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| Drug | Concentration  | Dose /route  | Vol calculated | Withdrawal time | Indication  |
| Tolazoline  | 100mg/ml | 0.05mg/kgSlow IV | **Bovine**(500kg x 0.05mg/kg)100mg/ml=0.25ml**Canine**(75kg x 0.05mg/kg)100mg/ml=0.0375ml | Milk: noneMeat:30 days | Reverse effects of xylazine (sedation and analgesia) |
| Atropine  | 0.54mg/ml | 0.04mg/kg¼ IV and the rest IM/SC | **Bovine** (500kg x 0.04mg/kg)0.54mg/ml=37ml**Canine**(75kg x 0.04mg/kg)0.54mg/ml=5.6ml | Milk: 3 daysMeat: 14days | -reduce secretions of resp tract-reverse sinus bradycardia (<30bpm), sinoatrial arrest, incomplete AV block |
| Epinephrine  | 1mg/ml | 0.02mg/kgIV ¼-1/2 ofIM dose if necessary  | **Bovine** (500kg x 0.02mg/kg)1mg/ml=10ml**Canine**(75kg x 0.02mg/kg)1mg/ml=1.5ml | None  | anaphylactic shock-cardiac resuscitation  |

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| Drug  | Contraindication  | Side effects |
| Tolazoline  | Animals with circulatory and cardia issues.If sings of stress, debilitation, cardiac disease, sympathetic blockage, hypovolemia or shock. | Tachycardia, peripheral vasodilation, bright pink to dark red mucus membranes, hyperalgesia of lips (licking/flipping of lips seen) |
| Atropine  | Narrow angle glaucoma, tachycardias, ileus, urinary obstruction | -dry mouth (xerostomia), dysphagia, constipation, vomiting, and thirst.- urinary retention or hesitancy- stimulation, drowsiness, ataxia, seizures, respiratory depression, etc- blurred vision, pupil dilation, cycloplegia, and photophobia- sinus tachycardia (at higher doses), bradycardia (initially or at very low doses), hypertension, hypotension, arrhythmias (ectopic complexes), and circulatory failure. |
| Epinephrine  | - Narrow-angle glaucoma- hypersensitivity to epinephrine- shock due to non-anaphylactoid causes- general anesthesia with halogenated hydrocarbons- during labor (may delay the second stage)- cardiac dilatation or coronary insufficiency (cases where vasopressor drugs are contraindicated (e.g., thyrotoxicosis, diabetes, hypertension, toxemia of pregnancy)- should not be used in areas with end artery blood flow (e.g. ears, digits, tail) | **-** Anxiety, tremor, excitability, vomiting,hypertension (overdosage), arrhythmias, hyperuricemia, & lactic acidosis (prolonged use or overdosage)- necrosis at the injection site.(if used repreatedly) |