evaluated in human studies.

#### Dependence:

Topiramate has not been systemically studied in Available in pack size of 60's. animals or humans for its potential for tolerance **Eminant 50mg Tablets:** or physical dependence.

### PEDIATRIC USE:

Safety and efficacy in the pediatric population has not been established.

### DOSAGE AND ADMINISTRATION:

	Initial Dose	Titration	Recommended Dose
Epilepsy monotherapy: children 2 to <10 years	25 mg/day administered nightly for the first week	The dosage should be titrated over 5-7 weeks	Daily doses in two divided doses based on weight
Epilepsy monotherapy: adults and pediatric patients >10 years	50 mg/day in two divided doses	The dosage should be increased weekly by increments of 50 mg for the first 4 weeks then 100 mg for weeks 5 to 6.	400 mg/day in two divided doses
Epilepsy adjunctive therapy: adults with partial onset seizures or LGS	25 to 50 mg/day	The dosage should be increased weekly to an effective dose by increments of 25 to 50 mg.	200-400 mg/day in two divided doses
Epilepsy adjunctive therapy: adults with primary generalized tonic- clonic seizures	25 to 50 mg/day	The dosage should be increased weekly to an effective dose by increments of 25 to 50 mg.	400 mg/day in two divided doses
Epilepsy adjunctive therapy: Pediatric patients with partial onset seizures, primary generalized tonic-clonic seizures or LGS.	25 mg/day (or less, based on a range of 1 to 3 mg/kg/day) nightly for the first week	The dosage should be increased at 1- or 2- week intervals by increments of 1 to 3 mg/kg/day (administered in two divided doses). Dose titration should be guided by clinical outcome.	5 to 9 mg/kg/day in two divided doses
Migraine	25 mg/day administered nightly for the first week	The dosage should be increased weekly by increments of 25 mg. Dose and titration should be guided by clinical outcome.	100 mg/day administered in two divided doses

# Adjunctive Therapy Use:

As adjunctive therapy, the recommended daily dose of Topiramate in adults with partial onset serious is 200 to 400mg/day in two devided doses and in adults with primary generalized tonic clonic seizures is 400mg/day in two divided doses.

# Usual Pediatric Dose for Seizure Prophylaxis:

1 to 3 mg/kg/day given nightly.

### **Renal Dose Adjustments:**

In renally impaired subjects, one half of the usual adult dose is recommended.

### **HOW SUPPLIED:**

# **Eminant 25mg Tablets:**

Available in pack size of 60's.

# **Eminant 100mg Tablets:**

Available in pack size of 30's.

## **INSTRUCTION:**

Store at 15-30°C. Protect from heat, light and moisture.

Keep out of the reach of children. To be sold on the prescription of a registered medical practitioner only.

خوراک: دواڈاکٹر کی ہدایت کےمطابق استعال کریں۔ ہدایات: دوالو °30-15سینٹی گریڈ پررکھیں۔ گری ، دوشن اورنی سے محفوظ رکھیں۔ تمام دوائیس بچول کی پیچن سے دور کھیں۔



Manufactured by STANDPHARM PAKISTAN (PVT) LTD. 20 Km Ferozepur Road Lahore, Pakistan.

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# **Eminant** (Topiramate)



# **COMPOSITION:**

# **Eminant 25mg:**

Each film coated tablet contains:

Topiramate (USP).......25mg Eminant 50mg:

Each film coaled tablet contains:

Topiramate (USP)......50mg

Eminant 100mg:

Each film coated tablet contains:

Topiramate (USP)......100mg

### **DESCRIPTION**

Eminant (Topiramate) is an anticonvulsant or anti epileptic drug.

### **CLINICAL PHARMACOLOGY**

#### Mechanism of Action:

The precise mechanisms by which Topiramate exerts its anticonvulsant and migraine prophylaxis effects are unknown; however, preclinical studies have revealed four properties that may contribute to Topiramate's efficacy for epilepsy and migraine prophylaxis. Electrophysiological and biochemical evidence suggests that Topiramate, at pharmacologically relevant concentrations, blocks voltagedependant sodium channels, augments the activity of the neurotransmitter gammaaminobutycic acid at some subtypes of the GABA-A receptor, antagonizes the AMPA/kainate subtype of the glutamate receptor and inhibits the carbonic anhydrase enzyme, particularly isozymes II and IV.

# Pharmacokinetics:

# Absorption and distribution:

Absorption of Topiramate is rapid, with peak plasma concentrations occurring at approximately 2 hours following a 400mg oral dose. The relative bioavailability of Topiramate from the tablet formulation is about 80% compared to a solution. The bioavailability of Topiramate is not affected by food. Topiramate is 15% to 41% bound to human plasma proteins over the blood concentration range 0.5 to 250ug/mL. The fraction of bound topiramate is decreased as blood concentration is increased.

#### Metabolism and Excretion:

Topiramate is not extensively metabolized and is primarily eliminated unchanged in urine (approximately 70% of an administered dose). Oral plasma clearance is approximately 20 to 30mL/min in humans following oral administration.

# **Special Populations:**

## Renal Impairment:

The clearance of Topiramate may reduce by 42% in moderately renally impaired and by 54% in severely renally impaired subjects compared to normal renal function subjects.

# **Hepatic Impairment:**

In hepatically impaired subjects, the clearance of Topiramate may decrease; however its underlying mechanism is not well understood.

