Drug calculations

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| Drug | What is it used for | Withdrawal time | Contraindications |
| Xylazine | An agonist at the α2 class of adrenergic receptor. Used for sedation, anesthesia, muscle relaxation, and analgesia in animals | Meat -4 days  Milk - 1 day | Should not be used in animals with known hypersensitivity or allergy to the drug. |
| Ketamine | Ketamine is a rapid acting general anesthetic that has significant analgesic activity and a lack of cardiopulmonary depressant effects. | 3 days for meat and 48 hours for milk. | When using ketamine in combination with an alpha-two agonist, one should always let at least 20 minutes pass before reversing the alpha-two to ensure that the ketamine has been metabolized and that no ketamine effect is left. |
| Tolazanine | Combination alpha-one and alpha-two antagonist developed to reverse the sedation and analgesia effects of xylazine | Meat -8 days  Milk - 2 days | Heart rate may briefly increase immediately after tolazoline injection at the recommended dose with a return to pre-treatment rate within 5-10 minutes. |
| Atropine/ epinephrine | Used to stimulate the heart in cpr. | - | Should be avoided in pregnant animals  Should not be given to animals with heart irregularities |
| Flunixin | Used to treat pain and inflammation  Postoperative period to reduce pain associated with surgical procedures. | Meat - 30 days  Milk - 3 days | Should not be used in animals with known hypersensitivity or allergy to the drug  Should be avoided in animals with liver, kidney, heart, or blood abnormalities. |
| Pen/strep | Combination of penicillin and dihydrostreptomycin used for preventing and treating infections caused by penicillin and dhs susceptible microorganisms | 30 days for meat  10 days for milk | Do not use in animals known to be hypersensitive to the components of the product or if they have renal failure.  Should not be given iv |
| Lidocaine  Toxic dose and  ½ toxic dose | Use as a local and topical anesthetic agent. | 24 to 36 hours withdrawal period for meat and milk. | Lidocaine is contraindicated in animals with a known hypersensitivity to the drug. |