

# PACKAGE INSERT TEXT

**SCHEDULING STATUS:** S3  
**PROPRIETARY NAME:** TIMOLOL MALEATE 10 mg TABLETS - LENNON  
**COMPOSITION:** Each tablet contains Timolol maleate 10 mg.

**PHARMACOLOGICAL CLASSIFICATION:**

A 5.2 Adrenolytics (sympatholytics).

**PHARMACOLOGICAL ACTION:**

(Timolol maleate) is a nonselective  $\beta$ -adrenergic blocking agent. It blocks both  $\beta$  1 and  $\beta$  2 receptors competitively and does not exhibit any intrinsic agonistic properties. It reduces cardiac activity by diminishing or preventing  $\beta$ -adrenergic stimulation. It reduces the rate and force of contraction of the heart and prolongs A - V conduction time. In response to the inhibition of the  $\beta$ -receptors, the oxygen requirement diminishes which proves beneficial in cases of angina pectoris. The blood pressure in hypertensive patients is also reduced.

**INDICATIONS:**

Cardiac arrhythmias, especially supraventricular arrhythmias.  
To improve the tolerance to exercise in patients with angina of effort.  
Treatment of hypertension - usually in conjunction with a thiazide diuretic.  
For the prophylaxis of migraine. (1) & (5)

**CONTRA-INDICATIONS:**

Particular caution should be exercised with patients suffering from the following: asthma, bronchitis, chronic respiratory diseases, second and third degree heart block and bradycardia less than 50 per minute, peripheral vascular diseases and Raynaud's phenomenon.

The normal dose should be reduced in elderly patients, or in patients suffering from renal dysfunction. (2)

In the perioperative period it is generally unwise to reduce the dosage to which the patient is accustomed, as there may be danger of aggravation of angina pectoris or of hypertension. A patient's normal tachycardic response to hypovolaemia or blood loss may be obscured during or after surgery. Particular caution should be taken in this regard.

Timolol maleate is contra-indicated in patients with metabolic acidosis, heart failure refractory not yielding to treatment to digitalis, hypoglycaemia and uremia.

Verapamil and Timolol maleate should not be given concomitantly or within several days of discontinuing either.

**WARNINGS:**

Caution should be exercised when transferring a patient from clonidine. The withdrawal of clonidine may result in the release of large amounts of catecholamines which may give rise to a hypertensive crisis. If  $\beta$ -blockers are administered in these circumstances, the unopposed  $\alpha$ -receptor stimulation may potentiate this effect.

If a  $\beta$ -blocker and clonidine are given concurrently, the clonidine should not be discontinued until several days after the withdrawal of the  $\alpha$ -blocker as severe rebound hypertension may occur. (3)

**DOSAGE AND DIRECTIONS FOR USE:**

**Hypertension:**

10 to 60 mg per day. Dosages of 10 to 20 mg per day may be given once or twice a day. Dosages above 20 mg per day should be given in divided doses.

**Angina:**

15 to 45 mg per day, in divided doses.

**Migraine:**

10 to 20 mg once daily.

**PRODUCT:**

**PAGE:**

# PACKAGE INSERT TEXT

## **SIDE-EFFECTS AND SPECIAL PRECAUTIONS:**

The most common side-effects of timolol maleate are nausea, vomiting, diarrhoea, fatigue and dizziness. (4)

Bronchoconstriction may occur in patients suffering from asthma, bronchitis and other chronic pulmonary diseases.

Congestive cardiac failure and marked bradycardia may occur.

A variety of neuropsychiatric disorders may occur, ranging from vague fatigue and malaise, sleeplessness, vivid dreams and nightmares, to overt psychosis.

The following may occur:

Exacerbation of peripheral vascular disease, or the development of Raynaud's phenomenon (due to unopposed arteriolar  $\alpha$ -sympathetic activation), sexual impotence, hypoglycaemia, skeletal muscle weakness and gastro-intestinal disturbances. Severe peripheral vascular disease and even peripheral gangrene may be precipitated.

Safety during long-term administration has not been demonstrated.

Adverse reactions are more common in patients with renal decompensation, and in patients who receive the drug intravenously.

It can be dangerous to administer this medicine concomitantly with the following medicines: hypoglycaemic agents, phenothiazines and various antiarrhythmic agents.

NB: Such drug-drug interactions can have life-threatening consequences.

## **SPECIAL NOTE:**

Digitalisation of patients receiving long-term  $\beta$ -blocker therapy may be necessary if congestive cardiac failure is likely to develop. This combination can be considered despite the potentiation of negative chronotropic effect of the two medicines. Careful control of dosages and of the individual patients' response (and notably pulse rate) is essential in this situation.

Abrupt discontinuation of therapy may cause exacerbation of angina pectoris in patients suffering from ischaemic heart disease. Discontinuation of therapy should be gradual and patients should be advised to limit the extent of their physical activity during the period that the medicine is being discontinued.

Administration to pregnant mothers shortly before giving birth, or during labour may result in the newborn infants being born hypotonic, collapsed and hypoglycaemic. Symptoms of hyperthyroidism may be masked by administration of timolol maleate.

Patients with phaeochromocytoma usually require treatment with an  $\alpha$ -adrenergic blocker. (2)

## **KNOWN SYMPTOMS OF OVERDOSAGE AND PARTICULARS OF ITS TREATMENT:**

Excessive bradycardia, and/or hypotension, heart failure and bronchospasm.

Excessive bradycardia and severe hypotension should be treated immediately by the intravenous injection of 1 to 2 mg of atropine followed, if necessary, by 25  $\mu$ g of isoprenaline or 500  $\mu$ g of orciprenaline by slow intravenous injection.

Heart failure should be treated with digitalis and diuretics.

Further treatment is symptomatic and supportive.

## **IDENTIFICATION:**

A pale blue, flat, bisected tablet with bevelled edges.

## **PRESENTATION:**

Blister packs and Securitainers of 100 tablets.

**PRODUCT:**

**PAGE:**

# PACKAGE INSERT TEXT

**STORAGE INSTRUCTIONS:** H/5.2/162

Store under 25°C and protect from light and moisture.  
KEEP OUT OF REACH OF CHILDREN.

**REGISTRATION NUMBER:**

**NAME AND BUSINESS ADDRESS OF THE APPLICANT:**

Lennon Limited  
7 Fairclough Road  
PORT ELIZABETH  
6001

**DATE OF PUBLICATION OF THIS PACKAGE INSERT:**

**PRODUCT:**

**PAGE:**