



Standard Operating Procedures



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Name of Policy:	Ceftazidime Dilution, Prescribing and Dispensing Instructions	Departments:	Exotics, Emergency, Pharmacy
Category & No.:	EXO 1A.1	Effective by:	11/1/24
Version No.:	1	Revision History:	October 30, 2024

Purpose: To establish a consistent and efficacious dilution, prescribing and dispensing of the antibiotic ceftazidime to reptile species for administration at home and in hospital injections.

Definitions:

- Dilution: process of adding another solvent to a solution in order to decrease its concentration, hence, maintaining the amount of solute to a certain amount while increasing the total volume of the solution.
- IM: intramuscular

Materials Required:

- Ceftazidime 1 g vial – located in pharmacy
- U100 Insulin Syringes (30U, 50U, or 100U), or 1 ml syringe with appropriate needles
- Sterile Water
- Appropriate needles and syringes for reconstitution
- Large blue dram
- Light Sensitive Bag
- Prescription label x2
- “Keep Frozen” Labels x2

Procedure:

Step 1: Adding Prescription – Prescribing Doctor to Complete

1. Prescription Instructions:

- a. Quantity to Dispense: Typically one 1g vial, unless patient >2.5 kg may require multiple.
 - i. **Total Volume Obtained after Dilution per 1g vial:**
 1. 25 mg/ml: 44 ml
 2. 50 mg/ml: 22 ml
 3. 100 mg/ml: 11 ml
 4. 200 mg/ml: 5.5 ml
- b. Instructions:
 - i. Type Shorthand Text: **#ceftaz**
 1. Give #INPUT# mL by INTRAMUSCULAR injection every 72 hours, in alternating front limbs, for #INPUT# doses. Injectable Antibiotic.

KEEP FROZEN; thaw the individual syringe before each dose and push out residual air before administering.

- ii. Fill in quantity and number of doses.
- c. Add & Dispense
- d. Prescribe as inpatient
- 2. **Communication with Technician:**
 - a. Discuss with discharging exotics or ER technician that ceftazidime will be sent home.
 - b. Pharmacy will NOT reconstitute ceftazidime or pre-draw syringes to go home.

Step 2: Filling Medication – Technician

- 1. DVM communications with discharging exotics or ER technician that medications to go home have been prescribed
- 2. Exotics or ER Technician **obtains printed labels from pharmacy**, blue dram, light sensitive bag, prescription labels, keep frozen labels, syringes/needles to go home, sterile water, and syringes/needles to reconstitute
- 3. **Reconstitution:**
 - a. Obtain 1g vial of ceftazidime from pharmacy with labels
 - b. Add appropriate dilutant of Sterile Water:
 - i. Ceftazidime **25 mg/ml**: Add **40 ml** of sterile water
 - ii. Ceftazidime **50 mg/ml**: Add **20 ml** of sterile water
 - iii. Ceftazidime **100 mg/ml**: Add **10 ml** of sterile water
 - iv. Ceftazidime **200 mg/ml**: Add **5 ml** of sterile water
 - c. Add appropriate dilutant volume of sterile water in ceftazidime vial
 - i. Recommend placing 18g needle in cap during administration to allow release of air pressure in vial
 - d. Mix to combine
- 4. **Individual Dosages**
 - a. Draw up volume on prescription label in an appropriate insulin syringe for number of doses on the prescription label.
 - i. If <0.05 ml – recommend U100 30 unit syringes
 - ii. If 0.05-0.1 ml – recommend U100 50 unit syringes
 - iii. If >0.15 ml and appropriate patient size, consider 1 ml and 25g, 23g or 20g needle
 - b. Draw up volume, then draw back syringe to add excess air to avoid accidental purging of medication and to account for increased volume during freezing
 - c. Place pre-drawn syringes in a large blue dram, place prescription label and “Keep Frozen” sticker on dram.
 - i. With larger syringes, place directly in light sensitive bag and handle with caution.
 - d. Place large blue dram in light sensitive bag, place prescription label, and “Keep Frozen” sticker on bag.
 - e. Discard remaining reconstituted ceftazidime vial
- 5. **Medication Demo** to owner reviewing injections and dosing.