

Dialyzing Wisely – Care Pathway Resource



CONTINUOUS RENAL REPLACEMENT THERAPY (CRRT) RECIRCULATION

September 2023

Purpose

This resource is for clinicians in intensive care units. It expands on the optimize acute dialysis section of the pathways available at the QR code and link below.

CRRT recirculation is a temporary disconnection from the circuit that can allow time for tests and ambulation to optimize dialysis therapy and reduce nursing workload by extending filter life.

Key Points

- Recirculation can be performed for:
 - The life of the filter or 72 hours
 - **120 minutes** at a rate of **100 mL/min**
- Filters should be in **good condition** and free of clots or debris
- Use **manual return** to clear the system of excess blood on return of blood. Saline should look “pink tinged”.
- Ensure you select **saline recirculation NOT** blood recirculation

CRRT Recirculation Equipment List

- PPE: Sterile gloves, sterile drapes, mask
- 1000 mL normal saline (NS)
- Sterile spike with Y connector
- Sterile dressing tray
- Antiseptic solutions/swabs
- 2-3 10mL syringes
- 4-6 10mL sterile NS prefilled syringes
- 2-3 intermittent injector caps
- Locking solution (per orders)
- Effluent bag

Documentation

Refer to the Connect Care ICU Nurse Adult CRRT Quick Start Guide on Insite for more information on recirculation documentation.

[References & Resources](#)





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PrisMax Guides

Follow the prompts on the PrisMax screen to start and end recirculation. The prompts are listed below and adapted from the Baxter Quick Start Guide Saline Recirculation.

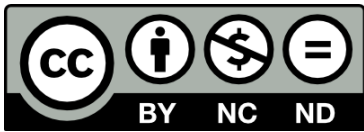
PrisMax Quick Start Guide for Saline Recirculation

1. Disconnect network cable
2. Press **STOP**
3. Press **RECIRCULATE SALINE**
 - Connect Y line with spike to NS bag
 - Prime Y line
 - Clamp both Y line extensions
4. Press **NEXT**
5. Prepare for blood return:
 - Clamp Red Access line on catheter and set.
 - Disconnect Red Access line from patient and connect to the saline bag
 - Unclamp Red access line and its connected Y-line
 - Press **CONFIRM ALL**
6. Press **NEXT**
7. Return blood:
 - Enter blood volume and return rate
 - Press **RETURN BLOOD** (Automatic return)
 - Use **MANUAL RETURN** to clear the system of excess blood. Saline should look “pink tinged”
8. Press **DISCONNECT** when blood return complete
9. Disconnect Patient:
 - Clamp Blue Return line on catheter and set
 - Disconnect Blue Return line from patient and connect to saline bag
 - Unclamp Red Access, Blue Return Y-lines
 - Press **CONFIRM ALL**
 - Press **START RECIRCULATION**
10. Press blood flow rate and increase to a maximum of 100 ml/min

PrisMax Guide to End Recirculation

1. Press **STOP**
2. Press **RECONNECT PATIENT**
3. Prepare to prime set
 - Hang 1 L NS on priming hook (left side machine)
 - Hang a new empty effluent bag on collection hook (right side machine)
 - Clamp access and return lines
 - Disconnect Red Access line from Y-line and connect to NS
 - Disconnect Blue Return line from Y-line and connect to new effluent bag
 - Unclamp access and return lines
4. Press **PRIME**
 - Inspect entire set for air (read step 2-4 on screen)
5. Press **ACCEPT**
6. Reconnect Patient
 - Clamp both Y-lines on priming bag
 - Clamp and disconnect Red Access line from priming bag
 - Clamp line on collection bag
 - Clamp and disconnect Blue Return line from collection bag
7. Press **NEXT**
 - Connect Blue Return line and Red Access line to patient.
 - Route lines through tubing guides
 - Unclamp all lines
 - Press **CONFIRM ALL**
8. Press **START TREATMENT**
9. Connect network cable

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