

PULMONARY ARTERIAL HYPERTENSION MEDICATION ADMIXTURE TIP SHEET

REVISED 6/2025

TIPS:

- ❖ 0.001 mg = 1 mcg = 1,000 ng (nanogram)
- ❖ Notify purchasing ASAP of patient admission, ensure that there is enough medication supply to last several days
- ❖ Ensure there are adequate supplies (i.e. syringes, tubing, cartridges).
- ❖ All products should be mixed to EXACT concentrations and volumes
 - Mix in empty 150 mL Intravia IV bag or in specified syringe for Sub Q administration (Crono Five or Smith Medical)
 - Do NOT use pre-packaged 0.9% sodium chloride bags
- ❖ Epoprostenol: Single Dose Vial, discard remainder of vial after use.
- ❖ Treprostinil: Multi Dose Vial. Do NOT discard vial after use.
 - Keep the remainder in the fridge and utilize labels to date and track use for reimbursement when the vial expires.
- ❖ Do not tube these drugs – they are very \$\$\$ and should not get lost in the tube system.
- ❖ Do not mix up a new bag or syringe based on a med message in EPIC. RNs should not request this drug; requests come from the RPh for refills
- ❖ Call ICU Pharmacist with any questions

EPOPROSTENOL (VELETRI®) FOR IV USE

PREP INSTRUCTIONS ADDED TO DISPENSE PREP FOR ADMIXING

1. Cath Lab/Angio patients for a Vasodilator Trial

- a. Dilute 1.5 mg vial of epoprostenol with 5 mL 0.9% sodium chloride (concentration = 300 mcg/mL)
- b. Withdraw 0.5 mL of diluted drug (150 mcg) and add to an empty sterile vial
 - i. Add 1 mL 0.9% sodium chloride to vial containing 150 mcg epoprostenol (concentration = 100 mcg/mL)
- c. Withdraw 0.5 mL (50 mcg) from vial and add to viaflex bag that contains 199.5 mL of 0.9% sodium chloride
 - i. Final concentration = 0.25 mcg/ mL; epoprostenol 50 mcg / 200 mL 0.9% sodium
- d. Send with a 0.22-micron filter
- e. BUD = Discard by 4 hr RT * [velettri-stability-of-infusion-solutions-at-a-concentration-of-less-than-3000-ngml](#)
- f. Discard remainder in vial of epoprostenol (SDV)

2. ICU patients

****WARNING: epoprostenol has a very short half-life (3 minutes) and any disruption in the infusion can lead to severe rebound pulmonary hypertension, a medical emergency. There should ALWAYS be one additional bag mixed and located in the refrigerator in KERN for all patients on epoprostenol****

- a. Admixture of epoprostenol if on LHS Alaris Pump for IV administration
 - i. Standard concentration = 15 mcg/mL (15,000 ng/mL)
 - ii. Dilute each 1.5 mg vial of epoprostenol with 5 mL of 0.9% sodium chloride, use clave to preserve port
 - iii. Add specified amount of epoprostenol to empty Intravia bag (or equivalent)
 - iv. Add specified amount of 0.9% sodium chloride to Intravia bag (or equivalent)

1,500 mcg	1 vial	5 ml epoprostenol	95 ml NS
3,000 mcg	2 vials	10 ml epoprostenol	90 ml NS
4,500 mcg	3 vials	15 ml epoprostenol	85 ml NS

- v. Cover with Protect from Light amber bag – due to light sensitivity of drug
- vi. Along with pink EPOPROSTENOL sticker, place an additional yellow expiration sticker on the amber bag with fridge expiration (example below)
 1. RN will fill in room temp expiration once removed from fridge
- vii. Send with 0.22-micron filter
- viii. Discard remainder in vial of epoprostenol (SDV)

3. Stability of epoprostenol, from 11/28/2022 package insert Janssen (Actelion MFR)

Specific Product Info	Velettri®
All uses (PAH patients: Kern and Cath Lab/Angio)	
Diluted SDV vial	Discard any remainder
Admixed CADD or IV bag	Admix using 0.9% sodium chloride <ul style="list-style-type: none"> • 15,000 - 60,000 ng/mL = 48 hr. room temp • All concentrations good for 8 days refrigerated
Light sensitivity	Protect from light with amber bag cover

Expiration Sticker:

Epoprostenol (VELETRI)

Fridge exp (8 days) ____/____/____ @ ____

Expires in 48hrs at room temp

****RN please date upon removal from fridge****

Room temp exp ____/____/____ @ ____

TREPROSTINIL (REMODULIN®) FOR IV USE

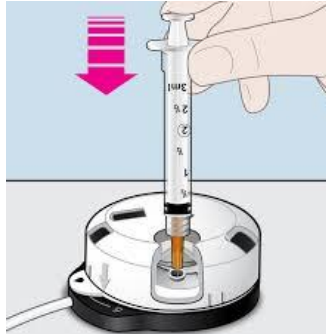
KEY POINTS: Treprostinil has a longer half-life than epoprostenol (3 – 4 hrs. vs. 3 min). Patients will be allowed to continue SQ infusions on 3NW and SQ/IV infusions in KERN. Back up bags/syringes are NOT required in KERN or 3NW.

****PAY ATTENTION TO TREPROSTINIL VIAL CONCENTRATIONS: 1 mg/mL, 2.5 mg/mL, 5 mg/mL, 10 mg/mL****

- a. Admixture of treprostinil if on LHS Alaris pump for IV administration; mix in standard LHS Concentration
 - i. 5,000 ng/mL = 5 mcg/mL (use the 1 mg/mL vial)
 - ii. 25,000 ng/mL = 25 mcg/mL, for patients on high rates of greater than 50 ng/kg/min (use 2.5 mg/mL vial)
- b. Add specified amount of treprostinil to empty Intravia bag (or equivalent)
- c. Add exact amount of 0.9% sodium chloride to Intravia bag ((or equivalent)
- d. Send with a 0.22-micron filter
- e. BUD = 48 hr. room temp
- f. Do NOT discard treprostinil vial since this is a multidose vial

2. Preparation of treprostinil SubQ pumps (mixed at LGS)

- a. **Remunity** SubQ Pump- see TEAMS > LGS Pharmacy > LGS Technicians find Remunity How To



b. **CADD MS3** SubQ pump

- i. Draw up the ordered concentration and volume into the specialized 3 mL syringe by Smith Medical (located next to treprostinil bins). Do not dilute.
- ii. Do not attach or prime tubing – send tubing with the syringe if requested by ICU pharmacist
 1. Two different tubing types
 - a. ICU pharmacist should specify type of CADD tubing needed
 - i. MedStream MS114 or CLEO 90
- iii. BUD = 72 hours
- iv. Do not discard treprostinil vial since this is a multidose vial

CADD MS3 Syringe



c. **Crono Five** SubQ Pump

- i. ICU RPh should obtain Crono Five syringe from patient, due to limited supply

Crono Five Syringe



ii. Preparation

1. Add specified amount of treprostinil to empty Crono Five syringe
2. Add exact amount of 0.9% sodium chloride (final volume is 10 - 20 mL)
3. Do NOT attach or prime tubing – send tubing with the syringe *if requested*
 - a. Tubing/filter: Baxter Micro-volume extension set 2N3350
4. BUD = 48 hours
5. Do not discard vial (MDV)

3. Stability of treprostinil

- i. Multi Dose Vial- use vial adaptor: 30-day expiration for opened vials
- ii. SQ administration (undiluted drug): 72 hr. at room temperature
- iii. IV administration (diluted drug): 48 hr. at room temperature

Tubing for Crono Five IV

