

## Sofosbuvir/Velpatasvir (Epclusa®) Drug Interactions A Quick Guide for Clinicians – 2023

John J Faragon, PharmD, BCPS, BCGP, AAHIVP

Mechanism of Action and Route of Metabolism for Sofosbuvir/Velpatasvir (Epclusa®)

Medication	<b>HCV Mechanism of Action</b>	Route of Metabolism and Drug Interaction Potential
Sofosbuvir/Velpatasvir (Epclusa®)	NS5b polymerase inhibitor and NS5a inhibitor	<ul> <li>Sofosbuvir is a substrate for P-glycoprotein (P-gp) and breast cancer resistance protein (BCRP). The intracellular metabolism of sofosbuvir is mediated by hydrolase and nucleotide phosphorylation pathways.</li> <li>Velpatasvir is an inhibitor of drug transporters P-gp, BCRP, OATP1B1, OATP1B3, and OATP2B1.</li> </ul>

## Sofosbuvir/Velpatasvir (Epclusa®) Drug Interactions with HIV Medications

Concurrent Medication	Recommendation and Clinical Comments
HIV Protease Inhibitors	
<ul> <li>Atazanavir (Reyataz<sup>®</sup>) + ritonavir (Norvir<sup>®</sup>)</li> </ul>	Concurrent use at standard doses appropriate.
Atazanavir/cobicistat (Evotaz®)	If using tenofovir disoproxil fumarate in combination with
<ul> <li>Darunavir (Prezista®) + ritonavir (Norvir®)</li> </ul>	sofosbuvir/velpatasvir, monitor for tenofovir-associated adverse
Darunavir/cobicistat (Prezcobix®; in Symtuza®)	reactions.
HIV Non Nucleoside Reverse Transcriptase Inhibitors	
<ul> <li>Efavirenz (Sustiva®; in Atripla® Symfi®, Symfi Lo®)</li> <li>Etravirine (Intelence®)</li> <li>Nevirapine (Viramune®)</li> </ul>	<ul> <li>Co-administration of sofosbuvir/velpatasvir with efavirenz, etravirine and nevirapine is expected to decrease the concentration of sofosbuvir and velpatasvir, leading to reduced efficacy. Co-administration not recommended.</li> </ul>
<ul> <li>Rilpivirine oral (Edurant<sup>®</sup>; in Complera<sup>®</sup>, Odefsey<sup>®</sup>, Juluca<sup>®</sup>)</li> <li>Rilpivirine injection (in Cabenuva<sup>®</sup>)</li> <li>Doravirine (Pifeltro<sup>®</sup>; in Delstrigo<sup>®</sup>)</li> </ul>	<ul> <li>Concurrent use at standard doses appropriate.</li> <li>If using tenofovir disoproxil fumarate in combination with sofosbuvir/velpatasvir, monitor for tenofovir-associated adverse reactions.</li> </ul>

