

## OrSense Non Invasive Hemoglobin Monitor Is Safe & Accurate for Pre-Donation Screening in Blood Banks



OrSense Ltd., developer of monitors for non-invasive measurements of various blood parameters, announced on May 28, 2013 that its noninvasive Hemoglobin (Hb) NBM-200 monitor was the topic of multiple recent studies highlighting the clinical value of the device. Four studies, from various countries around the world, were accepted for poster presentations at the International Society Blood Transfusion (ISBT) 2013 conference held in Amsterdam. All studies assessed NBM-200 as a pre-donation anemia screening device in blood banks, to prevent donations by people with Hb levels under the required cutoff. All four studies show that OrSense's non-invasive NBM-200 Hb monitor is accurate, easy to use and favorably accepted by both staff and subjects.

The studies were conducted independently by groups from Central Military Hospital - Military University Hospital Prague, Czech Republic; the Immunohematology and Transfusion Service, Policlinico S.Orsola-Malpighi, Bologna, Italy; Haema AG Leipzig, Germany; Assaf Harofe Hospital, Israel; Rabin Medical Center, Israel, and OrSense.

The NBM-200 device was compared to standard venous laboratory tests and capillary point-of-care devices for Hb measurement, and the studies conclude that OrSense's device is comparable to invasive, point-of-care Hb monitoring solutions while reducing risk of infection and eliminating the need for painful finger pricking. According to the study presented by Dr. Milos Bohonek, from the Military University Hospital Prague, OrSense's monitor provides even better results than point-of-care capillary devices. In addition, the accuracy of NBM-200 is independent of age, gender and body temperature of healthy volunteers. The authors conclude that NBM-200 is suitable for pre-donation screening of blood donors, and is more comfortable for donors and safer for staff.

The three other studies reach similar conclusions. Lior Maayan, CEO of OrSense said, "Numerous blood donation centers worldwide are successfully using our hemoglobin monitoring system and benefiting from its multiple advantages. Pre-donation hemoglobin and anemia screening is a routine and fundamental test aimed at protecting the health of potential blood donors. It is therefore imperative to be able to screen donors for anemia safely, quickly and reliably.

Over the past two years, more than 25 studies performed on thousands of patients and donors demonstrate that NBM-200 not only offers this possibility but also eliminates the need for painful finger pricking as well as biologically hazardous equipment and waste. In addition, these studies highlight the fact that our non-invasive device has the potential to increase first time and repeat blood donations."

"After evaluating OrSense's novel technology we found that it is comparable, or even better, to other existing methods. OrSense's non-invasive system has many benefits that are highly appreciated by blood donors," said Miloš Bohoněk, Ph.D., Head of Department of Hematology, Biochemistry and Blood Transfusion, Central Military Hospital, Prague, Czech Republic. Non Invasive Hemoglobin Measurement OrSense's non-invasive Hb measurement has many advantages including the prevention of pain and potential transmission of infectious diseases, a reduced need for trained personnel, short measurement time, and the absence of bio-hazardous waste. It offers a unique, breakthrough, non-invasive solution for accurate and quick Hb measurements.

The portable, wireless device operates via rechargeable batteries using a ring-shaped sensor that is fitted on the donor's finger and applies pressure, temporarily occluding local blood flow. During the occlusion, optical elements in the sensor perform a sensitive measurement of the light transmitted through the finger. This technology, called SpectOLight<sup>™</sup>, provides a quick, accurate and painless measurement of the donor's blood constituents, while greatly improving donors' comfort, eliminating infection risk, and providing the medical staff with accurate readings and immediate results.

The device has received CE and CDN approvals. It exhibits comparable accuracy to invasive point-of-care solutions while also demonstrating a strong safety profile, ease of use and substantial cost reduction.

## Source: OrSense

Published on : Wed, 29 May 2013