

# Evaluation of Socioeconomic Factors and Achievement of Sustained Virologic Response (SVR) in the Treatment of Hepatitis C Virus (HCV)

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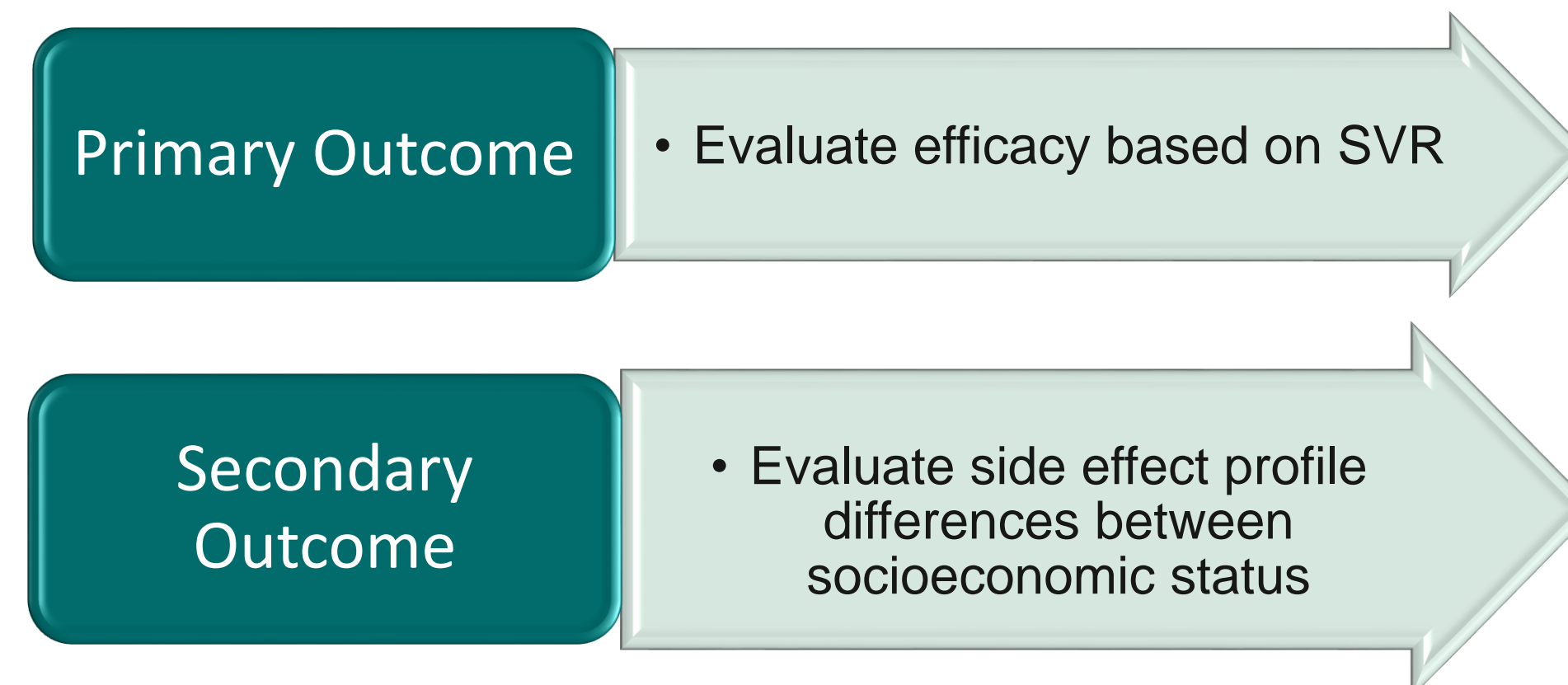
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## Background

- Current guidelines recommend newer direct acting antiviral therapies over previous interferon-based treatments.
- It is unknown if socioeconomic factors affect achievement of sustained virologic response in the treatment of HCV.

## Objective

- To evaluate the impact of socioeconomic factors in the treatment of HCV.



