

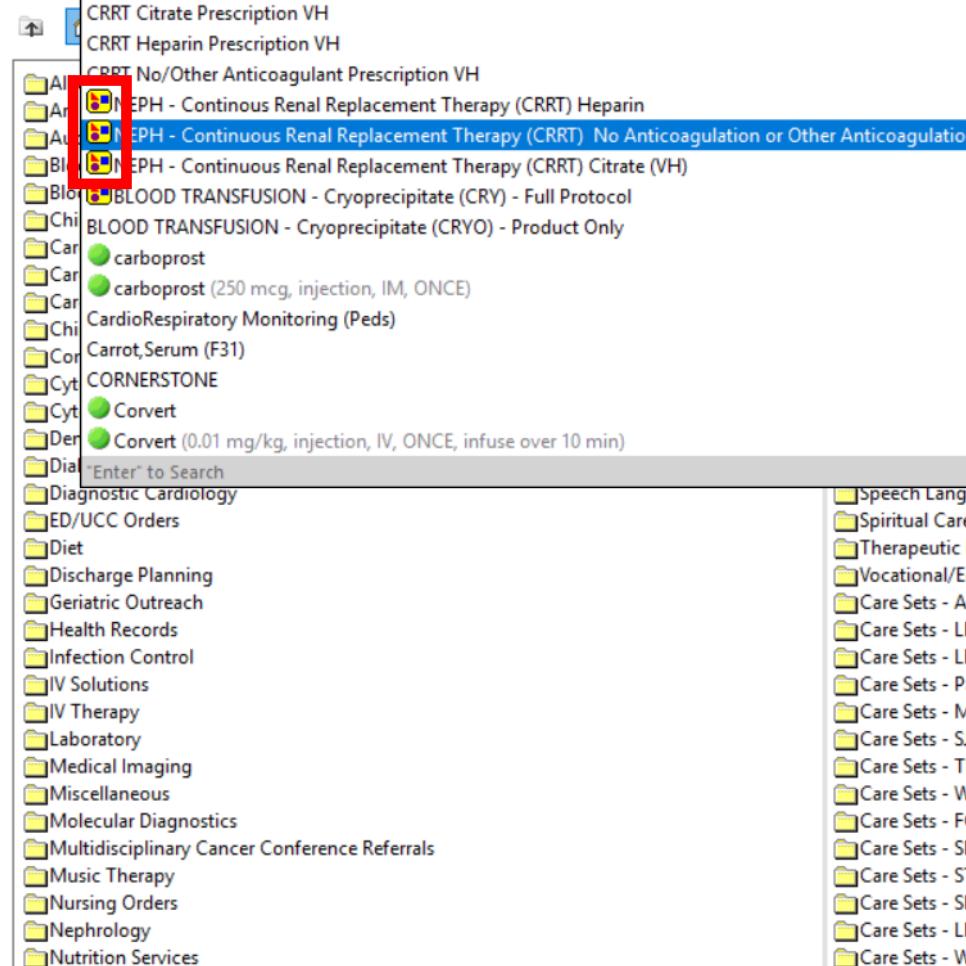
Entering CRRT Orders in Power Chart

No Anticoagulation

Use these orders for no anticoagulation (using predilution for filter anticoagulation).

Use these orders for patients who are receiving therapeutic systemic anticoagulation with no additional heparin via CRRT circuit.

Search: CRRT | Type: Inpatient



For new orders, always choose the appropriate **Power Plan**. The Power Plan includes the CRRT prescription plus the relevant labwork, nursing instructions and medication orders.

Use the **stand-alone orders** if you want to make a change to an existing prescription only.

If you want to change a prescription (e.g. from heparin to no anticoagulation), discontinue the old Power Plan and initiate the appropriate new Power Plan.

Therapy
Diagnostic Testing

ED SVS Demo Only
Dialysis Medication Favourites Ambulatory

Speech Language
Spiritual Care
Therapeutic Recreation
Vocational/Educational
Care Sets - AH
Care Sets - LHSC
Care Sets - LRCP
Care Sets - Parkwood
Care Sets - MENT HLT
Care Sets - SJHC
Care Sets - TDMH
Care Sets - Woodstock
Care Sets - FC
Care Sets - SMGH
Care Sets - STEGH
Care Sets - SHHA
Care Sets - LMH
Care Sets - WDH

Menu

Nurse View
Summaries ViewPoint
SBAR
IVView / I&O
Task List
MAR Summary
MAR
Medication List + Add
Orders + Add
Quick Orders
Allergies + Add
Clinical Documents/R... + Add
Documents
Clinical Notes Viewer
Form Browser
Results Review
Infection Control
Blood Product Information
Patient Information
Appointments
Behaviour Safety Alert Summary
Client Info

+ Add | Document Medication by Hx | Reconciliation

Orders Medication List Document In Plan

View

Orders for Signature

Plans

Document In Plan

Medical

NEPH - Continuous Renal Replacement Therapy (CRRT) No Anticoagulation or Other Anticoagulation (Planned Pending)

Patient Care

CRRT No/Other Anticoagulant Prescription VH
 Communication Order
 Electrolytes (Na/K/Cl/CO₂) Nurse order when
 Phosphate, Magnesium Nurse Order When
 Urea Serum Nurse order when
 Creatinine Serum Nurse order when
 Urea Fluid Nurse order when

Change filter if urea ultrafiltrate:serum ratio <0.80
q6 hour schedule while on CRRT
q6 hour schedule while on CRRT
q12 hour schedule while on CRRT
q12 hour schedule while on CRRT
q12 hour schedule while on CRRT
Ultrafiltrate
Nurse to discontinue CRRT No anticoagulation powerplan when CRRT prescription discontinued

Communication Order

Medications

sodium citrate (sodium citrate 4% injectable solution)

2.5 mL, injection, BLOCK, as directed, PRN Other: See Comments
Instill 4% sodium citrate solution into each catheter limb (total volume= limb v...)

