GABIX CAPSULES 100mg

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF DRUG PRODUCT

Gabix Capsules 100mg

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each capsule contains:
Gabapentin USP……..100mg

3. PHARMACEUTICAL FORM

Hard gelatin capsules with light blue opaque cap and body printed Getz logo and 100mg in black containing white powder.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Gabix (Gabapentin) is indicated as follows:

Epilepsy
GABIX (Gabapentin) is indicated as adjunctive therapy in the treatment of partial seizures with or without secondary generalization, in adults and children who have not achieved adequate control with standard antiepileptic drugs.

Neuropathic pain
For various types of neuropathic pain in adults:
- Postherpetic neuralgia (PHN)
- Peripheral diabetic neuropathies
- Trigeminal neuralgia

4.2 Posology and method of administration

GABIX (Gabapentin) is given in titrations that lead to an effective dose. Treatment progresses rapidly and can be accomplished over a few days. The total dose should be divided into three doses given at intervals not exceeding 12 hours. GABIX (Gabapentin) may be given orally with or without food.

Neuropathic Pain (Adults-over the age of 18)
The initial daily dose of GABIX (Gabapentin) can be titrated as given in the table below. Thereafter the dose maybe increased in increments of 300mg daily up to a maximum of 3600mg/day in three divided doses. It is not necessary to divide the doses equally.

Day 1	Day 2	Day 3
300mg Once a day	300mg Two times a day	300mg Three times a day.

Effectiveness as an adjunct therapy of neuropathic pain in pediatric patients has not been established.

Epilepsy
Adults and children over 12 years of age:
Therapy may be initiated by administering 300mg on first day of the treatment, 300mg twice daily on the second day and 300mg thrice daily on the third day. Thereafter the dose maybe increased in increments of 300mg daily until effective epileptic control is achieved, which is usually within the range of 900-1200mg daily. Higher doses up to a maximum of 2400mg daily may be required in some patients.

Children aged 6 to 12 years of age:
The initial recommended dose of GABIX (Gabapentin) is 10mg/kg/day on day 1, 20mg/kg/day on day 2, and 25-35mg/kg/day on day 3.

The following table shows the recommended maintenance doses according to the respective weight.

Weight Range (Kg)	Daily Dose (mg/day)
26-36	900
37-50	1200

Special Populations

Renal Impaired Patients
A dosage adjustment is recommended in renally impaired patients with neuropathic pain or epilepsy.

Creatinine Clearance (mL/min)	Total Daily Dose[a] (mg/day)
> 80	900-3600
50-79	600-1200
30-49	300-600
15-29	300[b]
< 15	300[c]

[a]Total daily dose should be administered as a tid regimen. Doses used to treat patients with normal renal function (creatinine clearance >80mL/min) range from 900 to 3600mg/day. Reduced dosages are for patients with renal impairment (creatinine clearance <79mL/min)
[b]To be administered daily or on every other day.
[c]To be administered on every other day.

Patients undergoing Haemodialysis
The recommended loading dose of GABIX (Gabapentin) is 300-400mg then 200-300mg following each 4 hours of haemodialysis.

4.3 Contraindications

-Gabapentin is contraindicated in patients with known hypersensitivity to gabapentin or any of the components of the product.

4.4 Special warnings and special precautions for use

- Gabapentin should not be abruptly discontinued because of the possibility of increasing seizure frequency.
- Caution is recommended in patients with a history of psychotic illness.
- Gabapentin should not be considered a treatment of absence seizures and may exacerbate these seizures in some patients. Consequently, gabapentin should be used with caution in patients who have mixed seizure disorders that include absence seizures.
- Patients should be advised neither to drive a car nor to operate complex machinery until they have gained sufficient experience on gabapentin.
- Suicidal ideation and behavior have been reported in patients treated with anti-epileptic agents in several indications. Therefore, patients ld be monitored for signs of suicidal ideation and behaviors and appropriate treatment should be considered.

4.5 Interaction with other medicaments

Phenytoin, Valproic acid, Carbamazepine or Phenobarbitone:
There is no interaction during the concomitant administration of gabapentin with these drugs. Gabapentin steady-state pharmacokinetics is similar for healthy subjects and patients with epilepsy receiving anti-epileptic agents.

Morphine:
Patients who require concomitant treatment with morphine may experience increases in gabapentin concentrations. Patients should be carefully observed for signs of CNS depression such as somnolence and the dose of gabapentin or morphine should be reduced appropriately.

Antacid:
Gabapentin's bioavailability was reduced by up to 24% when co-administered at the same time with an aluminium and magnesium containing antacid. It is recommended that gabapentin be taken about two hours following any such antacid administration.

Overdosage

Symptoms
Acute oral overdoses of gabapentin up to 49 grams have been reported. In these cases, double vision, slurred speech, drowsiness, lethargy and diarrhea were observed. All patients recovered with supportive care.

Management
Gabapentin can be removed by hemodialysis. Although hemodialysis has not been performed in the few overdose cases reported, it may be indicated by the patient's clinical state or in patients with significant renal impairment.

4.6 Pregnancy and Lactation

Pregnancy
There are no adequate and well-controlled studies in pregnant women. Gabapentin should be used during pregnancy only if the potential benefit justifies the potential risk to the foetus.

Nursing Mother
Gabapentin is secreted into human milk following oral administration. The effect on the nursing infant is unknown. Therefore, gabapentin should be used in nursing women only if the potential benefits clearly outweigh the risks.

