

ILIMUM MEDETOMIDINE INJECTION

Active Constituent:

1 mg/mL Medetomidine Hydrochloride

For use as a sedative and analgesic in the restraint of dogs and cats.

Mode of Action:

Medetomidine, 4(1-(2,3-dimethylphenyl)ethyl)-1H-imidazole, is a potent sedative and specific alpha-2 adrenoceptor agonist. Alpha-2 adrenoceptor activation by medetomidine induces a dose-dependent decrease in the release and turnover of nonadrenaline in the central nervous system which is manifested as sedation, analgesia and bradycardia.

In the periphery, medetomidine causes vasoconstriction by activating postsynaptic alpha-2 adrenoceptors in the vascular smooth muscle. Thus the blood pressure initially increases after medetomidine injection due to an increase in systemic vascular resistance. The pressure reverts to normal or slightly below within 1 to 2 hours. The respiratory frequency may transiently be lowered.

Pharmacology:

Medetomidine is rapidly absorbed after intramuscular injection. Peak concentration is reached within 15 – 20 minutes. Medetomidine is well distributed in the brain (volume of distribution between 2.8L/kg to 3.5L/kg. It is readily metabolised and excreted in the urine and in the faeces (half lives of elimination ranging from 1 to 1.6 hours).

The duration and degree of the sedative and analgesic effects depend on the dose administered. During maximal effect the animal is relaxed, lies down and does not react to external stimuli. Marked synergistic effects have been demonstrated between medetomidine and cyclohexamine compounds such as ketamine, and between medetomidine and opiate drugs such as fentanyl, producing deep anaesthesia. Similarly medetomidine has a very potent ability to reduce dose requirements of intravenous and inhalation anaesthetics.

Indications:

DOGS: Sedative, analgesic for use in the restraint of dogs for clinical examinations and procedures, minor surgery and pre-anaesthesia.

CATS: Sedative for restraint.

Directions for Use: Restraints:

NOT FOR USE in food producing animals.

Contraindications:

The use of Ilium Medetomidine Injection in pregnancy has not been monitored in sufficient animals and is, therefore not recommended. Ilium Medetomidine Injection should not be used with sympathomimetic amines.

Precautions:

Care should be taken with the use of Ilium Medetomidine Injection in animals with cardiovascular, respiratory, liver and kidney disease, hypotension, shock or in poor general health.

The concomitant use of other CNS depressants may potentiate the depressant effects of either product, and appropriate dose adjustments should be made. Due to the potent pharmacological activity of medetomidine, skin contact with Ilium Medetomidine Injection should be avoided. Wipe of excessive spillage on the skin of animals.

Side Effects:

Due to the mechanism of action of Ilium Medetomidine Injection, heart rate and body temperature decrease. Treated animals should be kept warm in an even temperature for 12 hours after sedation. Blood pressure will initially increase and then return to normal or slightly below. This is accompanied by a compensatory decrease in heart rate. Some dogs and most cats will vomit, (particularly if recently fed), 5 to 10 minutes post-injection. Some cats may also vomit at recovery. Occasionally muscle jerking in limbs has been observed.

ILIMUM MEDETOMIDINE INJECTION (CONT)

Dosage and Administration:

Use the contents of this vial within three months of first broaching. Discard the unused contents.

For intramuscular of intravenous injection in dogs and intramuscular injection in cats.

Dose Rate: DOGS (IM or IV Injection)		
Effect	Dose (μ G/KG)	Quantity (mL per 10kg)
Mild sedation	10-30	0.1-0.3
Moderate- sedation + analgesia	30-80	0.3-0.8
Pre-anaesthesia	10-20	0.1-0.2
Dose Rate: CATS (IM Injection)		
Effect	Dose (μ G/KG)	Quantity (mL per 10kg)
Mild sedation	500-100	0.25-0.5
Deep sedation	100-150	0.50-0.75

To get an equal effect, the higher recommended doses per kg body weight have to be used in small dogs compares in large dogs.

Maximal effect is obtained within 10 to 15 minutes. Duration of the clinically useful effect is dose related – 30 to 120 minutes (sedation), 30 to 150 minutes (analgesia). The dose can be repeated if necessary. The duration of analgesia is generally shorter than the duration of sedation. Both analgesic effect and sedative effect are reversed with the use of atipamezole injection.

Overdosage: In case of overdosage, atipamezole can be used. The administration of anticholinergic agents (atropine or glycopyrrolate) to treat bradycardia either simultaneously with medetomidine could lead to adverse cardiovascular effects.

First Aid:

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone New Zealand 0800 764 766 (0800 POISON).

Disposal:

Dispose of empty container by wrapping with paper and putting in garbage.

Storage:

Store below 30°C (room temperature). Protect from light.

Presentation:

10mL Injection.

Registered pursuant to the ACVM Act 1997, No A10465
RESTRICTED VETERINARY MEDICINE
Ilium Medetomidine Injection
For Animal Treatment Only

