REINFORCEMENT FOR PURGE MANAGEMENT
RECOMMENDATIONS

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- NEVER USE ANY SALINE IN THE PURGE (including normal saline NS, ½NS, D5 NS, D5 ½NS)
- Recommended purge is D5W (5% dextrose in water) with 50 U/ml of heparin
- Use of thrombolytic agents are not recommended under any circumstances
- Protocols and pharmacy rules for standard order sets and prohibiting incompatible fluid orders are highly recommended

Failure to properly manage the purge system can lead to pump stop and loss of hemodynamic support.

BACKGROUND

All Impella Heart Pump motors are protected from biomaterial build up by running fluid through a purge system. The Impella heart pump purge system must use a (hospital provided) dextrose solution between D5W and D40W. Impella 2.5® and Impella CP® heart pumps also use saline in the placement fluid line in the ICU (see figure below).

PUTTING IT INTO PRACTICE

Use the information below as a guide for proper purge management:

1. Follow Abiomed instructions on the use of dextrose solutions with heparin in the purge solutions.
   - Recommended purge solution is D5W with 50 U/ml of heparin
   - Impella System is approved for D5W to D40W

2. Never use any saline in the purge.
   - Including normal saline NS, ½NS, D5 NS, D5 ½NS
   - Saline solution is corrosive to the pump and will result in a pump stop, even after short exposure

3. For patients where there is a concern with the use of heparin due to heparin induced thrombocytopenia (HIT).
   - DTIs (Direct Thrombin Inhibitors) have not been tested with the Impella System
   - Contact our Medical Affairs department to understand the patient risks and benefits associated with alternate anticoagulants and DTIs (medicalaffairs@abiomed.com)

4. Use of thrombolytic agents are not recommended under any circumstances.

SUMMARY

Proper purge management is critical to maintain the Impella System for the intended durations of use. Periodic training of all staff responsible for the management of Impella products as well as hospital protocols and rules are highly recommended to ensure optimal performance.

Placement Line: Normal Saline* (*for ICU set up)

Purge Line: D5W with 50 U/ml heparin (never use any saline in this line)