

iCCnetSA PoCT EXTERNAL QUALITY ASSURANCE PROGRAM INSTRUCTIONS 2024

- Check External Quality Assurance Program Schedule for EQA sample result due dates.
- Select the appropriate EQA sample as indicated by label on vial (eg. EQA 2401 sample is tested in January).
- Print EQA Result sheet from iCCnet Website (Diagnostic Services, PoCT section)
- Follow the instructions below for testing samples.
- Please read instructions below for each analyte.
- For Patient ID use the EQA sample number e.g., 'EQA2401'

For more detailed instructions on testing EQA samples, refer to the **QC Bench Method** for the instrument.

BLOOD GAS AND ELECTROLYTES (EPOC AND ISTAT)

1. Remove EQA sample from refrigerator and allow to come to room temperature (at least 60 minutes).

Note: Do not open the vial until prompted to insert sample.

- 2. Prepare EPOC or ISTAT device and test card/cartridge for use.
- 3. Holding EQA sample with fingers on top and bottom of ampoule, shake vigorously for 15-20 seconds.
- 4. Swirl EQA sample gently to ensure liquid returns to the bottom of the ampoule. Bubbles should remain on liquid surface as a protective interface from air contamination.
- 5. Using a tissue to protect fingers, carefully snap off neck of ampoule.
- 6. Insert a syringe (1mL or 2mL) into the ampoule opening, <u>quickly</u> invert ampoule and syringe and draw up 0.5mL of EQA fluid into syringe.
- 7. Ensure there are no air bubbles in the EQA sample by discarding a drop onto a tissue.
- 8. Load the EQA sample into the test card/cartridge as per testing a patient sample.
- 9. Test EQA sample. Run EQA sample as a Patient test, with Patient ID as EQA sample number e.g., 'EQA2401'.

CRP and LIPIDS (COBAS B101)

- 1. Gently tap EQA sample vial on bench to dislodge lyophilised material from lid.
- 2. Carefully open lid to avoid loss of lyophilised material and add 0.5mL distilled water (or injection water).
- 3. Allow contents to dissolve for 15 minutes at room temperature.
- 4. Gently swirl contents until homogenous, avoid foam formation.
- 5. Test EQA sample. Run EQA sample as a Patient test, with Patient ID as EQA sample number e.g., 'EQA2401'.



D-DIMER (COBAS H232)

- 1. Gently tap EQA sample vial on bench to dislodge lyophilised material from lid.
- 2. Carefully open lid to avoid loss of lyophilised material and add <u>exactly</u> 0.5mL distilled water (or injection water).
- 3. Replace lid and allow contents to dissolve for 5 minutes at room temperature.
- 4. Gently swirl contents until homogenous, avoid foam formation.
- 5. Immediately test EQA sample after 5 minutes. Test EQA sample as a Patient test, with Patient ID as EQA sample number e.g., 'EQA2401'.

Glucose + Ketones (NOVA Statstrip)

- 1. Prepare instrument and insert the test strip with the writing facing up and press Accept/OK.
- 2. For Patient ID use the EQA sample number e.g., 'EQA2401'.
- 3. Using scissors, cut the tip off the long thin end of the dropper.
- 4. Apply a drop of the sample to the end of the test strip until the sample is drawn into the strip.
- 5. Use same EQA sample to perform Glucose + Ketones.

HBA1C (COBAS B101)

- 1. Gently tap EQA sample vial on bench to dislodge lyophilised material from lid, then carefully open.
- 2. Open dropper bottle of clear diluent and add 5 drops to the EQA sample vial.
- 3. Replace lid and allow contents to dissolve for 5 minutes at room temperature, occasionally swirling vial and avoiding foam formation.
- 4. Place diluent bottle back in box as this is required as diluent for the remaining EQA samples.
- 5. Test EQA sample as a Patient test, with Patient ID as EQA sample number e.g., 'EQA2401'.

HEMOCUE HAEMOGLOBIN

- 1. Cut the tip off the long end of the pipette.
- 2. Apply a drop of sample to the foil side (inside) of the microcuvette packaging.
- 3. Fill the microcuvette from the drop on the foil in one continuous motion.
- 4. Wipe excess sample off the outside of the microcuvette with a tissue and ensure no large bubbles are present.
- 5. Test EQA sample as a Patient test, with Patient ID as EQA sample number e.g., 'EQA2401'.



HEMOCUE WBCDIFF

- 1. Gently tap EQA sample vial on bench to dislodge lyophilised material from lid, then carefully open.
- 2. Using scissors, cut the tip off the long thin end of the dropper and add entire contents of the solution to the EQA sample vial.
- 3. Replace lid and allow EQA sample to sit undisturbed for 15 minutes at room temperature.
- 4. Gently invert EQA sample 10-20 times.
- 5. Test EQA sample as a Patient test, with Patient ID as EQA sample number e.g., 'EQA2401'.

INR (COAGUCHEK)

- 1. Gently tap EQA sample vial on bench to dislodge lyophilised material from lid, then carefully open.
- 2. Using scissors, cut the tip off the long thin end of the dropper and add entire contents of the red solution to the EQA sample vial.
- 3. Replace lid and gently swirl EQA sample vial 2-3 times to dissolve contents, avoiding foam formation.
- 4. Test EQA sample as a Patient test, with Patient ID as EQA sample number e.g., 'EQA2401'.

TROPONIN AND NT-PROBNP (COBAS H232)

- 1. Tap the bottle several times gently on the tabletop to dislodge any loose dry material.
- 2. Carefully open the cap on the bottle of control, avoiding the loss of any powdered material
- 3. Carefully add exactly 0.5ml of distilled water or water for injection
- 4. Carefully replace the cap on the bottle.
- 5. Gently swirl the bottle for about 30 seconds and then sit for 5 minutes to allow the contents to dissolve.
- 6. At the end of the 5 minutes, gently swirl again for about 30 seconds. Take care to avoid foam formation.
- 7. The control sample is now ready to test on the cobas h232 instrument. Ensure the sample is tested immediately as Troponin is unstable after reconstitution and any delay may cause falsely decreased results.
- 8. Test EQA sample as a Patient test, with Patient ID as EQA sample number e.g., 'EQA2401'.
- 9. Use same EQA sample to perform NT-proBNP test if needed.

If you have any questions regarding the External Quality Assurance Program, please contact iCCnetSA on (08) 7117 0600 or Health.iCCnetSupport@sa.gov.au.