

## Commonly Used Therapeutic Drugs in Rodents

| Common Medical Conditions | Treatment   |
|---------------------------|---|
| Dermatitis, bite wounds   | Clip hair and clean with 0.2% chlorhexidine solution or betadine solution |
|                           | Triple antibiotic ointment, ophthalmic preparation if lesion near eyes    |
|                           | Silvadene cream   |
|                           | Collasate Spray or Ointment   |
|                           | Zn7 Derm Spray or Ointment  |
|                           | Carprofen (5-20 mg/kg SQ) , Meloxicam ( 5-10 mg/kg SQ)                    |
| Eye infections            | Triple antibiotic ophthalmic ointment                                     |
| Systemic infections       | Enrofloxacin (10 mg/kg SQ)  |

Note 1: After notification of a rodent health concern as described above, the facility manager or designee should initiate treatment according to the table. The health concern should be noted on the “Animal Health Concern Form” (CMDC 155) for follow-up by a veterinarian.

Note 2: Initiation of the treatment should be annotated on the “Progress Notes Form” (CMDC 013) in the room log book according to **SOP 006: Animal Health and Environmental Surveillance.**

Note 3: All treatments are BID for 7 days.

Note 4: Systemic antibiotics should only be administered after consultation with a Veterinarian unless described in the IACUC protocol

## Baytril (enrofloxacin) Dilution Preparation for Rats

### Use Sterile Technique!

1. Always decontaminate the Baytril vial, NaCl bag port, and NaCl vials with ethanol **before** inserting a sterile needle, withdrawing compound, or injecting drug.
2. To prepare the mixture:
  - a. If using Baytril (enrofloxacin) 2.27% (22.7mg/ml) stock solution
    - 1) To make a 10ml Vial
      - i. Use a prepackaged sterile 10ml 0.9%NaCl preservative free vial
      - ii. Remove 2.2mls NaCl
      - iii. Add 2.2 mls Baytril (22.7mg/ml) stock solution
      - iv. Final concentration of new dilution is 5mg/ml
    - b. If using Baytril (enrofloxacin) 100mg/ml stock solution
      - 1) To make a 10ml vial
        - i. Use a prepackaged sterile 10ml 0.9%NaCl preservative free vial
        - ii. Remove 0.5 mls NaCl
        - iii. Add 0.5 mls Baytril stock solution (100mg/ml)
        - iv. Final concentration of new dilution is 5 mg/ml
      - 2) To make a 100ml Bag
        - i. Use a sterile 100ml bag of 0.9% NaCl
        - ii. **Remove 5mls of NaCl**
        - iii. Add 5mls Baytril (100mg/ml) stock solution
        - iv. Final concentration of new dilution is 5mg/ml
  3. Label the vial as follows:
    - a. Name of the drug (Baytril/NaCl solution)
    - b. Strength of the drug (5mg Baytril/ml)
    - c. Day of constitution
    - d. Initials of constituting technician
    - e. Dose of the drug for rats (10 mg/kg BW, SQ)
    - f. Baytril injection volumes for rats (based on grams of body weight (BW))
      - 1) 250 gm BW = 0.50 ml
      - 2) 275 gm BW = 0.55 ml
      - 3) 300 gm BW = 0.60 ml
      - 4) 325 gm BW = 0.65 ml
      - 5) 350 gm BW = 0.70 ml
      - 6) 375 gm BW = 0.75 ml
      - 7) 400 gm BW = 0.80 ml
      - 8) 425 gm BW = 0.85 ml
      - 9) 450 gm BW = 0.90 ml
      - 10) 475 gm BW = 0.95 ml
      - 11) 500 gm BW = 1.00 ml
    - g. "Decontaminate vial port with ethanol prior to each withdrawal."
    - h. "Discard vial and contents on \_\_\_\_ (date 28 days after constitution), or if solution changes in appearance, e.g. discoloration, precipitation, opacity."

