



Glecaprevir/Pibrentasvir (Mavyret™) Drug Interactions

A Quick Guide for Clinicians – 2023

John J Faragon, PharmD, BCPS, BCGP, AAHIVP

Mechanism of Action and Route of Metabolism for Glecaprevir/Pibrentasvir (Mavyret™)

Medication	HCV Mechanism of Action	Route of Metabolism and Drug Interaction Potential
<ul style="list-style-type: none"> Glecaprevir/Pibrentasvir (Mavyret™) 	NS3/4A protease inhibitor and an NS5a inhibitor	<ul style="list-style-type: none"> Glecaprevir and pibrentasvir are inhibitors of P-glycoprotein (P-gp), breast cancer resistance protein (BCRP), and organic anion transporting polypeptide (OATP) 1B1/3. Glecaprevir and pibrentasvir are also weak inhibitors of CYP3A4, CYP1A2 and uridine glucuronosyltransferase (UGT) 1A1.

Glecaprevir/Pibrentasvir (Mavyret™) Drug Interactions with HIV Medications

Concurrent Medication	Recommendation and Clinical Comments
HIV Protease Inhibitors	
<ul style="list-style-type: none"> Atazanavir (Reyataz®) + ritonavir (Norvir®) Atazanavir/cobicistat (Evotaz®) Darunavir (Prezista®) + ritonavir (Norvir®) Darunavir/cobicistat (Prezcobix®; in Symtuza®) Lopinavir/ritonavir (Kaletra®) 	<ul style="list-style-type: none"> Co-administration with atazanavir contraindicated due to increased ALT levels. Use of glecaprevir/pibrentasvir with darunavir/ritonavir and lopinavir/ritonavir is not recommended due to expected increases in glecaprevir levels.
HIV Non Nucleoside Reverse Transcriptase Inhibitors	
<ul style="list-style-type: none"> Efavirenz (Sustiva®, in Atripla®, Symfi®, Symfi Lo®) Etravirine (Intelence®) Nevirapine (Viramune®) 	<ul style="list-style-type: none"> Co-administration with efavirenz, etravirine, and nevirapine not recommended. Significant reduction in glecaprevir/pibrentasvir levels expected.
<ul style="list-style-type: none"> Rilpivirine oral (Edurant®; in Complera®, Odefsey®, Juluca®) Rilpivirine injection (in Cabenuva®) Doravirine (Pifeltro®; in Delstrigo®) 	<ul style="list-style-type: none"> Concurrent use at standard doses appropriate. If using tenofovir disoproxil fumarate in combination with glecaprevir/pibrentasvir, monitor for tenofovir-associated adverse reactions.

Glecaprevir/Pibrentasvir (Mavyret™) Drug Interactions with HIV Medications, continued

Concurrent Medication	Recommendation and Clinical Comments
HIV Integrase Strand Transfer Inhibitors	
<ul style="list-style-type: none"> • Bictegravir/tenofovir alafenamide/emtricitabine (Biktarvy®) • Cabotegravir oral (Vocabria®) • Cabotegravir injection (Apretude®; in Cabenuva®) • Dolutegravir (Tivicay®; in Dovato®, Triumeq®, Juluca®) • Elvitegravir/cobicistat/tenofovir alafenamide/emtricitabine (Genvoya®) • Elvitegravir/cobicistat/tenofovir disoproxil fumarate/emtricitabine (Stribild®) • Raltegravir (Isentress®, Isentress HD®) 	<ul style="list-style-type: none"> • Concurrent use at standard doses appropriate. • If using tenofovir disoproxil fumarate in combination with glecaprevir/pibrentasvir, monitor for tenofovir-associated adverse reactions.
HIV Nucleoside/Nucleotide Reverse Transcriptase Inhibitors	
<ul style="list-style-type: none"> • Abacavir (Ziagen®, in Epzicom®, Triumeq®, other STRs) • Emtricitabine (Emtriva®, in other STRs) • Lamivudine (Epivir®, in other STRs) • Tenofovir Disoproxil Fumarate (Viread®; in Cimduo®, Temixys®, Truvada®, other STRs) • Tenofovir Alafenamide (in Descovy®, other STRs) 	<ul style="list-style-type: none"> • Concurrent use at standard doses appropriate. • If using tenofovir disoproxil fumarate in combination with glecaprevir/pibrentasvir, monitor for tenofovir-associated adverse reactions.
HIV Entry Inhibitors, CCR5 Antagonists, gp120-Directed Attachment Inhibitors	
<ul style="list-style-type: none"> • Fostemsavir (Rukobia®) • Maraviroc (Selzentry®) • Ibalizumab (Trogarzo®) 	<ul style="list-style-type: none"> • Concurrent use at standard doses appropriate.
HIV Capsid Inhibitor	
<ul style="list-style-type: none"> • Lenacapavir (Sunlenca) 	<ul style="list-style-type: none"> • Concurrent use at standard doses appropriate.

