

## SpO<sub>2</sub> sensor tester builds momentum in the UK

The Electrode, the South Wales, UK company that produces a microspectrometer for checking the accuracy of pulse oximeters used in hospitals, is looking at international expansion in spring/summer 2006.

Its device, the Lightman portable SpO<sub>2</sub> sensor tester, is gaining growing acceptance in UK hospitals, which are increasingly recognising the need for accurate oxygen delivery. "Too much or too little could result in brain or eye damage," The Electrode's managing director, Dr Geoff Mathews, told *Clinica*. Pulse oximeter accuracy is important because it has clinical ramifications if the device is faulty. The Lightman is especially useful in special care baby units, where there are precise monitoring needs.

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The product fills a market gap, said Dr Mathews. "Test devices are out there – simulators and functional testers – but our strength is to be able to test the spectral outcomes coming from the probe." Indeed, a new pulse oximetry standard, ISO9919 (replacing BS EN865), states that simulators and functional testers cannot be used to assess accuracy, as they cannot take into account the spectral properties of the sensors.

The Gwent-based company describes the Lightman as a unique device that can be used for: pre-purchase sensor evaluation; to check sensor accuracy; for maintenance on the wards; and for incoming device inspection and repairs.

### **Lack of awareness of the issue**

The company, set up by Drs Mathews and Veronica Hickson, perceived the need for such a device in the late 1990s, when they identified a lack of awareness among professionals of the need for pulse oximeter testing. They set up a lab to begin R&D on the product, which they launched in the UK in early 2005. Commercial activity started to accelerate some six months ago. The product is already being used in UK hospitals, and also in mainland Europe and the US, and the company is beginning to get multiple orders of the hand-held device, which it sees as "a tremendous endorsement".

Results from two recent UK hospital surveys point to the need for the product. At Musgrove Park Hospital, in Taunton, Somerset, 37% of SpO<sub>2</sub> sensors checked with the Lightman were found to be unacceptable. A similar test being run by Manchester Royal Infirmary has revealed an average of six suspect sensors per week, needing testing with the Lightman.

### **Geographical expansion**

Wider awareness of the product and the need it fulfils is being achieved via scientific journals and by attendance at exhibitions (for instance, Medica, in 2005), and interest is being shown in the US, Japan and mainland Europe, said Dr Mathews. "We expect to get some international distributors on board as of spring/summer," he said.

For the US, a "dream" arrangement would be to secure one distributor, but the company is prepared to look at the possibility of dividing up the territory between two companies.

Further down the line, the company will be looking at the possibility of product enhancements, and in the meantime will continue with its policy of educating the market.