Start: Now Duration: None

Component Status Dose ... Details

Check Alerts Comments

Reconciliation Status
Meds History Admission Discharge

These are the orders within the No Anticoagulation Power Plan. Note that the prescription (first order requiring details) is contained within the Power Plan along with the labwork, nursing instructions and medication orders.

Plan for Later 



You need to **initiate** this Power Plan **first** to activate the orders. The No Anticoagulation prescription Power Form will automatically launch as soon as you choose initiate.

This Power Form launches automatically once you select initiate order.

*Performed on: 2020/08/18 1544 EDT By: CCTCRN, Train 1

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status Start or update prescription Discontinue

Filter Setup

Prismaflex Mode

Choose start or update prescription. If the patient has a previous prescription, it will automatically populate the fields. You will have to modify carefully to make sure the prescription is still correct.

Dialysate Solution If no anticoagulation in use, recommend high predilution replacement flow rate and NO dialysis fluid

Dialysate Solution Rate mL/hr

PRE Replacement Solution via pre blood pump (PBP)

PRE Replacement Rate mL/hr Recommended minimum rate of 2000 mL/hr (if no anticoagulation used)

POST Replacement Solution via replacement pump

POST Replacement Rate mL/hr Recommended minimum rate of 500 mL/hr

Add POTASSIUM CHLORIDE to dialysate according to Potassium Titration Protocol?** Yes

