



**HealthManagement.org**

*Promoting Management and Leadership*

## **Covidien Announces Integration of Nellcor™ BIS™ X4 Technology into Mindray BeneView Series Monitors**



Bilateral brain activity monitoring incorporated into patient monitors used worldwide

BOULDER, CO — July 30, 2010 — Covidien (NYSE: COV), a leading global supplier of healthcare products, today announced the integration of its Nellcor™ BIS™ X4 brain monitoring software into the Mindray BeneView Series of multi-parameter patient monitors. BIS X4 technology monitors both hemispheres of a patient's brain simultaneously and in real time, providing highly sophisticated data to help physicians make optimal decisions for safe patient care.

Covidien's BIS technology provides a direct, real-time measure of the effects of anesthetics and sedatives on the brain. The goal for anesthesiologists is to use the minimal amount of anesthetic needed during a procedure to maintain patient sedation and prevent recall. Too little anesthesia can lead to patient awareness during surgery; too much can result in life-threatening respiratory depression.

The critical improvement offered by BIS X4 technology— the latest advancement to BIS — is that clinicians can compare activity between hemispheres of the brain, identify imbalances and intervene to achieve the best and safest patient outcomes. Studies indicate that BIS-monitored patients wake up faster, are extubated sooner, are better oriented upon arrival to the post anesthesia care unit (PACU) and are eligible for PACU discharge sooner.(1, 2) Additionally, BIS technology may help clinicians measure anesthesia levels more precisely, which may decrease costs for surgical procedures (3, 4) and ICU care.(5, 6, 7) Incorporating BIS X4 technology in BeneView Series units enables physicians to adapt treatment to meet the specific needs of their patients, while also managing resource consumption effectively.

Mindray is a leading developer, manufacturer and marketer of medical devices worldwide. The incorporation of BIS X4 technology into its top-of-the-line multi-parameter BeneView Series patient monitors means that, for the first time, physicians globally can integrate critical data on patients' brain activity with other vital sign information before, during and after anesthesiology and surgery. With the use of BIS X4-enhanced BeneView Series monitors, clinicians can tailor anesthesia delivery more accurately, which can improve patient outcomes, minimize serious complications and reduce healthcare costs.

“By incorporating BIS X4 into its premier BeneView Series monitors, Mindray has raised the bar in OEM capabilities and demonstrated its commitment to providing clinicians with user-friendly, affordable access to the most advanced monitoring technologies,” said David Sheppard, Vice President, OEM Channel Strategy,

Respiratory and Monitoring Solutions, Covidien. “The speed of this integration shows how focused teamwork between two strong partners can generate impressive results. We are delighted with how seamlessly we were able to work with Mindray to quickly deliver a solution our global customers wanted.”

“Space in operating and recovery rooms is finite, and as technology advances and new monitoring devices become available, it is important to consider how they will fit into surgical suites, patient rooms and hospital budgets,” said Richard Yang Ting, Vice President, International Marketing, Mindray. “This partnership with Covidien is a perfect example of Mindray’s constant pursuit of better, more advanced technologies to incorporate into our products. Integrating BIS X4 into our BeneView Series monitors ensures our customers can simply and affordably tap into the best our industry has to offer.”

“Across the healthcare landscape, smart, strategic partnerships are helping patients, clinicians and hospitals gain access to the best medical care easily and efficiently,” said Pete Wehrly, President, Respiratory and Monitoring Solutions, Covidien. “Working with Mindray to incorporate BIS X4 into the BeneView Series patient monitors is just one way that Covidien is working to improve patient safety, enhance medical efficacy and increase healthcare efficiency. We are proud to announce this partnership, which offers our technology to Mindray customers globally.”

#### About Covidien

Covidien is a leading global healthcare products company that creates innovative medical solutions for better patient outcomes and delivers value through clinical leadership and excellence. Covidien manufactures, distributes and services a diverse range of industry-leading product lines in three segments: Medical Devices, Pharmaceuticals and Medical Supplies. With 2009 revenue of \$10.7 billion, Covidien has 42,000 employees worldwide in more than 60 countries, and its products are sold in over 140 countries. Please visit [www.covidien.com](http://www.covidien.com) to learn more about our business.

#### CONTACTS:

Sherri Hughes-Smith  
Manager, Media and Public Relations  
Respiratory and Monitoring Solutions  
+1/303-581-6849  
[sherri.hughes-smith@covidien.com](mailto:sherri.hughes-smith@covidien.com)

Coleman Lannum,  
CFA Vice President Investor Relations  
+1/508-452-4343  
[cole.lannum@covidien.com](mailto:cole.lannum@covidien.com)

Bruce Farmer  
Vice President  
Public Relations  
+1/508-452-4372  
[bruce.farmer@covidien.com](mailto:bruce.farmer@covidien.com)

Brian Nameth  
Director Investor Relations  
+1/508-452-4363  
[brian.nameth@covidien.com](mailto:brian.nameth@covidien.com)

#### References

1. Gan TJ, Glass PS, Windsor A, et al. Bispectral index monitoring allows faster emergence and improved recovery from propofol, alfentanil, and nitrous oxide anesthesia. BIS Utility Study Group. *Anesthesiology*. 1997;87(4):808-815.
2. Mayfield JB, Quigley JD. BIS monitoring reduces phase I PACU admissions in an ambulatory surgical unit (ASU). *Anesthesiology*. 1999;91(3A):A28.
3. Mak S, Crowley J. The utility of the Bispectral Index vs. standard practice anesthetic care: a meta analysis of randomized trials comparing drug reduction and recovery time. Poster presented at Society of Ambulatory Anesthesia (SAMBA) annual meeting. 2002.
4. Rosow C, Manberg PJ. Bispectral Index monitoring. *Anesthesiol Clin North America*. 2001;19(4):947-966, xi.
5. Simmons LE, Riker RR, Prato BS, Fraser GL. Assessing sedation during intensive care unit mechanical ventilation with the Bispectral Index and the Sedation-Agitation Scale. *Crit Care Med*. 1999;27(8):1499-1504.
6. Triltsch A, Spies C, Lenhart A, et al. Bispectral Index (BIS) correlates with Ramsay sedation scores in

neurosurgical ICU patients. *Anesthesiology*. 1999;91(3A):A295.

7. Shah N, Clack S, Chea F, et al. Can Bispectral Index (BIS) of EEG be useful in assessing sedation in ICU patients? *Anesth Analg*. 1996;82:S400.

Published on : Mon, 2 Aug 2010