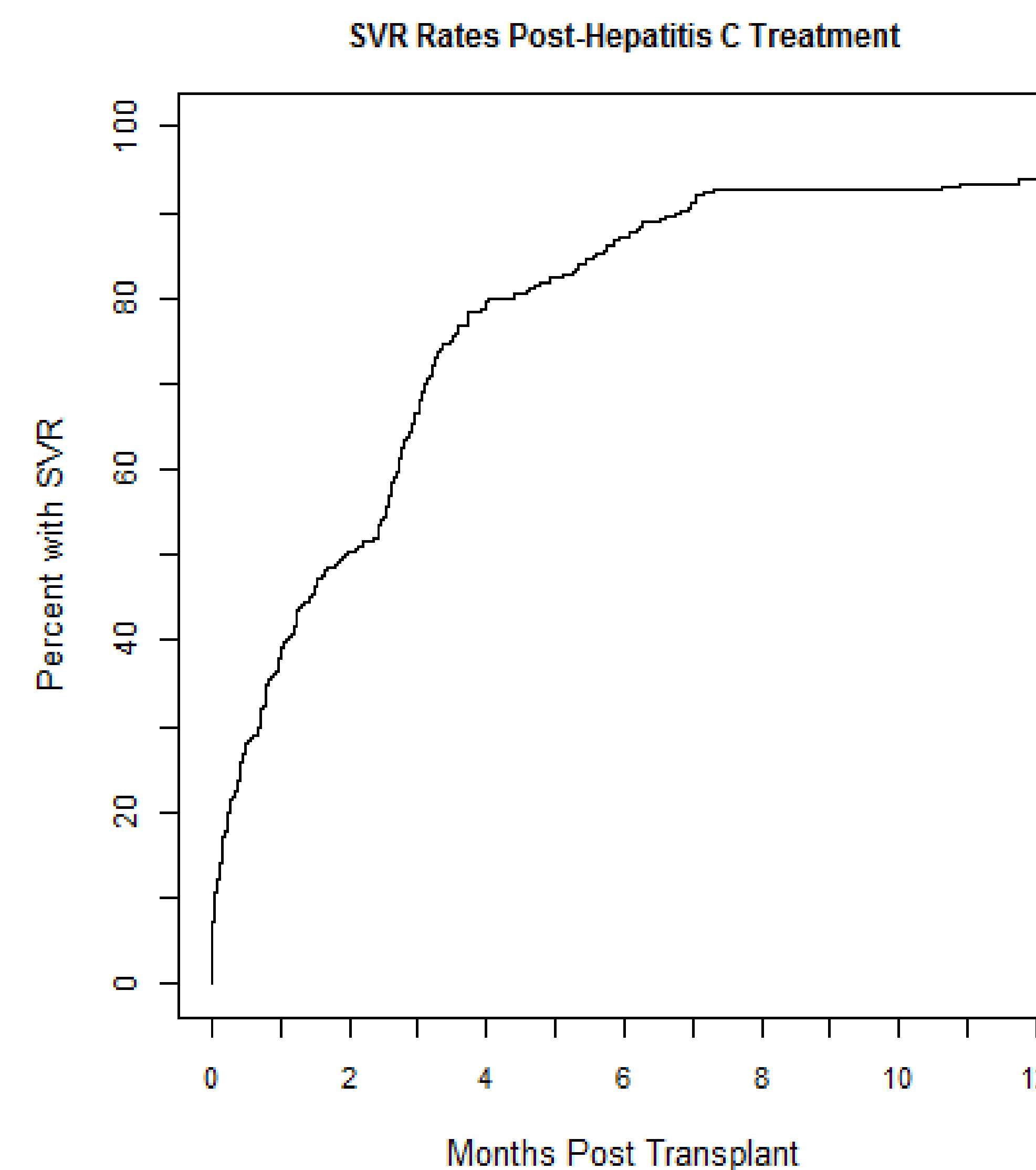
## Methods

- HCV patients who had prescriptions filled between 1/1/2014 and 12/31/2015 were reviewed.
- A total of 348 received prescriptions during the timeframe. Fifteen (4.3%) were excluded due to de-enrolling from treatment.
- SVR was defined as first Not Detectable HCV Quant post treatment
- Treatment end date was defined as 90 days post treatment regimen start date
- Zip code was used as a marker of household income.
- Kaplan-Meier Method was used to examine SVR rates after medication regimen completion.

	Freq (%); Mean +/- STD
Total N	333
Age at Treatment	58.5 +/- 9.5
Male	198 (59.5%)
Mean Household Income	
Mean Income<32k	47 (14.1%)
Mean Income 32k-52k	209 (62.8%)
Mean Income>52k	77 (23.1%)
Race	
Caucasian	235 (70.6%)
African-American	89 (26.7%)
Other	9 (2.7%)
Hispanic/Latino Ethnicity	27 (8.1%)
Marital Status	
Single	134 (40.2%)
Married	97 (29.1%)
Legally Separated	8 (2.4%)
Divorced	67 (20.1%)
Widowed	20 (6%)
Significant Other	7 (2.1%)
Smoking Status	
Current Smoker	136 (40.8%)
Never Smoker	52 (15.6%)
Former Smoker	144 (43.2%)
Unknown Smoking Status	1 (0.3%)
Alcohol Use	
Yes	84 (25.2%)
No	239 (71.8%)
Unknown/Not Asked	10 (3%)
Illicit Drug Use	
Yes	38 (11.4%)
No	273 (82%)
Unknown/Not asked	22 (6.6%)
Previous Treatment	108 (32.8%)
HCV Genotype 1 or 4	254 (77.4%)
HCV Genotype 2 or 3	74 (22.6%)
HCV Genotype 1a	192 (58.5%)
AST	71.2 +/- 52.6
Platelets	178.3 +/- 76.6

## Results

- A total of 333 patients had prescriptions filled between 1/1/2014 and 12/31/2015 and subsequently completed treatment
- The mean AST to Platelet Ratio Index (APRI) score, a measure that determines the likelihood of fibrosis/cirrhosis in patients with HCV was  $1.4 \pm 1.5$  with 44% of the patients having an APRI Score > 1.0.
- The SVR rate at 6 months post medication completion was 87%. Rates were statistically significantly lower in those with Genotype 1A vs those of other genotypes (83% vs 94%, p=0.02).



## Results Continued

- Side Effect rates were slightly higher in patients with genotype 2 or 3 vs others (26% vs 19%, p=0.09), and female patients (65% vs 54%, p=0.04).
- No other risk factors were statistically significantly associated with achievement of SVR post medication completion.

## Conclusions

- In our patient population, we found that there were no socioeconomic factors statistically significantly associated with SVR post HCV treatment.
- Women indicated having side effects at a statistically significantly higher frequency compared to males.
- Patients with genotype 1A had statistically significantly lower SVR rates post medication completion compared to other genotypes.

## References

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3. Meyer L. FDA approves new treatment for chronic hepatitis C genotype 3 infections. U.S. Food and Drug Administration. 24 July 2015. Available at: <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm455888.htm>. Accessed 17 February 2017.

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