Anticoagulation No anticoagulation Systemic anticoagulation Other anticoagulant

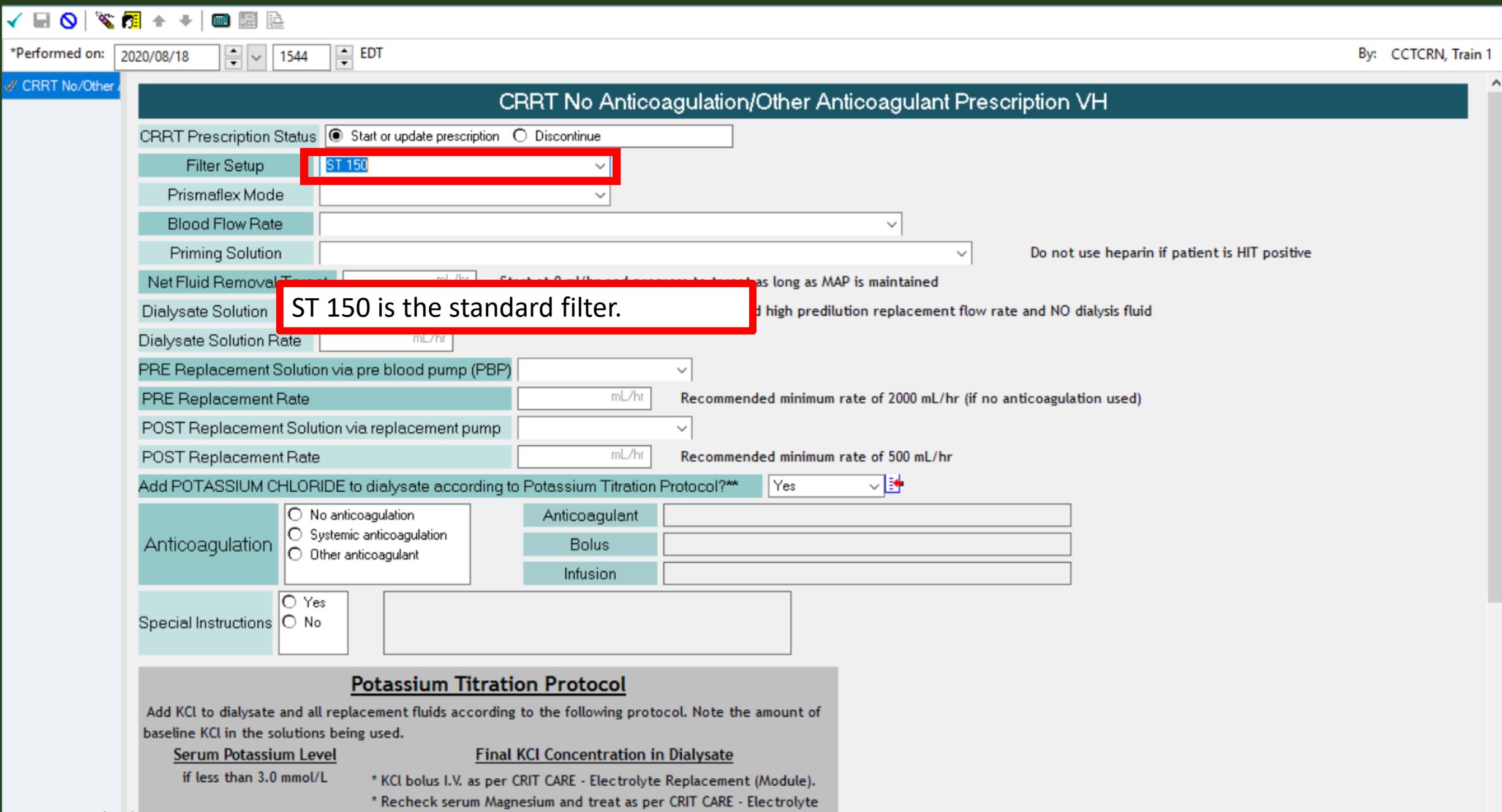
Anticoagulant
Bolus
Infusion

Special Instructions Yes No

Potassium Titration Protocol

Add KCl to dialysate and all replacement fluids according to the following protocol. Note the amount of baseline KCl in the solutions being used.

8/23/2020 Serum Potassium Level Final KCl Concentration in Dialysate



✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CVVHDF

Blood Flow Rate

Priming Solution

Net Fluid Removal Target

mL/hr

Start at 0 mL/hr and progress to target

Dialysate Solution

If no anticoagulation in use, recom

Dialysate Solution Rate

mL/hr

PRE Replacement Solution via pre blood pump (PPB)

mL/hr

Recommended minimum rate of 2000 mL/hr (if no anticoagulation used)

POST Replacement Solution via replacement pump

mL/hr

Recommended minimum rate of 500 mL/hr

Add POTASSIUM CHLORIDE to dialysate according to Potassium Titration Protocol?**

Yes



Anticoagulation

- No anticoagulation
- Systemic anticoagulation
- Other anticoagulant

Anticoagulant

Bolus

Infusion

Special Instructions

- Yes
- No

Potassium Titration Protocol

Add KCl to dialysate and all replacement fluids according to the following protocol. Note the amount of baseline KCl in the solutions being used.

Serum Potassium Level

Final KCl Concentration in Dialysate

Always order CVVHDF. This is the order for how to set the machine up, not the actual prescription. This allows the delivered CRRT treatment to be modified without changing the filter by adjusting flow rates.



*Performed on: 2020/08/18 1654 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status

Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CWHDHF

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

ml/hr Start at 0 ml/hr and increase to target as soon as MAP is maintained

Dialysate Solution

Dialysate Solution Rate

PRE Replacement Sol

PRE Replacement Rat

POST Replacement Sol

POST Replacement Rate

mL/hr

Recommended minimum rate of 500 mL/hr

Add POTASSIUM CHLORIDE to dialysate according to Potassium Titration Protocol?**

Yes

Anticoagulation

- No anticoagulation
- Systemic anticoagulation
- Other anticoagulant

Anticoagulant

Bolus

Infusion

Special Instructions

- Yes
- No

Potassium Titration Protocol

Add KCl to dialysate and all replacement fluids according to the following protocol. Note the amount of baseline KCl in the solutions being used.



*Performed on: 2020/08/18 1657 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status

Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CWHD

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

1

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride

2 litres of 0.9% sodium chloride

Dialysate Solution

1 L NO Heparin fluid

Dialysate Solution Rate

used)

PRE Replacement Solu

PRE Replacement Rate

POST Replacement Sol

POST Replacement Rat

Add POTASSIUM CHLO

Anticoagulation

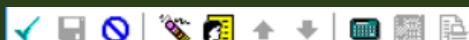
Special Instructions

Add KCl to dialysate and a

Prime with heparin (even if anticoagulation is contraindicated due to bleeding), UNLESS there is a concern of HIT/allergy. The heparin adheres to the filter but is rinsed out of the circuit with the second prime. This reduces filter clotting even when no anticoagulation is being used.

The patient does not receive a heparin bolus when using an ST 150 filter as this filter requires a 2 L prime. If using a smaller filter such as an ST 100 (rarely used in adults now), a heparin bolus would be given as this filter requires a single prime.

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*Performed on: 2020/08/18 1657 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status

Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CVVHDF

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

100 mL/hr

Start at 0 mL/hr and progress to target as long as MAP is maintained

Dialysate Solution

ysis fluid

Dialysate Solution Rate

PRE Replacement Sol

PRE Replacement Rate

mL/hr

Recommended minimum rate of 2000 mL/hr (if no anticoagulation used)

POST Replacement Solution via replacement pump

mL/hr

POST Replacement Rate

mL/hr

Recommended minimum rate of 500 mL/hr

Add POTASSIUM CHLORIDE to dialysate according to Potassium Titration Protocol?**

Yes



Anticoagulation

- No anticoagulation
- Systemic anticoagulation
- Other anticoagulant

Anticoagulant

Bolus

Infusion

Special Instructions

- Yes
- No

Potassium Titration Protocol

Add KCl to dialysate and all replacement fluids according to the following protocol. Note the amount of baseline KCl in the solutions being used.

Serum Potassium Level

if less than 3.0 mmol/L

Final KCl Concentration in Dialysate

* KCl bolus I.V. as per CRIT CARE - Electrolyte Replacement (Module).

