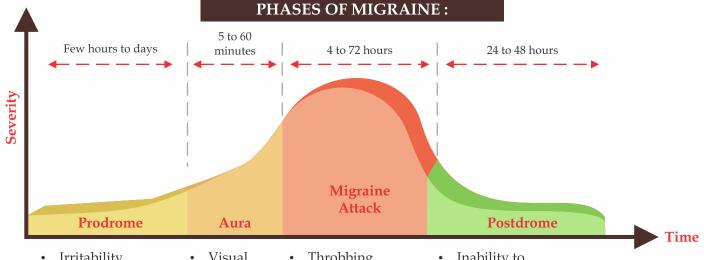


### **BACKGROUND:**



- Irritability
- Depression
- Yawning
- Increased need to urinate
- Food cravings
- Sensitivity to light / sounds
- Problem in concentrating
- Fatigue and muscle stiffness
- Difficulty in speaking & reading
- Nausea
- Difficulty in sleeping

- Visual Disturban ces
- Temporar y loss of sight
- Numbness and tingling on part of the body
- Throbbing
- Drilling Ice pick in the head
- Burning
- Nausea
- Vomiting
- Giddiness Insomnia
- **Nasal Congestion**
- Anxiety
- Depressed mood
- Sensitivity to Light, smell, sound
- Neck Pain and stiffness

- Inability to concentrate
- Fatigue
- Depressed mood
- Euphoric mood
- Lack of comprehension

### PREVALENCE:

- Migraine is the 3<sup>rd</sup> most prevalent illness in the world.
- Migraine is the 8<sup>th</sup> most disabling illness in the world.
- Amazingly, 12% of the population including children suffers from migraine.
- Migraine is most common between the ages of 25 and 55.
- While most sufferers experience attacks once or twice a month, more than 4 million people have chronic daily migraine, with at least 15 migraine days per month.
- Attacks usually last between 4 and 72 hours.
- About 25% of migraine sufferers also have a visual disturbance called an aura, which usually lasts less than an hour.
- More than 90% of sufferers are unable to work or function normally during their migraine.
- Migraine tends to run in families. About 80% of migraine sufferers have a family history of migraine.

- 1. American Migraine Foundation
- 2. Migraine Research Foundation

# ZINEPRA

Flunarizine with Propranolol Tablets 5 mg & 40 mg / 10 mg & 40 mg

### **CLINICAL EFFECTIVENESS:**

### 1. Diener et al. (2002); nice.org.uk

- Randomized controlled trial conducted in 8 European countries.
- Compared the efficacy and safety of Flunarizine at 2 different doses with propranolol over a 16-week period.
- The study included 810 adults aged 18 to 65 years (median age 37) with migraine for at least 1 year (median 10 years, with a median of 4 attacks per month).
- Participants had to have had 2 to 6 migraines every month for the 2 months before randomisation.

	Flunarizine - 5 mg	Flunarizine - 10 mg	Propranolol - 10 mg
Mean Attack Frequency (4 weeks)	2.0 (n=259)	1.9 (n=265)	1.9 (n=259)
Mean Attack Frequency in last 28 days	1.8	1.6	1.7

### **Result:**

For the mean attack frequency per 4 weeks and in the last 28 days of the study, both flunarizine 5 mg and flunarizine 10 mg were as effective as propranolol for the intention-to-treat (ITT) population

- The NICE guideline on the diagnosis and management of headaches in young people and adults makes recommendations on diagnosing and managing the most common primary headache disorders in young people (aged 12 years and older) and adults.
- The most common primary headache disorders are tension-type headache, migraine and cluster headache.

### 2. The Cochrane review, Victor et al. 2003

1-double-blind parallel-group RCT (n=33) comparing flunarizine with propranolol.

- The RCT comparing flunarizine with propranolol conducted in children and young people aged 3 to 15 years and compared flunarizine 5 mg or 10 mg daily (depending on bodyweight) with propranolol 10 mg or 20 mg 3 times a day (depending on bodyweight) for 4 months.
- 13 of the 17 participants in the flunarizine group and 12 out of the 15 in the propranolol group showed a greater than 75% improvement in migraine frequency.

## ZINEPRA

Flunarizine with Propranolol Tablets 5 mg & 40 mg / 10 mg & 40 mg

### DESCRIPTION:

**ZINEPRA** is a Bi-Layer Tablet with the combination of Flunarizine and propranolol. Available in combinational strength of 5 mg and 40 mg and also as 10 mg and 40 mg respectively, a medication developed for the treatment of migraine. Flunarizine is a selective calcium entry blocker with calmodulin binding properties and histamine H1 blocking activity. It is effective in the prophylaxis of migraine, occlusive peripheral vascular disease, vertigo of central and peripheral origin, and as an adjuvant in the therapy of epilepsy. Propranolol is a widely used non-cardioselective beta-adrenergic antagonist.

### MECHANISM OF ACTION:

### Flunarizine:

Flunarizine inhibits the influx of extracellular calcium through myocardial and vascular membrane pores by physically plugging the channel. The decrease in intracellular calcium inhibits the contractile processes of smooth muscle cells, causing dilation of the coronary and systemic arteries, increased oxygen delivery to the myocardial tissue, decreased total peripheral resistance, decreased systemic blood pressure, and decreased afterload.

### **Propranolol:**

Propranolol competes with sympathomimetic neurotransmitters such as catecholamines for binding at beta (1)-adrenergic receptors in the heart, inhibiting sympathetic stimulation. This results in a reduction in resting heart rate, cardiac output, systolic and diastolic blood pressure, and reflex orthostatic hypotension.

### INDICATION:

- To prevent migraine headaches and recurrence.
- · Migraine occlusive peripheral vascular disease
- Vertigo of central and peripheral origin.

### DOSAGE:

## Migraine prophylaxis:

Flunarizine: Adult: 5-10 mg daily at bedtime.

**Propranolol: Adult:** Initial: 40 mg bid or tid. Usual range: 120-240 mg/day.

### ADMINISTRATION:

It comes as tablets and to be taken by mouth with or without food.

### PRESENTATION:

Available as strip of 10 tablets.

### La Renon Healthcare Pvt. Ltd.

