Real-World Effectiveness of Sofosbuvir/Velpatasvir/Voxilaprevir in 573 Treatment-Experienced Patients with Hepatitis C Genotypes 1 through 4

Dr. Pamela S. Belperio, Dr. Troy Shahoumian, Dr. Timothy Loomis, Dr. Larry Mole and Dr. Lisa I. Backus, Population Health, VA Palo Alto Healthcare System

Abstract Text

Background: Sofosbuvir/velpatasvir/voxilaprevir (SOF/VEL/VOX) provides a needed hepatitis C virus (HCV) antiviral option in treatment-experienced patients. Understanding the real-world effectiveness of SOF/VEL/VOX in patients with prior HCV antiviral experience is necessary for informed treatment decisions.

Methods: Observational, intent-to-treat cohort analysis from the Veterans Affairs' Clinical Case Registry of genotype (GT) 1, 2, 3 or 4 treatment-experienced HCV-infected veterans initiating 12 weeks of SOF/VEL/VOX with an end of treatment (EOT) by 31 Jan 2018. Data were available through 1 May 2018. SVR4 is reported and was defined as HCV RNA below the limit of quantification >4 weeks after EOT. Patients were excluded for liver transplantation or baseline HCV RNA<1000 IU/mL.

Results: 573 treatment-experienced patients initiating SOF/VEL/VOX were included: 490 GT1; 20 GT2; 51 GT3 and 12 GT4. The mean age was 64 years, 99% were male, 39% were black. Rates of cirrhosis (defined as FIB4>3.25) were: GT1 23%, GT2 15%, GT3 47%, GT4 58%. Most had prior NS5A-experience: GT1 100%, GT2 95%, GT3 90%, GT4 100% and most commonly, ledipasvir/SOF (66%, n=377), elbasvir/grazoprevir (16%, n=90), and ombitasvir/parataprevir/ritonavir + dasabuvir (14%, n=79). At the time of this abstract, SVR data was available for 317 patients; data on full cohort will be presented. Overall SVR rates were: GT1 92.9% (250/269), GT2 100% (11/11), GT3 90.3% (28/31), GT4 100% (6/6) and were similar for those with prior NS5A-experience: GT1 92.9% (250/269), GT2 100% (10/10), GT3 89.7% (26/29), GT4 100% (6/6). SVR was lower in GT3 patients previously treated with ledipasvir/SOF (83.3%, 10/12) and SOF/VEL (88.9%, 8/9). Among GT1 patients SVR was lower in patients previously treated with elbasvir/grazoprevir+SOF (50%, 2/4), simeprevir+SOF (75%, 3/4) and SOF+ribavirin (67%, 4/6). SVR in GT1 patients with prior SOF/VEL experience was 91.7% (11/12). SVR in patients with FIB4>3.25 were: GT1 91.8% (56/61), GT2 100% (2/2), GT3 86.7% (13/15), GT4 100% (5/5). GT1 and GT3 patients who completed 12 weeks of SOF/VEL/VOX achieved SVR rates of 96.2% (231/240) and 96.6% (28/29), respectively.

Conclusion: In this real-world cohort of heavily NS5A pre-treated patients, SOF/VEL/VOX SVR rates in treatment-experienced patients were similar to clinical trials and 100% in GT2 and GT4. Advanced liver disease had minimal effect on SVR except for GT3 where SVR rates were lower. GT3 patients with prior ledipasvir/SOF experience also had lower SVR.

Disclosures

The following people have nothing to disclose: Pamela S. Belperio, Timothy Loomis, Larry Mole, Lisa I. Backus

Disclosure information not available at the time of publication: Troy Shahoumian