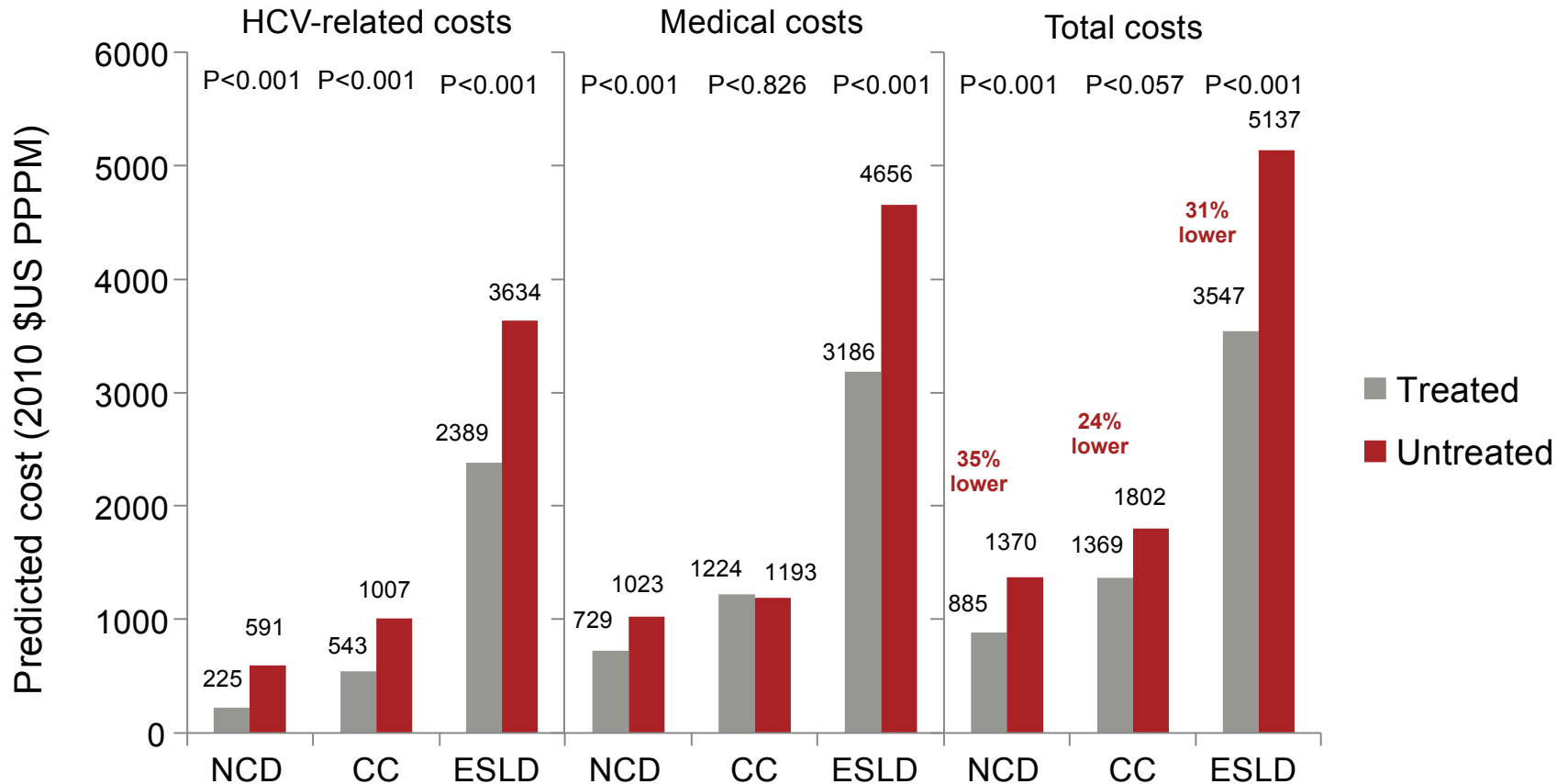


HCV HEOR

HCV Therapy Is Associated with Lower Healthcare Costs in Non-Cirrhotic and ESLD Patients

Mean follow-up per patient per month (PPPM)
by treatment history and liver disease severity



PPPM=per-patient-per-month; NCD=non-cirrhotic disease; CC=compensated cirrhosis; ESLD=end-stage liver disease
Covariates adjusted for in the analysis included age, sex, geographical region, index year, baseline comorbidities, and baseline treatment for HCV

