**Tolazoline hydrochloride**

**Description**
Tolazoline hydrochloride is a combination alpha-one and alpha-two antagonist developed to reverse the sedation and analgesia effects of xylazine hydrochloride. Tolazoline hydrochloride was developed and marketed for use in horses by Lloyd Laboratories in the 1990s. It was approved under the trade name Tolazine in 1996. Prior to this tolazoline was available as the human formulation trademarked Priscoline at a concentration of 25 mg/ml from Novartis.

**Indications: Wildlife Management**
In field applications, as a general rule, tolazoline is more effective in antagonism of an alpha-two agonist in the non-domestic members of the family Bovidae. It appears to be equal to yohimbine in Cervidae although veterinarians in the field have reported seizures in some of Asian species of deer when tolazoline was used to reverse xylazine [Bush, R. 1999. Personal communication]. Some of the key literature regarding tolazoline use in non-domestic species is as follows:


**Indications: Domestic Species**
Tolazoline HCl is used in horses to reverse the effects of sedation and analgesia from xylazine HCl. Studies conducted by Lloyd Laboratories have demonstrated efficacy of tolazoline in reversing xylazine sedation in cattle. [Powell et al. 1998. *JAVMA* 212(1):90-92]

**Chemistry & Pharmacology**
Tolazoline hydrochloride belongs to the synthetic group of alpha-adrenergic blocking agents known as imidazole derivatives. It is a mixed alpha-1 and alpha-2 adrenergic receptor antagonist that competitively inhibits alpha-adrenoreceptors. Tolazoline is also a direct peripheral vasodilator that decreases peripheral resistance and increases venous capacitance. [Tranquilli et al. 1984. *JAVMA* 184:1400-1402]

Chemically, tolazoline hydrochloride is 1H-imidazole,4,5-dihydro-2{phenylmethyl}-monohydrochloride.

**Pharmacokinetics**
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For ordering details contact us at: 866-823-9314 info@wildpharm.com
Tolazoline hydrochloride was approved by FDA in 1996 in a 100mg/ml concentration. Tolazoline hydrochloride is routinely compounded and available from ZooPharm in a 200mg/ml concentration in 30 ml multiple use vials.

How Supplied

Heart rate may briefly increase immediately after tolazoline injection at the recommended dose with a return to pre-treatment rate within 5-10 minutes. In safety studies, the degree and duration of tachycardia increased with higher doses, although the increased rate usually lasted less than 60 minutes.

WARNING:
Tolazoline hydrochloride is not for use in food-producing animals.

Caution Tolazoline hydrochloride should not be administered to animals exhibiting signs of stress, debilitation, cardiac disease, sympathetic blockage, hypovolemia or shock.

ADVERSE REACTION
When administered without prior xylazine administration in horses, tolazoline hydrochloride caused gastrointestinal hypermotility. Some horses exhibited mild colic and transient diarrhea.

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