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status	<input checked="" type="radio"/> Start or update prescription <input type="radio"/> Stop current prescription
Filter Setup	ST 150
Prismaflex Mode	CWHDF
Blood Flow Rate	Target Blood flow 250-300 mL/min
Priming Solution	5,000 units of heparin sodium in 500 mL of 0.9% NaCl
Net Fluid Removal Target	100 mL/hr
Dialysate Solution	PrismaSol 4
Dialysate Solution Rate	PrismaSol 4 PrismaSol 0
PRE Replacement Solution via pre blood pump (PBP)	
PRE Replacement Rate	
POST Replacement Solution via replacement pump	
POST Replacement Rate	
Add POTASSIUM CHLORIDE to dialysate according	
Anticoagulation	<input type="radio"/> No anticoagulation <input type="radio"/> Systemic anticoagulation <input type="radio"/> Other anticoagulant
Special Instructions	<input type="radio"/> Yes <input type="radio"/> No
Potassium Titration	
Add KCl to dialysate and all replacement fluids according to the following potassium titration table:	

Choose PrismaSol 4 if potassium is < 5.7. Choose PrismaSol 0 if potassium is 5.7 or higher. Potassium will generally fall after the first hour of CRRT; if potassium remains higher than the concentration in the replacement fluid, look for other causes for hyperkalemia than renal failure.

Regardless of the solution ordered, nurses change back and forth as needed to achieve the desired final potassium concentration per protocol, or to manage available supply. The concentration of sodium (140 mmol/L) and bicarbonate (32 mmol/L) is the same between solutions.

BLOOD SUGAR and insulin infusions need to be monitored closely when switching between solutions because PrismaSol 4 contains glucose 6.1 mmol/L but PrismaSol 0 contains zero.

PrismaSOL 0 may cause hypoglycemia or normoglycemia (consider DKA for patients with unexplained anion gap acidosis when PrismaSol 0 is in use).

BEFORE RECONSTITUTION Each 1000 mL contains	Prisma SOL 0	Prisma SOL 4	Prism OCAL
Compartment A			
Sodium bicarbonate			58.8 g
Magnesium chloride, hexahydrate	2.033 g	2.036 g	
Lactic acid	5.4 g	5.4 g	
Calcium chloride dihydrate	5.145 g	5.148 g	
Glucose anhydrous		24.2 g	
Compartment B			
Lactic acid			0.284 g
Magnesium chloride, hexahydrate			0.108 g
Sodium chloride	6.45 g	6.45 g	6.449 g
Sodium bicarbonate	3.09 g	3.09 g	
Potassium chloride		0.314 g	

These are the 3 solutions that are stocked in CCTC. The two used for No Anticoagulation or Heparin are highlighted.

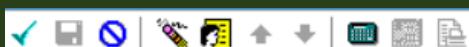
Prism OCAL is a calcium free product used only with citrate. Note that all 3 solutions contain the same final concentration of bicarbonate and sodium. They all contain 3 mmol/L of lactate which is added for pH adjustment; the lactate is metabolized to bicarbonate. Potassium is added by the nurse to achieve a minimum concentration of 2 mmol/L by protocol.

Each 5 L bag is divided into 2 compartments (250 mL upper and 4750 lower compartments). These must be mixed together at the time the solution is hung (stability is only 24 hours once mixed).

Refer to the “AFTER RECONSTITUTION” for the final concentration of electrolytes.

Failure to break the seal between the bags will change the concentration to that of the lower compartment only. The machine will also enter an alarm mode, potentially drawing in air from the bag as it assumes there is 5 L on the scale (but only 4750 is accessible).

AFTER RECONSTITUTION	Prisma SOL 0		Prisma SOL 4		Prism OCAL	
	mmol/L	mEq/L	mmol/L	mEq/L	mmol/L	mEq/L
Calcium	Ca ²⁺	1.75	3.50	1.75	3.50	
Magnesium	Mg ²⁺	0.5	1.0	0.5	1.0	0.5
Sodium	Na ⁺	140	140	140	140	140
Chloride	Cl ⁻	109.5	109.5	113.5	113.5	106
Lactate		3.0	3.0	3.0	3.0	3.0
Bicarbonate	HCO ₃ ⁻	32	32	32	32	32
Potassium	K ⁺	0	0	4.0	4.0	0
Glucose		0	0	6.1		0



*Performed on: 2020/08/18 1657 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status

Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CVVHDF

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

100 mL/hr

Start at 0 ml/hr and progress to target as long as MAP is maintained

Dialysate Solution

PrismaSol 4

If no anticoagulation in use, recommend high predilution replacement flow rate and NO dialysis fluid

Dialysate Solution Rate

0 mL/hr

PRE Replacement Solution via pre blood pump (PRP)

PRE Replacement Rate

POST Replacement S

POST Replacement R

Add POTASSIUM CHL

Anticoagulation

Special Instructions

When running no anticoagulation, the default setting when using no anticoagulation is "0". This makes the actual delivered treatment CVVHF. You can add a dialysis flow rate after treatment begins if necessary (which will change the delivered treatment to CVVHDF).