#### **Hemodialysis:**

Topiramate is cleared by hemodialysis, using a high efficiency, counterflow, single pass-dialysate hemodialysis procedure. Topiramate clearance by dialysis is 120mL/min with blood flow through the dialyzer at 400mL/min. This high clearance supplemental dose may be required.

#### Indications:

# For epilepsy:

### As monotherapy:

patients 10 years of age and older with partial onset or primary generalized tonic-clonic seizure. Fetal Toxicity:

# As Adjunctive Therapy:

tonic-clonic seizures.

# In prophylaxis of migraine:

prophylaxis of migraine headache.

#### **WARNINGS:**

# Acute Myopia and Secondary Angle Closure Glaucoma:

A syndrome consisting of acute myopia In Renal Failure: associated with secondary angle closure. The major route of elimination of unchanged glaucoma has been reported in patients receiving Topiramate and its metabolites is via the kidney. decreased visual acuity and/or ocular pain with reduced renal function. Ophthalmologic findings can include myopia, Decreased Hepatic Function: ocular hyperemia (redness) and increased In hepatically impaired patients, Topiramate reverse symptoms is discontinuation of clearance of Topiramate may be decreased. Topiramate as rapidly as possible.

### Suicidal Behavior and Ideation:

Patients treated with any AED for any indication the fetus' ability to tolerate labor.

will remove a clinically significant amount of should be monitored for the emergence or Topiramate from the patient over the worsening of depression, suicidal thoughts or hemodialysis treatment period. Therefore, a behavior and/or any unusual changes in mood or behavior.

# Withdrawal of Antiepileptic Drugs (AEDs):

In patients with or without a history of seizures or epilepsy, antiepileptic drugs including Topiramate should be gradually withdrawn to Topiramate is indicated as initial monotherapy in minimize the potential for seizures or increased seizure frequency.

Topiramate can cause fetal harm when Topiramate is indicated as adjunctive therapy for administered to a pregnant woman. Data from adults and pediatric patients ages 2 to 16 years pregnancy registries indicate that infants with partial onset seizures or primary generalized exposed to Topiramate in utero have an increased risk for cleft lip and/or cleft palate (oral clefts). When multiple species of pregnant animals Topiramate is indicated for adults for the received Topiramate at clinically relevant doses, structural malformations including craniofacial defects, and reduced fetal weights occurred in offspring.

### ADJUSTMENT OF DOSE:

Topiramate. Symptoms include acute onset of Dosage adjustment may be required in patients

intraocular pressure. Primary treatment to should be administered with caution as the

## Labor and Delivery:

Although the effect of Topiramate on labor and Antiepileptic drugs (AEDs), including Topiramate, delivery in humans has not been established. The increase the risk of suicidal thoughts/behavior in development of Topiramate-induced metabolic patients taking these drugs for any indication. acidosis in mother and/or in fetus might affect



# **Nursing Mothers:**

Caution should be exercised when administered to a nursing woman. Topiramate may excrete in ADVERSE REACTIONS milk.

#### **DRUG INTERACTIONS:**

# **Anti-epileptic Drugs:**

Concomitant administration of phenytoin or Cardiovascular Disorders: carbamazepine with Topiramate, decrease Infrequent: hypotension, postural hypotension, plasma concentrations of Topiramate by 48% and angina pectoris. 40% respectively when compared to Topiramate Gastrointestinal System Disorders: given alone.

# **CNS Depressants:**

Concomitant administration of Topiramate and Rare: tongue edema. alcohol or other CNS depressant drugs has not Urinary System Disorders: been evaluated in clinical studies. Because of the Infrequent: urinary retention, face edema, renal potential of Topiramate to cause CNS depression pain, albuminuria, polyuria, oliguria. as well as other cognitive and/or neuropsychiatric adverse events. Topiramate **OVERDOSE**: depressants.

# **Oral Contraceptives:**

The possibility of decreased contraceptive tachycardia, vomiting and seizures. efficacy and increased breakthrough bleeding Management of Overdose: Topiramate.

#### Metformin:

of metformin is contraindicated.

## Other Carbonic Anhydrase Inhibitors:

Concomitant use of Topiramate with any other DRUG ABUSE AND DEPENDENCE: carbonic anhydrase inhibitor (e.g., zonisamide, Controlled Substance: acetazolamide or dichlorphenamide) may Topiramate is not a controlled substance. increase the severity of metabolic acidosis and Abuse: may also increase the risk of kidney stone. The abuse potential of Topiramate has not been

formation.

Body as a whole:

Frequent: syncope.

Infrequent: abdomen enlargement.

Rare: alcohol intolerance.

Infrequent: Stomatitis, melena, gastritis,

esophagitis.

should be used with extreme caution if used in Overdose with Topiramate has occurred combination with alcohol and other CNS predominantly in combination with alcohol and/or other drugs. The most commonly reported events in overdosage include

should be considered in patients taking oral In Acute Topiramate overdose, if the ingestion is contraceptive products in combination with recent, the stomach should be emptied immediately by lavage or by induction of emesis. Activated charcoal has been shown to adsorb Topiramate treatment can frequently cause Topiramate in vitro. Treatment should be metabolic acidosis, a condition for which the use appropriately supportive. Hemodialysis is an effective mean of removing Topiramate from the body.