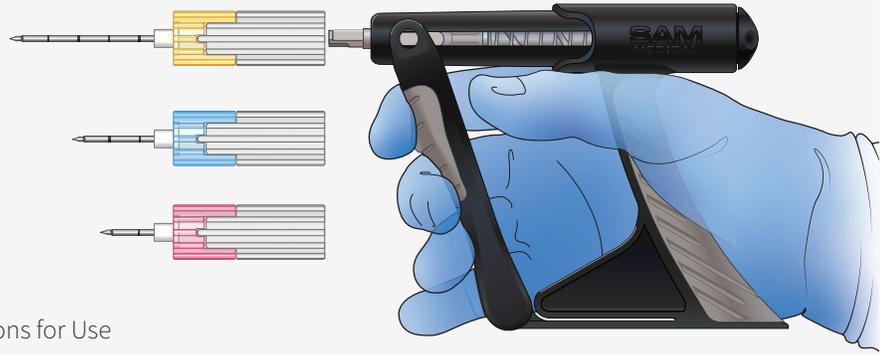
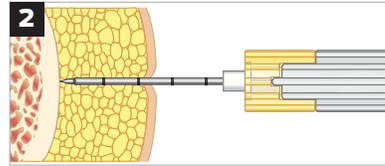


QUICK REFERENCE  
**TRAINING GUIDE**

This training guide does not replace the SAM IO® Instructions for Use (IFU) provided with the product. See QR Code below.



- Select optimal site according to institutional protocol.
  - Clean insertion site per institutional protocol or policy.
  - Prime infusion set.
  - Attach needle assembly to driver.
  - Remove safety cap from needle assembly.



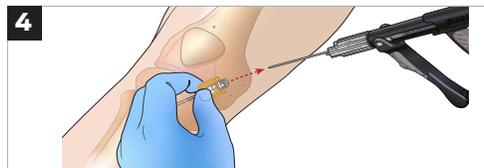
- Insert needle assembly through skin and adipose tissue. Needle assembly tip should come to rest against targeted periosteum.
  - Ensure that  $\geq 5$  mm of catheter (at least first black line on proximal catheter) is visible above the skin. (See Additional Notes: A)

**IMPORTANT: KNOW BEFORE YOU START**  
**DO NOT USE EXCESSIVE DRIVER FORCE**

- Use minimal (gentle) steady downward insertion pressure. Allow needle assembly tip rotation to penetrate compact bone.
- The mechanical rotation of the needle by handle actuation and the cutting edge of the needle should be the PRIMARY mechanisms to penetrate bone, NOT the force of downward pressure.
- Begin with little to no downward pressure, and gradually increase light pressure until advancement of the needle by handle actuation is achieved.
- Each patient may require a different amount of force to be applied.



- Continuously actuate (repeatedly compress) driver's trigger assembly, while applying gentle, steady downward insertion pressure to achieve controlled entry. See Additional Notes: B if driver is unavailable.



- A subtle "give" or "pop" indicates entry into the medullary space.
  - Remove stylet by stabilizing needle assembly hub while retracting (lifting off) and disconnecting driver. Stylet will remain attached to driver.



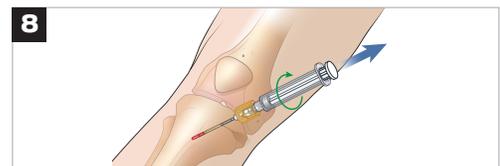
- While holding the driver, guide the stylet into provided NeedleWISE® or appropriate sharps containment device and disconnect stylet from driver.



- Attach primed extension set to catheter hub, firmly secure by twisting clockwise.
  - Confirm catheter placement.



- Flush SAM IO® with normal saline as directed by protocol or standard. Repeat flush as needed.



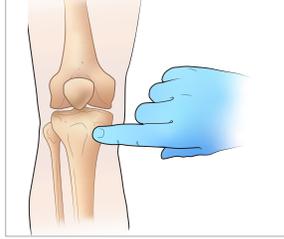
- Once SAM IO® catheter has been flushed, administer fluids and medications per protocol or standard.

## INSERTION SITE AND NEEDLE LENGTH RECOMMENDATIONS

ADULT



Proximal Humerus

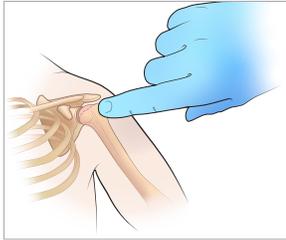


Proximal Tibia



Distal Tibia

PEDIATRIC



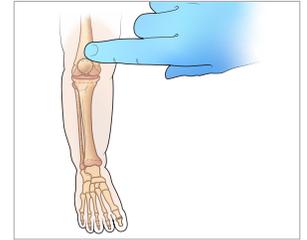
Proximal Humerus



Proximal Tibia



Distal Tibia



Distal Femur

- 15 mm Needle - For adult and pediatric patients with non-existent to limited overlying adipose tissue.
- 25 mm Needle - For adult and pediatric patients with minimal to moderate overlying adipose tissue.
- 45 mm Needle - For adult and pediatric patients with moderate to excessive overlying adipose tissue.

## ADDITIONAL NOTES

### NOTE A

Needle assembly selection starts with the general weight ranges but ultimately, the true measurement can be found by use of the black (depth marker) line, and post-insertion placement confirmation steps to further validate correct insertion depth.

### NOTE B

If driver is unavailable, a manual insertion technique can be applied. While holding needle assembly hub as illustrated, offer gentle downward pressure, while alternately rotating (twisting back and forth) to advance tip into medullary space. Do NOT use excessive force, and do NOT rock or bend needle assembly during insertion.

## INSTRUCTIONS FOR USE



### SCAN ME!

Scan the QR code for instant access to the Instructions for Use (IFU).

Disclaimer: This information is not intended to be a substitute for the SAM IO® instructions for use, sound clinical judgment or your institution's treatment protocols. Users must review the instructions for use prior to intraosseous access. SAM Medical disclaims all liability for the application or interpretation of this information in the medical treatment of any patient.

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