

# Telcot - M50

**Composition:** Telmisartan 40mg & Metoprolol 50 mg Tablets

**Indication:** Hypertension

**Mechanism of Action:** Telmisartan is a nonpeptide AT1 angiotensin II receptor antagonist. It exerts antihypertensive activity by preventing angiotensin II from binding to AT1 receptors thus inhibiting the vasoconstricting and aldosterone-secreting effects of angiotensin II.

**METOPROLOL :** Absorption: Absorbed readily and completely from the GI tract. Bioavailability increased by food. Bioavailability: Approx 50%. Time to peak plasma concentration: Approx 1.5-2 hr (oral). Distribution: Widely distributed, enters breast milk, crosses the placenta and blood-brain barrier. Volume of distribution: 3.2-5.6 L/kg. Plasma protein binding: Approx 12%.

**Metabolism:** Extensively hepatic via CYP2D6 isoenzyme and undergoes oxidative deamination, O-dealkylation followed by oxidation and aliphatic hydroxylation.

**Excretion:** Via urine (as metabolites and unchanged drug). Elimination half-life: 3-4 hr (fast hydroxylators); approx 7 hr (poor hydroxylators).

**Pharmacokinetic's:** Onset: 1-2 hr.

Duration: Up to 24 hr.

**Absorption:** Rapidly absorbed from the GI tract. Food may slightly decrease the bioavailability. Absolute bioavailability: Dose-dependent (approx 42% after 40-mg dose; 58% after 160-mg dose). Time to peak plasma concentration: Approx 0.5-1 hr.

**Distribution:** Volume of distribution: 500 L. Plasma protein binding: >99%.

**Metabolism:** Undergoes conjugation w/ glucuronic acid to form inactive metabolites.

**Excretion:** Via faeces (97%, as unchanged drug). Terminal elimination half-life: Approx 24 hr.

**Side effects:** TELMISARTAN Dizziness, fatigue, headache, sinusitis, upper resp tract infection, pharyngitis, UTI, back pain, myalgia, diarrhoea, abdominal pain, dyspepsia, nausea. Potentially Fatal: Intermittent claudication and skin ulcer.

**METOPROLOL :** Dizziness, insomnia, tiredness, headache, vertigo, confusion, bradycardia, shortness of breath, hypotension, Raynaud's phenomenon, CHF, peripheral oedema, cold extremities, syncope, chest pain, palpitations, gangrene, claudication, hallucinations, nightmares, visual disturbances; diarrhoea, constipation, flatulence, GI pain, heartburn, nausea, hiccups, xerostomia; bronchoconstriction, wheezing, dyspnoea; dry skin, maculopapular, psoriasiform, pruritus, worsening of psoriasis, urticarial rash. Rarely, Peyronie's disease, tinnitus, restless legs, musculoskeletal pain, a polymyalgia-like syndrome, decreased libido, blurred vision, dry mucous membranes, sweating; reversible alopecia, thrombocytopenia, agranulocytosis, retroperitoneal fibrosis, wt gain, arthritis, dry eyes.

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## Precaution:

TELMISARTAN : Volume- or salt-depleted patients including patients on prolonged diuretic therapy. Patients w/ renal artery stenosis, aortic or mitral stenosis, obstructive biliary disease. Renal and mild to moderate hepatic impairment. Lactation. Monitoring Parameters Monitor BP, electrolytes and serum creatinine levels.

METOPROLOL: Patients w/ myasthenia gravis, well-compensated heart failure, bronchospastic disease, AV conduction disorders, substantial cardiomegaly. May mask signs and symptoms of hyperthyroidism and hypoglycaemia. Patients w/ history of cardiac failure or those w/ minimal cardiac reserve. Patients undergoing major surgery involving general anaesth. Avoid abrupt withdrawal as it may precipitate thyroid storm or MI, and may exacerbate angina and ventricular arrhythmias. Hepatic impairment. Pregnancy and lactation. Patient Counselling May affect ability to drive or operate machinery. Monitoring Parameters Monitor BP, ECG and heart rate.

## Dosage:

TELMISARTAN : HTN Initial: 40 mg once daily, may be adjusted to 20-80 mg once daily. CV risk reduction 80 mg once daily.

METOPROLOL : Hypertension

Adult: Conventional tablet: Initially, 100 mg/day in single or 2 divided doses, may increase weekly to 400 mg/day depending on response. Maintenance: 100-200 mg/day. Extended-release tablet: Initially, 25-100 mg once daily.

Angina pectoris Adult: Conventional tablet: 50-100 mg Twice a day or Thrice a day. Extended release tablet: 100 mg once daily. Max: 200 mg once daily.

Stable symptomatic heart failure Adult: Conventional tablet: Initially, 12.5-25 mg once daily, may increase at 2 wk intervals to target dose 200 mg once daily if tolerated. Extended release: 25 mg once daily for 2 wk, 12.5 mg for patient's w/ severe heart failure. Increase at 2 wk intervals to target dose 200 mg once daily if tolerated.