

GENITOURINARY DRUGS:

TREATMENT FOR BENIGN PROSTATIC HYPERPLASIA (BPH) or LOWER URINARY TRACT SYMPTOMS (LUTS)

	INSTIs		NNRTIs		PIs
	<ul style="list-style-type: none"> • BICTEGRAVIR (<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>Intelence</i>) • NEVIRAPINE (<i>Viramune</i>) 	Boosted with ritonavir (Norvir) or cobicistat <ul style="list-style-type: none"> • ATAZANAVIR (<i>Reyataz, Evotaz</i>) • DARUNAVIR (<i>Prezista, Prezcobix, Symtuza</i>) • LOPINAVIR (<i>Kaletra</i>)

5 ALPHA REDUCTASE INHIBITORS

• Dutasteride (<i>Avodart</i>)		Potential for ↑ dutasteride		Potential for ↓ dutasteride	Potential for ↑ dutasteride
• Finasteride (<i>Proscar</i>)					

ALPHA 1 ADRENERGIC RECEPTOR BLOCKERS (NON-SELECTIVE)

• Doxazosin (<i>Cardura</i>)		Potential for ↑ doxazosin		Potential for ↓ doxazosin	Potential for ↑ doxazosin
• Terazosin (<i>Hytrin</i>)		Potential for ↑ terazosin		Potential for ↓ terazosin	Potential for ↑ terazosin

ALPHA 1 ADRENERGIC RECEPTOR BLOCKERS (SELECTIVE)

• Alfuzosin (<i>Xatral</i>)		Potential for ↑ alfuzosin and toxicity		Potential for ↓ alfuzosin	Potential for ↑ alfuzosin and toxicity
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	INSTIs		NNRTIs		PIs
	<ul style="list-style-type: none"> • BICTEGRAVIR (<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>Intelence</i>) • NEVIRAPINE (<i>Viramune</i>) 	Boosted with ritonavir (<i>Norvir</i>) or cobicistat <ul style="list-style-type: none"> • ATAZANAVIR (<i>Reyataz, Evotaz</i>) • DARUNAVIR (<i>Prezista, Prezcobix, Symtuza</i>) • LOPINAVIR (<i>Kaletra</i>)
• Silodosin (<i>Rapaflo</i>)		Potential for ↑ silodosin. Use 4 mg dose and monitor for toxicity.		Potential for ↓ silodosin	Potential for ↑ silodosin. Use 4 mg dose and monitor for toxicity.
• Tamsulosin (<i>Flomax CR</i>)		Potential for ↑ tamsulosin. Use 0.4 mg dose and monitor for toxicity.		Potential for ↓ tamsulosin	Potential for ↑ tamsulosin. Use 0.4 mg dose and monitor for toxicity.
PDE5 INHIBITORS					
• Tadalafil (<i>Cialis</i>)		Potential for ↑ tadalafil but dose adjustment not required (*for 5 mg daily dose only)		Potential for ↓ tadalafil	Potential for ↑ tadalafil but dose adjustment not required (*for 5 mg daily dose only)

*NB: for tadalafil, this table refers to the daily dose of 5 mg for benign prostatic hyperplasia. Please refer to “**Genitourinary Drugs: PDE5 Inhibitors for Erectile Dysfunction (ED) or Pulmonary Arterial Hypertension (PAH)**” table for recommendations on higher or intermittent dosing of tadalafil with antiretrovirals.

Mechanism of Drug Interactions, Management and Monitoring

Class	Mechanism of Interaction	Main Interacting ARVs	Management	Monitoring
5 alpha reductase inhibitors	Inhibition of CYP3A4 (dutasteride)	Ritonavir and cobicistat-boosted protease inhibitors and elvitegravir	Finasteride may be used	Dutasteride toxicity: erectile dysfunction, decreased libido
	Induction of CYP3A4 (dutasteride)	Efavirenz, etravirine, nevirapine	Finasteride may be used	Dutasteride efficacy
Alpha 1 adrenergic blockers (non-selective)	Inhibition of CYP3A4 (doxazosin, terazosin)	Ritonavir and cobicistat-boosted protease inhibitors and elvitegravir	Adjust dose according to efficacy/toxicity	Toxicity: hypotension, dizziness, headache, asthenia, nasal congestion
	Induction of CYP3A4 (doxazosin, terazosin)	Efavirenz, etravirine, nevirapine		Doxazosin & terazosin efficacy
Alpha 1 adrenergic blockers (selective)	Inhibition of CYP3A4 (alfuzosin>silodosin, tamsulosin)	Ritonavir and cobicistat-boosted protease inhibitors and elvitegravir	Alfuzosin: consider low-dose silodosin or tamsulosin with monitoring or change antiretroviral regimen.	Toxicity: hypotension, dizziness, headache, diarrhea, nasal congestion
	Induction of CYP3A4 (all)	Efavirenz, etravirine, nevirapine		Alfuzosin, silodosin, tamsulosin efficacy
PDE5 Inhibitor Tadalafil 5 mg daily dose ONLY*	Inhibition of CYP3A4 (tadalafil)	May be used with all ARVs	Daily tadalafil 5 mg may be used without dose adjustment. May ↓ to 2.5 mg daily based on tolerability.	Monitor for toxicity: headache, dyspepsia, flushing, back pain, nasal congestion.

*Please refer to “Genitourinary Drugs: PDE5 Inhibitors for Erectile Dysfunction (ED) or Pulmonary Arterial Hypertension (PAH)” table for recommendations on higher or intermittent dosing of tadalafil with antiretrovirals

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.

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

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