EQUASHIELD®
PROCEDURES
MANUAL
For Using EQUASHIELD Closed System
Drug Transfer Device
Equashield, LLC is a privately held medical device company with in-depth experience in the design, production and supply of drug admixing and transfer systems. The company’s proprietary product, EQUASHIELD®, is a Closed System Transfer Device for hazardous drugs that exemplifies our credo and commitment to safety and simplicity through innovation.

EQUASHIELD® provides unprecedented protection to healthcare workers and their patients, while remaining affordable and simple to use. All products are FDA cleared and CE approved, complying with the strictest regulatory requirements. Our ISO13485 production facility, is equipped with class 100,000 (ISO-8) clean rooms, and works in full compliance with U.S. Good Manufacturing Practices.

Equashield, LLC provides extensive in-house service and easily accessible local support. By designing and producing innovative protection products, Equashield is creating an environment where medical professionals have the confidence to serve others without compromising their own health and safety. We strive to provide superior innovative solutions for the protection of healthcare workers around the globe.

This procedural book provides suggested instructions on how to use Equashield products within your hazardous drug handling workflow policies. This book is not intended to substitute your facility policies and procedures, but instead, complement them. Local guidelines, regulations or your facility policies should always be followed as it relates to aseptic compounding of hazardous drugs, disinfection procedures for IV access ports, hazardous waste disposal, storage and disposal of used CSTD components and partially used vials.
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PREPARATION
1. Basic Pharmacy Procedures
1.1 Engaging and Disengaging System Components

**Engage:**

All Equashield components are engaged by aligning the red marks on each component and sliding components together (Push On)

**Disengage:**

All Equashield components are disengaged by pulling apart the Syringe Unit from its mating component (Pull Off)

**Note:** All Equashield membranes are cleared for up to 10 disengagements

**DO NOT TWIST OR ROTATE SYSTEM COMPONENTS DURING OR AFTER ENGAGEMENT**
1.2 Preparing a Vial Assembly

Equashield Vial Adaptors are available in five configurations:

- VA-13/2
- VA-13C/2
- VA-20/2
- VA-20C/2
- VA-28/2

Equipment:

1. Drug Vial or Diluent Vial
2. Equashield Vial Adaptor, Appropriate for Vial Closure Size

Adaptor:

1. Remove protective cap from vial and disinfect per facility protocol.

2a. Place Vial Adaptor on the neck of the vial and press down, ensuring snapping of all four locking elements.
   - For VA-13/2, center spike over the neck and push straight down (NOT AT AN ANGLE).

2b. To securely place VA-13/2 or VA-13C/2 onto small vials, ensure the vial adaptor is centered on the vial before pushing straight down.

3. Remove colored cap to access Equashield membrane.

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
1.3 Preparing a Simple Dose

Equipment:
1. Assembled Drug Vial (Refer to: Preparing a Vial Assembly)
2. Equashield Syringe Unit

Procedure:

1. Engage Syringe Unit to Vial Assembly
2. Invert vial and withdraw required amount of drug. Inject air bubbles into vial and continue to withdraw until the required amount is obtained
3. To reduce volume, turn vial in its upright position and inject the drug into vial
4. Disengage Syringe Unit from Vial Assembly
   Syringe Unit is now ready for administration or downstream preparation
5. Dispose of or store Vial Assembly per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
1.4 Preparing a Dose With Multiple Vials

Equipment:
1. Assembled Drug Vial (Refer to: Preparing a Vial Assembly)
2. Equashield Syringe Unit

Procedure:

1. Engage Syringe Unit to Vial Assembly

2. Invert vial and withdraw required amount of drug. Inject air bubbles into vial and continue to withdraw until the required amount is obtained.

3. To reduce volume, turn vial in its upright position and inject the drug into vial.

4. Disengage Syringe Unit from Vial Assembly

5. Repeat the process for each vial until required dose is obtained.

   Syringe Unit is now ready for administration or downstream preparation.