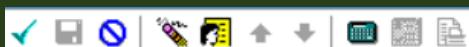
Add a dialysis flow rate if you cannot achieve adequate clearance with the standard pre and post dilution flow rates.

Potassium Titration Protocol

Add KCl to dialysate and all replacement fluids according to the following protocol. Note the amount of baseline KCl in the solutions being used.

Current Potassium Level

Final KCl Concentration in Dialysate



*Performed on: 2020/08/18 1657 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status

Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CVVHDF

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

100 mL/hr

Start at 0 mL/hr and progress to target as long as MAP is maintained

Dialysate Solution

PrismaSol 4

If no anticoagulation in use, recommend high predilution replacement flow rate and NO dialysis fluid

Dialysate Solution Rate

0 mL/hr

PRE Replacement Solution via pre blood pump (PBP)

PrismaSol 4

PRE Replacement Rate

PrismaSol 4

POST Replacement Solution via replacement pump

PrismaSol 4

POST Replacement Rate

PrismaSol 4

We use the same solution on all pumps when running No Anticoagulation to reduce risk for error

Add POTASSIUM CHLORIDE to dialysate according to Potassium Titration Protocol?**

Yes

Anticoagulation

- No anticoagulation
- Systemic anticoagulation
- Other anticoagulant

Anticoagulant

Bolus

Infusion

Special Instructions

- Yes
- No

Potassium Titration Protocol

Add KCl to dialysate and all replacement fluids according to the following protocol. Note the amount of baseline KCl in the solutions being used.

Serum Potassium Level

Final KCl Concentration in Dialysate

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CWHD

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

100

mL/hr

Start at 0 ml/hr and progress to target as long as MAP is maintained

Dialysate Solution

PrismaSol 4

If no anticoagulation in use, recommend high predilution replacement flow rate and NO dialysis fluid

Dialysate Solution Rate

0

mL/hr

PRE Replacement Solution via pre blood pump (PBP)

PrismaSol 4

mL/hr

Recommended minimum rate of 2000 mL/hr (if no anticoagulation used)

POST Replaceme

POST Replaceme

Add POTASSIUM

Anticoagulation

Special Instructions

Add KCl to dialysat

baseline KCl in the solutions being used.

Serum Potassium Level

if less than 3.0 mmol/L

Final KCl Concentration in Dialysate

* KCl bolus I.V. as per CRIT CARE - Electrolyte Replacement (Module).

Our standard flow rate is 2000 ml/hr. This provides adequate clearance and filter dilution with a delivered prescription dose > 25 ml/kg in most patients.

Higher predilution flow rates do not necessarily improve filter life by increased dilution. Because fluid must be pulled across the filter membrane at a rate equal to the pre plus post dilution plus fluid removal volumes, higher hemofiltration rates may fatigue the filter prematurely. If higher clearance is needed, add the additional clearance in the form of some hemodialysis flow (e.g., 500 or 1000 ml/hr).



*Performed on: 2020/08/18 1657 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status

Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CVHDF

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

100 mL/hr

Start at 0 ml/hr and progress to target as long as MAP is maintained

Dialysate Solution

PrismaSol 4

If no anticoagulation in use, recommend high predilution replacement flow rate and NO dialysis fluid

Dialysate Solution Rate

0 mL/hr

PRE Replacement Solution via pre blood pump (PBP)

PrismaSol 4

PRE Replacement Rate

2,000 mL/hr

Recommended minimum rate of 2000 mL/hr (if no anticoagulation used)

POST Replacement Solution via replacement pump

PrismaSol 4

POST Replacement Rate

PrismaSol 4

We use the same solution on all 3 pumps to reduce risk for error

Anticoagulation

- No anticoagulation
- Systemic anticoagulation
- Other anticoagulant

Anticoagulant

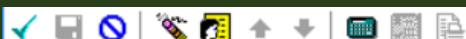
Bolus

Infusion

Special Instructions

- Yes
- No

Potassium Titration Protocol



*Performed on: 2020/08/18 1657 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status

Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CVHDF

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

100

mL/hr

Start at 0 ml/hr and progress to target as long as MAP is maintained

Dialysate Solution

PrismaSol 4

If no anticoagulation in use, recommend high predilution replacement flow rate and NO dialysis fluid

Dialysate Solution Rate

0

mL/hr

PRE Replacement Solution via pre blood pump (PBP)

PrismaSol 4

PRE Replacement Rate

2,000

mL/hr

Recommended minimum rate of 2000 mL/hr (if no anticoagulation used)

POST Replacement Solution via replacement pump

PrismaSol 4

POST Replacement Rate

500

mL/hr

Recommended minimum rate of 500 mL/hr

Add POTASSIUM CHLORIDE to dialysate according to Potassium Titration Protocol?**

Yes



Anticoagulation

- No anti
- Systemic
- Other a

Special Instructions

- Yes
- No

We always need some post dilution replacement, only for the prevention of clotting in the deairation chamber. Historically, 200-250 ml was always sufficient but we are currently using 500 ml to try and prevent foam build up in the deairation chamber. We are still playing with the optimal rate with the new machines.

