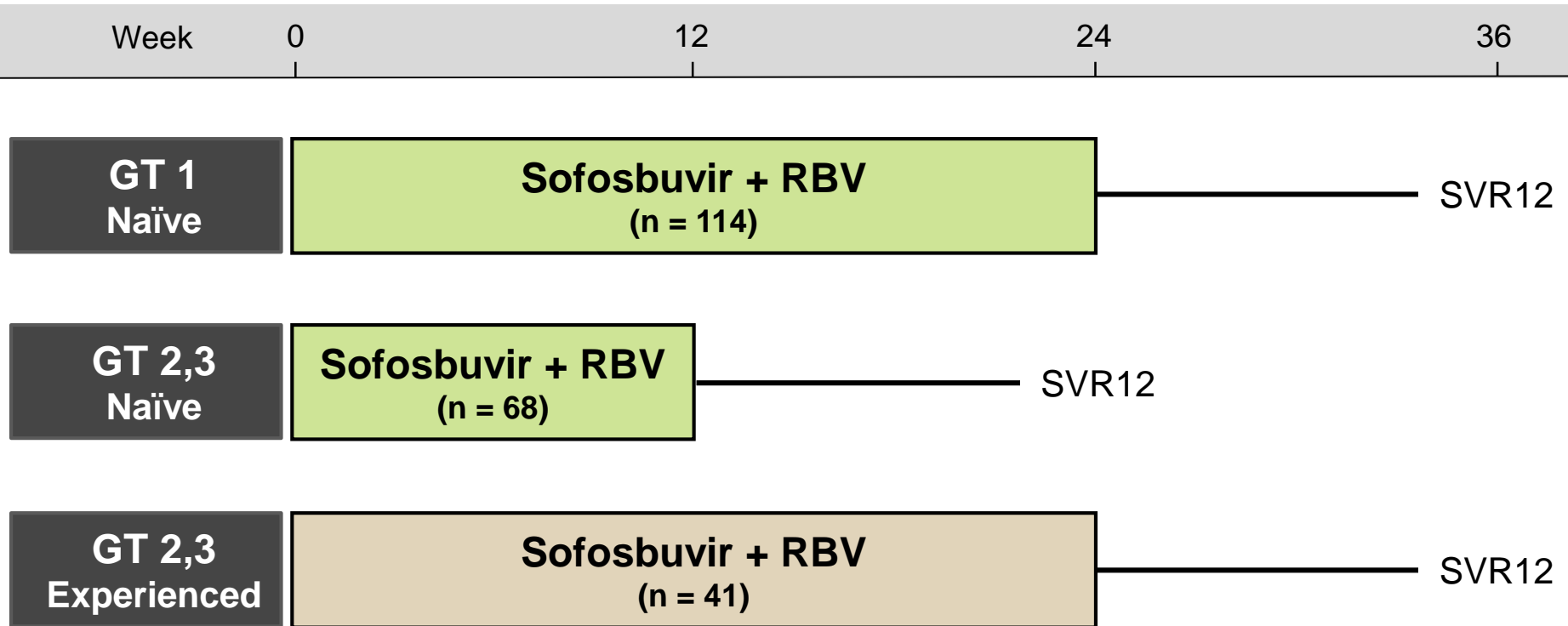
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PHOTON-1 Trial: Participants

	Treatment Naive		Treatment Experienced
	GT 1 (n=114)	GT 2 or 3 (n=68)	GT 2 or 3 (n=41)
Age, mean (range)	48 (25-70)	49 (24-71)	54 (34-68)
Male, %	82%	81%	90%
Black, %	32%	12%	17%
IL28B CC genotype, %	27%	37%	49%
Cirrhosis, %	4%	10%	24%
On ART [§] , %	98%	90%	95%
CD4 count, cells/mm ³ , median	581	562	579

[§]Tenofovir-emtricitabine plus [efavirenz, r-atazanavir, r-darunavir, raltegravir, rilpivirine, or other]

