

Ritonavir

Keith Alcorn

Factsheet

Names: Ritonavir, RTV, *Norvir*

Approved dosage: Ritonavir is available as a generic so its appearance will vary. Ritonavir was one of the first protease inhibitors developed, but is no longer used as an anti-HIV drug due to its side effects. However, it is given at very low doses (too low for anti-HIV effects) to 'boost' the level of other protease inhibitors such as [darunavir](#) and [atazanavir](#).

Ritonavir inhibits the activity of the gut and liver enzymes that break down protease inhibitors and clear them from the body. Taking a low dose of ritonavir alongside another protease inhibitor therefore increases the concentration of the other protease inhibitor in the blood and maintains it at effective levels in the blood for longer.

When used for its boosting effects, the dose of ritonavir is usually 100mg or 200mg once or twice daily (depending on the frequency with which you take the protease inhibitor it is boosting).

Tips on taking it: Take with food to reduce nausea. Do not chew, break or crush tablets. Ritonavir tablets and the powder for oral suspension should always be stored at room temperature.

Common side effects (at low dose): Raised lipid levels, diarrhoea.

Rare side effects: Changes in heart rhythm, severe allergic (hypersensitivity) reaction and rash (Stevens-Johnson syndrome).

Key drug interactions: You should not take ritonavir with any of the following drugs: alfuzosin, amiodarone, astemizole, bepridil, avanafil, chlorazepate, cisapride, colchicine, diazepam, dihydroergotamine, dronedarone, elbasvir/grazoprevir, ergonovine, ergotamine, estazolam, flecanaide, flurazepam, fusidic acid, lovastatin, lurasidone, ombitasvir/paritaprevir/ritonavir, methylergonovine, midazolam taken orally, pethidine, pimozone, piroxicam, propafenone, quetiapine, ranolazine, sildenafil (for hypertension), simvastatin, St John's wort, terfenadine, triazolam, vardenafil.

Ritonavir interacts with many other medications and can change blood levels of one or both drugs. Consult your doctor or HIV pharmacist before taking any other drugs with ritonavir or a ritonavir-boosted drug. This includes: calcium channel blockers, drugs for heart conditions, anticoagulants, asthma and allergy drugs, proton pump inhibitors and H2 receptors, indigestion remedies, anti-fungal treatments, anticonvulsants, anti-TB drugs rifabutin and rifapentine, immunosuppressants, some chemotherapy drugs, steroid-containing inhalers, nasal sprays, eye drops, creams, as well as medicines bought from a high-street chemist, herbal preparations and recreational drugs.

Methadone levels may be reduced by protease inhibitors, and require an increase in dose to achieve the same effect.

Protease inhibitors may reduce the effectiveness of some hormonal contraceptives (such as the pill, patches or an implant). If you are using this type of contraceptive to prevent pregnancy you may need to use an additional or different type of contraception.