

# NeuroWave announces the presentation of 3 Scientific Abstracts at the American Society of Anesthesiologists Annual Meeting

CLEVELAND HEIGHTS, Ohio (October 2010) - NeuroWave Systems Inc. announced that three new scientific abstracts demonstrating the clinical features of the NeuroSENSE NS-701 Monitor, were presented at the Annual Meeting of the American Society of Anesthesiologists (ASA) in San Diego, CA, October 16-20, 2010. This is the most comprehensive anesthesiology-related scientific meeting in the world, which showcases the most accomplished and talented experts in the field of anesthesiology.

The NeuroSENSE Monitoring System, Model NS-701, is a bilateral electroencephalographic (EEG) device to monitor the brain function in the operating room, intensive care unit, emergency room and other clinical settings. This system acquires and processes EEG signals from each brain hemisphere, obtained using 4 proprietary non-invasive electrodes placed on patient's forehead. The acquired raw EEG signals and processed EEG variables are continuously displayed and recorded by the system for interpretation by the clinician. The proprietary processed variable,  $WAV_{CNS}$  (Wavelet Analysis Value for Central Nervous System monitoring), quantifies the patient's brain activity, providing a simple 0-100 score for both hemispheres independently. This second-by-second  $WAV_{CNS}$  index may be used as an aid in monitoring the effects of certain anesthetic agents on adult patients.

The scientific abstracts, presented at Anesthesiology 2010, demonstrated various clinical features of the NeuroSENSE Monitor for bilateral brain function monitoring. Tatjana Zikov, President of NeuroWave, stated: "We are pleased to report the publication of additional clinical validation studies of NeuroSENSE, which provide further information for anesthesiologists on how NeuroSENSE can better assist them in monitoring the effects of anesthetic agents."

## Abstracts:

- **Recommended Clinical Range for  $WAV_{CNS}$  Index during General Anesthesia.**  
Gracee Agrawal, M.S.E.; Stephane Bibian, Ph.D.; Tatjana Zikov, M.A.Sc.  
NeuroWave Systems Inc., Cleveland Heights, Ohio, United States.  
*Proceedings of the 2010 Annual Meeting of the American Society Anesthesiologists, San Diego, CA, A1347, October 2010.*  
**Summary:** This study established the recommended clinical range for the  $WAV_{CNS}$  index (NeuroSENSE Monitor) to be between 40 and 60 during general anesthesia.
- **Relationship between  $WAV_{CNS}$  Index and Suppression Ratio.**  
Gracee Agrawal, M.S.E.; François Clément, M.S.; Jean-Louis Scholtes, M.D.; Stephane Bibian, Ph.D.; Tatjana Zikov, M.A.Sc.  
NeuroWave Systems Inc., Cleveland Heights, Ohio, United States; Hôpital Erasme, ULB, Brussels, Belgium; Hôpital Saint Luc, UCL, Brussels, Belgium.  
*Proceedings of the 2010 Annual Meeting of the American Society Anesthesiologists, San Diego, CA, A1348, October 2010.*  
**Summary:** This study revealed a linear relationship between  $WAV_{CNS}$  index (NeuroSENSE Monitor) and suppression ratio (SR) for SR values greater than 5%.
- **Inter-Hemispheric Agreement of NeuroSENSE and BIS-XP Monitors during General Anesthesia.**  
Olivier Pruszkowski, M.D.; Julie Bresson, M.D.; Ngai Liu, M.D.; Thierry Chazot, M.D.;

Gracee Agrawal, M.S.E.; Stephane Bibian, Ph.D.; Tatjana Zikov, M.A.Sc.  
Hôpital Foch, Suresnes, France; NeuroWave Systems Inc., Cleveland Heights, Ohio,  
United States.

*Proceedings of the 2010 Annual Meeting of the American Society Anesthesiologists, San Diego, CA, A1363, October 2010.*

**Summary:** This study demonstrated a high level of inter-hemispheric agreement for WAV<sub>CNS</sub> index (NeuroSENSE Monitor; 95% limits: [-6.6, 8.1]), in comparison to BIS index (BIS-XP Monitor; 95% limits: [-13.5, 14.5]), during general anesthesia.

**About NeuroWave:**

NeuroWave Systems Inc. is focused on developing improved clinical brain monitoring devices. The Company's mission is to develop, manufacture, and market monitoring products using advanced signal processing of brain waves (electroencephalogram - EEG) and other biosignals for Neurology, Anesthesia, Emergency Medicine and Psychiatry applications, in order to improve patient outcome and quality of life.