
SILDENAFIL (Viagra) Fact Sheet [G]

Bottom Line:

Sildenafil is the original PDE-5 inhibitor, and as such it has the best evidence and longest track record.

FDA Indications:

Erectile dysfunction (ED); pulmonary arterial hypertension (Revatio brand name).

Dosage Forms:

Tablets (G): 20 mg, 25 mg, 50 mg, 100 mg.

Dosage Guidance:

Start 50 mg ×1 (25 mg if >65 years old or with CYP3A4 inhibitors) from 30 minutes to four hours before sexual activity. Max 100 mg/dose and one dose/day. Avoid taking with a high-fat meal.

Monitoring: No routine monitoring recommended unless clinical picture warrants.

Cost: \$

Side Effects:

- Most common: Headache, dyspepsia/heartburn, flushing.
- Serious but rare: May cause dose-related impairment of color discrimination. Sudden decrease or loss of hearing has been reported rarely; hearing changes may be accompanied by tinnitus and dizziness. Decreases in blood pressure may occur due to vasodilator effects; concurrent use with alpha-adrenergic antagonists or substantial alcohol consumption may cause symptomatic hypotension. Avoid use with nitrates (see below). Painful erection greater than six hours in duration (priapism) may occur rarely.

Mechanism, Pharmacokinetics, and Drug Interactions:

- Phosphodiesterase type 5 (PDE-5) inhibitor.
- Metabolized primarily through CYP3A4 and to a lesser extent 2C9; t $\frac{1}{2}$: 4 hours.
- Avoid concomitant use with nitrates in any form (eg, nitroglycerin, isosorbide dinitrate, amyl nitrite “poppers”). Use with caution in patients taking alpha-adrenergic blockers; may cause symptomatic hypotension (use 25 mg dose). Use with caution in patients taking strong CYP3A4 inhibitors, which may increase or extend effects of sildenafil (maximum of 25 mg in 48 hours).

Clinical Pearls:

- Onset of effect is usually 15–20 minutes after a dose (but may be delayed 60 minutes by a high-fat meal), and usual duration is approximately two hours.
- The 20 mg dosage is approved for pulmonary arterial hypertension, but some prescribers may use it off label for ED if a lower dose is preferred.

Fun Fact:

Sildenafil has been used recreationally. Some users mix it with MDMA (ecstasy) to counteract the ED that MDMA can cause; this combination is known as “sextasy.”