4. Expiration date: 28 days after constitution

## Baytril (enrofloxacin) Dilution Preparation for Mice

### Use Sterile Technique!

1. Always decontaminate the Baytril vial, NaCl bag port, and NaCl vials with ethanol before inserting a sterile needle, withdrawing compound, or injecting drug.
2. To prepare the mixture:
  - a. If using Baytril (enrofloxacin) 2.27% (22.7mg/ml) stock solution
    - 1) To make a 10ml Vial
      - i. Use prepackaged 10ml sterile 0.9% NaCl preservative free vial
      - ii. Remove 0.45 ml NaCl from Vial
      - iii. Add 0.45 ml Baytril (22.7mg/ml) stock solution
      - iv. Final concentration of new dilution is 1.0 mg/ml
    - 2) To make a 100ml Bag
      - i. Use prepackages 100ml sterile 0.9% NaCl preservative free vial
      - ii. Remove 0.1ml NaCl from vial
      - iii. Add 0.1ml Baytril (100mg/ml) stock solution
      - iv. Final Concentration of new dilution is 1.0 mg/ml
  - b. If using Baytril (enrofloxacin) 100mg/ml stock solution
    - 1) To make a 10ml vial
      - i. Use prepackages 10ml sterile 0.9% NaCl preservative free vial
      - ii. Remove 0.1ml NaCl from vial
      - iii. Add 0.1ml Baytril (100mg/ml) stock solution
      - iv. Final Concentration of new dilution is 1.0 mg/ml
    - 2) To make a 100ml Bag
      - i. Use a sterile 100ml bag of 0.9% NaCl
      - ii. Remove 1ml NaCl from bag of 0.9% NaCl
      - iii. Add 1.0ml Baytril (100mg/ml) stock solution
      - iv. Final Concentration of new dilution is 1.0 mg/ml
3. Label the **vial** as follows:
  - a. Name of the drug (Baytril/saline solution)
  - b. Strength of the drug (1mg Baytril/ml)
  - c. Day of constitution
  - d. Initials of constituting technician
  - e. Dose of the drug for **mice** (10.0 mg/kg BW, SQ)
  - f. Baytril injection volumes for **mice** (based on grams of body weight BW):
    - 1) 15 gm BW = 0.15 ml
    - 2) 20 gm BW = 0.20ml
    - 3) 25 gm BW = 0.25 ml
    - 4) 30 gm BW = 0.30 ml
    - 5) 35 gm BW = 0.35 ml
    - 6) 40 gm BW = 0.40 ml
    - 7) 45 gm BW = 0.45 ml
  - a. "Decontaminate vial port with ethanol **prior to each withdrawal.**"
  - b. "Discard vial and contents on \_\_\_\_ ( date 28 days after constitution), or if solution changes in appearance, e.g. discoloration, precipitation, opacity."
4. Expiration date: 28 days after constitution

## Carprofen Dilution Preparation for Rats

### Use Sterile Technique!

1. Always decontaminate the Carprofen vial stopper, sterile 0.9% NaCl vials, and 0.9% NaCl Bags with ethanol **before** inserting a sterile needle.
2. To prepare the mixture:
  - a. Using a 100ml bag of sterile NaCl
    - 1) Remove 5.0 mls NaCl from 100ml bag
    - 2) Add 5.0 ml Carprofen (50mg/ml stock solution)
  - b. Using a 10ml vial of NaCl
    - 1) Remove 0.5 ml NaCl from 10ml vial
    - 2) Add 0.5 ml Carprofen (50mg/ml stock solution)
3. Label the **bag / vial** as follows:
  - a. name of the drug (Carprofen/saline solution)
  - b. strength of the drug (2.5 mg Carprofen/ml)
  - c. date of constitution
  - d. initials of constituting technician
  - e. dose of the drug for **rats** (5 mg/kg BW, SQ)
  - f. Carprofen injection volumes for **rats** (body weight [BW]) SC:
    - 1) 250 gm BW = 0.50 ml
    - 2) 275 gm BW = 0.55 ml
    - 3) 300 gm BW = 0.60 ml
    - 4) 325 gm BW = 0.65 ml
    - 5) 350 gm BW = 0.70 ml
    - 6) 375 gm BW = 0.75 ml
    - 7) 400 gm BW = 0.80 ml
    - 8) 425 gm BW = 0.85 ml
    - 9) 450 gm BW = 0.90 ml
    - 10) 475 gm BW = 0.95 ml
    - 11) 500 gm BW = 1.00 ml
  - g. "Decontaminate bag port with ethanol **prior to each withdrawal.**"
  - h. "Keep refrigerated."
  - i. "Discard bag and contents on \_\_\_\_ (date 28 days after constitution), or if solution changes in appearance, e.g. discoloration, precipitation, opacity."
4. Expiration date: 28 days after constitution