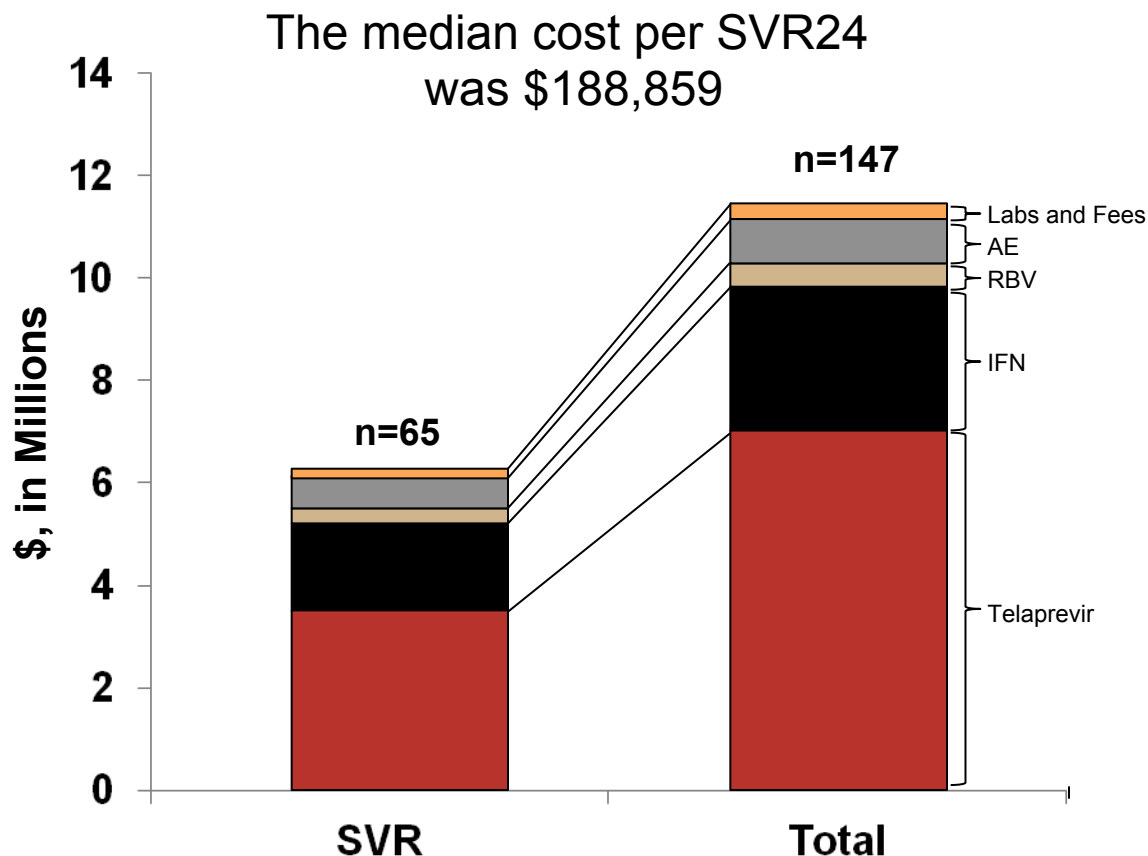
Gordon S.C., et al. *Aliment Pharmacol Ther.* 2013; 38:784-793.

Real World Efficacy and Costs per SVR of TVR-Based Triple Therapy



Review of TVR-based triple therapy in 147 patients at Mt. Sinai Medical Center, NY

- ◆ 44% of patients achieved SVR
- ◆ Almost half of all costs (45%) were spent on patients who did not achieve an SVR
- ◆ Cost per SVR is substantially higher when you consider AEs, premature DC, and virologic failures



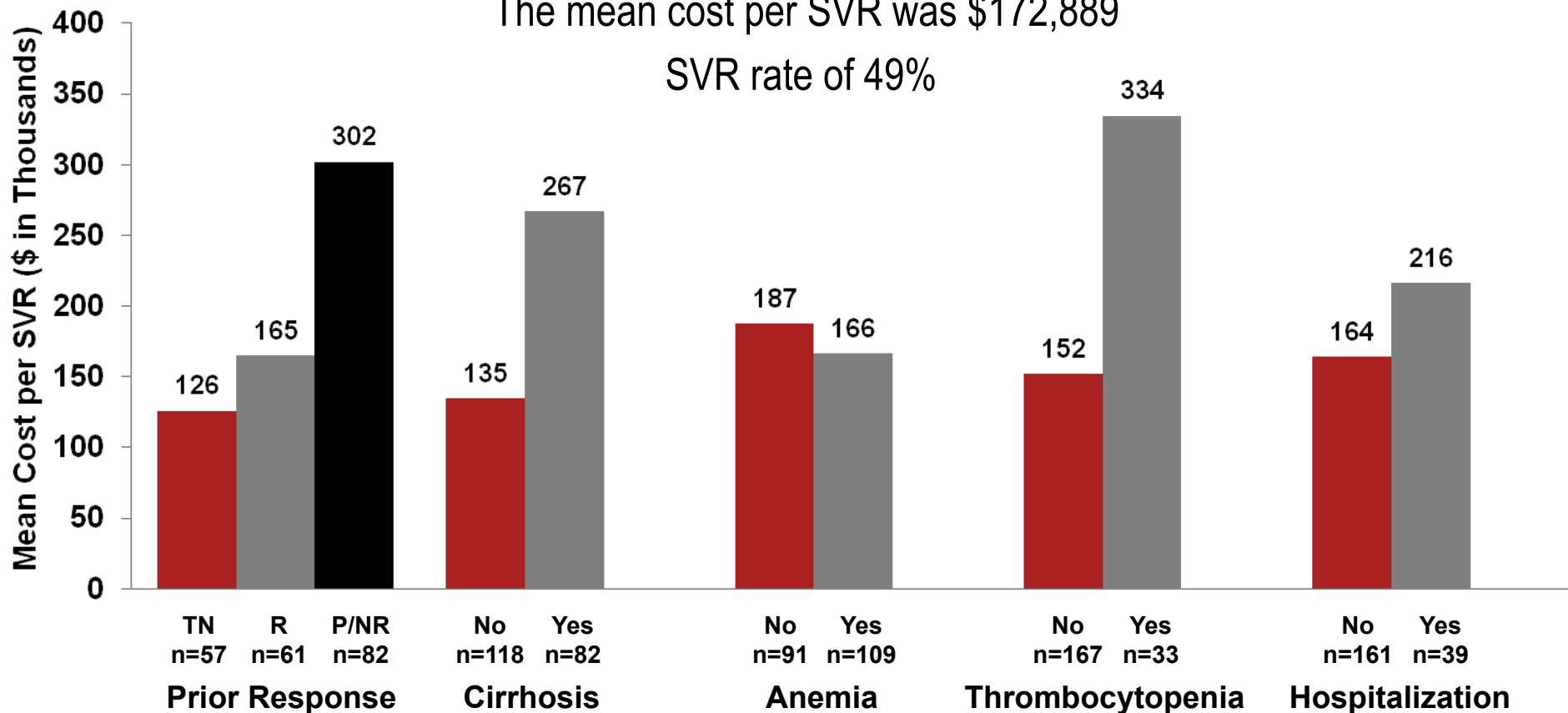


Real World Cost per SVR of HCV Triple Therapy with PIs

Evaluation of the true direct cost of treatment with PI+PR in unselected sequential population of patients (n=200) treated at a tertiary care center (BIDMC, Boston) for HCV GT1

