

# Acumen IQ™ Sensor with Transpulmonary Thermodilution (TPTD)

## Setup Guide

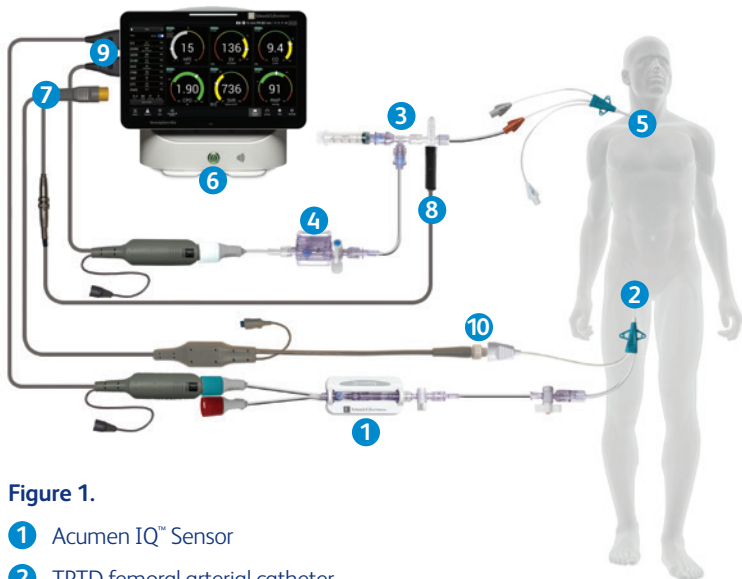


**Figure 1.**

- 1 Acumen IQ™ Sensor
- 2 TPTD femoral arterial catheter
- 3 TPTD thermistor manifold
- 4 TruWave Pressure Transducer
- 5 Central venous catheter
- 6 HemoSphere Alta™ Monitor
- 7 Swan-Ganz™ Patient Cable
- 8 In-line injectable temperature probe
- 9 Pressure cable
- 10 Femoral catheter thermistor connection

## Transpulmonary Thermodilution (TPTD) Connection Overview

- 1 Connect the HemoSphere Alta™ Swan-Ganz™ Patient Cable to the HemoSphere Alta™ Monitor as described in section 8.1 of the HemoSphere Alta™ Operator's Manual. Figure 1 **7**
- 2 Verify that the femoral catheter Figure 1 **2** and central venous catheter Figure 1 **5** are properly inserted into the patient. Refer to details in catheter IFU.
- 3 Attach the thermistor end of the HemoSphere Alta Swan-Ganz patient cable to the thermistor connector on the femoral arterial catheter. Figure 1 **10**
- 4 Connect the pressure cables as described in section 9.1 Pressure Cable Overview of the HemoSphere Alta™ Operator's Manual. Figure 1 **9**
- 5 Follow detailed instructions provided in section 9.2.1 Connect FloTrac™, FloTrac Jr™, or Acumen IQ™ Sensor of the HemoSphere Alta™ Operator's Manual for priming the Acumen IQ™ Sensor, zeroing, and connecting it to the femoral catheter. Figure 1 **1**
- 6 Follow detailed instructions provided in the IFU of the Transpulmonary Thermodilution kits for priming and connecting the thermistor manifold to the central venous catheter. Figure 1 **3**
- 7 Connect the injectate temperature probe(in-line) to the injectate temperature probe connector on the TPTD thermistor manifold. Figure 1 **8**
- 8 Follow detailed instructions provided in section 9.3.1 Connect TruWave™ DPT of the HemoSphere Alta™ Operator's manual for priming the TruWave™ Sensor and connecting it to the TPTD thermistor manifold and central venous catheter. Figure 1 **3 4**
- 9 Continue below for on screen monitoring prompts.

