

Pain Gone **E A S Y**

# Tamepro

Metoprolol Succinate 25 mg,  
50 mg ER Tablets



## Introduction

- ◆ Metoprolol was developed since 1969 by US Pharmaceutical Holdings I and FDA approved in 1978.
- ◆ Beta receptors are on the surface of the cells innervated by sympathetic nervous system. It mediates certain physiological response to adrenaline.
- ◆ Metoprolol is a selective beta-1 blocker commonly employed as the succinate and tartrate derivatives depending if the formulation is designed to be of immediate release or extended release.<sup>[1]</sup>

## Salient Features:

- ◆ **The 2012 American Academy of Neurology guideline recommends beta-blockers, specifically propranolol and Metoprolol as first line therapy for preventing migraines.**<sup>[2]</sup>
- ◆ Metoprolol had a significant effect regarding parameters such as the migraine attack frequency, the number of migraine days and the sum of intensity score.<sup>[3]</sup>
- ◆ Oral administration of Metoprolol caused a reduction in heart rate, systolic blood pressure and cardiac output.<sup>[4]</sup>

## References:

1. Silberstein SD: Preventive Migraine Treatment. Continuum (Minneapolis, Minn). 2015 Aug;21(4 Headache):973-89.
2. PLOS ONE | <https://doi.org/10.1371/journal.pone.0212785> March 20, 2019.
3. Louis, P., Schoenen, J. and Hedman, C., 1985. Metoprolol v. clonidine in the prophylactic treatment of migraine. Cephalalgia, 5(3), pp.159-165.



## ARTICLE 1:

### “Metoprolol v. clonidine in the prophylactic treatment of migraine”

Ref: Louis, P., Schoenen, J. and Hedman, C., 1985. Metoprolol v. clonidine in the prophylactic treatment of migraine. Cephalalgia, 5(3), pp.159-165.

- ◆ Double-blind, cross-over trial
- ◆ Indication- Migraine
- ◆ The dosage of metoprolol was 50 mg b.i.d. and of clonidine 50 µg b.i.d.
- ◆ 31 patients were included in the study.

### Result:

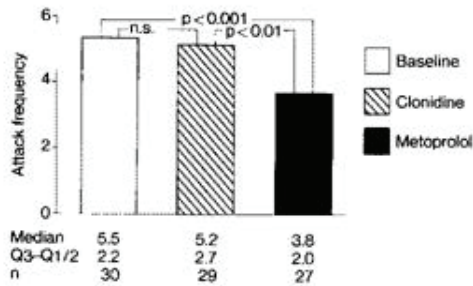


Fig 2 Number of Migraine attacks per 4 week during baseline, clonidine and metoprolol periods.

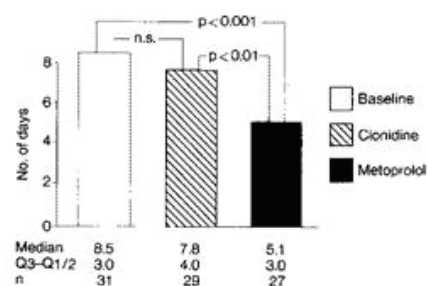


Fig 2 Number of days with Migraine per 4 week during baseline, clonidine and metoprolol periods.

### Conclusion

Metoprolol 50 mg b.i.d. is more efficacious than clonidine 50 µg b.i.d. in migraine prophylaxis and in the reduction in acute migraine therapy, and the difference between the two drugs is statistically significant.

## ARTICLE 2:

### “Metoprolol and propranolol in migraine prophylaxis: a double-blind multicentre study”

Ref: Olsson JE, Behring HC, Forssman B, et al. Metoprolol and propranolol in migraine prophylaxis: a double-blind multicentre study. Acta Neurol Scand. 1984;70(3):160-168

- ◆ Double-blind, cross-over multicentre trial to evaluate and compare the prophylactic effect of metoprolol with propranolol.
- ◆ 56 patients with classical or common migraine were included in the double-blind part of the investigation.
- ◆ Metoprolol was used in a dosage of 50 mg b.i.d. and propranolol in 40 mg b.i.d.

### Result:

The subjective patient evaluation of improvement showed that 63% of the patients during metoprolol treatment and 64% during propranolol treatment.

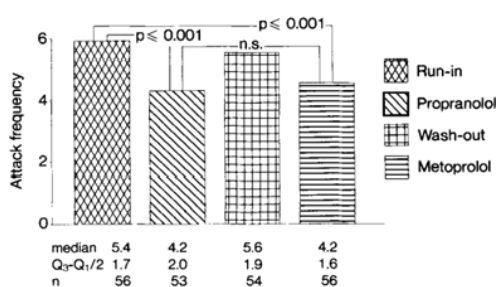


Fig 2 Number of Migraine attacks per 4 week during run-in, propranolol, wash-out and metoprolol periods.

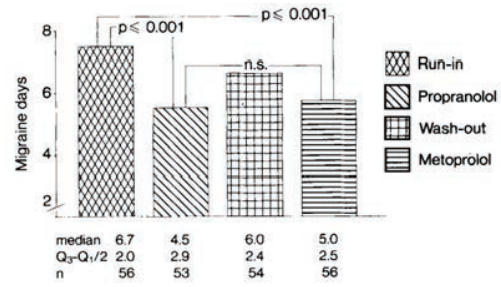


Fig 3 Number of Migraine days per 4 week during run-in, propranolol, wash-out and metoprolol periods.

### Conclusion

Metoprolol is clinically equivalent in effectiveness to propranolol in migraine prophylaxis regarding parameters such as attack frequency, improvement in sum of severity score and subjective evaluation.

# Tamepro

Metoprolol Succinate 25 mg, 50 mg ER Tablets

## Description:

Tamepro contains metoprolol succinate, is a beta<sub>1</sub> selective adrenoreceptor blocking agent for oral administration available as extended release tablets.

## Mechanism of Action

Several reports have indicated a platelet hyperaggregability in migraine patients. Platelet release substances, such as beta-thromboglobulin and platelet factor 4, have also been found elevated in migraine patients. The plasma levels of thromboxane B<sub>2</sub> (metabolite of thromboxane A<sub>2</sub>) are reported to decrease during metoprolol treatment.<sup>[1]</sup> Beta-blockers inhibit the platelet aggregation in hyperaggregable patients.<sup>[1]</sup>

## Indication:

Migraine

## Dose

50 mg BID- Migraine

## Presentation

Available as strip of 10 Tablets.

## Storage

Store protected from light and moisture at a temperature not exceeding 30° C.

## Reference:

1. Olsson JE, Behring HC, Forssman B, et al. Metoprolol and propranolol in migraine prophylaxis: a double-blind multicentre study. Acta Neurol Scand. 1984;70(3):160-168

## La Renon Healthcare Private Limited

207-208 ISCON Elegance | Circle P | Prahlad Nagar Cross Roads S.G.Highway |  
Ahmedabad - 380015 | Gujarat | India.  
Phone: +91-79-6616-8998, +91-79-2693-6656 | Fax: +91-79-6616-8998  
E-Mail: info@larenon.com | www.larenon.com