



Royal United Hospital Bath
Critical Care Services (Outreach and Unit)
Standard Operating Procedures

COPY

Title: Guidelines for using the ABL 800 FLEX Gas Machine, when processing a blood sample.

Objective: To standardise practice for the safe use of processing blood samples in the ABL 800 FLEX Gas Machine.

Clinical question answered by guideline: How to use the ABL 800 FLEX Gas Machine, when processing an arterial or venous blood sample.

Who the guideline is aimed at: All staff managing the patients who are requiring blood gas results.

Procedure:

- Before you start, check the status (e.g. ready for use, on hold, etc).



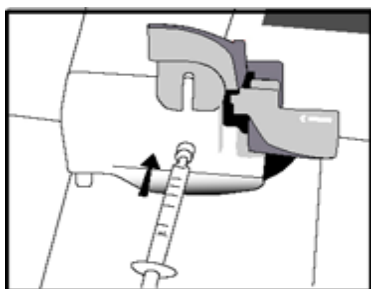
- Only start if it is ready and the green lights are on all of the measurements.
- The parameter bar lists all measured parameters available and activated on your analyzer.
- It allows you to judge the parameter status at a glance before you have to perform a measurement.
- Red = cannot be used
- Yellow = unreliable
- Green = OK



- When starting press Menu on the Ready screen.
- Then click on Logon.
- Type in your password:
- Confirm with Enter



- Always remove air bubbles from the sample before introducing it into the analyzer. Air bubbles may result in incorrect pO2 values.
- Visually inspect the measuring chambers for blockages when lifting the inlet flap prior to performing a measurement. If there is a blockage, close the flap and the machine will perform a rinse.
- Place the blood gas syringe into the port where there is a picture of a gas syringe.



- You will then have to enter in all the details correctly in order for it to process the report.
- Enter in Patients Surname, Registration Number, Sample (i.e. Arterial or Venous), Oxygen percentage, Department (i.e. ITU or Theatres)
- Arterial is the most preferred and recommended type of blood for pH/blood gas analysis. It gives the best information about oxygen uptake in the lungs and oxygen transport.
- Venous not generally recommended for blood gas analysis. It can also be affected by peripheral circulatory efficiency and cellular metabolic needs. It should not be used to evaluate oxygen status. Although it can be used to reflect acid-base status (pH, pCO2,ctHb)
- Once the machine has taken the sample it will make a noise and the gas syringe can be removed.
- If your patient is on more than 20mls/hr Propofol or TPN, please put the machine through cleaning. To do this press Menu, Start Programs, Auxiliary Programs, Cleaning.
- The patient result screen will be displayed automatically when the measurement has been completed.
- Press print to print out the paper report.
- The absence of any markings next to a parameter indicates that the parameter was measured without any fault.
- If it shows (?), before result it means there is an error. The result must not be used. Another sample could be tried after making sure the machine is on green.