Pyng Medical has developed two types of devices to aid in the training curriculum of the FAST1® Intraosseous Infusion System: The FAST1 Training Device and The SimIO Training Device.

**FAST1 Training Device**

The FAST1 Training Device (also referred to as the “Demo Introducer”) allows students to practice on a device very similar to the actual FAST1 and to become acquainted with proper deployment and safety procedures.

As a training device, the FAST1 Trainer can be re-set and re-used multiple times. The FAST1 Training Device is used on simulated devices such as the SimStern, allowing students to get hands-on experience with a similar replicate of the device and get a feel for how the device really works.

**SimIO Simulator System**

The SimIO Training Device (also referred to as the “SimIO Introducer”), a simulated FAST1 device, is used to practice the FAST1 Intraosseous Infusion System on “volunteer patients” and allows for realistic practice scenarios without needles.

The SimIO Training Device duplicates all aspects of the FAST1, except for actual penetration of the skin or sternum by the Stabilizer Needles or Infusion Tube. The Stabilizer Needles and Infusion Tube have been replaced with a “hook-sided” Velcro patch that is attached to the end of the Infusion Tube. The SimIO Infusion Tube is held in place on the Target Patch by a Velcro “loop-sided” fastener.

Since the SimIO Training Device does not contain any needles or sharps, it can be deployed on a live person in order to practice emergency scenarios.

More information follows on how to use these devices, as well as how to reset them for repeated usage.
FAST1 TRAINING PRODUCT CATALOG

FAST1 Training System RTR
01-0144
  • SimIO System, 01-0115 (see below for parts)
  • Target Patch, 01-0026
  • Reset Tool, 01-0036
  • Demo Introducer, 01-0150
  • SimStern Thick Normal, 01-0051
  • SimStern Thin Normal, 01-0053
  • Demo Kit Spare Parts Pkg, 01-0157
    • Post-Use Sharps Plug, 01-0033
    • SimIO Infusion Tube, 01-0012
    • Stylet Supports, 02-0018
    • Infusion Tube, 01-0174
  • SimIO Accessories - 10 Pack, 01-0058
  • SimStern Marrow, 02-0098
  • Instructions for Use, 04-0057
  • Training System Carrying Case - Clear, 04-0085
  • Training DVD, 07-0104
  • FAST1® Poster, PM-026

SimIO System
01-0015
  • SimIO Patch, 01-0027
  • SimIO Introducer, 01-0047
  • Dome, 01-0104
  • SimIO Unit Package Label, 04-0090

SimIO Accessories (10 pack)
01-0058
FAST1 TRAINING PRODUCT CATALOG

SimIO Introducer
(also referred to as “SimIO Training Device”)
01-0047

SimIO Target Patch
01-0027

SimIO Infusion Tube
01-0012

Dome
(also referred to as “Protector Dome”)
01-0104

Demo Introducer
(also referred to as “FAST1 Training Device”)
01-0150

Infusion Tube
01-0174
FAST1 TRAINING PRODUCT CATALOG

Reset Tool
01-0036

SimSternal
- SimStern Marrow - 02-0098
- SimStern Thick Normal - 01-0051
- SimStern Thin Hard - 01-0052
- SimStern Thin Normal - 01-0053

Target Patch
01-0026

Post-Use Sharps Plug
(also referred to as “Sharps Foam Plug”)
01-0033

Pre-Use Sharps Cap
(also referred to as “Sharps Protection Cap”)
02-0022

Stylet Supports (pair)
02-0018
FAST1 TRAINING DEVICE INSTRUCTIONS

DEPLOYMENT

1. Place Target Patch on a SimStern block (yellow foam with plastic over white foam).
   a. The clear, hard plastic represents the bone.
   b. The yellow foam represents the skin and fat tissue.
   c. The white Styrofoam represents the marrow.

2. Peel off tabs #1, then #2 and adhere to SimStern block.

3. Hold FAST1 Training Device in dominant hand (or as comfortable).

4. Remove the Sharps Protection Cap from the FAST1 Training Device.
5. Place Stabilizer Needles in the Target Zone of the Target Patch, perpendicular to the SimStern block.

6. Press down with firm and increasing force until the Introducer releases.

7. Pull the FAST1 Training Device straight back to separate the Handle from the Infusion Tube, which is now inserted into the SimStern “bone.”

8. Push the Stabilizer Needles straight into the red Sharps Foam Plug and reattach Sharps Protection Cap.

This is a one-handed procedure and the Sharps Foam Plug must remain on the table/surface and NOT be picked up.
9. Remove BLUE cap and connect the Infusion Tube to the connector tubing attached to the Patch. Remove the WHITE cap from Luer fitting and connect IV tubing.

