

This guide can be used to assist the Trainer when training operators for the ABL90 Flex Plus Blood Gas Analyser.

Pre- Analytical	
Health and Safety	Reinforce the need to use PPE and follow the OH&S procedures relating to blood collection and handling.
Identify the components of the ABL90 Flex Plus	Point out and explain the function of the Touchscreen, Sample inlet probe, Barcode scanner, Automatic mixer, Printer, Solution pack and Sensor cassette.
Traffic Light System	Point out the traffic light on the touch screen which indicates Analyser Status. Green – Ready and no issues. Amber – Can still use analyser but consumables maybe getting low. Red – There is an error or the machine is in start-up mode and analyser cannot be used.
Analytes – QC and Calibrations	Explain that the analyser has QC and Calibration fluids on board and will run QC and Cal's periodically and automatically. If the QC or Calibration are out of acceptable limits, the analyser will turn the analyte red and put a cross through it. Results will not be available for this analyte until the QC and Calibration come back into limits. Explain that QC and Calibrations will occur more frequently after sensor cassette or solution pack has been changed.
Sample requirements & sample collection.	Syringe: Safe PICO syringe – Have one of these on hand and explain the 1.0mL mark and that minimum volume is 0.7mL and maximum is 1.5mL. Show the mixing ball and the balanced heparin in the syringe. Refer the trainee to LWI-POC-027 and go through all of the steps. Demonstrate the process of preparing the safe PICO syringe for testing and observe trainee doing it, once these steps are done explain the sample is stable for up to 30 mins in the safe PICO syringe. If another syringe type is used, explain the specifics of that syringe and how to fill and mix correctly. Capillary: Demonstrate how to use the end caps, mixing wire, clot catcher and magnet to mix and prepare a capillary sample. Sample collection, handling and mixing is a crucial part of blood gas analysis, so make sure the trainee is clear on the correct procedure.
Analytical	
Patient Identification & POCT Patient Reconciliation Form	Patient must be positively identified when sample is collected. Emphasise the correct Patient details have to be entered into ABL90 and the potential consequences if wrong Patient ID is entered i.e. the results going into the wrong patients records. Point out a common error is putting the first name and surname the wrong way around in the Patient Demographics field. Show the POCT Patient Reconciliation Form and reinforce that this needs to be filled in and sent every time a Patient ID error is made. Make sure the trainee knows where to locate these forms and show an example of a completed form.

ABL90 Flex Plus Training Guide

TNG-POC-002

Issued: 18 February 2026 Approved by: R. Nallas

Running and mixing a sample	Demonstrate how to mix and run a syringe and capillary sample and observe the trainee running the samples. Refer to LWI-POC-026 which will be on display and gives step by step instructions. Use Training UR Number 123456 Surname TRAINING for demonstration, except for Bendigo site where UR: 555558 and Surname: Testmartian must be used.
Operator ID and Operator Responsibility	Explain that all testing done on the ABL90 Flex Plus is traceable, each operator is accountable for everything done under their Login. The Operator ID is also used to assess competency for each Operator. Tell the trainee to think of their ID like a Signature and DO NOT SHARE
Post Analytical	
Significant & Critical Results	Direct staff to the Critical Limits display document, explain to the trainee that they are responsible for notifying the clinician of significant and critical results.
Unexpected results	Explain that if results are unexpected and do not 'fit' with the clinical picture that a new blood collection and repeat testing is advised.
Reprinting results	Demonstrate how to reprint results – Data Log>Patient Result Log>Result>Print
Error Codes & Troubleshooting	Explain that errors will occur sometimes, these could be due to clotted or insufficient sample. Advise the trainee to repeat the test, but, if the same error reoccurs to ask Superuser or Supervising Lab for advice. Make sure trainee can locate contact details for Supervising Lab and is aware of who are Superusers on-site.
Maintenance	
Cleaning	Explain the analyser can be cleaned with a CLINELL or similar wipe if required on external surfaces only.
Replace Printer Paper	Demonstrate how to replace printer roll and observe trainee replacing paper. Explain if printer is not working after replacing paper, make sure the lid is closed properly.
Superuser – Only Austin Pathology Staff can train Superusers	
Sensor Cassette & Solution Pack Replacement	Demonstrate replacing a sensor cassette and solution pack. The Sensor Cassette should be loaded straight from the fridge and ensure that the Solution Pack is activated by making sure the lid is firmly pushed down and clicks. Follow instructions on touch screen.
Inlet Gasket	Demonstrate how to change an inlet gasket
Flush sample pathway	Explain the steps to take to overcome a suspected clot in the system
tHb Calibration	Demonstrate how to perform tHb Calibration and advise trainee to follow instruction on the screen for assistance.
QAP	Explain the QAP procedure of running the samples as a patient and make sure the trainee can locate the QAP schedule. Detail the instructions for preparing and handling the QAP samples and the importance of following the instructions.

End Of Document