Adafil®

Tadalafil
Tablet

Description

Adafil® (Tadalafil) tablet is an oral treatment for erectile dysfunction, is a selective inhibitor of cyclic guanosine monophosphate (cGMP)-specific phosphodiesterase type 5 (PDE5). Tadalafil has the empirical formula $C_{22}H_{19}N_3O_4$ representing a molecular weight of 389.41. It is a crystalline solid that is practically insoluble in water and very slightly soluble in ethanol. It is available as film-coated tablets for oral administration.

Indications

Tadalafil is indicated for the treatment of erectile dysfunction. This medication is used to treat male sexual function problems (erection problems). Tadalafil acts quicker and lasts much longer. Tadalafil tablet gives faster results, has a higher success rate, lasts up to 32 hours longer, and causes fewer unpleasant side effects.

Tadalafil is also known to:

- Increase Sex Drive
- Boost Sexual Performance
- Cause Fuller & Harder Erections
- Increase Stamina & Endurance
- Help with Quicker Recharges

Dosage & Administration

The recommended starting dose of Tadalafil in most patients is 10 mg, taken prior to anticipated sexual activity (20 minutes before). The dose may be increased to 20 mg or decreased to 5 mg, based on individual efficacy and tolerability. The maximum recommended dosing frequency is once per day in most patients. Tadalafil may be taken without regard to food.

In case of mild renal insufficiency, no dose adjustment is required. For patients with moderate (Creatinine clearance 31 to 50 mL/min) renal insufficiency, a starting dose of 5 mg not more than once daily is recommended, and the maximum dose should be limited to 10 mg not more than once in every 48 hours. For patients with severe (creatinine clearance <30 ml/min) renal insufficiency on hemodialysis, the maximum recommended dose is 5 mg.

Contraindication

Tadalafil is contraindicated for patients with a known hypersensitivity to Tadalafil or any component of the tablet. Administration of Tadalafil to patients who are using any form of organic nitrate, either regularly and/or intermittently, is contraindicated. In clinical pharmacology studies, Tadalafil was shown to potentiate the hypotensive effect of nitrates. This is thought to result from the combined effects of nitrates and Tadalafil on the nitric oxide/cGMP pathway.

Administration of Tadalafil to patients taking any alpha-adrenergic antagonist other than 0.4 mg once-daily Tamsulosin is contraindicated. In a drug-drug interaction study, when Tadalafil 20 mg was administered to healthy subjects taking Doxazosin (8 mg daily), there was a significant augmentation of the blood-pressure-lowering effect of Doxazosin.

Precautions

Before using this drug, patient should disclose to the physician the medical history, including any allergies (especially drug allergies), any penis conditions such as fibrosis/scarring, history of painful/prolonged erection (priapism), sickle cell anemia, blood system cancers (such as leukemia or myeloma), or Peyronie's disease, eye problems (retina diseases). kidney or liver disease, bleeding disorders or active stomach ulcers, heart diseases, stroke or severe high or low blood pressure. Limit alcohol intake, as it may aggravate side effects of this drug.

To avoid dizziness and lightheadedness when rising from a seated or lying position, get up slowly. The elderly may be more sensitive to the side effects of this drug; therefore caution is advised in this group. There have been rare reports of prolonged erections greater than 4 hours and priapism (painful erections greater than 6 hours in duration) for this class of compounds. Priapism, if not treated promptly, can result in irreversible damage to the erectile tissue. Patients who have an erection lasting greater than 4 hours, whether painful or not, should seek emergency medical attention.

Adverse Reactions

Tadalafil was administered to over 5700 men (mean age 59, range 19 to 87 years) during clinical trials worldwide. Over 1000 patients were treated for 1 year or longer and over 1300 patients were treated for 6 months or more. In placebo-controlled Phase-3 clinical trials, the discontinuation rate due to adverse events in patients treated with Tadalafil 10 or 20 mg was 3.1%, compared to 1.4% in placebo-treated patients. When Tadalafil was taken as recommended in the Placebo-controlled clinical trials, the following adverse events were reported.

Treatment-emergent adverse events reported by 2% of patients treated with Tadalafil (10 or 20 mg) and more frequent on drug than placebo in the eight primary placebo-controlled phase 3 studies (Including a study in patients with diabetes)

	Placebo	Tadalafil 5 mg	Tadalafil 10 mg	Tadalafil 20 mg
Adverse Event	**(N=476)**	**(N=151)**	**(N=394)**	**(N=635)**
Headache	5%	11%	11%	15%
Dyspepsia	1%	4%	8%	10%
Back pain	3%	3%	5%	6%
Myalgia	1%	1%	4%	3%
Nasal congestion	1%	2%	3%	3%
Flushing*	1%	2%	3%	3%
Pain in limb	1%	1%	3%	3%

* The term flushing includes: Facial flushing and flushing

Drug Interactions

Tadalafil is a substrate of and predominantly metabolized by CYP3A4. Studies have shown that drugs that inhibit CYP3A4 can increase Tadalafil exposure. Ketoconazole, HIV Protease inhibitor. Based upon these results, in patients taking concomitant potent CYP3A4 inhibitors, the dose of Tadalafil should not exceed 10 mg, and Tadalafil should not be taken more frequently than once in every 72 hours.

Other Cytochrome P450 inhibitors- although specific interactions have not been studied, other CYP3A4 inhibitors, such as Erythromycin, Itraconazole, and Grape fruit juice, would likely increase Tadalafil exposure.

Studies have shown that drugs like Rifampin, that induce CYP3A4 can decrease Tadalafil exposure.

Tadalafil is not expected to cause clinically significant inhibition or induction of the clearance of drugs metabolized by cytochrome P450 (CYP) isoforms. Studies have shown that Tadalafil does not inhibit or induce P450 isoforms CYP1A2, CYP3A4, CYP2C9, CYP2C19, CYP2D6, and CYP2E1.

Tadalafil had no clinically significant effect on the pharmacokinetics of Theophylline.

Tadalafil had no clinically significant effect on exposure (AUC) to Midazolam or Lovastatin.

Tadalafil had no clinically significant effect on exposure (AUC) to S-warfarin or R-warfarin, nor did Tadalafil affect changes in prothrombin time induced by warfarin.

High Risk Group

Tadalafil is not indicated for use in newborns, children, or women.

Commercial Pack

Adafil® 20 tablet: Box containing 4 tablets in 1x4's blister strip. Each film coated tablet contains Tadalafil INN 20 mg.

BEXIMCO PHARMA

Manufactured by

BEXIMCO PHARMACEUTICALS LTD.

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