InnoPharma LABORATORIO	**MEDICAL INFORMATION ON VETERINARY PRODUCTS**
	ONDANTRON SOLUTION FOR INJECTION **Ondansetron 2 mg / mL**

ONDANTRON

REGISTRATION NUMBER Q-0666-039

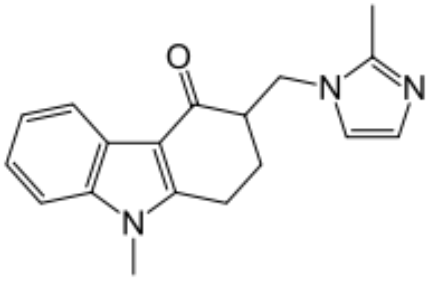
FORMULA:

Each mL contains:
Ondansetron Hydrochloride Dihydrate
equivalent to Ondansetron.....2.0 mg
Vehicle q.s. .....1 mL

THERAPEUTIC INDICATIONS

Ondantron, is an antiemetic indicated in the control of severe nausea and vomiting of cytotoxic and gastroenteric origin such as parvovirus, enteritis in general, hemorrhagic gastroenteritis, chemotherapy, as well as post-surgical treatment. It has been used in vestibular syndrome with very good response (add bibliographic reference).

PHARMACOLOGY



Ondansetron is a carbazole derivative that acts as a selective and competitive inhibitor of serotonin 5-HT3 receptors. The 5-HT3 receptors are located in the enteric, sympathetic, parasympathetic and peripheral nervous system, as well as in the central nervous system, but mainly in the enterochromaffin cells of the gastrointestinal mucosa and are related to many pathological and physiological processes.

Ondansetron is 100 times more potent than metoclopramide in neurotransmitter blockade, both in the zone of activation of chemoreceptors and in vagal afferent pathways.

In domestic felines it is the ideal drug when they are anesthetized with Xylazine without interfering with the anesthetic effect.

In the 1990s, they found great effectiveness of anti-serotonergic drugs, especially Ondansetron, where dogs were treated with Ondansetron before the use of cisplatin with excellent results.

Cytotoxic drugs and radiation damage the gastric mucosa, causing serotonin release from enterochromaffin cells in the gastrointestinal tract. Stimulation of 5-HT3 receptors causes the emission of sensitive signals to the vomiting center through afferent pathways to induce vomiting. Ondansetron by binding to these receptors, blocks the emesis produced by the release of serotonin.

As in 2021 they found great effectiveness in vomiting produced in vestibular syndrome. The vestibular system involves not only the cerebellum, spinal cord and extraocular muscles, but also the cranial nerve III and the vestibular nuclei. The vestibular nuclei are directly involved in the pathways for the induction of nausea in the nucleus of the solitary tract. By activating projections to the dorsal vagal complex and ascending projections to higher brain areas such as the thalamus, lateral postcentral gyrus, insular cortex, and temporoparietal cortex, nausea induction can be modulated. The complexity and multidimensional nature of nausea make pharmacologic management challenging, ondansetron has been shown to decrease nausea as emesis

The effect of ondansetron in controlling nausea and vomiting is due to both a central and peripheral mechanism.

PHARMACOKINETICS

It has a bioavailability of 40 - 60%, reaching plasma concentration in 0.7 to 1.5 hours after parenteral administration. It has a half-life of 3 to 4 hours. With high plasma protein binding of up to approximately 75%. It is widely distributed in the organism. Its metabolites cross the blood-brain barrier in small amounts. It is metabolized in liver and excreted through feces and urine. There is no accumulation in tissues after administration of multiple doses.

CONTRAINDICATIONS:

The 5-HT3 receptors are involved in regulation of GI motility such blockade could disrupt these physiological functions. 5-HT3 receptors involved in sleep induction induce apnea, Ondansetron inhibits this phenomenon.

WARNINGS:

Ondansetron has a relatively small incidence of adverse effects, such as headache, diarrhea and increases in the plasma concentration of hepatic transaminases.
Ondansetron is potentially neurotoxic and may cause hypersensitivity reactions in herding breeds especially Collie, Shetland Shepherd, Australian Shepherd.
Do not use in pregnant or lactating females.
Do not use in animals with hypersensitivity to it.
It should be used at a reduced dose in animals with compromised hepatic function.
Keep out of reach of children and domestic animals.
Its sale requires medical prescription.
Do not administer after expiration date.
Do not administer if the cap has been violated, if the solution is not transparent or if it contains particles in suspension.

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Exclusive information for the Veterinarian
Technical Department

Use in: Domestic canines and felines

Route of administration: Deep intramuscular or slow intravenous. Use sterile syringe and needle.

Dose:
Low Dose: Domestic Canines and Felines 0.1 to 0.15 mg/ kg body weight. Equivalent to 1.0 mL per 15-20 kg body weight.
High Dose: 0.22 mg/kg, equivalent to 1 mL per 10 kg body weight.
Every 8 - 12 hours. The duration of the treatment will be according to the clinical case and Veterinarian Doctor's criteria.

PRESENTATION:
Box with 10 and 50 mL vial.

STORAGE RECOMMENDATIONS:
Protect from light.
Store in a cool, dry place at no more than 30ºC.

Bibliography

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GLP

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MADE IN MEXICO BY:
INNOPHARMA, S. DE R. L. DE C.V.
Av. San Pablo No 79-C
Col. Santa Barbara
Azcapotzalco, CP 02230.
Tel: (55) 2626 9100 512-522
ventas@innopharma.com.mx
www.innopharma.com.mx