

Atipamezole:

SCHEDULING STATUS: S4

CURRENTLY COMPOUNDED FORMULATIONS:

Active ingredient(s)	Injectable	Oral equine paste	Oral carnivore paste	Orals for exotics	Oral solution/suspension	Topical treatment	Shampoo	Capsules/Tablets	Oral powder
Atipamezole hydrochloride	✓								

REGISTERED PRODUCT/ TRADE NAME: Antisedan®

PHARMACOLOGICAL CLASSIFICATION: Alpha₂-adrenergic antagonist

PHARMACOLOGICAL ACTION: Atipamezole competitively inhibits alpha₂-adrenergic receptors, thereby acting as a reversal agent for alpha₂-adrenergic agonists (e.g. medetomidine). Net pharmacologic effects are to reduce sedation, decrease blood pressure, increase heart and respiratory rates and reduce the analgesic effects of alpha₂-adrenergic agonists.^[1]

INDICATIONS: Atipamezole is used as a reversal agent for medetomidine and demedetomidine. It potentially could be useful for reversal of other alpha₂-adrenergic agonists as well, such as amitraz and xylazine.^[1]

DOSAGE AND DIRECTIONS FOR USE:

DOGS:

For amitraz toxicity: 50 mcg/kg IM (Hugnet, Buronrosse et al. 1996)^[1]

For reversal of medetomidine:

- give 5 times the previously administered medetomidine dose.^[2]
- can be given IV as well as IM. If it has been at least 45 minutes since medetomidine was given, may give atipamezole at half the volume of medetomidine if administered IV. If after 10 – 15 minutes an IM dose of atipamezole has not seemed to reverse the effects of medetomidine, an additional dose of atipamezole at half the volume of the medetomidine dose may be given. (McGrath and Ko 1997)^[1]

CATS:

For reversal of medetomidine, give 2.5 times the previously administered medetomidine dose.^[2]

HORSES:

For reversal of medetomidine: 150 mcg/kg^[2]

WILDLIFE:

Range 0.2-1 mg/kg. Recommendations for carnivores are 2.5-5 times the mg equivalent of medetomidine. It is recommended that it be given IM, as IV administration often results in excitement.^[3]

As described in literature, atipamezole can be used in cases of emergency for reversal of acute opioid intoxication in humans.

WARNINGS/ PRECAUTIONS/ CONTRA-INDICATIONS:

- Not recommended in pregnant or lactating animals due to the lack of data establishing safety.^[1]
- Caution should be used in administration of anesthetic agents to elderly or debilitated animals.^[1]

- Potential adverse effects include occasional vomiting, diarrhea, hypersalivation, tremors and brief excitation or apprehensiveness.^[1]
- Because reversal can occur rapidly, care should be exercised as animals emerging from sedation and analgesia may exhibit apprehensive or aggressive behaviours.^[1]

REFERENCES:

1. Plumb's Veterinary Drug Handbook, Sixth edition by Donald C. Plumb
2. The Veterinary Formulary, Sixth Edition, Edited by Yolande Bishop
3. Chemical and Physical Restraint of Wild Animals, Second Edition, Edited by Michael D. Kock, and Richard Burroughs