



**NEPHROLOGY PROGRAM
DEPARTMENT POLICIES AND PROCEDURES**

**Hemodialysis - Section 10 - Gambro Artis - Neph 10-05
Shutdown of Gambro Artis Hemodialysis Machine with Gambro Portable
Reverse Osmosis Unit outside the Dialysis Unit
No.: 00757 (TOH Standardized Policy Number)**

ISSUED BY:
Hemodialysis Clinical Practice Committee

DATE OF APPROVAL:
N/A

APPROVED BY:
Program Clinical Director & Division Head

LAST REVIEW/REVISION DATE:
2017/11

CATEGORY:
Gambro Artis

IMPLEMENTATION DATE:
2011/10

PURPOSE:

- To discontinue usage of Gambro Artis dialysis machine and the Gambro WRO300 Portable Reverse Osmosis (RO) and removal, if required, when the equipment is located outside the hemodialysis unit

BACKGROUND STATEMENTS:

1. **Note:** Failure to shut off both the water and electrical supply to the Reverse Osmosis (RO) may result in premature failure of the carbon filters to remove Chloramine and /or premature failure of the reverse osmosis motor
2. Only a Peracetic disinfect using Dialox may be done off unit unless there is access to a 20-amp plug. (available in the **ICU only** and labeled Dialysis) If a 20 amp plug is available then follow the schedule in [Neph 10-03](#)
3. The disinfection can be done in the dialysis unit when the machine has been disconnected and returned to the dialysis unit. Only then can the regular disinfection schedule be followed
4. Hand Hygiene: As per [Hand Hygiene 00014](#)
5. Personal Protective Equipment: As per [Routine Practices 00023](#)

SUPPLIES:

- Gambro Artis Dialysis Machine
- TOH AquaCart with Gambro WRO300 Portable RO
- 1 bottle Dialox (Peracetic) with connector, or CleanCart A or C cartridge if following regular disinfect schedule (must have 20-amp plug).
- Non sterile gloves
- 1 Bottle Serim Guardian Residual Peroxide test strips
- 1 10mL syringe

DEFINITION(S): N/A

ALERTS: N/A

PROCEDURE:

1. Once the dialysis treatment has been completed refer to policy [Neph 10-03](#) Stripping and Disinfection of the Gambro Artis Hemodialysis machine. Follow the disinfection schedule unless Peracetic (Dialox) is required
2. If following the disinfection schedule, proceed to Step #7 for the shutdown procedure once the disinfection is complete
3. If using Peracetic (Dialox) Disinfect:
 - Apply non-sterile gloves. Place the disinfectant (Dialox) bottle on the rear panel of the machine. Connect tubing attached to the back of the Artis machine with yellow quick-connect to the disinfect bottle labeled “Dialox”, then remove gloves.
 - On the front of the Gambro Artis machine, press ‘Disinfect/Rinse’. Press Process Type ‘Selection’ button and from that menu, select the disinfection “Peracetic” (Dialox). Press “*confirm.*” Press the ‘Disinfect/Rinse’ button to activate the disinfect cycle.
 - On the main screen, the length of time remaining in the disinfect cycle is displayed at the top of the screen

Phase 1: the machine will draw up Dialox and dwell (16 minutes)

Phase 2: the machine will go into (38 minutes)

4. Once the rinse cycle is complete, the machine will go into low power mode (as indicated by the power light being illuminated green on the front of the hemodialysis machine)
5. Disconnect the yellow quick-connector from the Dialox bottle and replace on the back of the hemodialysis machine
6. Press the on/off key to resume power. A message will be displayed on the main screen **582 Residual check reminder**

7. Test for residual chemical using Serim Guardian Residual Peroxide Test Strips:
 - Apply non-sterile gloves. Connect syringe to the red dialysis fluid tube sample port and withdraw 10 mL, discard and withdraw another 10 mL. If you are not able to take a sample from the port, wait a few seconds for the cycle to resume flow
 - Use this sample to check with the Peroxide test strip and verify the results on the side of the bottle
 - If Positive, place the machine in RINSE Press 'Disinfect/Rinse'. A sub-screen will appear. Press Process Type 'selection' button and from that menu, select rinse and re-test at the end of the cycle
 - If Negative proceed to the following steps

Note: During the rinse cycle, the flow will cycle on/off. If you are not able to take a sample from the port, wait a few seconds for the flow to resume.
8. Turn off the Gambro Artis machine
9. On the Gambro portable RO, press and hold the operation button (Center button) for three seconds to put the RO into "Standby"
10. Locate water tap, turn "Off". Shut down is complete. If removal of the Gambro Artis with Reverse Osmosis is required follow these additional steps:
 - Remove Reverse Osmosis incoming water line from water tap. (For other location the incoming water line may be connected to the sink water tap)
 - Disconnect the "product water hose" from the Hemodialysis machine
 - Disconnect the drain lines. Coil both drain lines and incoming water line and store at rear of the Gambro Artis and the portable RO
11. Hand hygiene sinks should not be used for drainage purposes. However, if this is unavoidable, once the equipment is disconnected ensure the sink and surrounding area is cleaned with hospital-grade disinfectant wipes. Inform the unit clerk or delegate to contact the Housekeeping Department.
12. Disconnect electrical power cords for both the Reverse Osmosis and Gambro Artis. Coil at rear of Gambro Artis and portable RO
13. Return dialysis machine to appropriate storage area

DOCUMENTATION:

- Document according to unit standard

RELATED POLICIES / LEGISLATION:

1. Nephrology Policies and Procedures - [Hemodialysis - Section 10 - Gambro Artis - Neph 10-03 Stripping and Disinfection of the Gambro Artis Hemodialysis Machine](#)
2. Infection Prevention and Control Policies and Procedures – Infection Prevention and Control Precautions - [Control Routine Practices 00023](#)
3. Corporate Policies and Procedures – Occupational Health and Safety – [Hand Hygiene 00014](#)

REFERENCES:

1. Centre for Disease Control and Prevention. Recommendations for Preventing Transmission of Infections among Chronic Hemodialysis Patients. MMWR 2001 / 50(RR05); 1-43
2. Gambro Artis User Manual, 2012 Version 8.09
3. Gambro Artis Service Manual, 2012 Version 8.06, Service code 6997860
4. Gambro WRO 300 User Manual HCEN9939 Rev may2011
5. Serim Guardian Residual Peroxide Test Strips, Product Information Insert

COMMENTS / SIGNIFICANT REVISIONS: N/A