The mean cost per SVR was \$172,889

SVR rate of 49%

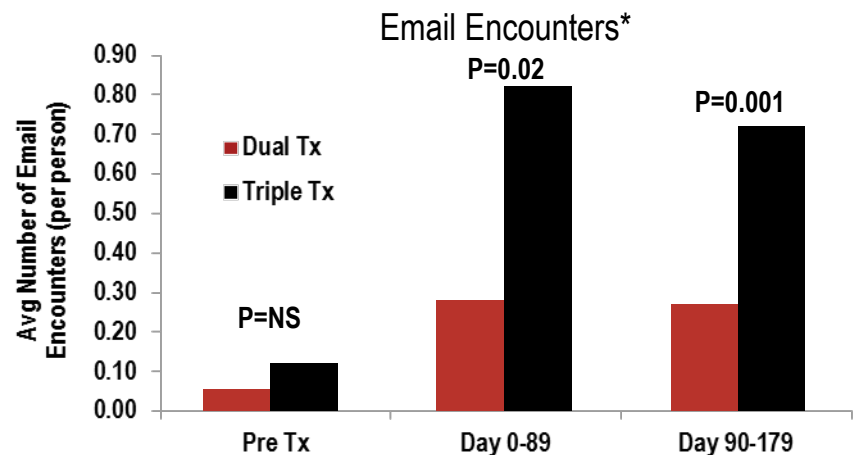
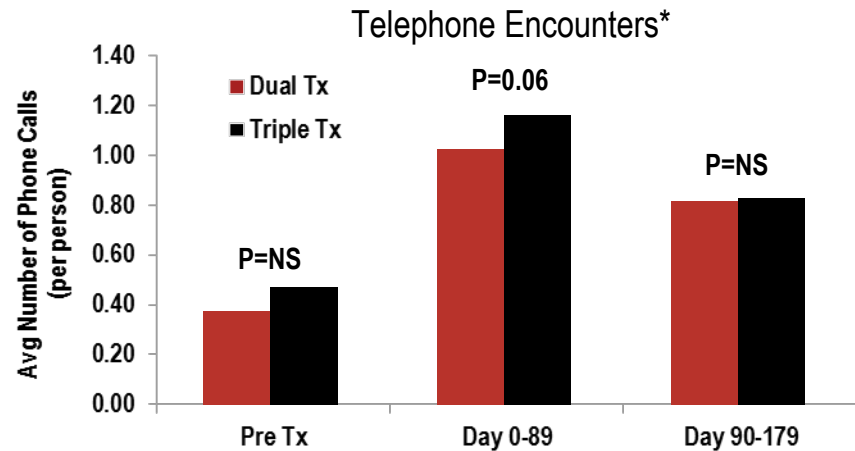


TN: Treatment-naïve; R: Relapsers; P/NR: Partial or null responders
Sethi N, et al. AASLD 2013. Washington, DC. #1847

Health Care Resource Utilization

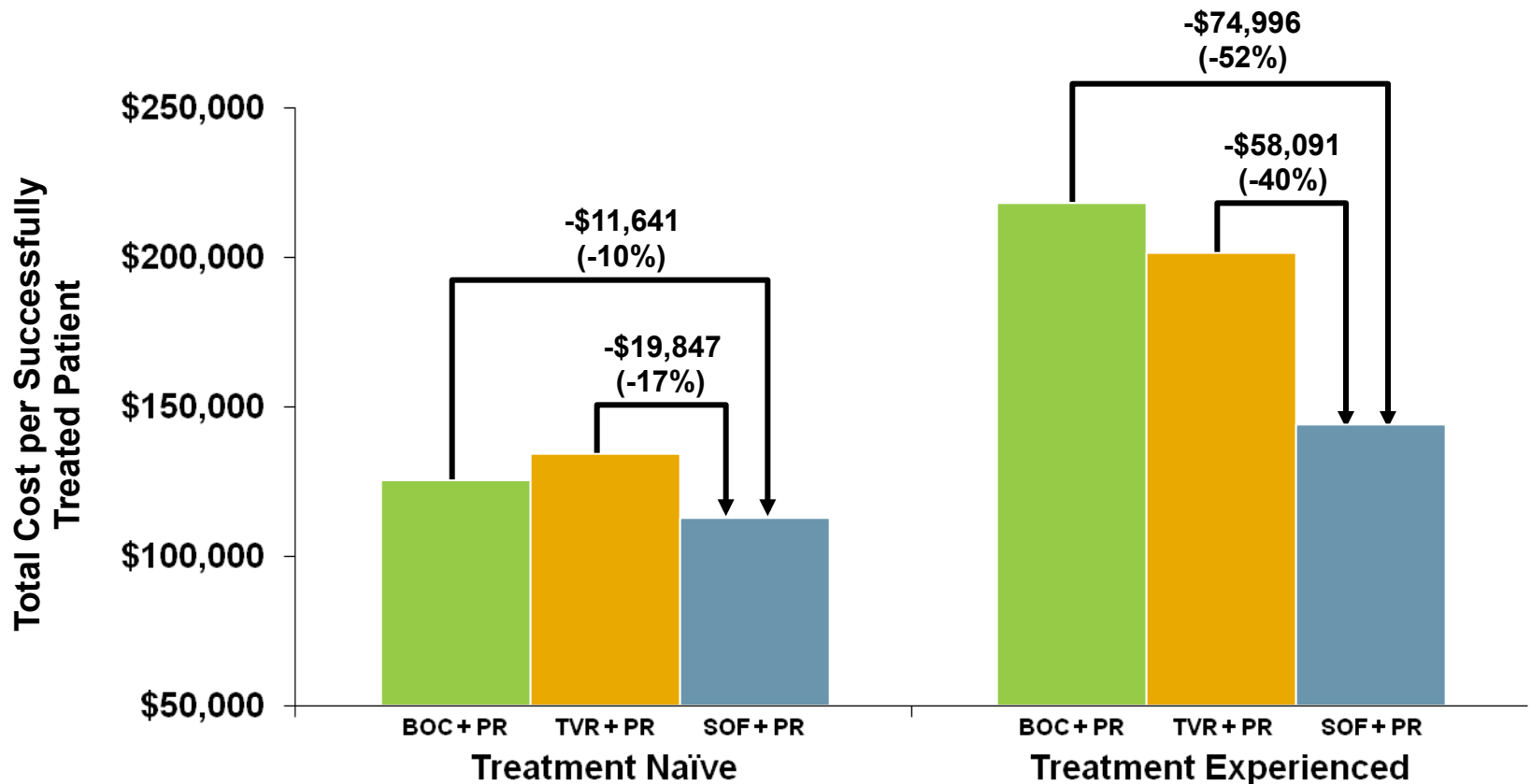
- ◆ A significant increase in direct health care resources was seen during triple therapy vs. dual therapy
 - Email encounters were 2–3 fold higher