6. Dispose of or store Vial Assembly per facility protocol.

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
1.5 Reconstituting Lyophilized Powder Using a Diluent Vial

Equipment:

1. Assembled Lyophilized Drug Vial (Refer to: Preparing a Vial Assembly)
2. Assembled Diluent Vial (Refer to: Preparing a Vial Assembly)
3. Equashield Syringe Unit

Procedure:

1. Engage Syringe Unit to Vial Assembly
2. Invert vial and withdraw required amount of diluent. Inject air bubbles into vial and continue to withdraw until required amount is obtained
3. To reduce volume, turn the vial in its upright position and inject diluent into vial
4. Disengage Syringe Unit from Vial Assembly
5. Engage Syringe Unit to lyophilized Vial Assembly and inject diluent in an upright position. Shake, swirl or set aside per package insert
6. Invert vial and withdraw required dose. Disengage Syringe Unit from Vial Assembly
   Syringe Unit is now ready for administration or downstream preparation
7. Dispose of or store Vial Assembly per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
1.6 Reconstituting Lyophilized Powder Using a Diluent Bag

Equipment:

1. Assembled Lyophilized Drug Vial (Refer to: Preparing a Vial Assembly)
2. Diluent Bag
3. Equashield Syringe Unit
4. Equashield Spike Adaptor W (SA-W)

Spike Adaptor W (SA-W) is a spike adaptor specifically designed to withdraw diluent from IV bags for reconstitution. NEVER engage a Syringe Unit to the SA-W, if the Syringe Unit was previously engaged to a hazardous drug vial.

1. Using the SA-W, spike a diluent bag up to the ridge on the spike.

2. Disinfect SA-W membrane per facility protocol.

3. Engage Syringe Unit to SA-W and withdraw required amount of diluent.

4. Disengage Syringe Unit from SA-W.

5. Engage Syringe Unit to lyophilized Vial Assembly and inject diluent in an upright position. Shake, swirl or set aside per package insert.

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
6. Invert vial and withdraw required dose. Disengage Syringe Unit from Vial Assembly

Syringe Unit is now ready for administration or downstream preparation

7. Dispose of or store Vial Assembly per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
1.7 Preparing an IV Bag Using an Equashield Spike Adaptor

Equipment:

1. Equashield Syringe Unit With Required Drug Dose
2. Equashield Spike Adaptor (SA-1/SA-1T)
3. IV Bag

This preparation assumes that pharmacy does not connect the tubing set.

Procedure:

1. Using the Spike Adaptor, spike an IV bag up to the ridge on the spike

2. Disinfect Spike Adaptor membrane per facility protocol

3. Engage Syringe Unit to Spike Adaptor and inject drug. Flush Spike Adaptor by aspirating at least 0.5 mL and re-inject

4. Disengage Syringe Unit from Spike Adaptor
   IV bag is now ready for administration or downstream preparation

5. Dispose of Syringe Unit per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
1.8 Preparing an IV Bag Using an Equashield Spike Adaptor and IV Tubing Set

Equipment:
1. Equashield Syringe Unit With Required Drug Dose
2. Equashield Spike Adaptor (SA-1/SA-1T)
3. IV Bag
4. IV Tubing Set
5. Equashield Female Connector (FC-1/FC-1S)

Procedure:

1. Using the Spike Adaptor, spike an IV bag up to the ridge on the spike

2. Flip open cap on Spike Adaptor, insert tubing spike, prime tubing per facility protocol and attach Female Connector to tubing end

3. Disinfect Spike Adaptor membrane per facility protocol

4. Engage Syringe Unit to Spike Adaptor and inject drug. Flush Spike Adaptor by aspirating at least 0.5 mL and re-inject

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
5
Disengage Syringe Unit from Spike Adaptor
IV bag is now ready for administration

6
Dispose of Syringe Unit per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
1.9 Preparing an IV Bag Using an Equashield Secondary Set

Equipment:

1. Equashield Syringe Unit With Required Drug Dose
2. Equashield Secondary Set (SA-1S/SA-1ST)
3. IV Bag
4. Equashield Female Connector (FC-1/FC-1S)

Procedure:

1. Using the Equashield Secondary Set, spike an IV bag up to the ridge on the spike

2. Prime the tubing per facility protocol and attach Female Connector to tubing end

3. Disinfect Spike Adaptor membrane per facility protocol

4. Engage Syringe Unit to Spike Adaptor and inject drug. Flush Spike Adaptor by aspirating at least 0.5 mL and re-inject

5. Disengage Syringe Unit from Spike Adaptor
IV bag is now ready for administration

6. Dispose of Syringe Unit per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
2. Advanced Pharmacy Procedures
2.1 Batch Reconstituting Lyophilized Powder Using an Equashield Reconstitution Set

Equipment:

1. Empty IV Bag
2. Diluent Bag
3. Luer Lock Syringe
4. Equashield Reconstitution Set (LL-1R)
5. Assembled Lyophilized Drug Vials (Refer to: Preparing a Vial Assembly)

Procedure:

1. Spike LL-1R tubing with white one-way valve into an empty IV bag

2. Hang diluent bag and spike with other tubing

3. Attach luer lock syringe to luer port of LL-1R

4. Withdraw approximately 15 mL of diluent into the syringe and push back into system to prime tubing; ensuring there are no air bubbles in tubing

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
5 Engage Female Connector to lyophilized Vial Assembly; keep Vial Assembly in an upright position

6 Use syringe to withdraw required amount of diluent and inject into Vial Assembly

7 Disengage Female Connector from Vial Assembly. Shake, swirl or set aside per package insert

8 Repeat the process for additional lyophilized drug vials

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
2.2 Circle Priming

Equipment:

1. Assembled IV Bag (Refer to: Preparing an IV Bag Using an Equashield Spike Adaptor)
2. IV Tubing Set
3. Equashield Female Connector (FC-1/FC-1S)

Procedure:

1. Clamp tubing, attach Female Connector to tubing end, flip open the cap on Spike Adaptor and insert the tubing spike.

2. Hang assembled IV bag and fill drip chamber.

3. Disinfect the Spike Adaptor membrane per facility protocol.

4. Remove the cap from Female Connector and engage to the Spike Adaptor.

5. Open the roller clamp gradually to prime tubing.

6. Close the roller clamp, disengage Female Connector from Spike Adaptor and reattach the cap.

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
2.3 Priming Into an Empty Bag Using an Equashield Spike Adaptor

Equipment:

1. Assembled IV bag (Refer to: Preparing an IV Bag Using an Equashield Spike Adaptor)
2. IV Tubing Set
3. Equashield Female Connector (FC-1/FC-1S)
4. Equashield Spike Adaptor (SA-1/SA-1T)
5. Empty IV Bag

Procedure:

1. Clamp tubing, attach Female Connector to tubing end, flip open the cap on Spike Adaptor and insert the tubing spike.

2. Hang assembled IV bag and fill drip chamber.

3. Using the Spike Adaptor, spike an empty IV bag and disinfect Spike Adaptor membrane per facility protocol.

4. Remove the cap from Female Connector and engage to the Spike Adaptor attached to an empty bag.

5. Open the roller clamp gradually to prime tubing.

6. Close roller clamp, disengage the Female Connector from the Spike Adaptor and reattach cap.

7. Dispose of empty IV bag and Spike Adaptor per facility protocol.

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
2.4 Transferring From an Equashield Syringe Unit to Another Equashield Syringe Unit

Equipment:

1. Equashield Syringe Unit With Required Drug Dose
2. Equashield Syringe Unit With Required Diluent
3. Equashield Luer Lock Adaptor DC (LL-1DC)

Procedure:

1. Disinfect LL-1DC per facility protocol
2. Engage a Syringe Unit to each end of LL-1DC
3. Inject fluid from one Syringe Unit to the other
4. Disengage the Syringe Units from LL-1DC
5. Dispose of the components per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
2.5 Filtering Into an IV Bag Using a Disc Filter

Equipment:

1. Assembled IV Bag (Refer to: Preparing an IV Bag Using an Equashield Spike Adaptor)
2. Luer Lock Disc Filter
3. Equashield Luer Lock Adaptor (LL-1)
4. Equashield Female Connector (FC-1/FC-1S)
5. Equashield Syringe Unit With Required Drug Dose
6. Equashield Syringe Unit With Fluid for Flushing

Procedure:

1. Attach LL-1 to disc filter

2. Attach Female Connector to disc filter

3. Disinfect the Spike Adaptor membrane per facility protocol and engage the Disc Filter Assembly

4. Disinfect LL-1 membrane per facility protocol and engage the Syringe Unit with required dose

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
5. Inject the drug through disc filter

6. Disengage Syringe Unit from the Disc Filter Assembly

7. Engage the Syringe Unit for flushing of Disc Filter Assembly and inject

8. Disengage the Disc Filter Assembly from Spike Adaptor

9. Dispose of the Syringe Units and Disc Filter Assembly per facility protocol
   Always refer to disc filter manufacturer’s data sheet

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
2.6 Preparing an Ambulatory Pump Cassette

Equipment:

1. Ambulatory Pump Cassette and Tubing
2. Equashield Luer Lock Adaptor (LL-1)
3. Equashield Female Connector (FC-1/FC-1S) - Two Pieces
4. Equashield Syringe Unit With Required Dose
5. Luer Lock Syringe With Required Diluent

Procedure:

1. Attach luer lock syringe to cassette, inject diluent and remove air

2. Clamp cassette and detach luer lock syringe

3. Attach LL-1 to the cassette, unclamp and disinfect LL-1 membrane per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.

