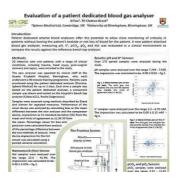


## Clinical Evaluation of New Patient Dedicated Blood Gas Analyser Published



Results from evaluation study of Proxima miniature in-line analyser demonstrate excellent agreement with bench top blood gas analyser

Sphere Medical, innovator in critical care monitoring and diagnostics equipment, announced that the results of a clinical study evaluating its new Proxima miniature in-line blood gas analyser have been published at the recent 35th International Symposium on Intensive Care and Emergency Medicine (ISICEM 2015). A scientific poster, 'Evaluation of a patient dedicated blood gas analyser' [1], was presented by Dr. Tom Clutton-Brock (University Hospitals Birmingham) and Dr. Jess Fox (Sphere Medical). This discussed the excellent results of a method comparison study undertaken at the Queen Elizabeth Hospital, Birmingham, and is also now published as a paper in *Critical Care* [1], or see <a href="https://www.spheremedical.com/content/clinical-resources">www.spheremedical.com/content/clinical-resources</a>.

The study included 20 intensive care unit (ICU) patients with a range of clinical conditions, including trauma, head injury, post-surgical recovery and sepsis. Patients were monitored using the Proxima patient dedicated analyser for up to three days. Each time a sample was tested on the patient dedicated analyser, a concurrent sample was drawn and tested on the hospital's bench top analyser (Cobas b221, Roche Diagnostics). Results demonstrated excellent agreement for pH, pCO<sub>2</sub>, pO<sub>2</sub> and K<sup>+</sup> between the analysers, whilst Proxima could be used for trend analysis for Haematocrit.

The study also observed the potential of patient dedicated arterial blood gas analysers to allow close monitoring of critically ill patients without leaving the patient's bedside or net loss of blood for the patient. It concluded that, "Proxima is well suited to enable staff to more closely manage unstable and critically ill patients. This device may be of significant benefit to patients at risk of iatrogenic anaemia or those being treated in side and isolation rooms."

Dr. Clutton-Brock also presented on 'Bedside Blood Analysis' at ISICEM 2015 within the Respiratory Monitoring Session. Here he highlighted how blood gas should be considered a 'vital sign' that requires monitoring to ensure the effective management of patients in the critical care environment, particularly for those that are unstable.

Maintenance of tissue oxygenation, ventilation and acid-base status is a major concern for most ICUs, since life-threatening changes in these characteristics can occur suddenly and so rapid results are often needed for effective patient monitoring and treatment. Dr. Clutton-Brock observed that the CE marked Proxima can meet these needs and presented further validation data demonstrating excellent agreement with bench top blood gas analysers.

## Reference

1. Fox JJ, Clutton-Brock TH (2015) <u>Evaluation of a patient dedicated blood gas analyser</u>. 35th International Symposium on Intensive Care and Emergency Medicine (ISICEM), Brussels. Critical Care 2015, 19(Suppl 1):P261

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