Potassium Titration Protocol

Add KCl to dialysate and all replacement fluids according to the following protocol. Note the amount of



*Performed on: 2020/08/18 1657 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status

Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CVVHDF

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

100 mL/hr

Start at 0 ml/hr and progress to target as long as MAP is maintained

Dialysate Solution

PrismaSol 4

If no anticoagulation in use, recommend high predilution replacement flow rate and NO dialysis fluid

Dialysate Solution Rate

0 mL/hr

PRE Replacement Solution via pre blood pump (PPB)

PrismaSol 4

PRE Replacement Rate

2,000 mL/hr

Recommended minimum rate of 2000 mL/hr (if no anticoagulation used)

POST Replacement Solution via replacement pump

PrismaSol 4

POST Replacement Rate

500 mL/hr

Recommended minimum rate of 500 mL/hr

Add POTASSIUM CHLORIDE to dialysate according to Potassium Titration Protocol?**

Yes

Anticoagulation

- No anticoagulation
- Systemic anticoagulation
- Other anticoagulant

Anticoagulant

Bolus

Special Instructions

- Yes
- No

Yes auto-populates. This enables the nurse to titrate the potassium concentration by protocol. The minimum final potassium concentration is 2 mmol/L.

Potassium Titration Protocol

Add KCl to dialysate and all replacement fluids according to the following protocol. Note the amount of baseline KCl in the solutions being used.

Serum Potassium Level

if less than 3.0 mmol/L

Final KCl Concentration in Dialysate

* KCl bolus I.V. as per CRIT CARE - Electrolyte Replacement (Module).



*Performed on: 2020/08/18 1657 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status

Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CVHDF

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

100 mL/hr

Start at 0 mL/hr and progress to target as long as MAP is maintained

Dialysate Solution

PrismaSol 4

If no anticoagulation in use, recommend high predilution replacement flow rate and NO dialysis fluid

Dialysate Solution Rate

0 mL/hr

PRE Replacement Solution via pre blood pump (PBP)

PrismaSol 4

PRE Replacement Rate

2,000 mL/hr

Recommended minimum rate of 2000 mL/hr (if no anticoagulation used)

POST Replacement Solution via replacement pump

PrismaSol 4

POST Replacement Rate

500 mL/hr

Recommended minimum rate of 500 mL/hr

Add POTASSIUM CHLORIDE to dialysate according to Potassium Titration Protocol?**

Yes

No anticoagulation

Anticoagulant

Anticoagulation

Systemic anticoagulation

Other anticoagulant

Bolus

For this Power Plan, choose “NO anticoagulation”. *This refers to anticoagulation delivered through the filter only.* If the patient is on systemic therapeutic anticoagulation, choose “NO anticoagulation” and use “NO anticoagulation” Power Plan.



*Performed on: 2020/08/18 1657 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

CRRT Prescription Status

Start or update prescription Discontinue

Filter Setup

ST 150

Prismaflex Mode

CVVHDF

Blood Flow Rate

Target Blood flow 250-300 mL/min; increase to target within first minute of initiation

Priming Solution

5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride

Do not use heparin if patient is HIT positive

Net Fluid Removal Target

100

mL/hr

Start at 0 mL/hr and progress to target as long as MAP is maintained

Dialysate Solution

PrismaSol 4

If no anticoagulation in use, recommend high predilution replacement flow rate and NO dialysis fluid

Dialysate Solution Rate

0

mL/hr

PRE Replacement Solution via pre blood pump (PBP)

PrismaSol 4

PRE Replacement Rate

2,000

mL/hr

Recommended minimum rate of 2000 mL/hr (if no anticoagulation used)

POST Replacement Solution via replacement pump

PrismaSol 4

POST Replacement Rate

500

mL/hr

Recommended minim

Add POTASSIUM CHLORIDE to dialysate according to Potassium Titration Protocol?**

Yes

Anticoagulation

- No anticoagulation
- Systemic anticoagulation
- Other anticoagulant

Anticoagulant

Bolus

Infusion

Special Instructions

- Yes
- No

If there are any special instructions, choose "yes" and enter in text box.

Example: "Heater on only if core temperature < 35.5"

All titration protocols appear at the end of the Power Form. These are also available on the CCTC website and are printed by nurses for ease of use.

Potassium Titration Protocol

Add KCl to dialysate and all replacement fluids according to the following protocol. Note the amount of baseline KCl in the solutions being used.

Serum Potassium Level

if less than 3.0 mmol/L

Final KCl Concentration in Dialysate

* KCl bolus I.V. as per CRIT CARE - Electrolyte Replacement (Module).

* Recheck serum Magnesium and treat as per CRIT CARE - Electrolyte Replacement (Module)

* KCl to equal 6 mmol/L

* Notify Nephrology and Critical Care if repeat potassium level is < 3.0 mmol/L

if 3.0 - 3.4 mmol/L

KCl to equal 5 mmol/L

if 3.5 - 4.5 mmol/L

KCl to equal 4 mmol/L

if 4.6 - 5.0 mmol/L**

KCl to equal 3 mmol/L

If 5.1 - 6.0 mmol/L**

KCl to equal 2 mmol/L

if greater than 6.0 mmol/L**

Notify Nephrology and Critical Care if repeat potassium level is > 6 mmol/L

** If serum potassium is 4.6 - 5.6 mmol/L at the start of dialysis, the treatment may be started using PrismaSol 4. Repeat the serum potassium 1 hour after treatment is started.

