

Rabbit Anesthesia/Analgesia

Recommended Best Practices

Note that all of these doses are approximations and must be titrated to the animal's strain, age, sex and individual responses. Significant departures from these doses should be discussed with a veterinarian. Doses will also vary depending on what other drugs are being administered concurrently.

All doses are listed as milligrams per kilogram (mg/kg) unless otherwise noted. (source UCSF)

| DRUG NAME | DOSE (mg/kg) & ROUTE | FREQUENCY | NOTES |
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| Inhalation anesthetics | | | |
| Recommended: Isoflurane | 1-3% inhalant to effect (up to 5% for induction) | Whenever general anesthesia is required | Survival surgery should have concurrent preemptive analgesia. Must use precision vaporizer. Mask or chamber induction without injected pre-medication may result in breath-holding and injury. |
| Ketamine combinations | | | |
| Recommended: Ketamine-Xylazine | 35 – 50 + 5-10 IM or SC (in same syringe or with xylazine administered 10-20 minutes in advance) | As needed | May not produce surgical-plane anesthesia for major procedures. If redosing, use ketamine alone. May be partially reversed with Atipamezole or Yohimbine. Note that IM Ketamine combinations often sting upon injection. |
| Ketamine-Medetomidine | 35 - 50 + ~ 0.5 IM or SC (in same syringe, or with medetomidine administered 10-20 minutes in advance) | As needed | May not produce surgical-plane anesthesia for major procedures. If redosing, use ketamine alone. May be partially reversed with Atipamezole. Note that IM Ketamine combinations often sting upon injection. |
| Ketamine-Xylazine-Acepromazine | 35-40 + 3 - 5 + 0.75 – 1.0 IM or SC (in same syringe) | As needed | May not produce surgical-plane anesthesia for major |

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| | | | procedures. If redosing, use ketamine alone. May be partially reversed with Atipamezole or Yohimbine. Note that IM Ketamine combinations often sting upon injection. |
| Ketamine-Midazolam | 35 - 50 + ~ 2 IM or SC (in same syringe) | As needed | May not produce surgical-plane anesthesia for major procedures, but may be useful for restraint. Note that IM Ketamine combinations often sting upon injection. |
| Reversal agents | | | |
| Atipamezole | 0.1 - 1.0 subcutaneous or IP | Any time medetomidine or xylazine has been used | More specific for medetomidine than for xylazine (as a general rule, Atipamezole is dosed at the same <i>volume</i> as Medetomidine, though they are manufactured at different concentrations) |
| Yohimbine | ~ 0.2 IV or SC | For reversal of xylazine effects | |
| Other injectable anesthetics | | | |
| Sodium pentobarbital (Nembutal) | 20 - 60 IV; 40 IP | Best for terminal/acute procedures only, with booster doses as needed | Consider supplemental analgesia (opioid or NSAID) for invasive procedures. Apnea is common at anesthetic doses. |
| Opioid analgesia | | | |
| Recommended: Buprenorphine | 0.05 - 0.1 SC or IP | Used pre-operatively for preemptive analgesia and post-operatively every 6-12 hour | For major procedures, require more frequent dosing than 12 hour intervals. Consider multi-modal analgesia with a NSAID |
| Non-steroidal anti-inflammatory analgesia (NSAID) - Note that prolonged use may cause renal, gastrointestinal, or other problems | | | |
| Recommended: Carprofen | 4-5 SC | Used pre-operatively for preemptive analgesia and post- | Depending on the procedure, may be used as sole analgesic, or as multi-modal analgesia |

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| | | operatively every 12-24 hour | with buprenorphine. |
| Meloxicam | 0.1 – 0.3 PO, IM or SC | Used pre-operatively for preemptive analgesia and post-operatively every 24 hour for up to 4 days. | Depending on the procedure, may be used as sole analgesic, or as multi-modal analgesia with buprenorphine. |
| Ketoprofen | 2 – 5 SC | Used pre-operatively for preemptive analgesia and post-operatively every 12-24 hour | Depending on the procedure, may be used as sole analgesic, or as multi-modal analgesia with buprenorphine. |
| Local anesthetic/analgesics (lidocaine and bupivacaine may be combined in one syringe for rapid onset and long duration analgesia) | | | |
| Lidocaine hydrochloride | Dilute to 0.5%, do not exceed 7 mg/kg total dose, SC or intra-incisional | Use locally before making surgical incision | Faster onset than bupivacaine but short (<1 hour) duration of action |
| Bupivacaine | Dilute to 0.25%, do not exceed 8 mg/kg total dose, SC or intra-incisional | Use locally before making surgical incision | Slower onset than lidocaine but longer (~ 4-8 hour) duration of action |