

HEPATITIS C AGENTS




	INSTIs		NNRTIs		PIs	RTI	
	<ul style="list-style-type: none"> • BICTEGRIVIR (<i>Biktarvy</i>) • DOLUTEGRAVIR (<i>Tivicay, Triumeq, Juluca</i>) • RALTEGRAVIR (<i>Isentress</i>) 	<ul style="list-style-type: none"> • ELVITEGRAVIR/COBICISTAT (<i>Stribild, Genvoya</i>) 	<ul style="list-style-type: none"> • DORAVIRINE (<i>Pifeltro, Delstrigo</i>) • RILPIVIRINE (<i>Edurant, Complera, Odefsey, Juluca</i>) 	<ul style="list-style-type: none"> • EFAVIRENZ (<i>Sustiva, Atripla</i>) • ETRAVIRINE (<i>Intelece</i>) • NEVIRAPINE (<i>Viramune</i>) 	<ul style="list-style-type: none"> • ATAZANAVIR (<i>Reyataz/Norvir, Evotaz</i>) • DARUNAVIR (<i>Prezista/Norvir, Prezcobix, Symtuza</i>) • LOPINAVIR (<i>Kaletra</i>) 	<ul style="list-style-type: none"> • TENOFOVIR DISOPROXIL, TDF (<i>Viread, Truvada, Atripla, Complera, Delstrigo, Stribild</i>) 	<ul style="list-style-type: none"> • TENOFOVIR ALAFENAMIDE, TAF (<i>Descovy, Biktarvy, Genvoya, Odefsey, Symtuza</i>) • ABACAVIR (<i>Kivexa, Ziagen, Triumeq</i>)

DIRECT ACTING ANTIVIRALS (DAAs)

• Glecaprevir + pibrentasvir (<i>Maviret</i>)				Potential for ↓ glecaprevir, pibrentasvir	Potential for ↑ glecaprevir, pibrentasvir		
• Ledipasvir + sofosbuvir (<i>Harvoni</i>)						Potential for ↑ tenofovir	
• Velpatasvir + sofosbuvir (<i>Eplclusa</i>)				Potential for ↓ velpatasvir		Potential for ↑ tenofovir	
• Velpatasvir + voxilaprevir + sofosbuvir (<i>Vosevi</i>)				Potential for ↓ velpatasvir, voxilaprevir	darunavir Atazanavir, lopinavir: potential for ↑ voxilaprevir	Potential for ↑ tenofovir	
• Elbasvir + grazoprevir (<i>Zepatier</i>)		Potential for ↑ elbasvir, grazoprevir		Potential for ↓ elbasvir, grazoprevir	Potential for ↑ elbasvir, grazoprevir		

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Ribavirin							

Legend:		No dose adjustment required.
		Use combination with caution. Adjustment in drug dose or frequency or additional/more frequent monitoring may be required. May wish to consult with a pharmacist knowledgeable in HIV drug interactions.
		Contraindicated/avoid combination.

Mechanism of Drug Interactions, Management and Monitoring

Hepatitis C Agent	Mechanism of Interaction	Main Interacting ARVs	Management	Monitoring
Glecaprevir/ Pibrentasvir (Maviret®)	Glecaprevir and pibrentasvir inhibit P-gp, BCRP, OATP1B1/3 and are substrates of P-gp and/or BCRP.	Boosted protease inhibitors. Efavirenz can reduce DAA concentrations.	Select INSTI or non-inducing NNRTI (e.g., doravirine, rilpivirine).	
Ledipasvir/ Sofosbuvir (Harvoni®)	Ledipasvir is a mild inhibitor of PgP, BCRP, OATP1B1 and OATP1B2.	Tenofovir DF containing products (including single tablet regimens with darunavir, elvitegravir, rilpivirine and doravirine). Increased tenofovir levels can potentially lead to renal toxicity.	If pre-existing renal compromise, consider switching to non-tenofovir backbone or regimen. Otherwise, monitor renal function closely.	Monitor renal function when used with tenofovir: eGFR, serum creatinine and phosphate; urine creatinine and phosphate if assessing tubular damage.
Velpatasvir/Sofosbuvir (Epclusa®)	Velpatasvir is a substrate of CYP3A4, 2C8, 2B6, OATP1B1/3, Pgp, BCRP and inhibits Pgp, BCRP, OATP1B1/3	Efavirenz can reduce DAA concentrations.	Select non-inducing NNRTI (e.g., doravirine, rilpivirine) or another drug class.	
		Tenofovir DF containing products (including single tablet regimens with darunavir, elvitegravir, rilpivirine and doravirine). Increased tenofovir levels can potentially lead to renal toxicity.	If pre-existing renal compromise, consider switching to non-tenofovir backbone or regimen. Otherwise, monitor renal function closely.	Monitor renal function when used with tenofovir: eGFR, serum creatinine and phosphate; urine creatinine and phosphate if assessing tubular damage.

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Hepatitis C Agent	Mechanism of Interaction	Main Interacting ARVs	Management	Monitoring
Velpatasvir/Voxilaprevir/ Sofosbuvir (Vosevi®)	Voxilaprevir is a substrate of Pgp, BCRP, OAT1B1/3 as well as CYP3A4. Voxilaprevir inhibits Pgp, BCRP, OATP1B1/3 and OATP2B1.	Atazanavir, lopinavir: potential for increase in voxilaprevir.	Consider using darunavir or an alternate non-interacting antiretroviral class	
		Efavirenz can reduce DAA concentrations.	Select non-inducing NNRTI (e.g., doravirine, rilpivirine) or another drug class.	
		Tenofovir DF containing products (including single tablet regimens with darunavir, elvitegravir, rilpivirine and doravirine).	If pre-existing renal compromise, consider switching to non-tenofovir backbone or regimen.	Monitor renal function when used with tenofovir: eGFR, serum creatinine and phosphate; urine creatinine
		Increased tenofovir levels can potentially lead to renal toxicity.	Otherwise, monitor renal function closely.	and phosphate if assessing tubular damage.
Elbasvir/Grazoprevir (Zepatier®)	Elbasvir/grazoprevir are substrates of CYP3A4, Pgp and OATP	Ritonavir- or cobicistat-boosted regimens may increase elbasvir/grazoprevir. Efavirenz may decrease elbasvir/grazoprevir.	Select unboosted integrase inhibitor, doravirine or rilpivirine.	

A MANAGEMENT TOOL FOR **HIV** DRUG-DRUG INTERACTIONS

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