HC resource utilization was significantly increased with triple vs. dual therapy
 Consideration of direct resource utilization as well as impact on clinical capacity should be considered when evaluating new HCV DAA therapies



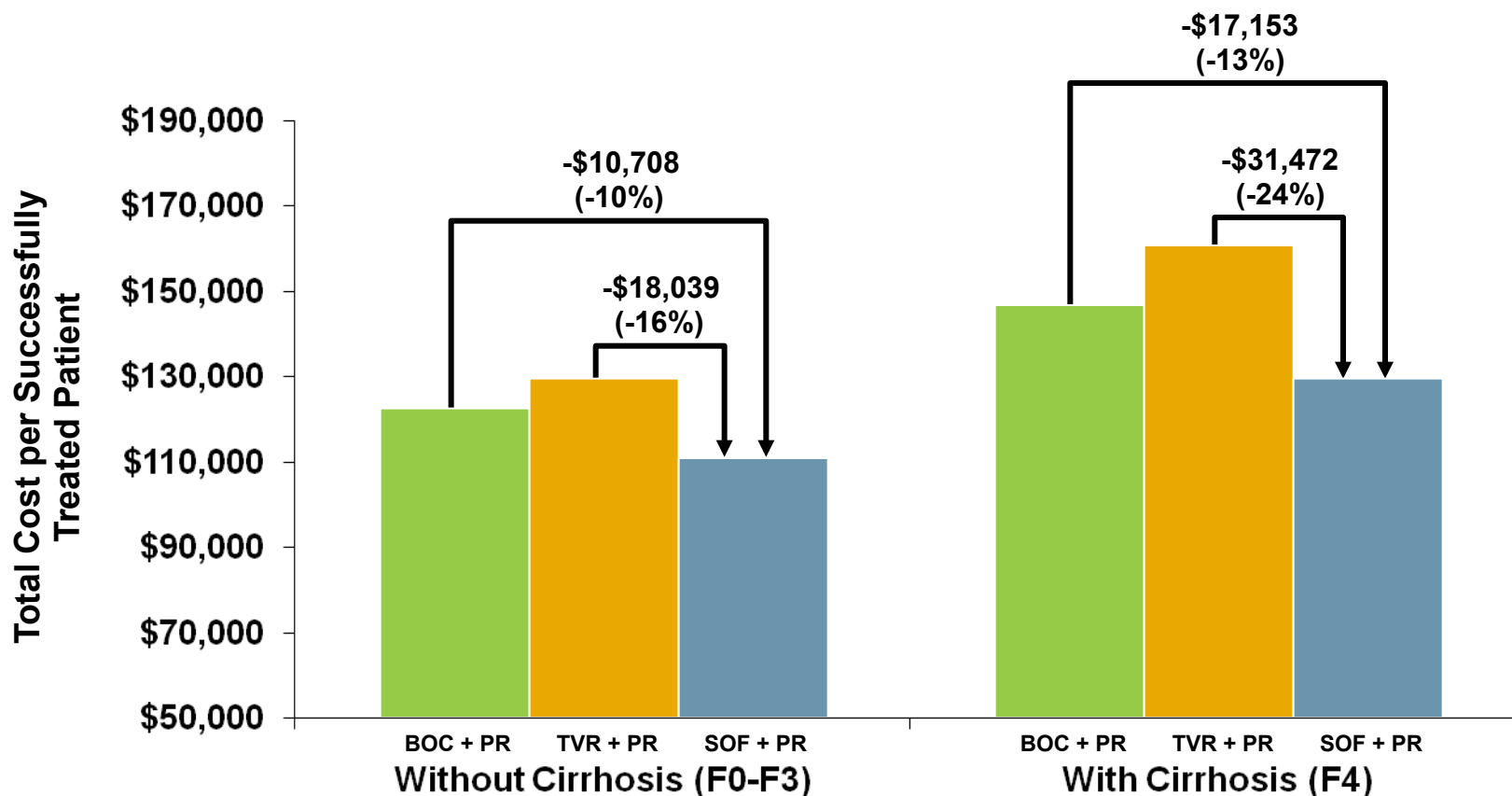
*Data for telephones and email encounters from Jan 1, 2008 – Dec 31, 2012
 Nyberg L, et al. AASLD 2013. Washington, DC. #371

