



Resource: ART Drug-Drug Interactions

April 2023

Table 38: Erectile and Sexual Dysfunction Agents (also see drug package inserts)		
→ Sildenafil [a], vardenafil, tadalafil [b,c], and alprostadil for men; flibanserin [d] for women		
Class or Drug	Mechanism of Action	Clinical Comments
<ul style="list-style-type: none"> • NRTIs • Dolutegravir (DTG) • Bictegravir (BIC) • Cabotegravir (CAB) • Raltegravir (RAL) • Rilpivirine (RPV) • Doravirine (DOR) 	No significant interactions reported.	No dose adjustments are necessary.
Elvitegravir (EVG), boosted	PDE5 inhibitors: PDE5 inhibitors are substrates of CYP3A. Increased PDE5 inhibitor concentrations are expected.	<ul style="list-style-type: none"> • PDE5 inhibitors: Avoid concomitant use or use with lowest effective dose of PDE5 inhibitor (may increase risk of hypotension, syncope, priapism, and other adverse effects). • Avanafil: No data available; do not coadminister. • Sildenafil: Start with 25 mg every 48 hours; monitor for adverse effects. • Tadalafil: Start with 5 mg and do not exceed 10 mg every 72 hours; monitor for adverse effects. • Vardenafil: Administer 2.5 mg every 72 hours; monitor for adverse effects.
Atazanavir (ATV), unboosted	Avanafil: Increased avanafil concentration is expected (for other oral erectile dysfunction drugs, see above).	Avanafil: Do not exceed 50 mg every 24 hours.
Boosted PIs	<ul style="list-style-type: none"> • PDE5 inhibitors: Increased PDE5 inhibitor concentrations are expected. • Flibanserin: Increased flibanserin concentrations are expected. 	<ul style="list-style-type: none"> • Sildenafil: Start with 25 mg every 48 hours; monitor for adverse effects. • Tadalafil: Start with 5 mg and do not exceed 10 mg every 72 hours; monitor for adverse effects. • Vardenafil: Administer 2.5 mg every 72 hours; monitor for adverse effects. • Avanafil, flibanserin: Do not coadminister.
<ul style="list-style-type: none"> • Efavirenz (EFV) • Etravirine (ETR) 	<ul style="list-style-type: none"> • PDE5 inhibitors: EFV and ETR may reduce effectiveness of PDE5 inhibitors (sildenafil, vardenafil, and tadalafil). • Flibanserin: EFV and ETR may reduce flibanserin concentrations. 	<ul style="list-style-type: none"> • PDE5 inhibitors: Monitor for clinical effect; if dose increase is needed to achieve desired clinical effect, titrate under medical supervision to lowest effective dose. • Flibanserin: Do not coadminister.

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Lenacapavir (LEN)	PDE5 inhibitors: Moderate inhibition of CYP3A4 and P-gP potentially increases PDE5 inhibitor levels.	PDE5 inhibitors , refer to package inserts and guidance listed below: <ul style="list-style-type: none"> • Avanafil: Do not coadminister. • Sildenafil: Start with 25 mg every 48 hours; monitor for adverse effects. • Tadalafil: Start with 5 mg and do not exceed 10 mg every 72 hours; monitor for adverse effects. • Vardenafil: Administer 2.5 mg every 72 hours; monitor for adverse effects.
<p>Abbreviations: COBI, cobicistat; CYP, cytochrome P450; NRTI, nucleoside reverse transcriptase inhibitor; PAH, pulmonary arterial hypertension; PDE5, phosphodiesterase type 5; P-gP, P-glycoprotein; PI, protease inhibitor.</p> <p>Notes:</p> <p>a. Sildenafil for treatment of PAH: Concurrent administration of all PIs and EVG/COBI is <i>contraindicated</i>.</p> <p>b. Tadalafil for treatment of PAH: When coadministered with any PIs or with EVG/COBI, start with 20 mg per day and increase to 40 mg per day based on tolerability.</p> <p>c. Tadalafil for treatment of benign prostatic hyperplasia: When coadministered with any PIs, the maximum recommended dose is 2.5 mg per day.</p> <p>d. Flibanserin should not be administered with alcohol in any circumstances.</p>		