If potassium remains greater than 4.6 mmol/L change solution to PrismaSol 0 and add appropriate KCl as per protocol.

If the serum potassium remains above 5 mmol/L with dialysis KCl 2 mmol/L, notify Nephrology and Critical Care to review possible causes for persistent hyperkalemia.



Sign Form on: 2020/08/18 1657 EDT

By: Morgan, Brenda (RN)

✓ CRRT No/Other

CRRT No Anticoagulation/Other Anticoagulant Prescription VH

Click the green check box in top left corner
to sign the form and complete the
prescription order.

continue

▼

▼

use to target within first minute of initiation

Priming Solution	5,000 units of heparin sodium in 1 litre of 0.9% sodium chloride then reprime with 1 litre of 0.9% sodium chloride	Do not use heparin if patient is HIT positive
Net Fluid Removal Target	100 mL/hr	Start at 0 mL/hr and progress to target as long as MAP is maintained
Dialysate Solution	PrismaSol 4	If no anticoagulation in use, recommend high predilution replacement flow rate and NO dialysis fluid
Dialysate Solution Rate	0 mL/hr	
PRE Replacement Solution via pre blood pump (PBP)	PrismaSol 4	
PRE Replacement Rate	2,000 mL/hr	Recommended minimum rate of 2000 mL/hr (if no anticoagulation used)
POST Replacement Solution via replacement pump	PrismaSol 4	
POST Replacement Rate	500 mL/hr	Recommended minimum rate of 500 mL/hr
Add POTASSIUM CHLORIDE to dialysate according to Potassium Titration Protocol?**		Yes
Anticoagulation	<input checked="" type="radio"/> No anticoagulation <input type="radio"/> Systemic anticoagulation <input type="radio"/> Other anticoagulant	Anticoagulant Bolus Infusion
Special Instructions	<input type="radio"/> Yes <input checked="" type="radio"/> No	

Full screen Print 9 minutes ago

Reconciliation Status
Meds History Admission Discharge

Add to Phase Comments Start: 2020/08/18 16:57 Duration: None

Component	Status	Dose ...	Details
NEPH - Continuous Renal Replacement Therapy (CRRT) No Anticoagulation or Other Anticoagulation (Initiated Pending)			
1. Patient Care			
<input checked="" type="checkbox"/> CRRT No/Other Anticoagulant Prescription VH	Order		
<input checked="" type="checkbox"/> Communication Order	Order	Change filter if urea ultrafiltrate:serum ratio <0.80	
<input checked="" type="checkbox"/> Electrolytes (Na/K/Cl/CO ₂) Nurse order when	Order	q6 hour schedule while on CRRT	
<input checked="" type="checkbox"/> Phosphate, Magnesium Nurse Order When	Order	q6 hour schedule while on CRRT	
<input checked="" type="checkbox"/> Urea Serum Nurse order when	Order	q12 hour schedule while on CRRT	
<input checked="" type="checkbox"/> Creatinine Serum Nurse order when	Order	q12 hour schedule while on CRRT	
<input checked="" type="checkbox"/> Urea Fluid Nurse order when	Order	q12 hour schedule while on CRRT Ultrafiltrate	
<input checked="" type="checkbox"/> Communication Order	Order	Nurse to discontinue CRRT No anticoagulation powerplan when CRRT prescription discontinued	
Medications			
<input checked="" type="checkbox"/> sodium citrate (sodium citrate 4% injectable solution)	Order	2.5 mL, injection, BLOCK, as directed, PRN for Other: See Comments, Start: 2020/08/18 16:57 EDT Instill 4% sodium citrate solution into each catheter limb (total volume= limb volume + 0.1 mL)	

▲ Details for CRRT No/Other Anticoagulant Prescription VH

Orders For Nurse Review Save as My Favorite Initiate Now Orders For Signature



You will be brought back to this page to sign the orders. You will not be able to sign until you enter a reason for initiation of CRRT in the details section. If the highlighted Reason/Clinical History box does not appear, click on the CRRT No Anticoagulation Prescription at the top.

← Add to Phase Comments Start: 2020/08/18 16:57 ... Duration: None ...

	Component	Status	Dose ...	Details
NEPH - Continuous Renal Replacement Therapy (CRRT) No Anticoagulation or Other Anticoagulation (Initiated Pending)				
Patient Care				
<input checked="" type="checkbox"/>	CRRT No/Other Anticoagulant Prescription VH	Order		
<input checked="" type="checkbox"/>	Communication Order	Order	Change filter if urea ultrafiltrate:serum ratio <0.80	
<input checked="" type="checkbox"/>	Electrolytes (Na/K/Cl/CO ₂) Nurse order when	Order	q6 hour schedule while on CRRT	
<input checked="" type="checkbox"/>	Phosphate, Magnesium Nurse Order When	Order	q6 hour schedule while on CRRT	
<input checked="" type="checkbox"/>	Urea Serum Nurse order when	Order	q12 hour schedule while on CRRT	
<input checked="" type="checkbox"/>	Creatinine Serum Nurse order when	Order	q12 hour schedule while on CRRT	
<input checked="" type="checkbox"/>	Urea Fluid Nurse order when	Order	q12 hour schedule while on CRRT Ultrafiltrate	
<input checked="" type="checkbox"/>	Communication Order	Order	Nurse to discontinue CRRT No anticoagulation powerplan when CRRT prescription discontinued	
Medications				
<input checked="" type="checkbox"/>	sodium citrate (sodium citrate 4% injectable solution)	Order	2.5 mL, injection, BLOCK, as directed, PRN for Other: See Comments, Start: 2020/08/18 16:57 EDT Instill 4% sodium citrate solution into each catheter limb (total volume= limb volume + 0.1 mL)	

▲ Details for CRRT No/Other Anticoagulant Prescription VH 

Orders For Nurse Review Save as My Favorite  Orders For Signature

The detail box may be difficult to view. If you cannot see the details, drag the box up to make it visible.