Cost Per Cure of Sofosbuvir vs PIs: Treatment-Naïve and Experienced Genotype 1

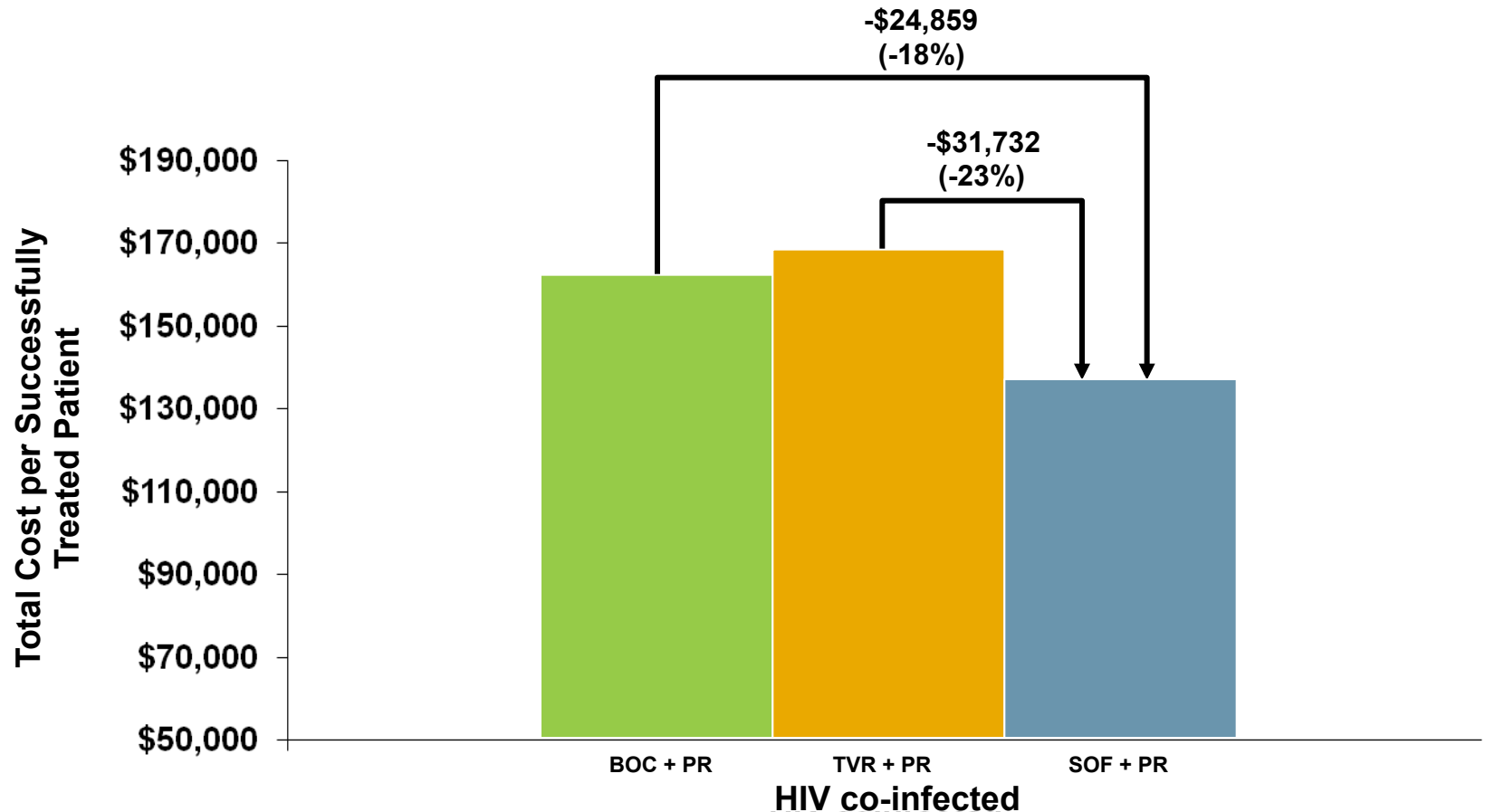




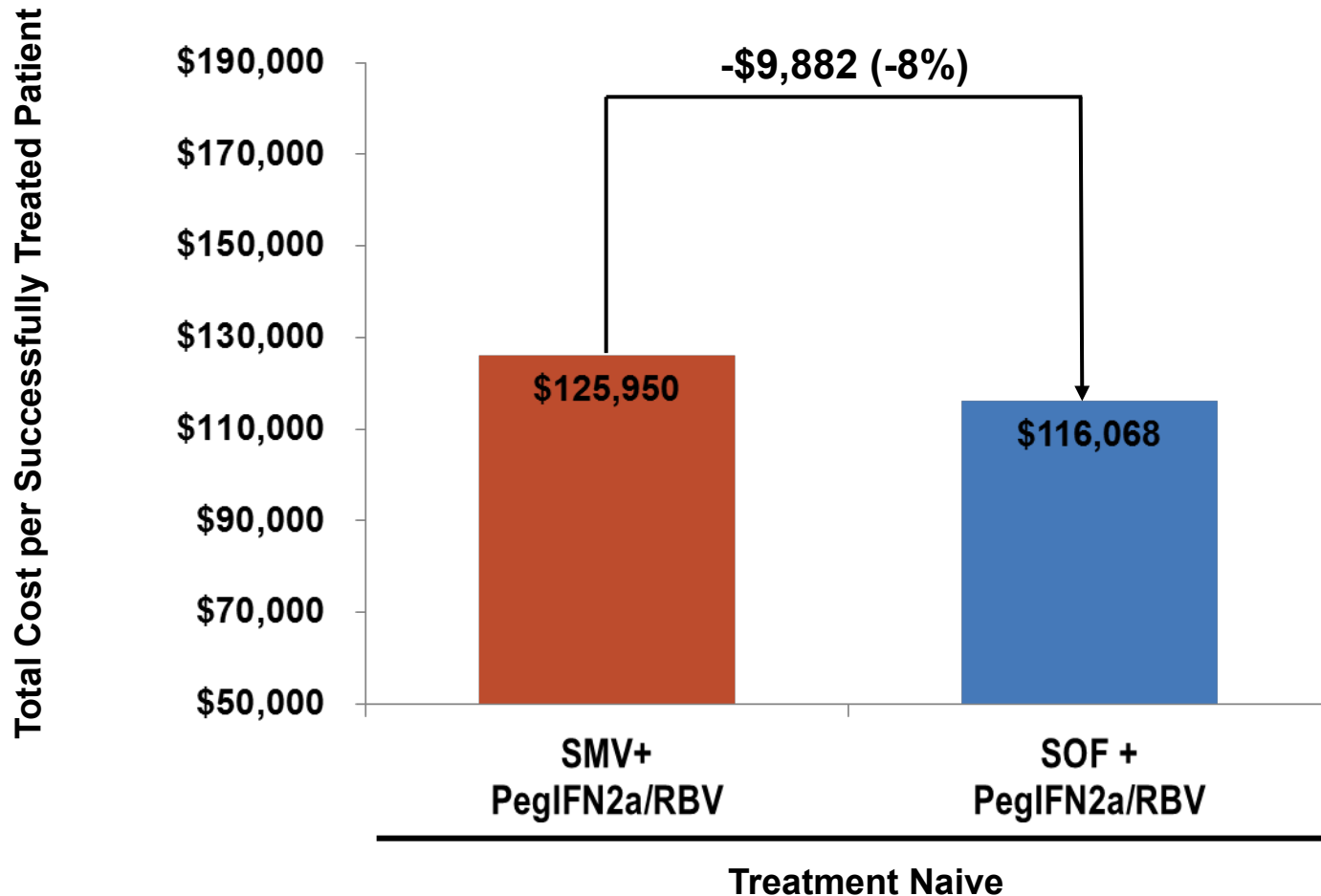
Cost Per Cure of Sofosbuvir vs PIs: Treatment-Naïve With and Without Cirrhosis Genotype 1



Cost Per Cure of Sofosbuvir vs. PIs: Treatment-Naïve HIV Co-infected Genotype 1



