

## **Two Independent Studies Report that Masimo SET Pulse Oximetry Provides The Highest Sensitivity, Specificity and Fidelity**

*Chicago, Illinois, June 11, 2001* - Robert Whitman, PhD, Director, Sleep Disorders Laboratory at the University of Kansas Medical Center and Scott Morgan from the University of Arizona, last week presented their research at the 2001 Associated Professional Sleep Society's Annual Meeting in Chicago. Dr. Whitman's research concluded that Masimo SET V3 Technology detected twice the number of significant true hypoxemias as Nellcor's conventional pulse oximetry technology. Dr. Whitman concluded that this was due to Masimo SET's higher signal fidelity, which should lead to improved diagnostic capabilities. Mr. Morgan's research concluded that Masimo SET pulse oximetry should have a significant impact on patient care, particularly where patient motion is likely.

Dr. Whitman's study evaluated the impact of Masimo SET pulse oximetry technology as compared to the Nellcor technology, on profiles of patients undergoing polysomnography. In the data presented, on 58 patients, the researchers demonstrated that Masimo SET detected two times the number of clinically relevant hypoxemias than the Nellcor unit, a conventional pulse oximeter commonly used in the sleep laboratory for assessing arterial oxygen saturation linked to obstructive sleep apnea. Dr. Whitman concluded, "Masimo SET V3 technology has higher signal fidelity relative to actual physiologic changes in saturation than conventional oximetry technology, which should lead to improved diagnostic capabilities".

In a second study conducted together with Steven J. Barker, PhD, MD, Professor and Head of Anesthesiology at University of Arizona, Mr. Morgan presented their two-year pulse oximetry research on the effects of motion and hypoxemia upon the accuracy of 20 pulse oximeters. This is the largest study of its kind. Seventy subjects were tested with random and periodic motions. All of the motions were continuous, which are the most challenging motions and the type that predominantly causes false alarms in the clinical environment. Using a proven motion and low perfusion protocol sufficiently challenging to distinguish the performance of various pulse oximeters, Mr. Morgan and Dr. Barker's research concluded that Masimo SET was by far the most accurate and reliable pulse oximetry technology tested, demonstrating a sensitivity and specificity of 98% and 93% respectively. Dr. Barker concluded, "our results show that the Masimo SET pulse oximeter performs better during motion and low perfusion than the other units tested. This new technology should have a significant impact on patient care, particularly where patient motion is likely."

"Nine years of clinical research and over 40 independent studies have been done on Masimo SET since we first demonstrated that pulse oximetry could indeed work during motion", stated Joe E. Kiani, President and CEO of Masimo Corporation. "Leading researchers in the field of anesthesia, pediatric anesthesia, neonatology, respiratory care, transport, emergency care, and most recently sleep disorder have all concluded that Masimo SET has broken the motion barrier. All independent studies have shown that Masimo SET has clearly established a new level of performance, not only by virtually eliminating false alarms, but also by improving the detection of clinically relevant alarms due to its fidelity. Masimo's unprecedented performance and reliability has been linked to reduction of latent conditions, which have been linked to medical errors. We are proud of our contribution to the medical community and hope that clinicians will be able to use our technology to take better care of their patients."