Glecaprevir/Pibrentasvir (Mavyret™) Drug Interactions with Common Primary Care Medications

Medication and or Class	Recommendation and Clinical Comments
<ul style="list-style-type: none"> • Antiarrhythmic – Digoxin 	<ul style="list-style-type: none"> • Increased digoxin levels expected. Measure serum digoxin level prior to initiating therapy with glecaprevir/pibrentasvir; reduce digoxin dosage 50% or adjust dosing frequency and continue monitoring.
<ul style="list-style-type: none"> • Anticoagulant – Dabigatran 	<ul style="list-style-type: none"> • Refer to dabigatran package insert and follow dosage recommendations for patients receiving concurrent P-gp inhibitors in the setting of renal impairment.
<ul style="list-style-type: none"> • Anticonvulsants – carbamazepine 	<ul style="list-style-type: none"> • Significant decrease in glecaprevir/pibrentasvir levels expected. Co-administration not recommended.
<ul style="list-style-type: none"> • Antimycobacterials – rifampin 	<ul style="list-style-type: none"> • Significant decrease in glecaprevir/pibrentasvir levels expected. Co-administration contraindicated.
<ul style="list-style-type: none"> • Ethinyl Estradiol 	<ul style="list-style-type: none"> • Potential increased risk of ALT elevations when glecaprevir/pibrentasvir is combined with ethinyl estradiol. Co-administration not recommended.
<ul style="list-style-type: none"> • Herbal products – St. John’s Wort 	<ul style="list-style-type: none"> • Significant decrease in glecaprevir/pibrentasvir levels expected. Co-administration not recommended.
<ul style="list-style-type: none"> • HMG-CoA Reductase Inhibitors – atorvastatin, lovastatin, simvastatin 	<ul style="list-style-type: none"> • Significant increase in statin levels when combined with glecaprevir/pibrentasvir. Co-administration not recommended.
<ul style="list-style-type: none"> • HMG-CoA Reductase Inhibitors – fluvastatin, pitavastatin, pravastatin, rosuvastatin 	<ul style="list-style-type: none"> • Fluvastatin, pitavastatin – Increase statin levels likely when used with glecaprevir/ pibrentasvir; Use lowest dose and monitor closely for statin toxicity, including myopathy. • Pravastatin – Increased statin levels likely when used with glecaprevir/pibrentasvir. Reduce pravastatin dosage 50% prior to adding glecaprevir/pibrentasvir. • Rosuvastatin – Increased statin levels likely when used with glecaprevir/pibrentasvir. Do not exceed rosuvastatin 10mg when combined.
<ul style="list-style-type: none"> • Immunosuppressants – cyclosporine 	<ul style="list-style-type: none"> • Increased levels of cyclosporine expected when combined with glecaprevir/pibrentasvir. Co-administration not recommended in patients requiring cyclosporine doses greater than 100mg 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.

Funding for this presentation was made possible [in part, if applicable] by U10HA29291 from the Health Resources and Services Administration HIV/AIDS Bureau. The views expressed do not necessarily reflect the official policies of the Department of Health and Human Services nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government. Any trade/brand names for products mentioned during this presentation are for training and identification purposes only.