Cost Per SVR of Sofosbuvir vs Simeprevir: Treatment Naïve Genotype 1



Gordon SC, et al. Hepatology. 2012;56(5):1651-60.

Lawitz E, et al. N Engl J Med. 2013 May;368(20):1878-87.

Lenz O, et al. AASLD 2011. San Francisco, CA, USA. Poster #1329

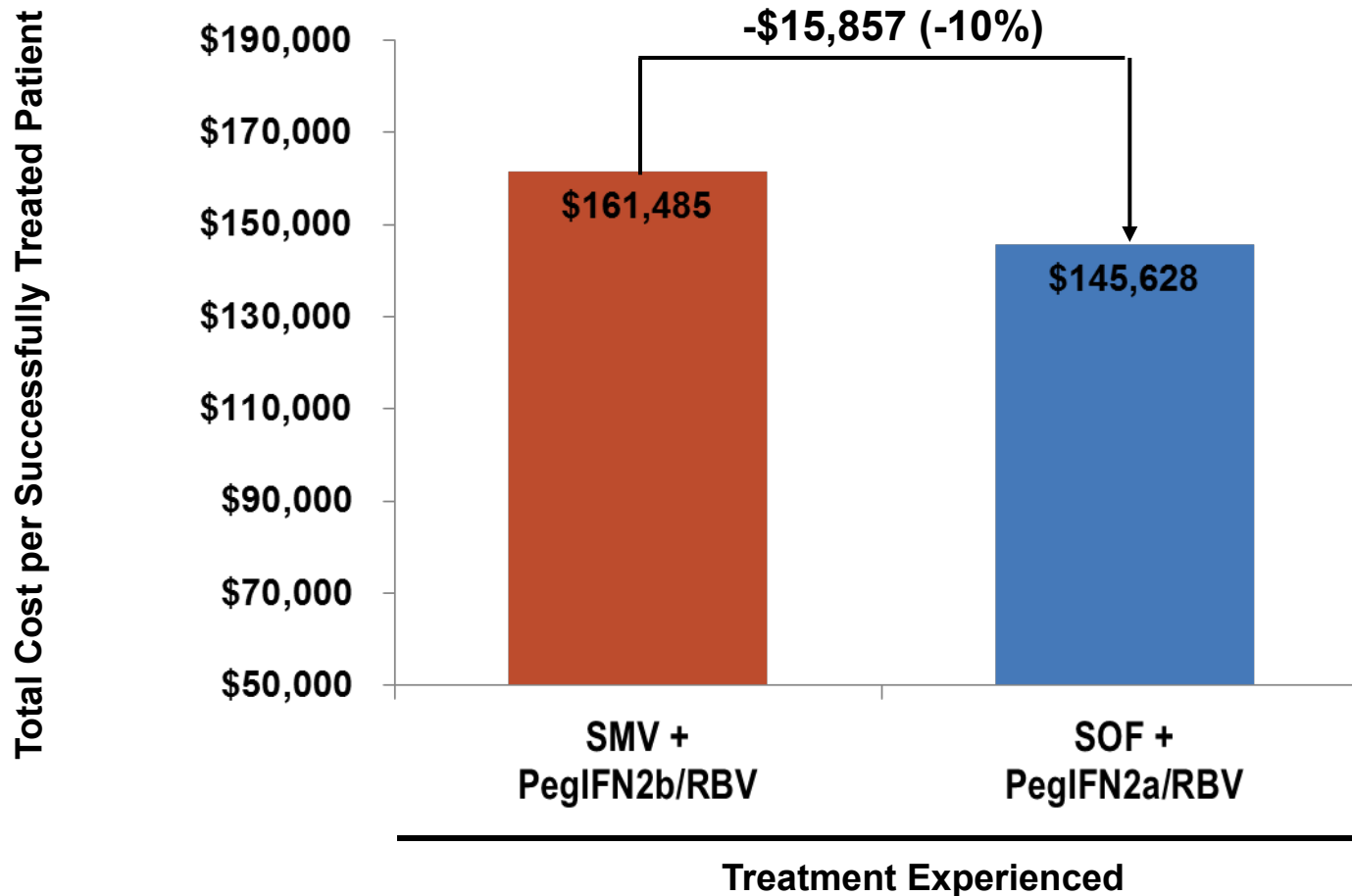
Jacobson I, et al. EASL 2013. Amsterdam, the Netherlands. Poster #1525

