Drug Name: **clevidipine**

Trade Name: **CLEVIPREX®**

REVISED: **May 01, 2022**

Class:

- Dihydropyridine Calcium Channel Blocker

Mechanism of Action:

- Clevidipine is a dihydropyridine L-type calcium channel blocker. L-type calcium channel blockers mediate the influx of calcium during repolarization in arterial smooth muscle, causing arterial vasodilatation and reducing blood pressure.

Indications:

- Cleviprex is a dihydropyridine calcium channel blocker indicated for the reduction of blood pressure

Contraindications:

- Hypersensitivity to soybeans, soy products, eggs, or egg products
- Severe aortic stenosis
- Defective lipid metabolism seen in conditions such as pathologic hyperlipemia, lipoid nephrosis, or acute pancreatitis if it is accompanied by hyperlipidemia

Precautions:

- Dihydropyridine calcium channel blockers can produce negative inotropic effects and exacerbate heart failure. Monitor heart failure patients carefully
- Pregnancy category C

Dosage:

IV Infusion: Double check orders with transferring physician.

- **IV infusion: 1-16 mg/hour Titrated for B/P < 180 mm Hg systolic or as ordered (see Pearls)**

Onset:

- IV/IO: Onset: (IV) 1-5 minutes

Duration:

- 5-15 minutes.

Side Effects:

- Most common adverse reactions (>2%) are headache, nausea, and vomiting.
- Hypotension
- Reflex Tachycardia

Interactions:

- Cleviprex should not be administered in the same line as other medications.

IFT

REFERENCE ONLY

This document is for reference only. Please refer to Physician Order's for specific indications, dosages, and applications

IFT DRUG: CLEVIDIPINE

PEARLS:

Cleviprex should not be administered in the same line as other medications.

- Cleviprex is supplied in sterile, pre-mixed, ready-to-use 50 mL or 100 mL vials. It appears as a milky white injectable emulsion similar to propofol.
- Cleviprex should not be diluted.
  - Invert vial gently several times before use to ensure uniformity of the emulsion prior to administration.
- Cleviprex can be administered “piggy backed” onto the following solutions.
  - Water for Injection, USP
  - Sodium Chloride (0.9%) Injection, USP
  - Dextrose (5%) Injection, USP
  - Dextrose (5%) in Sodium Chloride (0.9%) Injection, USP
  - Dextrose (5%) in Ringers Lactate Injection, USP
  - Lactated Ringers Injection, USP
- ***Dose titration:*** Double the dose at short (90 second) intervals initially. As the blood pressure approaches goal, increase the dose by less than doubling and lengthen the time between dose adjustments to every 5-10 minutes. An approximately 1-2 mg/hour increase will generally produce an additional 2-4 mmHg decrease in systolic pressure.
  - **Maintenance dose:** Most patients will achieve the desired therapeutic response at approximately 4-6 mg/hour. Severe hypertension is likely to require higher doses.
  - **Decrease or discontinuation:** The initial phase half-life is approximately 1 minute, and accounts for 85-90% of clevidipine elimination. The terminal half-life is approximately 15 minutes.

- Patients who receive prolonged CLEVIPREX® infusions and are not transitioned to other antihypertensive therapies should be monitored for the possibility of rebound hypertension for at least 8 hours after the infusion is stopped.
- Due to the risk of medical errors, double check dose w/ another ALS provider (Paramedic, RN, etc.). Specifically observe for:
  - Dosing errors: Dosing errors have occurred, particularly in peds
  - Concentration Errors: Medical errors have occurred because of differences in concentration.