

A monitor designed to help treat a range of complex patients

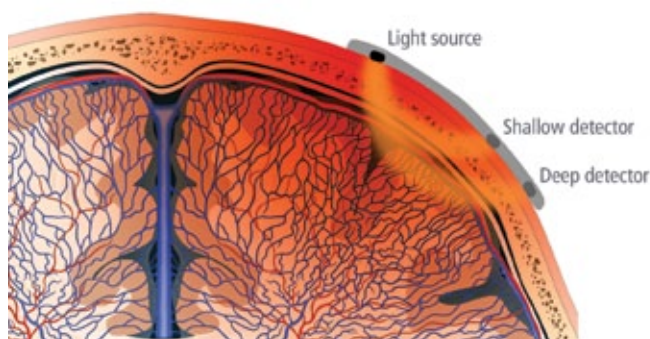
The INVOS™ Cerebral/Somatic Oximeter non-invasively measures regional oxygen saturation (rSO₂) at the capillary bed to detect site-specific adequacy of tissue perfusion in patients of all ages and weights:

- Unique sensor designs optimized for adult, pediatric and infant/neonatal patients
- Simultaneous, 4-channel cerebral/somatic monitoring capability
- Ability to monitor any cerebral/somatic site

How INVOS™ Cerebral/Somatic Oximetry works

Using a proprietary algorithm, the INVOS™ system provides clinicians with immediate, actionable information to optimize patient care:

- The appropriately sized sensor is placed directly on the desired monitoring site (such as the forehead for cerebral oximetry)
- Two specific wavelengths of near-infrared light are used to determine the oxygen-hemoglobin saturation in the tissue beneath the sensor
- Two detectors (shallow and deep) are uniquely spaced to enable suppression of superficial tissue
- This provides an accurate measurement of site-specific tissue oxygenation



NIRS technology/functionality

Clinically validated design and capabilities: Using a patented sensor spacing configuration, the INVOS™ system demonstrates sensitivity to subtle changes in saturation and cerebral blood flow.

Contact your local sales representative or visit covidien.com today to learn more about what the INVOS™ Cerebral/Somatic Oximeter can do for your patients.

Tailor baselines to individual patients

The use of patient-specific baselines and thresholds is well established in peer-reviewed clinical publications. In fact, clinical data shows that declines of >25% rSO₂ value as measured by the INVOS™ cerebral/somatic oximeter from a patient's baseline are associated with neurologic dysfunction and other adverse outcomes.¹⁻⁸

The INVOS™ system was the first regional oximeter to enable setting of individual patient baselines and critical thresholds.

Using the natural distribution of normal cerebral saturations, the INVOS cerebral/somatic oximeter allows clinicians to easily:

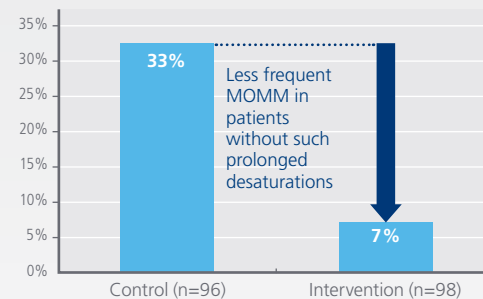
- Identify individual patient rSO₂ baselines
- Establish critical, patient-specific thresholds for initiating AUC (area under the curve) calculations
- Monitor oxygenation changes from baselines
 - Trend graph display of each rSO₂ channel monitored
 - On-screen display of AUC (visual accumulation of the depth and duration of values below set thresholds)
 - Trend line averaging display with 60-minute rolling rSO₂ average

Additional benefits

The INVOS™ system also provides:

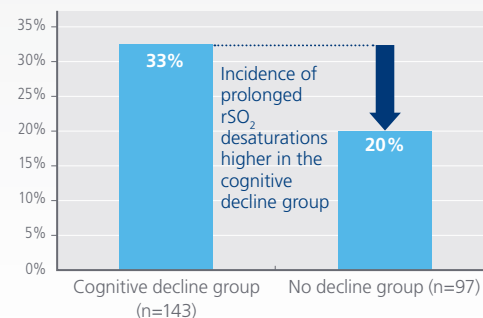
- On-board data storage of up to 28 cases
- Connectivity to multi-parameter monitors and electronic medical record systems
- Support from a world-class customer clinical support team
- Cost benefits through increased efficiency of interventions resulting in lower incidence of adverse outcomes
- Detailed INVOS case review and documentation with the INVOS Analytics Tool

More frequent major organ morbidity and mortality (MOMM) in patients with AUC >150 min %



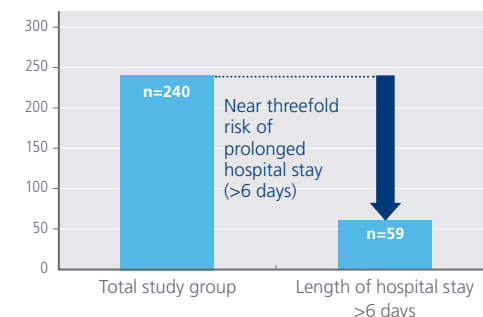
AUC accounted for when rSO₂ <70% of baseline
Murkin, et al. 2007.⁹

Higher risk of post operative cognitive dysfunction (POCD) in patients with AUC >50min%



AUC accounted for when rSO₂ <50%
Slater, et al. 2007.¹⁰

Higher risk of prolonged hospital stay in patients with AUC >50min%



AUC accounted for when rSO₂ <50%
Slater, et al. 2007.¹⁰

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6135 GUNBARREL AVENUE
BOULDER, CO
80301

800-635-5267

WWW.COVIDIEN.COM