Manns M, et al. EASL 2013. Amsterdam, the Netherlands. Poster #1525

McAdam-Marx C, et al. J Manag Care Pharm. 2011;17(7):531-46.

Zein NN, et al. Clin Microbiol Rev. 2000 Apr;13(2):223-35.

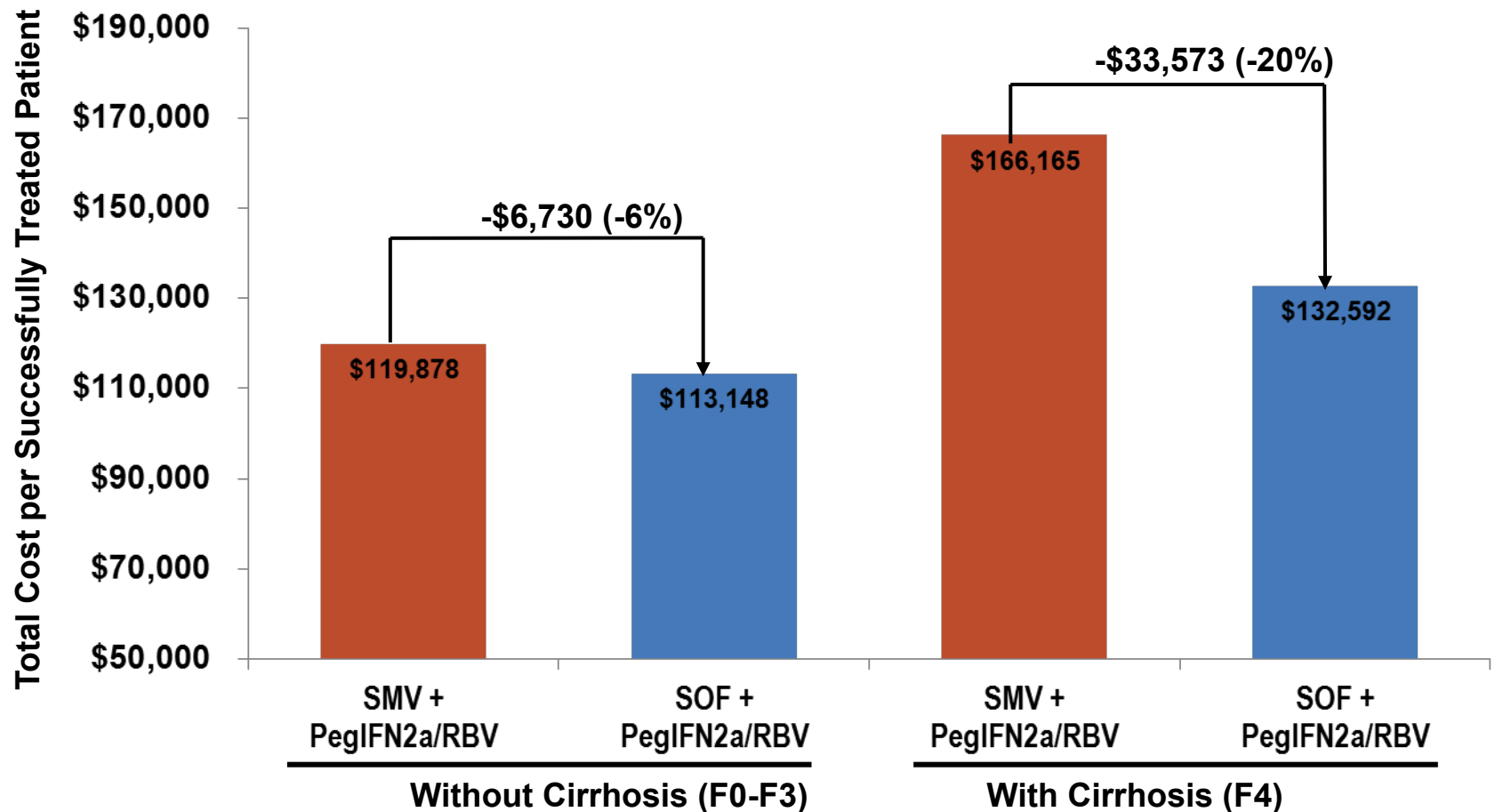
Cost Per SVR of Sofosbuvir vs Simeprevir: Treatment Experienced Genotype 1



Antiviral Drugs Advisory Committee Meeting; October 25th, 2013.
Gordon SC, et al. Hepatology. 2012;56(5):1651-60.
Lenz O, et al. AASLD 2011. San Francisco, CA, USA. Poster #1329

McAdam-Marx C, et al. J Manag Care Pharm. 2011;17(7):531-46.
Zeuzem S, et al. Gastroenterology. 2014 Feb;146(2):430-441.e6.
Zein NN, et al. Clin Microbiol Rev. 2000 Apr;13(2):223-35.

