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| Drug | Concentration | Dose /route | Vol calculated | Withdrawal time | Indication |
| Tolazoline | 100mg/ml | 0.05mg/kg  Slow IV | **Bovine**  (500kg x 0.05mg/kg)  100mg/ml  =0.25ml  **Canine**  (75kg x 0.05mg/kg)  100mg/ml  =0.0375ml | Milk: none  Meat:30 days | Reverse effects of xylazine (sedation and analgesia) |
| Atropine | 0.54mg/ml | 0.04mg/kg  ¼ 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 days  Meat: 14days | -reduce secretions of resp tract  -reverse sinus bradycardia (<30bpm), sinoatrial arrest, incomplete AV block |
| Epinephrine | 1mg/ml | 0.02mg/kg  IV ¼-1/2 of  IM 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) |