Reconciliation Status
Meds History Admission Discharge

Add to Phase Comments Start: 2020/08/18 16:57 Duration: None

Component	Status	Dose ...	Details
NEPH - Continuous Renal Replacement Therapy (CRRT) No Anticoagulation or Other Anticoagulation (Initiated Pending)			
Patient Care			
CRRT No/Other Anticoagulant Prescription VH	Order		
Communication Order	Order	Change filter if urea ultrafiltrate:serum ratio <0.80	
Electrolytes (Na/K/Cl/CO ₂) Nurse order when	Order	q6 hour schedule while on CRRT	
Phosphate, Magnesium Nurse Order When	Order	q6 hour schedule while on CRRT	

Details for CRRT No/Other Anticoagulant Prescription VH

Details Order Comments Offset Details

*Requested Start Date/Time: 2020/08/18 1657 EDT *Reason/Clinical History: AKI

Special Instructions:

Orders For Nurse Review Save as My Favorite Initiate Now Orders For Signature

Enter a reason for starting CRRT
then choose “order for signature”.

Order Name	Status	Start	Details
NEPH - Continuous R... Initiated ...			placing 9 order(s)
△ V-C53; C5-3 OF; A VISIT #:411442900 Admit: 2008/05/27 13:41			
△ Patient Care			
CRRT No/Other Anticoagulant Prescri...	Order	2020/08/18 16:57	Reason: AKI
Communication Order	Order	2020/08/18 16:57	Change filter if urea ultrafiltrate:serum ratio <0.80
Electrolytes (Na/K/Cl/CO2) Nurse ...	Order	2020/08/18 16:57	q6 hour schedule while on CRRT
Phosphate, Magnesium Nurse Order When	Order	2020/08/18 16:57	q6 hour schedule while on CRRT
Urea Serum Nurse order when	Order	2020/08/18 16:57	q12 hour schedule while on CRRT
Creatinine Serum Nurse order when	Order	2020/08/18 16:57	q12 hour schedule while on CRRT
Urea Fluid Nurse order when	Order	2020/08/18 16:57	q12 hour schedule while on CRRT Ultrafiltrate
Communication Order	Order	2020/08/18 16:57	Nurse to discontinue CRRT No anticoagulation powerplan when CRRT prescription discontinued
△ Medications			
△ Details			
0 Missing Required Details	Orders For Nurse Review		<input type="button" value="Sign"/>

Sign the Order

[] Full screen 12 minutes ago

Reconciliation Status
✓ Meds History

Component	Status	Dose ...	Details
Processing. Please refresh.			

▲ Details

Refresh

Add to Phase ▾ Comments Start: 2020/08/18 16:57 Stop: None

	Component	Status	Dose ...	Details
NEPH - Continuous Renal Replacement Therapy (CRRT) No Anticoagulation or Other Anticoagulation (Initiated)				
Last updated on: 2020/08/18 17:06 by: Morgan, Brenda (RN)				
Patient Care				
<input checked="" type="checkbox"/>	CRRT No/Other Anticoagulant Prescription VH	Ordered		Reason: AKI
<input checked="" type="checkbox"/>	Communication Order	Ordered		Change filter if urea ultrafiltrate:serum ratio <0.80
<input checked="" type="checkbox"/>	Electrolytes (Na/K/Cl/CO2) Nurse order when	Ordered		q6 hour schedule while on CRRT
<input checked="" type="checkbox"/>	Phosphate, Magnesium Nurse Order When	Ordered		q6 hour schedule while on CRRT
<input checked="" type="checkbox"/>	Urea Serum Nurse order when	Ordered		q12 hour schedule while on CRRT
<input checked="" type="checkbox"/>	Creatinine Serum Nurse order when	Ordered		q12 hour schedule while on CRRT
<input checked="" type="checkbox"/>	Urea Fluid Nurse order when	Ordered		q12 hour schedule while on CRRT Ultrafiltrate
<input checked="" type="checkbox"/>	Communication Order	Ordered		Nurse to discontinue CRRT No anticoagulation powerplan when CRRT prescription discontinued
Medications				
<input checked="" type="checkbox"/>	sodium citrate (sodium citrate 4% injectable solution)	Ordered		2.5 mL, injection, BLOCK, as directed, PRN for Other: See Comments, Start: 2020/08/18 16:57:00 E... Instill 4% sodium citrate solution into each catheter limb (total volume= limb volume + 0.1 mL)

Details

 Orders For Nurse Review Save as My Favorite Orders For Signature

Orders have been completed