## Sofosbuvir/Velpatasvir (Epclusa®) Drug Interactions with HIV Medications, continued

HIV Integrase Strand Transfer Inhibitors				
Bictegravir/tenofovir alafenamide/emtricitabine (Biktarvy®)	Concurrent use at standard doses appropriate.			
<ul> <li>Dolutegravir (Tivicay®; in Dovato®, Triumeq®, Juluca®)</li> </ul>	• If using tenofovir disoproxil fumarate in combination with			
Cabotegravir oral (Vocabria®)	sofosbuvir/velpatasvir, monitor for tenofovir-associated adverse			
<ul> <li>Cabotegravir injection (Apretude®; in Cabenuva®)</li> </ul>	reactions.			
<ul> <li>Dolutegravir (Tivicay®; in Dovato®, Triumeq®, Juluca®)</li> </ul>				
<ul> <li>Elvitegravir/cobicistat/tenofovir alafenamide/emtricitabine</li> </ul>				
(Genvoya®)				
<ul> <li>Elvitegravir/cobicistat/tenofovir disoproxil fumarate/</li> </ul>				
emtricitabine (Stribild®)				
• Raltegravir (Isentress® Isentress HD®)				
HIV Nucleoside/Nucleotide Reverse Transcriptase Inhibitors				
<ul> <li>Abacavir (Ziagen<sup>®</sup>, in Epzicom<sup>®</sup>, Triumeq<sup>®</sup>, other STRs)</li> </ul>	Concurrent use at standard doses appropriate.			
• Emtricitabine (Emtriva®, in other STRs)	If using tenofovir disoproxil fumarate in combination with			
• Lamivudine (Epivir®, in other STRs)	sofosbuvir/velpatasvir, monitor for tenofovir-associated adverse			
<ul> <li>Tenofovir Disoproxil Fumarate (Viread®; in Cimduo®, Temixys®,</li> </ul>	reactions.			
Truvada®, other STRs)				
<ul> <li>Tenofovir Alafenamide (in Descovy®, other STRs)</li> </ul>				
HIV Entry Inhibitors, CCR5 Antagonists, gp120-Directed Attachment Inhibitors				
• Fostemsavir (Rukobia®)	Concurrent use at standard doses appropriate.			
Maraviroc (Selzentry®)				
Ibalizumab (Trogarzo®)				
HIV Capsid Inhibitor				
• Lenacapavir (Sulenca®)	Concurrent use at standard doses appropriate.			

## Sofosbuvir/Velpatasvir (Epclusa®) Drug Interactions with Common Primary Care Medications

Medication and or Class	Recommendation and Clinical Comment
Antacids	<ul> <li>Separate antacids and sofosbuvir/velpatasvir administration by 4 hours.</li> </ul>
H2-receptor antagonists	Administer simultaneously with or 12 hours apart from sofosbuvir/velpatasvir. Do
	not exceed doses comparable to famotidine 40 mg twice daily.
Proton-pump inhibitors	Co-administration not recommended. If medically necessary,
	sofosbuvir/velpatasvir should be administered with food and taken 4 hours before omeprazole 20mg. Use with other proton pump inhibitors has not been studied.
Antiarrhythmic – Amiodarone	Significant bradycardia expected with concurrent use. Co-administration not
	recommended. If concurrent use required, cardiac monitoring is recommended,
	see package insert for additional information.
Antiarrhythmic – Digoxin	• Increase in digoxin levels possible. Monitor digoxin levels.
Anticancer – topotecan	Potential increase in topotecan levels. Coadministration not recommended.
<ul> <li>Anticonvulsants – carbamazepine, oxcarbazepine,</li> </ul>	• Significant decrease in sofosbuvir/velpatasvir levels expected. Co-administration
phenobarbital, phenytoin	not recommended.
<ul> <li>Antimycobacterials – rifampin, rifabutin,</li> </ul>	• Significant decrease in sofosbuvir/velpatasvir levels expected. Co-administration
rifapentine	not recommended.
<ul> <li>Herbal products – St. John's Wort</li> </ul>	• Significant decrease in sofosbuvir/velpatasvir levels expected. Co-administration
	not recommended.
<ul> <li>HMG Co-A Reductase Inhibitors: Atorvastatin,</li> </ul>	• Increase in atorvastatin likely with sofosbuvir/velpatasvir; monitor for signs of
Rosuvastatin	myopathy and rhabdomyolysis.
	• Significant increase in rosuvastatin levels when used with sofosbuvir/velpatasvir
	leading to increased risk of myopathy, including rhabdomyolysis. Rosuvastatin may
	be used; Do not exceed 10mg daily.

Disclaimer: The information contained in this table has been developed from various resources, including FDA product information, abstracts and posters presented at national and international meetings, and from Recommendations for the Testing, Managing and Treating of Hepatitis C from AASLD and IDSA located at www.hivguidelines.org. While the tables contained in this guide are complete based upon references reviewed, there may be other medications that may also be contraindicated or should be co-administered with caution. Please consult additional resources as needed.

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