

Acepromazine

- Drug Information

Brand Names:

PromAce®, Aceproject®, Aceprotabs®

Pharmacology:

Phenothiazine neuroleptic tranquilizer with some antiemetic, anticholinergic, antihistaminic, alpha adrenergic blocking and antispasmodic effects.

No analgesic properties.

Indications:

Depending on product, acepromazine is approved for use in dogs, cats and horses as a pre anesthetic, tranquilizer, antiemetic for motion sickness, antipruritic for skin irritation.

Has been shown to reduce the incidence of malignant hyperthermia associated with halothane anesthesia in susceptible pigs.

Contraindications:

- General

Contraindicated in patients with epilepsy - lowers the seizure threshold.

Caution in debilitated or very young - alters thermoregulation.

Caution in geriatric animals as the effects may be prolonged.

Caution in animals with strychnine or organophosphate poisoning, animals treated with succinylcholine or other cholinesterase inhibitors.

Caution in animals with liver and heart disease.

Caution in animals with hypovolemia or shock.

Do not inject intraarterially.

- Small Animal

- Dog

Use caution in giant breeds, greyhounds, boxers as they may be overly sensitive to the hypotensive effects.

Use with caution in terrier breeds as they can be somewhat resistant to the effects.

Use with caution as a restraining agent in aggressive dogs - they may be more prone to startle and noise reactions.

- Rodent

Do not use in gerbils.

- Large Animal

- Horse

Do not use in horses intended for human consumption.

Do not use in racing horses within 4 days of racing.

Use with caution in stallions as injury to the penis may result - see adverse effects section.

Do not administer intra-arterially in horses because it may cause severe CNS excitement/depression, seizures, and death.

Interactions:

- General Interactions

No identified General Interactions at time of publishing.

- Category Interactions

- Aminoglycoside Antibiotic

May mask the ototoxic effects of aminoglycosides.

- Anesthesia

Doses of general anesthesia may need to be lowered if used concurrently.

- Antacid

May slow GI absorption of oral form of Acepromazine.

- Anticholinergic

May have additive anticholinergic effects.

- Antidiarrheal

May slow GI absorption of oral form.

- Antiemetic

Concurrent use of dolasetron, Granisetron, or ondansetron may increase risk for QT interval prolongation, cardiac arrhythmias, and torsade de pointes.

- Barbiturates

May increase metabolism of acepromazine and decrease it's effects.

- Blood pressure treatment

May increase risk for hypotension and orthostasis.

- CNS depressant

May cause additive effects of sedation, hypotension and respiratory depression.

- Emetic

May reduce the effect of emetics.

- Hepatic enzyme inhibitor

Metabolism of other cytochrome P-450 metabolized drugs may be altered.

- Opiate agonist

May enhance the hypotensive effects of acepromazine; doses of acepromazine are generally reduced when used with an opiate.

- Organophosphate

May be potentiated. Do not use within 1 month of each other.

- Protein bound drug

May displace other highly protein bound drugs resulting in increased activity of both.

- TCA - Tricyclic Antidepressant

May increase sedation and anticholinergic effects.

- **Drug Interactions**

- Acetaminophen

Possible increased risk for hypothermia.

- Atropine sulfate

May have additive anticholinergic effects.

- Cisapride

Concurrent use with phenothiazines may increase risk for QT interval prolongation, cardiac arrhythmias, torsade de pointes, and death. Combination is contraindicated.

- DOPamine

May impair the vasopressive effects of DOPamine.

- EPINEPHrine

Should not be used to treat hypotension as further reduction in blood pressure may result.

- FLUoxetine

May increase levels of chlorpromazine because of inhibition of cytochrome P450 2D6 isozyme. This interaction may potentially apply to acepromazine. Use cautiously and monitor.

- Metoclopramide

Enhanced extrapyramidal (tremors) are possible.

- MetroNIDAZOLE

May increase risk for QT interval prolongation, cardiac arrhythmias, and torsade de pointes. Use cautiously and monitor.

- Phenylpropanolamine

Humans on PPA have experienced sudden death when given acepromazine concurrently.

- Phenytoin sodium

Metabolism may be slowed.

- Propranolol

May cause increased blood levels of both if given concurrently.

- QuiNIDine

May cause additive cardiac depression.

Adverse Effects:

- **General**

Much individual variability in dose response.

Hypotension and bradycardia may occur - can cause cardiovascular collapse in all species.
 Causes IM injection site pain
 Can cause aggression and CNS excitation in some individuals.
 Other reported effects include death, constipation, sinus bradycardia, depression of myocardial contractility, convulsions, shock, vomiting, apnea, dyspnea, and hypothermia.
 Can mask ototoxicity associated with aminoglycoside antibiotics.
 Geriatric animals may have prolonged effects.
 May discolor urine to pink or red brown color - this is no problem.

- Small Animal

- Dog

Causes third eyelid prolapse.

Giant breeds, greyhounds, boxers and terriers may be overly sensitive to effects.

- Cat

Causes third eyelid prolapse and decreased tear production.