4 Engage Syringe Unit to LL-1 and inject drug

5 Withdraw small air bubbles, clamp and disengage the Syringe Unit from LL-1

If attaching tubing:

6 Prime tubing per facility protocol and attach a Female Connector to each end

7 Remove cap from Female Connector and engage to LL-1
   Cassette is ready for administration

8 Dispose of Syringe Unit per facility protocol
2.7 Preparing an Elastomeric Pump

Equipment:

1. Elastomeric Pump
2. Equashield Syringe Unit With Required Dose
3. Equashield Luer Lock Adaptor (LL-1)
4. Equashield Female Connector (FC-1/FC-1S)
5. Luer Lock Syringe With Required Diluent

Procedure:

1. Attach luer lock syringe to pump and inject diluent
2. Prime tubing and attach Female Connector to the tubing end
3. Attach LL-1 to pump
4. Engage Syringe Unit to the LL-1, invert pump and inject drug
5. Disengage Syringe Unit from LL-1
   Elastomeric pump is ready for administration
6. Dispose of Syringe Unit per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
ADMINISTRATION
3. Basic Nursing Procedures
3.1 Engaging and Disengaging System Components

Engage:

All Equashield components are engaged by aligning the red marks on each component and sliding components together (Push On)

Disengage:

All Equashield nursing components are disengaged by depressing the lever on the Luer Lock Adaptor (LL-1) and pulling apart (Pull Off)

DO NOT TWIST OR ROTATE SYSTEM COMPONENTS DURING OR AFTER ENGAGEMENT

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
3.2 Administering an IV Push (IVP)

Equipment:

1. Equashield Syringe Unit Prepared With Drug
2. Equashield Luer Lock Adaptor (LL-1)

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Disinfect desired access site per facility protocol
2. Luer LL-1 to the access site
3. Remove cap from Syringe Unit
4. Disinfect LL-1 membrane per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
5. Align red to red and engage Syringe Unit to LL-1 (Push On)

6. After IVP is complete, depress lever on LL-1 and disengage Syringe Unit (Pull Off)

7. Dispose of per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
3.3 Administering an IV Piggyback (IVPB)

Equipment:

1. Equashield Prepared IV Bag With Drug
2. Equashield Luer Lock Adaptor (LL-1)

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Disinfect desired access site per facility protocol
2. Luer LL-1 to access site
3. Remove cap from Female Connector
4. Disinfect LL-1 membrane per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
5 Align red to red and engage Female Connector to LL-1 (Push On)

6 After infusion is complete, depress lever on LL-1 and disengage Female Connector (Pull Off)

7 Dispose of per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
3.4 Administering a Direct Connect Infusion

Equipment:

1. Equashield Prepared IV Bag With Drug
2. Equashield Luer Lock Adaptor (LL-1)

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Disinfect desired access site per facility protocol
2. Luer LL-1 to access site
3. Remove cap from Female Connector
4. Disinfect LL-1 membrane per facility protocol
5. Align red to red and engage the Female Connector to LL-1 (Push On)

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
6
After infusion is complete, depress lever on LL-1 and disengage Female Connector (Pull Off)

7
Dispose of per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
3.5 Administering Intramuscular (IM) and Subcutaneous (SQ) Injections

Equipment:

1. Equashield Syringe Unit Prepared With Drug
2. Equashield Luer Lock Adaptor (LL-1)
3. Injection needle

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Luer LL-1 to injection needle

2. Remove the cap from Syringe Unit

3. Disinfect LL-1 membrane per facility protocol

4. Align red to red and engage Syringe Unit to LL-1 (Push On)

5. After injection is complete dispose of per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
3.6 Equashield Y-Site Tubing Accessory

Equipment:

1. Equashield Syringe Unit Prepared With Drug or Equashield Prepared IV Bag With Drug
2. Equashield Y-Site Tubing Accessory (LL-1Y)

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Prime and attach LL-1Y between patient access site and primary IV tubing, using aseptic technique and following facility protocol.