Sofosbuvir and Ribavirin for HCV-HIV Coinfection PHOTON-1 Trial: Treatment Arms



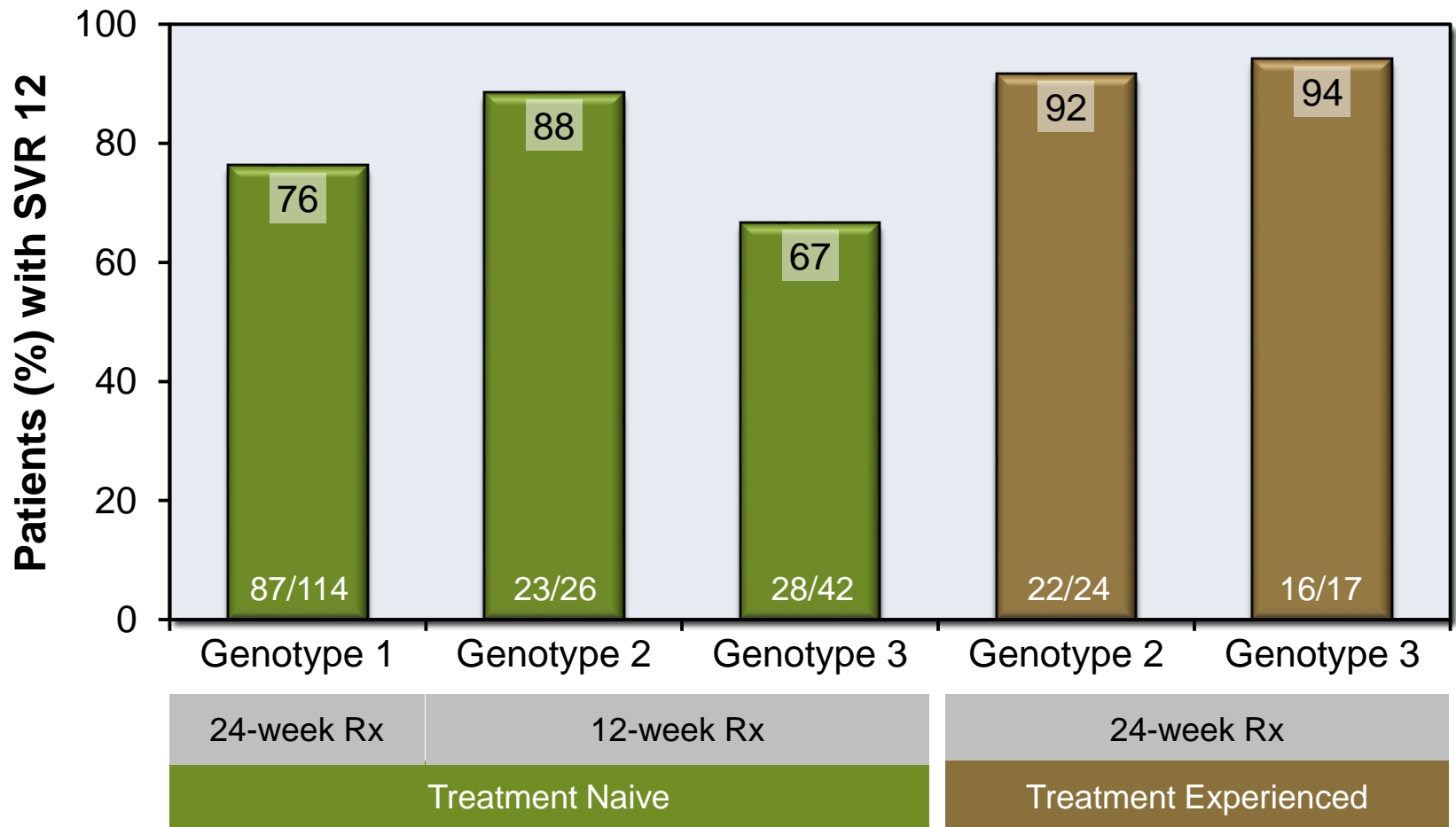
Drug Dosing

Sofosbuvir: 400 mg once daily

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

Sofosbuvir and Ribavirin for HCV-HIV Coinfection PHOTON-1 Trial: Results

PHOTON-1: SVR 12 with Sofosbuvir + RBV x 12-24 weeks



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Sofosbuvir and Ribavirin for HCV-HIV Coinfection PHOTON-1 Trial: Conclusions

Conclusions and Relevance: “In this open-label, nonrandomized, uncontrolled study, patients with HIV who were coinfecting with HCV genotype 1, 2, or 3 who received the oral, interferon-free combination of sofosbuvir and ribavirin for 12 or 24 weeks had high rates of SVR12. Further studies of this oral regimen in diverse populations of coinfecting patients are warranted.”

This slide deck is from the University of Washington's *Hepatitis C Online* and *Hepatitis Web Study* projects.

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www.hepatitisc.uw.edu

Hepatitis Web Study

<http://depts.washington.edu/hepstudy/>

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