

Intravenous treprostinil (Remodulin®)

Description

Intravenous (IV) treprostinil is a potent medication used to treat pulmonary arterial hypertension, a type of high blood pressure in the lungs that affects heart function. IV treprostinil works by causing the blood vessels in the lungs to relax, resulting in a decrease in pressure and improvement in heart function.

How It Is Administered

Students receiving IV treprostinil have a flexible tube or catheter placed under the skin on their chest which goes into a vein and then to the heart. The catheter is connected to tubing, which is then joined to a syringe or cassette attached to a pump. The medication pump delivers a continuous, slow flow of medicine into the student's blood. There are 3 different medication pumps that may be used including the CADD MS3®, Crono Five®, or CADD Legacy® infusion pumps. Due to the different size of the pumps they may be kept in a black bag or fanny pack, clipped to a belt or placed in a pant pocket.

It is critical that this medication remain connected and continuously delivered. The pump should NEVER be stopped or removed and the pump rate should NEVER be altered.

Infusion Pump and Alarms

All three medication pumps will alarm if the infusion has been interrupted or there is a malfunction of the pump (both quite rare). The alarms should NEVER be ignored. **The parent will review with the school staff how they would like alarms handled.** Many patients are able to solve simple issues such as an accidental kink in the tubing, but if your student cannot resolve the issue themselves they will need your help to contact emergency services.

Notify the parents immediately if:

- ◆ The bandage which holds the catheter in place gets wet, is leaking liquid or has fallen off.
- ◆ You note any change in the student's symptoms or behaviors

Quick Emergency Information:

Interruptions or changes in intravenous treprostinil delivery can be life threatening.

- **NEVER** manipulate your student's line or pump.
- If your student's line falls out or becomes disconnected, call 911.
- If your student's pump is alarming, they will need to address it **immediately**.
- If the pump is stopped and the student becomes symptomatic (chest pain, difficulty breathing, dizziness, appears blue, fainting or seizures) call 911.
- Notify parent if the bandage on the catheter gets wet, is leaking liquid or is falling off.

Back-up supplies

Since IV treprostinil needs to be delivered continuously, patients are required to keep a back-up pump, vial of medication, syringe/cassette, line and battery/batteries near them at all times. These supplies are generally stored in the nurse's office.

Common Side Effects

Side effects may vary depending upon the patient and the dose of IV treprostinil. Common side effects include:

- ◆ Jaw pain
- ◆ Headache
- ◆ Diarrhea
- ◆ Nausea
- ◆ Joint/muscle aches
- ◆ Flushing
- ◆ Loss of appetite
- ◆ Vomiting
- ◆ Dizziness
- ◆ Sweating

A list of side effects experienced by the student and treatments for these side effects are listed below.

Student's Side Effects and Treatments

What to Do in an Emergency

The most dangerous situation for your student on IV treprostinil would be the inability to deliver the medication. **CALL 911** if your student complains of or exhibits any of the following symptoms:

- ◆ Chest pain
- ◆ Difficulty breathing/stops breathing (may require CPR until help arrives)
- ◆ Dizziness or lightheadedness
- ◆ Appears blue (lips, fingers etc.)
- ◆ Passes out (may require CPR until help arrives)
- ◆ Has a seizure (protect the student from the environment, may require CPR until help arrives)

If you do not have a phone in your classroom, send another student to the office to get help. **DO NOT leave your student unattended.** After calling 911, call the parent. When emergency help arrives, notify the paramedics of the student's medical condition and that an IV must be started in their arm. The pump tubing will attach directly onto the new IV and re-establish the delivery of the medication.