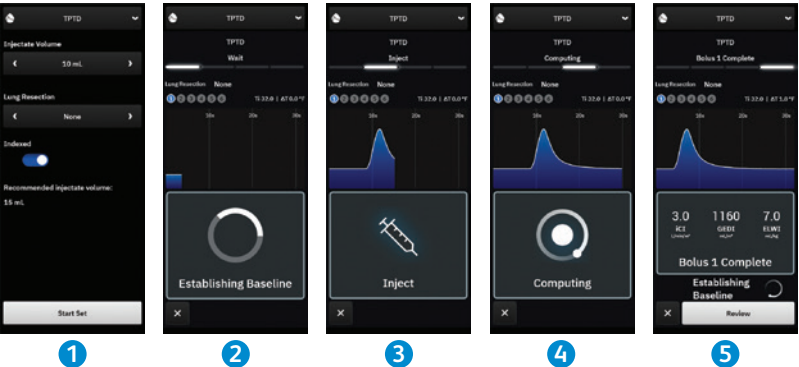
# Transpulmonary Thermodilution Procedure

Connect a pre-chilled syringe with normal saline to the TPTD thermistor manifold valve/port connection. Figure 1 **3**



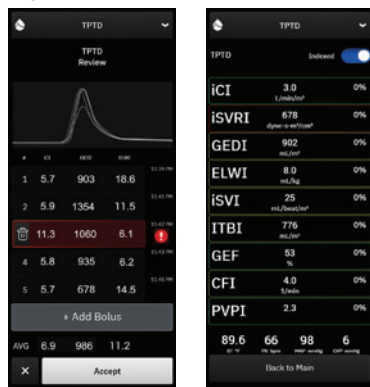
1 Touch the **Clinical Tools** icon, and then the **TPTD** button.

Figure 2.



- 2 For **Injectate Volume**, select either **10 mL**, **15 mL**, or **20 mL** using the arrows to switch through the menu options. Figure 2 **1**
- 3 If appropriate, according to the patient history, use the arrows to **Lung Resection** and select the descriptor of the lung portion removed (for example RUL right upper lobectomy). Figure 2 **1**
- 4 Toggle the **Indexed** menu option on or off for desired parameter results. Figure 2 **1**
- 5 Touch the **Start Set** button. If the **Start Set** button is disabled, refer to section 13.6.2 TPTD Procedure of the HemoSphere Alta™ Operator's Manual. Figure 2 **1**
- 6 **Wait** will appear at the top of the side panel with text "**Establishing Baseline**". Figure 2 **2**
- 7 When the thermal baseline is established the "**Inject**" screen will appear. Figure 2 **3**
- 8 When **Inject** appears on the screen, use a rapid, smooth, continuous method to inject the cold solution with the volume amount previously selected.
- 9 If more measurements are required, replace with another pre-chilled primed syringe.
- 10 Observe the thermal washout curve. "**Computing**" will appear to indicate parameters are being calculated from the washout curve. Figure 2 **4**
- 11 When the thermal washout curve is complete and a stable thermal baseline is reached, the Inject screen will appear. Repeat steps 6 through 10 up to six times.

Figure 3.



- 12 Touch the **Review** button to review the set of washout curves. Waveforms that are irregular or questionable will have a  next to the waveform data set.
- 13 Touch the trashcan icon to remove any irregular or questionable bolus from the set.



- 14 Touch the **Accept** button when you are done reviewing to use the average value as the TPTD algorithm CO calibration and to view the TPTD values. Figure 3

After accepting TPTD set values, CO and SV parameter tiles will display "CAL" to indicate TPTD algorithm calibration.

## TPTD Summary Screen



After the TPTD set has been accepted, the set summary will be displayed as a time stamped event on the Events & Intervention side panel. This summary screen can be accessed anytime by touching the **Clinical Tools** icon, and then the **Events and Intervention** button. Scroll through the events list and select the desired Thermodilution set to view the summary.

Medical device for professional use. For a listing of indications, contraindications, precautions, warnings, and potential adverse events, please refer to the Instructions for Use (consult [eifu.edwards.com](http://eifu.edwards.com) where applicable).

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