1. Ensure the HemoSphere Swan-Ganz module is inserted into the monitor. The module will click when properly engaged.

2. Connect the patient CCO cable to the HemoSphere Swan-Ganz module.

3. Attach the thermistor and thermal filament catheter connections to the patient CCO cable by aligning arrows.

4. Touch the **Start** monitoring icon.

   A countdown timer will appear indicating CO data is being collected.

   After approximately 5 to 12 minutes, when sufficient data has been obtained, a CO value will appear.

   For longer time spans between calculations, select STAT CO (sCO) as a key parameter. Estimate of the CO value updated every 60 seconds.
Oximetry (SvO₂ / ScvO₂) connection overview
Note: Swan-Ganz catheter should not be primed prior to In Vitro calibration.

1. Connect the HemoSphere oximetry cable to the HemoSphere advanced monitor.
2. Connect the HemoSphere oximetry cable to the oximetry port of the Swan-Ganz catheter.
3. Select Settings on navigation bar.
4. Select Oximetry Calibration.
5. Select In Vitro Calibration or In Vivo Calibration as desired and follow prompts.

Pause monitoring
1. Hold the Silence Alarm button until monitoring pause confirmation pop-up appears.
2. Confirm suspension of monitoring operations.
3. To resume monitoring, touch the Monitoring Pause Exit button.

EDV/RVEF monitoring
Right ventricular end diastolic volume (EDV) monitoring is available in conjunction with CO monitoring mode when using a Swan-Ganz CCOombo V catheter and ECG signal input.

1. Ensure patient CCO cable is connected to Swan-Ganz catheter.
2. Connect the ECG interface cable’s 1/4 inch miniature phone plug to the ECG monitor input on the rear panel of the HemoSphere advanced monitor.
3. Change parameter tiles to reflect EDV/RVEF parameters as desired.
In Vitro Calibration
Note: Swan-Ganz catheter should not be primed prior to In Vitro calibration.

1. Touch the Settings icon and select Oximetry Calibration.

2. At the top of the Oximetry Calibration screen, select Oximetry Type: $\text{SvO}_2$ or $\text{ScvO}_2$.

3. Touch In Vitro Calibration icon. On the In Vitro calibration screen, enter either the patient’s hemoglobin (HGB) or hematocrit (Hct).

4. Touch Calibrate button to start the calibration process.

5. When the calibration successfully completes, the following message appears: In Vitro Calibration OK, insert catheter.

6. Insert the catheter as described in the catheter instructions for use.
In Vivo Calibration

1. Touch the Settings icon and select Oximetry Calibration.

2. At the top of the Oximetry Calibration screen, select Oximetry Type: \( \text{SvO}_2 \) or \( \text{ScvO}_2 \).

3. Touch In Vivo Calibration button. Touch Continue button to proceed to the draw operation.

4. When baseline calibration is successful, touch Draw button and perform blood draw.

5. Draw the blood sample slowly (2 mL or 2 cc over 30 seconds) and send the blood sample to the lab for measured analysis by co-oximeter.

6. When lab values are received, touch HGB button to enter the patient’s hemoglobin or Hct button to enter the patient’s hematocrit. Enter the lab oximetry value (\( \text{SvO}_2 \) or \( \text{ScvO}_2 \)).

7. Touch Calibrate button to complete.

Note: This process requires approved personnel to draw waste blood (clearing volume) and a blood sample for laboratory processing.

CAUTION: Federal (United States) law restricts this device to sale by or on the order of a physician. See instructions for use for full prescribing information, including indications, contraindications, warnings, precautions and adverse events.

ForeSight Elite tissue oximetry system is manufactured by CAS Medical, Inc., a subsidiary of Edwards Lifesciences Corporation.

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