2. Remove cap from Female Connector or Syringe Unit.

3. Disinfect LL-1Y membrane per facility protocol.

4. Align red to red and engage Female Connector or Syringe Unit to LL-1Y (Push On).

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
5. After infusion or push is complete, depress lever on LL-1Y and disengage Female Connector or Syringe Unit (Pull Off)

6. Dispose of per facility protocol
3.7 Back Priming

Equipment:

1. Equashield Prepared IV Bag With Drug
2. Equashield Luer Lock Adaptor (LL-1)

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Disinfect the desired access site per facility protocol
2. Luer LL-1 to access site
3. Remove cap from Female Connector
4. Disinfect LL-1 membrane per facility protocol
5. Align red to red and engage Female Connector to LL-1 (Push On)

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
6 Lower secondary bag below the primary bag until the secondary tubing is primed and drip chamber is filled to facility standard

7 Tubing is now primed and ready for administration per facility protocol
3.8 Flushing

A. With An Equashield Syringe Unit

Equipment:

1. Equashield Syringe Unit Prepared With Diluent

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Disinfect LL-1 membrane per facility protocol

2. Remove cap from Syringe Unit

3. Align red to red and engage Syringe Unit to LL-1 (Push On)

4. After flush is complete, depress lever on LL-1 and disengage Syringe Unit (Pull Off)

5. Dispose of per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
B. With Back Priming Technique

Equipment:

1. Completed IV Infusion

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. After infusion is complete, lower secondary bag below the primary bag until the secondary tubing is flushed per facility protocol

2. After flush is complete, depress lever on LL-1 and disengage Female Connector (Pull Off)

3. Dispose of per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
C. With Equashield Spike Adaptor

Equipment:

1. Equashield Syringe Unit Prepared With Diluent
2. Completed IV Infusion

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. **Disinfect Spike Adaptor membrane per facility protocol**

2. **Align red to red and engage Syringe Unit to Spike Adaptor (Push On)**

3. **After flush is complete disengage Syringe Unit (Pull Off) from Spike Adaptor and flush IV tubing per facility protocol**

4. **Dispose of per facility protocol**
ADMINISTRATION

4. Advanced Nursing Procedures
4.1 Intravesical Instillation (Bladder)

A. Straight Catheter Via Push

Equipment:

1. Equashield Syringe Unit Prepared With Drug
2. Luer Lock Adaptor C (LL-1C)

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Insert LL-1C into straight catheter
2. Remove cap from Syringe Unit
3. Disinfect LL-1C membrane per facility protocol
4. Align red to red and engage Syringe Unit to LL-1C (Push On)
5. After instillation is complete, depress lever on LL-1C and disengage Syringe Unit (Pull Off)
6. Dispose of per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
B. Indwelling Catheter Via Push

**Equipment:**

1. Equashield Syringe Unit Prepared With Drug
2. Equashield Luer Lock Adaptor (LL-1)

**Procedure:**

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Disinfect access port per facility protocol
2. Luer LL-1 to access port
3. Remove cap from Syringe Unit
4. Disinfect LL-1 membrane per facility protocol
5. Align red to red and engage Syringe Unit to LL-1 (Push On)

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
6. After instillation is complete, depress lever on LL-1 and disengage Syringe Unit (Pull Off).

7. Dispose of per facility protocol.
C. Straight Catheter Via Gravity

Equipment:

1. Equashield Prepared IV Bag With Drug
2. Equashield Luer Lock Adaptor C (LL-1C)

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Insert LL-1C into catheter
2. Disinfect LL-1C membrane per facility protocol
3. Remove cap from Female Connector
4. Align red to red and engage Female Connector to LL-1C (Push On)
5. After instillation is complete, depress lever on LL-1C and disengage Female Connector (Pull Off)
6. Dispose of per facility protocol

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
4.2 Ambulatory Pump

A. Administration

Equipment:

1. Equashield Prepared IV Bag With Drug or Equashield Prepared Cassette With Drug
2. Equashield Luer Lock Adaptor (LL-1)

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. Disinfect desired access site per facility protocol

2. Luer LL-1 to access site

3. Remove cap from Female Connector

4. Disinfect LL-1 membrane per facility protocol

5. Align red to red and engage Female Connector to LL-1 (Push On)

NOTE: Facility protocol may vary. Please follow local safe handling guidelines and your facility protocols for aseptic handling.
B. Disconnection

Equipment:

1. Completed Ambulatory Pump Infusion

Procedure:

Follow aseptic technique and facility guidelines for safe handling and drug administration, confirming all connections are tightened securely. Follow facility protocol for disinfection of all access ports and Equashield components.

1. After infusion is complete, depress lever on LL-1 and disengage Female Connector (Pull Off). Flush per facility protocol.

2. Dispose of per facility protocol.