Cost Per SVR of Sofosbuvir vs Simeprevir: Treatment Naïve With and Without Cirrhosis Genotype 1



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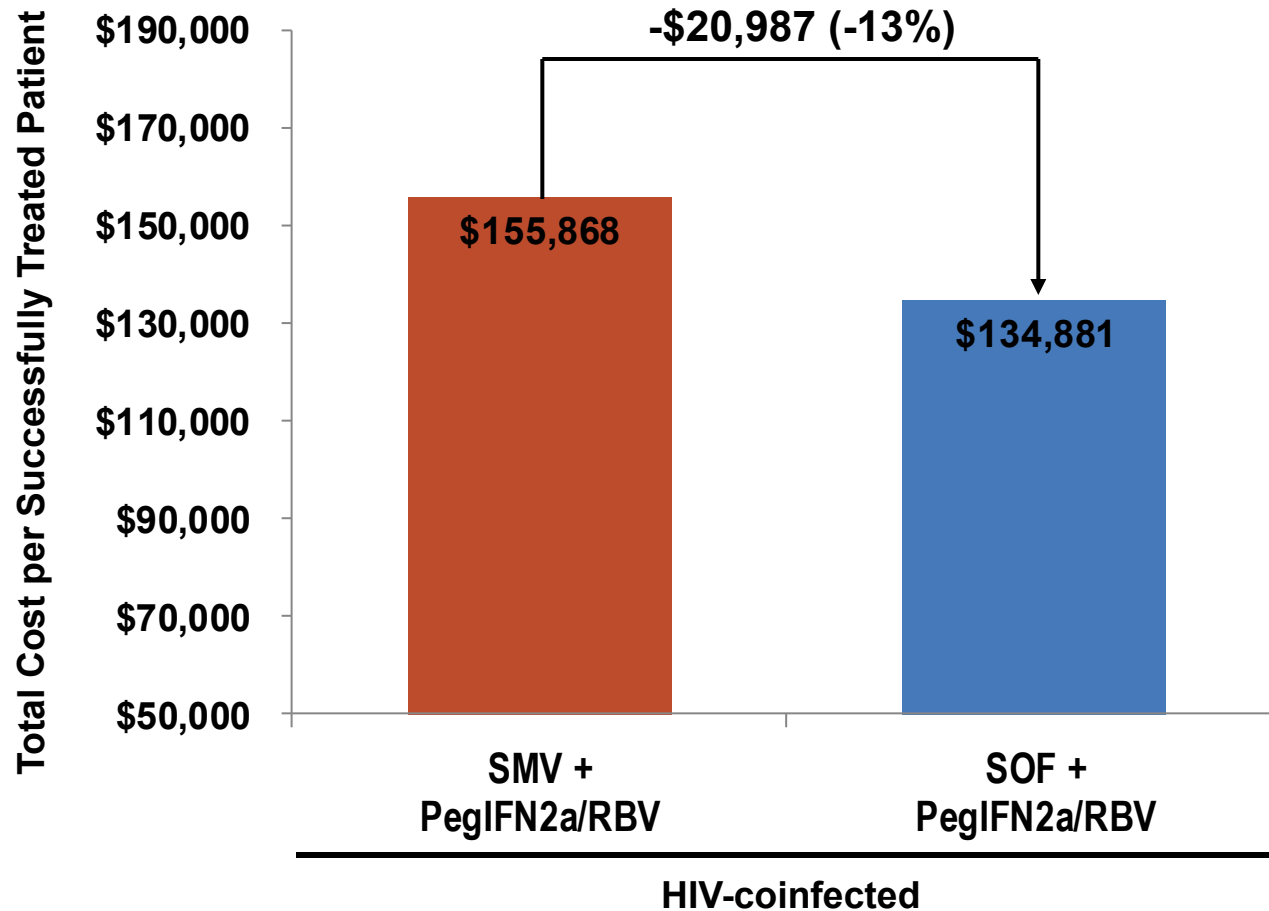
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McAdam-Marx C, et al. J Manag Care Pharm. 2011;17(7):531-46.

Zein NN, et al. Clin Microbiol Rev. 2000 Apr;13(2):223-35.

Cost Per SVR of Sofosbuvir vs Simeprevir: Treatment Naïve HIV-Coinfected Genotype 1



Base-Case Lifetime Model Results for Cohort of 10,000[±] NNT to Avoid a Negative Outcome in Genotype 1

Number Needed to Treat With Specified Regimen
(Rather than Remain Untreated) to Avoid Case of:

Treatment Naïve				
	SOF+PR	SMV+PR	TVR+PR	BOC+PR
DCC	5	6	6	7
HCC	8	10	10	12
LT	84	104	105	120
HCV-Related Death	4	4	4	5
Treatment Experienced				
DCC	6	6	9	11
HCC	10	11	15	20
LT	106	113	162	209
HCV-Related Death	4	5	7	8
HIV Co-Infected Treatment Naïve				
DCC	4	4	5	5
HCC	6	8	8	9
HCV-Related Death	3	3	4	4