4.7 Effects on ability to drive and use machine

Gabapentin may have minor or moderate influence on the ability to drive and use machines. Gabapentin acts on the central nervous system and may cause drowsiness, dizziness or other related symptoms.
Even, if they were only of mild or moderate degree, these undesirable effects could be potentially dangerous in patients driving or operating machinery. This is especially true at the beginning of the treatment and after increase in dose.

4.8 Undesirable effects

Neuropathic Pain

Common: Dizziness, somnolence.
Less Common: Diarrhea, dry mouth, peripheral edema, weight gain, abnormal gait, amnesia, ataxia, abnormal thinking, rash and amblyopia.
Rare: Accidental injury, asthenia, back pain, constipation, flatulence, nausea, confusion, hypesthesia, vertigo, dyspnea and pharyngitis.

Epilepsy (Adults)

Common: Dizziness, somnolence.
Less Common: Ataxia, fatigue, nystagmus, tremor, diplopia, amblyopia, abnormal vision, dysarthria, amnesia, asthenia, paraesthesia, arthralgia, purpura, dyspepsia, anxiety, weight increase, urinary tract infection and pharyngitis.

Uncommon: Leucopenia, nervousness, rhinitis and male sexual dysfunction (impotence).
Rare: Urinary incontinence, pancreatitis, elevated liver function tests, erythema multiforme and Stevens Johnson Syndrome, confusion, depression, emotional lability, hostility, abnormal thinking and psychoses/hallucinations, blood glucose fluctuations in patients with diabetes, myalgia, headache, nausea and/or vomiting.

Epilepsy (Children 3-12 years)

Common: Emotional lability, nervousness and thinking abnormally. All reports of these events were rated as mild or moderate and discontinuation or dose reduction was infrequent.
Uncommon: Somnolence, fatigue, weight increase, hostility, emotional lability, dizziness, hyperkinesia, nausea/vomiting, viral infection, fever, bronchitis, respiratory infection.

Adverse events associated with both epilepsy and neuropathic pain include: acute kidney failure, allergic reaction including urticaria, alopecia, angioedema, chest pain, hepatitis, jaundice, movement disorders such as choreoathetosis, dyskinesia and dystonia, palpitation, thrombocytopenia, and tinnitus.

Adverse events following the abrupt discontinuation of gabapentin have also been reported. The most frequently reported events are anxiety, insomnia, nausea, pain and sweating.

PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic Group: Antiepileptics

ATC Code: N03AX12

Gabapentin is structurally related to the neurotransmitter gammaaminobutyric acid (GABA) but its mechanism of action is different from that of several drugs that interact with GABA synapses. Gabapentin has proven affinity for special site in brain tissues such as neocortex and hippocampus. Though exact mechanism of its CNS depressant and anticonvulsant activity is not fully understood.

5.2 Pharmacokinetic properties

Absorption:

Gabapentin is absorbed from the gastrointestinal tract by means of saturable mechanism. Gabapentin bioavailability is not dose proportional i.e. as dose is increased bioavailability is decreased. Absolute bioavailability of 300mg oral dose is approximately 60%. At doses of 300mg and 400mg, gabapentin bioavailability was unchanged following multiple-dose administration. Food has no effect on the rate and extent of absorption.

istribution:

Gabapentin circulates largely unbound (<3%) to plasma proteins. Gabapentin is distributed into breast milk.

Metabolism and Elimination:

Gabapentin is not appreciably metabolised and is eliminated from the systemic circulation by renal excretion as unchanged drug. Elimination half-life ($T_{1/2}$) ranges from 5 to 7 hours and is unaltered by dose or following multiple dosing. Gabapentin elimination rate constant, plasma clearance and renal clearance are directly proportional to creatinine clearance.

Special Populations

Renal Insufficiency

The mean gabapentin half-life ranged from about 6.5 hours (patients with creatinine clearance (CL_{cr} >60mL/min) to 52 hours (CL_{cr} <30mL/min) and gabapentin renal clearance ranged from 90mL/min (CL_{cr} >60mL/min) to about 10mL/min (CL_{cr} <30mL/min). Gabapentin dosage should be adjusted in patients with compromised renal function.

Patients on Haemodialysis

In anuric patients, the elimination half-life of gabapentin on a nondialysis day was about 132 hours; during dialysis the apparent half-life was reduced to 3.8 hours. Thus haemodialysis has a significant effect on gabapentin elimination in anuric patients.
Gabapentin dosage should be adjusted in patients undergoing haemodialysis.

Elderly Patients:

The apparent oral clearance (CL/F) of gabapentin decreased as age increased, from about 225mL/min in those under 30 years of age to about 125mL/min in those over 70 years of age. Reduction of gabapentin dose may be required in patients who have aged related compromised renal function.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Microcrystalline Cellulose (Avicel PH-102), Colloidal Anhydrous Silica (Aerosil 200), Magnesium Stearate, Empty gelatin capsules.

6.2 Incompatibilities

None

6.3 Shelf-life

3 Years

6.4 Special precautions for storage

Do not store above 30°C.
Protect from sunlight and moisture.

6.5 Nature and contents of container

Gabix (Gabapentin) Capsules 100mg are available in blister Pack of 1x10's in a carton along with a packaging insert.

6.6 Instructions for use/handling

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

7. APPLICANT/HOLDER OF CERTIFICATE OF PRODUCT REGISTRATION

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