

Quality control



Reliability of your patient results

The health of your patients depends on quality control

The diagnosis and treatment of critically ill patients to a high degree depend on the results of the blood samples. Test results must reflect the current status of the patient and not be related to changes in analyzer performance. Quality control is the only reliable way of ensuring the performance of the analyzer in terms of accuracy and precision. Therefore, QC materials should be measured on all analyzers regularly.

Is your analyzer in control?

If QC is not measured, there is no way of knowing that the analyzer is measuring correctly.



If the QC interval is too long, there is no way of knowing what is happening between measurements.



With QC you know your analyzer performance

Results from this analyzer reflect patient status arbitrarily as the analyzer has a big random error (low precision), although the mean of the results only shows a small systematic error (high accuracy).



A systematic error (low accuracy of the analyzer) may lead to misinterpretation of patient status. However, trends in results can be followed over time, as there is only a small random error (high precision).



Results from this analyzer will reflect patient status at any given time: the analyzer is in control.



Radiometer's QC approach

Guaranteed compatibility between analyzer and quality control

Radiometer's QC system and analyzers are developed in parallel. Thousands of tests made throughout the development process guarantee that nothing in the QC material will harm the analyzer.

Optimized control ranges

Properly established control ranges are important to ensure that the analyzer measures correctly. If the control ranges are too wide, it will not be possible to detect out-of-control analyzers. If the control ranges are too narrow, time and money is wasted on unnecessary troubleshooting. Radiometer establishes control ranges based on its thorough knowledge of both the analyzer and the QC material.

Metrological traceability

Radiometer manufactures QC material of high quality based on internationally recommended reference methods. In most cases our QC material is traceable to certified reference materials from the National Institute of Standards and Technology (NIST).

Software simplifies your QC processes

Radiometer QC allows you to take full advantage of the specialized analyzer software features that simplify QC procedures and makes it easy to evaluate QC results.

Calibration is not enough to ensure analyzer performance

QC and calibration are two entirely different procedures. QC will detect drift on the sensors, which the calibration will adjust for instead. QC will detect calibration solution errors such as a wrong solution or increased concentrations due to evaporation of solution. With QC the entire sample pathway is checked, whereas the calibration solutions only check the sensors.

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