**v-TAC™ can improve outcomes and save NHS hospitals millions of pounds by Optimizing Acute Non-Invasive Ventilation Care**

The 2017 NCEPOD report and the BTS 2018 Quality Standards for acute NIV in adults revealed serious quality issues across NHS on the delivery of acute NIV services. One of the underlying causes is delays and omissions in blood gas assessment – a vital part of care for this patient group.

v-TAC™ – the new alternative to arterial blood gas (ABG) – makes ABG values easily available from venous blood gas (VBG) and enables significant improvements in clinical care while improving work-flow and lowering costs.

**Application of v-TAC™ for acute NIV blood gas testing will:**

1. **PRODUCE**
   - ABG values from venous blood

2. **ENHANCE**
   - nurse autonomy by easy and rapid access to blood gas testing

3. **IMPROVE**
   - compliance with clinical guidelines, quality of treatment and patient experience

4. **REDUCE**
   - Delay in care
   - Length of stay
   - Cost of care
   - Patient mortality

**Background**

Accurate assessment of gas exchange via blood gas analysis is essential for the clinical management of patients with acute and chronic hypercapnic respiratory failure. Where-as ABG sampling is complex and requires a medical doctor, v-TAC™ combines VBG measurements with oxygen saturation data collected from a pulse oximeter in a process of mathematical arterialisation.

**Benefits**

There are several benefits from the application of v-TAC™ in clinical practice: In the A&E, v-TAC™ reduces the need for follow-up ABGs and ensures pre-NIV baseline to monitor the success/failure of treatment. In respiratory wards, v-TAC gives nurses easy and rapid access to blood gas testing, allowing them to work more independently, e.g. enable nurse-led NIV titration. Nurse-autonomy and nurse-staffing continuity will enhance compliance with acute NIV quality standards to monitor the success or failure of treatment and ensure intervention in time. Compliance with standards-of-care will improve quality of care and outcomes and reduce length-of-stay, costs and patient mortality.
v-TAC™ Product Information

v-TAC™ is an advanced software algorithm that converts VBG values, combined with an oxygen saturation measurement (SpO2), to ABG values with great accuracy and precision. The v-TAC™ software works seamlessly with existing blood gas analysers by capturing VBG results through a data manager in the hospital IT system. It calculates ABG values instantly and automatically and transfers the results to the patient information system or allows their printing on a normal network printer. v-TAC™ is CE-marked as an IVD.

For additional information contact OBI Medical, or visit www.obimedical.com

REFERENCES

- M Lundholdt, KA Damgaard, EF Christensen, P Leuthscher (North Denmark Regional Hospital). Can routine blood gas screening identify patients with unsuspected acid-base conditions and lead to optimised triage group allocation? BMJ Open 2018;8 (Suppl 1, A25)