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# Nikal

(MECOBALAMIN)

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**TABLETS**

**INJECTION**

## COMPOSITION

### TABLETS:

Each film coated tablet contains: Mecobalamin (J.P).....500mcg

### INJECTION:

Each 1ml contains: Mecobalamin (J.P).....500mcg

## PHARMACOLOGY

### 1. MECOBALAMIN IS A KIND OF ENDOGENOUS COENZYME B12

Mecobalamin plays an important role in transmethylation as a coenzyme of methionine synthetase in the synthesis of methionine from homocysteine.

### 2. MECOBALAMIN IS WELL TRANSPORTED TO NERVE CELL ORGANELLES, AND PROMOTES NUCLEIC ACID AND PROTEIN SYNTHESIS

Mecobalamin is better transported to nerve cell organelles than cyanocobalamin in rats. It has been shown in experiments with cells from the brain origin and spinal nerve cells in mice to be involved in the synthesis of thymidine from deoxyuridine, promotion of deposited folic acid utilization and metabolism of nucleic acid. Also Mecobalamin promotes nucleic acid and protein synthesis in rats more than cobamamide does.

### 3. MECOBALAMIN PROMOTES AXONAL TRANSPORT AND AXONAL REGENERATION

Mecobalamin normalizes axonal skeletal proteins transport in sciatic cells from rat models with streptozotocin induced diabetes mellitus. It exhibits neuropathologically and electrophysiologically inhibitory effects on nerve degeneration in neuropathies induced by drugs, such as adriamycin, acrylamide and vincristine (in rats and rabbits).

### 4. MECOBALAMIN PROMOTES MYELINATION (PHOSPHOLIPID SYNTHESIS)

Mecobalamin promotes the synthesis of lecithin, the main constituent of medullary sheath lipids, and increases myelination of neurons in rat tissue culture more than cobamamide does.

### 5. MECOBALAMIN RESTORES DELAYED SYNAPTIC TRANSMISSION AND DIMINISHED NEUROTRANSMITTERS TO NORMAL

Mecobalamin restores end-plate potential induction early by increasing nerve fiber excitability in the crushed sciatic nerve in rats. In addition, Mecobalamin normalizes diminished brain tissue levels of acetylcholine in rats fed a choline-deficient diet.



## INDICATIONS

Peripheral Neuropathies.

Megaloblastic anemia caused by vitamin B12 deficiency.

## DOSAGE AND ADMINISTRATION

**FOR TABLETS:** The usual adult dosage for oral use is 3 tablets (1,500mcg of mecobalamin) daily in 3 divided doses. The dosage may be adjusted depending on the patient's age and symptoms.

**FOR INJECTIONS:** For peripheral neuropathies, the usual dose for adult is 1 ampoule (500mcg of mecobalamin) a day, administered intramuscularly or intravenously three times a week. For megaloblastic anemia, the usual dose for adult is 1 ampoule (500mcg of mecobalamin) a day, administered intramuscularly or intravenously three times a week.

After approximately 2 months of medication, the dose should be reduced to a single administration of ampoule at 1 to 3 months intervals for maintenance therapy.

#### CONTRAINDICATION

Hypersensitivity to mecobalamin or other Vitamin B12 containing products.

#### PRECAUTIONS

Mecobalamin should not be used for more than one month unless it is effective. Prolonged use of larger doses of mecobalamin is not recommended for patients whose occupation requires handling mercury or its compounds. Since this drug decomposes on exposure to light, it should be used immediately after the package is opened.

In intramuscular administration, care should be exercised to avoid adverse effects on tissues or nerves. Repeated injections at the same site should be avoided. Particular care should be exercised when administering the drug to neonates, premature infants and children. Do not inject at innervated site. In case of severe pain after insertion of injection or if blood flow back into the syringe, withdraw the needle immediately and inject at a different site. The cut point of ampoules should be wiped with alcohol swab before opening.

#### ADVERSE REACTIONS

In case of tablets, symptoms such as anorexia, nausea or diarrhoea may infrequently occur. Pain and induration may occur infrequently at the site of intramuscular injection. Headache, diaphoresis or hot sensation may occur infrequently.

#### PHARMACEUTICAL PRECAUTIONS

Mecobalamin is unstable to light. It should be protected from light. Mecobalamin injection and tablets are provided in special heat and light resistant packs to prevent any change in quality during storage, hence, care should be exercised to remove an individual ampoule from the package just before use. Tablets are provided in Alu-Alu pack and injections are provided in aluminium pouch for extra protection.

#### INSTRUCTIONS

Store below 25°C. Protect from heat, light & moisture. Keep all medicines out of the reach of children. To be sold on the prescription of a registered medical practitioner only.

#### PRESENTATION

NIKAL Tablets: Available in Alu-Alu pack of 2x10's

NIKAL Injection: Available in aluminium pouch 1ml x 10 ampoules

## نائیکل ٹیبلٹس / انجکشن (میکیوبالامین)

ہدایات: 25° سینٹی گریڈ سے کم درجہ حرارت پر رکھیں۔ گرمی، روشنی اور نمی سے محفوظ رکھیں۔ تمام ادویات بچوں کی پہنچ سے دور رکھیں۔ صرف مستند ڈاکٹرز کے نسخے پر فروخت کریں۔ منجمد ہونے سے بچائیں۔ انجکشن کے لیک ہونے، دھندلا ہونے یا اس میں غیر حل پذیر ذرات نظر آنے کی صورت میں ہرگز استعمال نہ کریں۔



Manufactured by:

**STANDPHARM PAKISTAN (PVT) LTD.**

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