

CYNOSEL

Injection

For Veterinary Use Only

Composition:

Each ml contains:

Cyanocobalamin.....250mcg

Indications:

Cynosel injection is indicated in the management of Vitamin B12 deficiency like wasting disease, weight loss, suppressed appetite, lethargy, diarrhea, scaly ears and watery eyes, failure to grow, anemia, anorexia, feverish condition etc. and also helps to recover the symptoms caused by deficiency of cobalt.

Properties and action Spectrum:

Vitamin B12 can be converted to coenzyme B12 in tissues and, as such, is essential for conversion of methyl malonate to succinate and synthesis of methionine from homocysteine, a reaction that also requires folate. Without coenzyme B12, folate deficiency occurs. Vitamin B12 also facilitates fat and carbohydrate metabolism and protein synthesis. Cells characterized by rapid division (epithelial cells, bone marrow, and myeloid cells) appear to have the greatest requirement for vitamin B12.

Vitamin B12 is a vitamin that exert trophic and protective action on nerve tissue and therefore degrade and potentiate the complex action of other substances in the normalization of neuromuscular function. Cyanocobalamin and its analog hydroxyl cobalamin are equivalents of the natural Vitamin. Adenosyl cobalamin and methyl cobalamin are alkyl derivatives synthesized from the vitamin serving as coenzymes.

Pharmacokinetics:

Vitamin B12 is quickly absorbed from intramuscular (IM) and subcutaneous (SC) sites of injection; with peak plasma concentrations achieved about 1 hour after IM injection.

Cobalamin is distributed to tissues and stored mainly in the liver and bone marrow. Very high (to specific plasma proteins called trans cobalamins); binding of hydroxocobalamin is slightly higher than cyanocobalamin.

Vitamin B12 or cyanocobalamin obtained from food is initially bound by haptocorrin, a protein found in the saliva with high affinity for B12. This forms a haptocorrin-B12 complex. Cyanocobalamin passes through the stomach and is protected from acid degradation due to its binding to haptocorrin. This drug is partially excreted in the urine.

Dosage and Administration:

Intra-muscular (IM), Intra-venous (IV) or Sub-Cutaneous (SC) if needed with following doses.

Cattle/Horses: 4-12ml

Calves/Foals: 2-6ml

Sheep/Goat: 1-3ml

Dogs/Cats: 1-2ml

Dosage may be repeated once or twice weekly.

Precautions:

- Shake well before use.
- Consult the veterinarian before use.
- Store between 15-25 °C at a cool and dry place.
- Keep out of the reach of children.

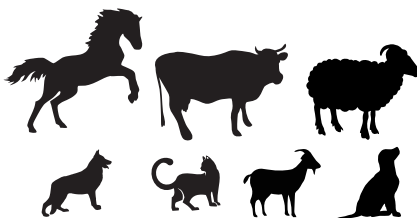
Withdrawal Time:

Nil

Packing:

100ml

USP Specs



 **Selmore**
Pharmaceuticals (Pvt) Ltd.

Manufactured by:
Selmore Pharmaceuticals (Pvt) Ltd.
36 Km Multan Road, Lahore, Pakistan.

