PRIMIDONE TABLETS, USP
Rx Only

DESCRIPTION
Chemical name: 5-ethylidihydro-5-phenyl-4,6 (1H,5H)-pyrimidinedione.

Structural Formula:

Primidone is a white, crystalline, highly stable substance, M.P. 279-284°C. It is poorly soluble in water (60 mg per 100 mL at 37°C) and in most organic solvents. It possesses no acidic properties, in contrast to its barbiturate analog. Each tablet, for oral administration, contains 50 mg or 250 mg Primidone, and the following inactive ingredients: lactose monohydrate, magnesium stearate, microcrystalline cellulose, povidone, sodium lauryl sulfate, sodium starch glycolate, and stearic acid.

CLINICAL PHARMACOLOGY
Primidone raises electro- or chemoshock seizure thresholds or alters seizure patterns in experimental animals. The mechanism(s) of Primidone’s antiepileptic action is not known.

Primidone per se has anticonvulsant activity as do its two metabolites, phenobarbital and phenylethylmalonamide (PEMA). In addition to its anti-convulsant activity, PEMA potentiates the anticonvulsant activity of phenobarbital in experimental animals.

INDICATIONS AND USAGE
Primidone, used alone or concomitantly with other anticonvulsants, is indicated in the control of grand mal, psychomotor, and focal epileptic seizures. It may control grand mal seizures refractory to other anticonvulsant therapy.

CONTRAINDICATIONS
Primidone is contraindicated in:
1. Patients with porphyria and
2. Patients who are hypersensitive to phenobarbital (see CLINICAL PHARMACOLOGY).

WARNINGS
The abrupt withdrawal of antiepileptic medication may precipitate status epilepticus.

The therapeutic efficacy of a dosage regimen takes several weeks before it can be assessed.

Usage in Pregnancy
The effects of primidone in human pregnancy and nursing infants are unknown.

Recent reports suggest an association between the use of anticonvulsant drugs by women with epilepsy and an elevated incidence of birth defects in children born to these women. Data are more extensive with respect to diphenylhydantoin and phenobarbital, but these are also the most commonly prescribed anticonvulsants, less systematic or anecdotal reports suggest a possible similar association with the use of all known anticonvulsant drugs.

The reports suggesting an elevated incidence of birth defects in children of drug-treated epileptic women cannot be regarded as adequate to prove a definite cause-and-effect relationship. There are intrinsic methodologic problems in obtaining adequate data on drug teratogenicity in humans; the possibility also exists that other factors leading to birth defects, e.g., genetic factors or the epileptic condition itself, may be more important than drug therapy. The majority of mothers on anticonvulsant medication deliver normal infants. It is important to note that anticonvulsant drugs should not be discontinued in patients in whom the drug is administered to prevent major seizures because of the strong possibility of precipitating status epilepticus with attendant hypoxia and threat to life. In individual cases where the severity and frequency of the seizure disorder are such that the removal of medication does not pose a serious threat to the patient, discontinuation of the drug may be considered prior to and during pregnancy, although it cannot be said with any confidence that even minor seizures do not pose some hazard to the developing embryo or fetus.

The prescribing physician will wish to weigh these considerations in treating or counseling epileptic women of childbearing potential.

Neonatal hemorrhage, with a coagulation defect resembling vitamin K deficiency, has been described in newborns whose mothers were taking primidone and other anticonvulsants. Pregnant women under anticonvulsant therapy should receive prophylactic vitamin K, therapy for one month prior to, and during, delivery.

PRECAUTIONS
The total daily dosage should not exceed 2 g. Since primidone therapy generally extends over prolonged periods, a complete blood count and a sequential multiple analysis-12 (SMA-12) test should be made every six months.

In Nursing Mothers
There is evidence that in mothers treated with primidone, the drug appears in the milk in substantial quantities. Since tests for the presence of primidone in biological fluids are too complex to be carried out in the average clinical laboratory, it is suggested that the presence of undue somnolence and drowsiness in nursing newborns of primidone-treated mothers be taken as an indication that nursing should be discontinued.
ADVERSE REACTIONS
The most frequently occurring early side effects are ataxia and vertigo. These
tend to disappear with continued therapy, or with reduction of initial dosage.
Occasionally, the following have been reported: nausea, anorexia, vomiting,
fatigue, hyperirritability, emotional disturbances, sexual impotency, diplopia,
nystagmus, drowsiness, and morbilliform skin eruptions.
Granulocytopenia, agranulocytosis, and red-cell hypoplasia and aplasia, have
been reported rarely. These and, occasionally, other persistent or severe side
effects may necessitate withdrawal of the drug. Megaloblastic anemia may
occur as a rare idiosyncrasy to primidone and to other anticonvulsants. The
anemia responds to folic acid without necessity of discontinuing medication.

DOSAGE AND ADMINISTRATION
Adult Dosage
Patients 8 years of age and older who have received no previous treatment
may be started on primidone according to the following regimen using either
50 mg or 250 mg primidone tablets.

Days 1 to 3: 100 to 125 mg at bedtime
Days 4 to 6: 100 to 125 mg b.i.d.
Days 7 to 9: 100 to 125 mg t.i.d.
Day 10 to maintenance: 250 mg t.i.d.

For most adults and children 8 years of age and over, the usual maintenance
dosage is three to four 250 mg primidone tablets daily in divided doses (250
mg t.i.d. or q.i.d.). If required, an increase to five or six 250 mg tablets daily
may be made but daily doses should not exceed 500 mg q.i.d.

INITIAL: ADULTS AND CHILDREN OVER 8

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Adjust to Maintenance

Dosage should be individualized to provide maximum benefit. In some
cases, serum blood level determinations of primidone may be necessary for
optimal dosage adjustment. The clinically effective serum level for primidone
is between 5 to 12 µg/mL.

In Patients Already Receiving Other Anticonvulsants
Primidone should be started at 100 to 125 mg at bedtime and gradually
increased to maintenance level as the other drug is gradually decreased. This
regimen should be continued until satisfactory dosage level is achieved for the
combination, or the other medication is completely withdrawn. When therapy
with primidone alone is the objective, the transition from concomitant therapy
should not be completed in less than two weeks.

Pediatric Dosage
For children under 8 years of age, the following regimen may be used:

Days 1 to 3: 50 mg at bedtime.
Days 4 to 6: 50 mg b.i.d.
Days 7 to 9: 100 mg b.i.d.
Day 10 to maintenance: 125 mg t.i.d. to 250 mg t.i.d.

For children under 8 years of age, the usual maintenance dosage is 125 to 250
mg three times daily, or 10 to 25 mg/kg/day in divided doses.

HOW SUPPLIED
Primidone Tablets USP, 50 mg are supplied as: white, round tablets;
embossed “W” on one side and “82” on the other side and are available in:

- Bottles of 100 tablets.
- Bottles of 500 tablets.
- Bottles of 1000 tablets.

Primidone Tablets USP, 250 mg are supplied as: white, round tablets;
embossed “WW 484” and are available in:

- Bottles of 100 tablets.
- Bottles of 1000 tablets.

Store at 20-25° C (68-77° F) [See USP Controlled Room Temperature].

Dispense in a tight, light-resistant container as defined in the USP using a
child-resistant closure.