- Large Animal

- Cattle

May cause regurgitation of ruminal contents when inducing general anesthesia.

- Horse

Causes protrusion of the penis - use caution when using in stallions.

Horses may react violently to sudden noise-use caution.

Intra arterial injections in the horse in contraindicated-can cause CNS excitation, seizures and possibly death.

Other possible effects include excitement, restlessness, sweating, trembling, tachypnea, tachycardia and rarely seizures and recumbency.

Dose dependent reduction in hematocrit may occur 30 minutes after dose.

Dosages:

- General

Veterinary approved products are labeled for use in dogs, cats and horses, depending on specific product. Use in other species is considered extra label.

Dose requirement in mg/ pound. decrease as weight increases.

Manufacturer dose is thought to be 10 times greater than necessary for most indications.

Give IV doses slowly.

Allow 10 - 15 minutes for onset of action.

- Small Animal

- Dog

Labeled dosage (FDA-approved): As an aid in controlling intractable animals, alleviate itching as a result of skin irritation; as an antiemetic to control vomiting associated with motion sickness and as a preanesthetic agent: 0.55 - 2.2 mg/kg by mouth (dogs) or 0.55 - 1.1 mg/kg (dogs) IV, IM, or SQ.

The labeled dosage is considered by most clinicians to be 10 times (or more) greater than is necessary for most indications; consider using dosages below.

Give IV doses slowly; allow at least 15 minutes for onset of action

Sedation, tranquilization, premedication, or restraint (extra-label): Injectable: 0.01 - 0.2 mg/kg IV (slowly), IM, or SQ once.

Total dose should not exceed more than 3 mg. "Common" dosages usually are 0.02 - 0.03 mg/kg.

Oral: Anecdotal dosage recommendations vary widely but generally are similar to the labeled dosage range of 0.55 - 2.2 mg/kg, although some think that dosages at the higher end of this range are too high.

If oral dosages require repeating, they are usually given every 6 - 12 hours.

- Cat

Labeled dosage (FDA-approved): As an aid in controlling intractable animals, alleviate itching as a result of skin irritation; as an antiemetic to control vomiting associated with motion sickness and as a preanesthetic agent: 1.1 - 2.2 mg/kg (cats) IV, IM, or SQ.

The labeled dosage is considered by most clinicians to be 10 times (or more) greater than is necessary for most indications; consider using dosages below.

Give IV doses slowly; allow at least 15 minutes for onset of action

Sedation, tranquilization, premedication, or restraint (extra-label): Injectable: 0.01 - 0.2 mg/kg IV (slowly), IM, or SQ once.

Total dose should not exceed more than 1 mg .

"Common" dosages usually are 0.02 - 0.03 mg/kg.

Oral: Anecdotal dosage recommendations vary widely but generally are similar to the labeled dosage range of 0.55 - 2.2 mg/kg, although some think that dosages at the higher end of this range are too high.

If oral dosages require repeating, they are usually given every 6 - 12 hours.

- Rodent

0.5 - 1 mg/kg IM preanesthetic. Not for gerbils.

- Rabbit

Tranquilizer: 1 mg/kg IM Effect should begin in 10 minutes and last for 1 to 2 hours.

As a premed: 0.1 - 0.5 mg/kg SQ; 0.25 - 2 mg/kg IV, IM, SQ 15 min prior to induction.

- Ferret

0.1 - 0.25 mg/kg IM, SQ

- **Large Animal**

- Cattle

0.01 - 0.1 mg/kg IV, IM or SQ.

- Horse

Labeled dosage (FDA-approved): As an aid in controlling fractious animals and in conjunction with local anesthesia for various procedures and treatments: 0.044 - 0.088 mg/kg (2 - 4 mg/100 pound body weight) IV (slowly), IM, or SQ

Doses > 0.2 mg/kg may cause recumbency.

Sedation, tranquilization, premedication, vasodilator (laminitis); (extra-label): When used alone, acepromazine is usually dosed similarly to the label: 0.02 - 0.1 mg/kg IM, IV, or SQ.

When used in combination with drugs such as butorphanol as a premedication or to increase blood flow in the treatment of laminitis, recommended dosages are usually on the low end of this range.

Repeat dosages should be limited and ideally given no more often than every 36 hours.

Anesthetic premedication, tranquilization, or sedation (extra-label in US): 0.03 - 0.1 mg/kg IM or slow IV.

Following acepromazine administration, the amount of anesthetic necessary to induce anesthesia is considerably reduced (by approximately one-third of a suitable induction agent).

Normally, single doses of acepromazine are administered; long-term use is not recommended. On rare occasions when repeat dosing is required, the dosing interval should be 36 to 48 hours.

Lower dosages may reduce anxiety and be beneficial before shoeing or transportation; higher dosages may be effective sedative as an adjunct to or replacement for physical restraint

- Sheep

All dosages are extra-label.

0.05 - 0.1 mg/kg IM, IV or SQ

- Goat

0.05 - 0.1 mg/kg IM, IV or SQ

- Swine

All dosages are extra-label.

0.03 - 0.1 mg/kg IV, IM or SQ

Special Notes:

None