Common over-the-counter vitamins, supplements, herbal products and recreational substances that can have significant interactions with HIV medications [*1,7]

Supplement	HIV medication interaction
Multivitamins and "Multi-valent cations" (vitamins that contain elements and minerals such as iron, calcium, magnesium, zinc, aluminum or other similar elements)	If taken at the same time on an empty stomach, **vitamins and supplements such as iron and calcium can bind to integrase inhibitors (e.g., bictegravir, dolutegravir, elvitegravir, raltegravir) like magnets and significantly decrease absorption.** A lower concentration of HIV medication can lead to treatment failure and resistance. This does not apply to medications that are injected (like cabotegravir). In general, **it's okay to take vitamins and supplements at the same time as your HIV meds with food**. You can also **take HIV medication 2 hours before or 6 hours after taking a vitamin**. Regardless of food, **it is not recommended to take Isentress with aluminum- or magnesium-containing supplements.**
Red yeast rice (used for cholesterol)	Red yeast rice contains monacolin K, a natural component with the same chemical structure as lovastatin. Coadministration of lovastatin with HIV medicines containing a boosting agent or a protease inhibitor can result in potentially serious reactions such as myopathy (muscle aches) or rhabdomyolysis (a severe breakdown of muscle tissue usually requiring hospitalization or close medical monitoring). **It is recommended to use an alternative medicine for cholesterol if needed.**
St. John's Wort (used for depression)	St. John's Wort is expected to substantially decrease concentrations of most HIV medicines. A lower concentration of HIV medication can lead to treatment failure and resistance. **It is recommended to use an alternative medicine for depression if needed.**
Acid-suppressing medications (used for heartburn or gastro-esophageal reflux disease, GERD) in antacids such as Tums, Pepto-Bismol, Mylanta or Maalox; H2 blockers like cimetidine, famotidine or ranitidine; and proton pump inhibitors like dexlansoprazole, esomeprazole, lansoprazole, omeprazole, pantoprazole, rabeprazole.	**Drugs that lower stomach acid can significantly decrease the absorption of some HIV medications like rilpivirine or atazanavir.** Lower concentrations of HIV medication can lead to treatment failure and resistance. ***HIV medications containing rilpivirine or atazanavir should always be taken with food. It is recommended to take antacids 2 hours before or at least 4 hours after HIV medicines containing rilpivirine.*** *Generally,* ***it is recommended to take H2 blockers 12 hours before or at least 4 hours after HIV medicines containing rilpivirine.*** *It is* ***not*** ***recommended to take proton pump inhibitors with any oral HIV medicines containing rilpivirine.*** *It is recommended to take HIV medicines containing atazanavir 2 hours before or 1 hour after antacids.* Depending on the dose of atazanavir and other drug interactions present, there is specific guidance for administration of H2 blockers and proton pump inhibitors contained in the prescribing information.
Contraceptives (used for birth control)	Coadministration of some HIV medicines containing protease inhibitors (e.g. darunavir or atazanavir) or non-nucleoside reverse transcriptase inhibitors (e.g., efavirenz, etravirine, or nevirapine) with hormones used for contraception may decrease hormone levels and decrease their effectiveness. ***It is recommended to use different HIV medicines or alternative/back up contraceptive methods.***

Supplement	HIV medication interaction
Inhaled corticosteroids (used for allergies or asthma) such as budesonide, ciclesonide, fluticasone or mometasone in products like Advair, Arnuity Ellipta, Asmanex, Breo Ellipta, Dulera, Flonase, Nasonex, Symbicort or Trelegy Ellipta	Regular or daily coadministration of any over-the-counter or prescription inhaled or nasal spray corticosteroids with an HIV medicine containing **a boosting agent such as cobicistat or ritonavir or a protease inhibitor can significantly increase the steroid concentration.** This interaction can increase the risk for Cushing's syndrome and adrenal suppression as well as other complications. ***An alternative steroid that does not have a strong interaction is recommended.***
Phosphodiesterase 5 (PDE-5) inhibitors (used for erectile dysfunction or heart failure) such as sildenafil, tadalafil or vardenafil in products like Cialis, Levitra, or Viagra	Coadministration of HIV medicines containing **a boosting agent such as cobicistat or ritonavir or a protease inhibitor can significantly increase the PDE-5 inhibitor concentration.** This interaction can lead to complications such as significantly low blood pressure, vision changes, and a prolonged painful erection called priapism. Depending on the PDE-5 inhibitor being used, there is specific guidance for coadministration contained in the prescribing information.
Methamphetamines	Coadministration of HIV medicines containing **a boosting agent such as cobicistat or ritonavir or a protease inhibitor can significantly increase methamphetamine concentrations.** This increases the risk of overdose. Because the concentration of methamphetamine and a person's tolerance to the substance can be variable, it is important to use with caution and be sure someone nearby is sober who can be trusted to call for help if needed. Consider discussing changing HIV medicines to minimize interaction.
Cocaine	Coadministration of HIV medicines containing **a boosting agent such as cobicistat or ritonavir or a protease inhibitor can increase cocaine concentrations.** This increases the effects of cocaine and may increase the risk of heart attack, stroke or seizures. Because the concentration of cocaine and an individual's tolerance to the substance can vary, it's important to use cautiously and be sure someone nearby is sober who can be trusted to call for help if needed. Consider discussing changing HIV medicines to minimize interaction.
Ecstasy, X, MDMA	Coadministration of HIV medicines containing **a boosting agent such as cobicistat or ritonavir or a protease inhibitor can significantly increase MDMA concentrations**. This increases the effects of MDMA, such as rising heart rate and blood pressure as well as increasing the risk of dehydration. Because individual reactions to MDMA can vary, it's important to use cautiously and be sure someone nearby is sober who can be trusted to call for help if needed. May also discuss changing HIV medicines to minimize interaction.

***This is not a complete list of interactions.** Descriptions of interactions listed are only generalizations and are not meant to be used in place of clinical judgement. It is recommended all medications be evaluated for possible drug interactions prior to administration per patient and discussed with your provider(s).