



# REGIONAL ADULT PARENTERAL DRUG MONOGRAPH

GENERIC NAME

**heparin**



<b>Effective Date:</b> Dec 2011	CLASSIFICATION <b>Anticoagulant</b>	OTHER NAMES	PAGE
<b>Revised Date:</b> Nov 2023			1 of 3

**ADMINISTRATION POLICY:**

IV Infusion – May be administered by a nurse at Regional sites with 24/7 lab access on site

*NOTE: Heparin continuous infusion may be initiated with the direction of a prescriber before the patient is transferred to a site that can measure aPTT.*

- IV Bolus – May be administered by a nurse
- Subcutaneous – May be administered by a nurse
- CVAD Lock – May be administered by a nurse
- IM Injection – *Not to be administered*

**RECONSTITUTION/DILUTION/ADMINISTRATION:**

**Note:** *Heparin is available in multiple concentrations and vial sizes. Use caution when selecting a product.*

- Available as:**
- IV bolus: Use 1000 units/mL
  - IV continuous: Use pre-mix heparin in D5W (Heparin 25,000 units in 250 mL)
  - Subcutaneous: Use 5000 units/0.5 mL vial
  - CVAD Lock: Use 100 units/mL pre-filled syringe

**IV Bolus/ Subcut:** Administer undiluted

**IV Continuous: Pump Library:** *Note: Use tubing with no access ports*

**heparin ACS**

Drug Library	Rate	Short Name	Care Unit
Yes	units/h	hepACS	Critical Care & General
Drug	Diluent	Final Volume (VTBI)	Final Concentration
25000 units pre-mixed	250 mL pre-mixed	250 mL	100 units/mL
Clinical Advisory: High Alert			
Soft Low Dose Limit: 480 units/h		Soft High Dose Limit: 1000 units/h	

**heparin VTE**

Drug Library	Rate	Short Name	Care Unit
Yes	units/h	hepVTE	Critical Care & General
Drug	Diluent	Final Volume (VTBI)	Final Concentration
25000 units pre-mixed	250 mL pre-mixed	250 mL	100 units/mL
Clinical Advisory: High Alert			
Soft Low Dose Limit: 700 units/h		Soft High Dose Limit: 2150 units/h	



# REGIONAL ADULT PARENTERAL DRUG MONOGRAPH

GENERIC NAME

**heparin**



<b>Effective Date:</b> Dec 2011	<b>CLASSIFICATION</b> <b>Anticoagulant</b>	<b>OTHER NAMES</b>	<b>PAGE</b> 2 of 3
<b>Revised Date:</b> Nov 2023			

## DOSAGE:

### Acute Coronary Syndromes (Acute MI with or without thrombolytic therapy and unstable angina):

**Loading dose:** IV bolus: 60 units/kg  
Give undiluted (1000 units/mL) over 1 to 2 minutes

**Maximum dose:** 4000 units

**Maintenance dose:** Initial infusion rate of 12 units/kg/hour

**Maximum rate:** Initial infusion not to exceed 1000 units/hour then adjust rate according to heparin nomogram (PTT values).

### Primary Angioplasty/ Percutaneous Coronary Intervention:

**IV bolus:** 70 units/kg x 1 dose

**Maximum dose:** 10 000 units

### Thromboembolism/Pulmonary Embolism:

**Loading dose:** IV bolus: 80 units/kg  
Give undiluted (1000 units/mL) over 1 to 2 minutes

**Maximum dose:** 9600 units

**Maintenance dose:** Initial infusion rate of 18 units/kg/hour

**Maximum rate:** 2150 units/hour. Adjust rate to 1.5 to 2.5 times the PTT

### Thromboembolism Prophylaxis:

**Usual:** Subcut: 5000 units every 8 to 12 hours

### Central Venous Access Device Locking (non-hemodialysis):

**Open-ended, non-valved devices (e.g. Arrow, Hickman, Cooks catheters):**  
200 units (2 x 100units/mL) per lumen  
When the catheter is not in use, locking is required weekly

**Implanted Ports:**  
300 units (3 x 100 units/mL)  
When the catheter is not in use, locking is required monthly

**Maximum rate:** IV bolus: Over 1 to 2 minutes  
IV continuous: Dose dependant

**Maximum concentration:** IV bolus: 1000 units  
IV continuous: 100 units/mL

## STABILITY/COMPATIBILITY:

**Stability of Final Admixture:** 24 hours at room temperature

**Compatibility:** Compatible with normal saline, D5W and combination dextrose/saline solutions

## PRECAUTIONS, POTENTIAL ADVERSE REACTIONS:

- Bleeding, thrombocytopenia



## REGIONAL ADULT PARENTERAL DRUG MONOGRAPH

GENERIC NAME

**heparin**



<b>Effective Date:</b> Dec 2011	CLASSIFICATION <b>Anticoagulant</b>	OTHER NAMES	PAGE 3 of 3
<b>Revised Date:</b> Nov 2023			

### ADDITIONAL NOTES AND NURSING CONSIDERATIONS:

- Monitor CBC, aPTT, platelets
- *IF PREMIXED BAG UNAVAILABLE:*
  - Use D5W 250 mL bag
  - Remove 25 mL of solution and discard
  - Add 25,000 units heparin (25 mL of 1000 units per mL concentration)
  - Final concentration 100 units/mL
- *ANTIDOTE:* protamine sulfate