10. Secure Protector Dome to Target Patch.

REMOVAL

11. Remove the Protector Dome.

12. Disconnect the IV line from the Connector Tube on the Target Patch and the friction fitting from the Infusion Tube.

13. To remove, grip as close to the lower end of the Infusion Tube as possible. Pull the Infusion Tube out from the SimStern "bone."

Note: Pull in one continuous motion (do not start/stop) until removed. Use the Tube to pull, not the Luer connection. It is normal for the tubing to stretch.
RESETTING THE FAST1 TRAINING DEVICE

RESETTING THE STABILIZER NEEDLES

1. Remove the Sharps Protection Cap and/or Sharps Foam Plug.

2. Ensure that there is no Infusion Tube on the Stylet.

3. Reset the FAST1 Training Device using the Reset Tool.

   Insert the Reset Tool through the small hole in the distal end (opposite end from the Stabilizer Needles) of the FAST1 Training Device.

4. Hold the FAST1 Training Device in one hand and the Reset Tool in the other, so that the Reset Tool can be pushed while keeping the Stabilizer Needles pointed away from you and anyone else.

   Warning: When you reset the Training Device, its sharp Stabilizer Needles will snap forward into place. Keep fingers well away from this end.

5. Reset the FAST1 Training Device by pushing on the Reset Tool (as shown) until the Stabilizer Needles snap forward into place. Remove the Reset Tool.

   The Stabilizer Needles are now reset.
REPLACING THE INFUSION TUBE AND STYLET SUPPORTS

Warning: The Stabilizer Needles are very sharp. Use caution when replacing the Infusion Tube and Stylet Supports. Use the Reset Tool to prevent needle stick injuries.

1. After the Stabilizer Needles have been reset, place the Infusion Tube into the center of the Stabilizer Needles.

   Ensure the Stylet enters the Infusion Tube. Be careful not to puncture the Tube with the Stylet tip.

2. Use the Reset Tool to seat the stainless steel bone portal tip on the tip of the Stylet.

3. Pick up one Stylet Support. Loosely place its bulb end into the bore of the Stabilizer Needles, on one side of the Infusion Tube. The bulb end must face into the Introducer.
4. Hold the Reset Tool as shown to push the Stylet Support gently into the bore until it clicks into place. The Reset Tool will slide between the needles.

Once in place, the end of the Stylet Support should be approximately flush with the proximal face of the bone probe.

**Note:** Holding the Reset Tool as shown prevents over-insertion of the Stylet Supports.

5. Repeat steps 3 and 4 with the second Stylet Support.

Be careful to insert the second Stylet Support on the opposite side of the Infusion Tube from the first support. Ensure the Stylet Support is inserted bulb end first.

6. Replace the Sharps Protection Cap.

The FAST1 Training Device is now reset and reloaded. It is ready to be used in the SimStern.
FAST1 SIMIO TRAINING DEVICE INSTRUCTIONS

DEPLOYMENT

1. Have “volunteer” patient lay down on the floor in the supine position.
   Expose sternum and locate the sternal notch by placing index finger in the notch.

2. Place SimIO Target Patch on patient by removing the adhesive backing. Pull off tabs #1, then #2 and adhere.

3. Stand at the patients head and hold the SimIO Training Device in dominant hand (or as comfortable).
   Place the “hook-sided” Velcro Patch that is on the SimIO Training Device, on the Target Zone of the SimIO Target Patch (loop-side).
   Hold SimIO Training Device perpendicular to the manubrium.

4. Press down smoothly with increasing force until you hear the Infusion Tube separate from the SimIO Training Device.
5. Pull SimIO Training Device up, off of the SimIO Infusion Tube.

6. Remove BLUE cap and connect the SimIO Infusion Tube to friction fitting on tubing attached to the SimIO Target Patch.

   Remove WHITE cap from Luer fitting and connect IV tubing.

7. Secure Protector Dome to SimIO Target Patch.
REMOVAL

8. Remove the Protector Dome. The SimIO Target Patch may have to be held down while the Dome is being removed.

9. Disconnect the IV line from the Connector Tube on the SimIO Target Patch and the friction fitting from the SimIO Infusion Tube.

10. Remove the SimIO Infusion Tube from the SimIO Target Patch by disengaging the Velcro fastening.

11. Remove the SimIO Target Patch.
RESETTING THE SIMIO TRAINING DEVICE

1. Reset the SimIO Training Device by using the Reset Tool.

   Insert the Reset Tool through the small hole in the distal end (opposite end from the Velcro Patch) of the SimIO Training Device.

2. Push the Reset Tool forward until the SimIO Foot snaps into place. Remove the Reset Tool.

3. Insert the SimIO Infusion Tube, Luer end first, into the SimIO Foot. The Foot is magnetized and will attach itself to the SimIO Infusion Tube.

4. The SimIO Training Device is now reset and reloaded, and is ready to be re-used.