## Carprofen Dilution Preparation for Mice

### Use Sterile Technique!

1. Always decontaminate the Carprofen vial stopper, sterile 0.9% NaCl vials, and 0.9% NaCl Bags with ethanol **before** inserting a sterile needle.
2. To prepare the mixture:
  - a. Using a 100ml bag of sterile NaCl
    - 1) Remove 2.0 mls NaCl from 100ml bag
    - 2) Add 2.0 ml Carprofen (50mg/ml stock solution)
  - b. Using a 10ml vial of NaCl
    - 1) Remove 0.2ml NaCl from 10ml vial
    - 2) Add 0.2ml Carprofen (50mg/ml stock solution)
3. Label the **bag / vial** as follows:
  - a. name of the drug (Carprofen/saline solution)
  - b. strength of the drug (1.0 mg Carprofen/ml)
  - c. date of constitution
  - d. initials of constituting technician
  - e. dose of the drug for **mice** (8-11 mg/kg BW, SQ)
  - f. Carprofen injection volumes for **mice** (body weight [BW]) SC:
    - 1) 15 g BW = 0.15 ml
    - 2) 20 g BW = 0.20 ml
    - 3) 25 g BW = 0.25 ml
    - 4) 30 g BW = 0.30 ml
    - 5) 35 g BW = 0.35 ml
  - g. "Decontaminate bag port with ethanol **prior to each withdrawal.**"
  - h. "Keep refrigerated."
  - i. "Discard bag and contents on \_\_\_\_ (date 28 days after constitution), or if solution changes in appearance, e.g. discoloration, precipitation, opacity."
4. Expiration date: 28 days after constitution

## Ketoprofen Dilution Preparation for Mice

### Use Sterile Technique!

1. Always decontaminate the ketoprofen vial stopper with ethanol **before** inserting a sterile needle.
2. Always decontaminate the saline bag port with ethanol **before** injecting the drug.
3. To prepare the mixture, inject **1.2 ml** ketoprofen (of the 100mg/ml strength) in a **150 ml** bag of sterile saline.
4. Label the bag as follows:
  - a. name of the drug (ketoprofen/saline solution)
  - b. strength of the drug (0.8 mg ketoprofen/ml)
  - c. day of constitution
  - d. initials of constituting technician
  - e. dose of the drug for **mice** (8-11 mg/kg BW, SQ)
  - f. ketoprofen injection volumes for **mice** (based on grams of body weight (BW):
    - 1) 15 g BW = 0.2 ml
    - 2) 20 g BW = 0.25 ml
    - 3) 25 g BW = 0.3 ml
    - 4) 30 g BW = 0.35 ml
    - 5) 35 g BW = 0.4 ml
  - g. "Decontaminate bag port with ethanol **prior to each withdrawal.**"
  - h. "Discard bag and contents on \_\_\_\_ (date 28 days after constitution), or if solution changes in appearance, e.g. discoloration, precipitation, opacity."
5. Label the **vial** as follows:
  - a. strength of the drug (0.8 mg ketoprofen/ml)
  - b. dose of the drug for **mice** (10 mg/kg BW, SQ)
  - c. Expiration date: (28days after constitution)

## Ketamine/Xylazine Dilution Preparation for Mice

### Use Sterile Technique!

1. Always decontaminate the Ketamine vial, Xylazine vial, and NaCl vials with ethanol before inserting a sterile needle, withdrawing or injecting drug.
2. To prepare the mixture:
  - a. To make a 10ml vial
    - 1) Use prepackaged 10ml sterile 0.9% NaCl preservative free vial
    - 2) Remove 1.1ml NaCl from vial
    - 3) Add 1.0ml Ketamine (100mg/ml) stock solution
    - 4) Add 0.1ml Xylazine (100mg/ml) stock solution
    - 5) Final concentration of new dilution is Ketamine 10mg/ml with Xylazine 1mg/ml
3. Labeling
  - a. **Label the vial** as follows:
    - 1) Name of the drug (Ketamine/Xylazine Injectable)
    - 2) Strength of the drug (Ketamine 1.0mg/ml with Xylazine 0.1mg/ml)
    - 3) Date prepared
    - 4) Dose of the drug for **mice** (0.1 mg/kg BW, SQ)
    - 5) Expires 24 hours after prepared
4. Ketamine/Xylazine injection volumes for **mice** (based on grams of body weight BW):
  - a. **Decontaminate vial port with ethanol** prior to each withdrawal.
    - 1) 15 gm BW = 0.15 ml
    - 2) 20 gm BW = 0.20ml
    - 3) 25 gm BW = 0.25 ml
    - 4) 30 gm BW = 0.30 ml
    - 5) 35 gm BW = 0.35 ml
    - 6) 40 gm BW = 0.40 ml
    - 7) 45 gm BW = 0.45 ml
5. Expiration date: 24 hours after prepared
  - a. Discard vial and contents 24 hours after dispensing, or if solution changes in appearance, e.g. discoloration, precipitation, opacity.”