EPOC Blood Gas Analysis

Quick Guide

Instrument setup:

1. Switch the host on by pressing the red power button and the reader on by pressing the blue power button down.
2. Log in to the epoc using your initials as the username. There is no password.
3. Wait about 30 seconds for electronic tests and configuration to complete.

Sample Collection (recommended during calibration):

~0.2mL whole blood, in a syringe:

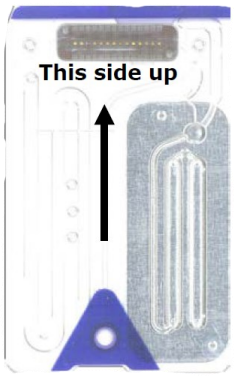
- Heparinised blood gas syringe; OR
- Directly from patient in plain syringe; OR
- Syringe filled from paed tube.

Calibration:

1. Take a card and insert into the reader label-side down, with syringe port facing you.
2. Wait until calibration is complete (approx. 3 minutes). Do not inject sample during this time. If the calibration fails due to an iQC error, remove the card and insert a new one. Vepalabs will replace all failed cards FOC.

Running a test:

1. Once calibration has successfully completed, you have 450 seconds to introduce the patient sample.
2. Eject any air bubbles and the first few drops of blood from your collection syringe. Wipe the leur taper with a kimwipe.
3. Insert the syringe into the syringe port. Give the syringe a 1/4 twist to ensure the seal is good.
4. In a *single fluid motion*, inject the sample into the test card. Aim for about 0.1mL over one second. Do not stop or change speed during injection. Stop when the epoc beeps at you.
5. Remove the syringe, and wait about a minute for the test to complete. Ensure you enter PID and sample type in order to release results.

Analytes Measured:

Potential of Hydrogen ***pH***	*Bicarbonate **cHCO3-**
CO_2 partial pressure ***pCO2***	*Total CO_2 **cTCO2**
O_2 Partial pressure ***pO2***	*Base excess **BE**
Sodium **Na+**	*Oxygen saturation **cSO2**
Potassium **K+**	*Anion Gap **AGap, AGapK**
Ionized Calcium **Ca++**	*Estimated Glomerular
Chloride **Cl-**	Filtration Rate **eGFR**
Glucose **Glu**	*Hemoglobin **cHgb**
Lactate **Lac**	
Creatinine **Crea**	* *calculated values*
Hematocrit **Hct**