

REDUCED RISK.
FASTER WAKEUPS.
IMPROVED
PATIENT
SATISFACTION.

Demonstrated benefits of using
the Bispectral Index™ (BIS™)
brain function monitoring system



Medtronic
Further. Together

REDUCE THE RISK OF POSTOPERATIVE DELIRIUM



Postoperative delirium is preventable in 40% of cases¹ with:

- A proper screening program¹
- Identification of risk factors¹
- Selecting the right type of anesthesia²
- Evidence-based monitoring methods within the OR¹

BIS™ monitoring may be cost effective for hospitals

- In a prospective, randomized, double-blind trial of 114 hip fracture patients over 65 years old, investigators used BIS™ monitoring³. The study found that monitoring resulted in:
 - A reduction in the incidence of delirium by 53%
 - Elimination of one case of delirium for every five patients monitored

Patients with postoperative delirium have:

- More than twice the odds of being unable to walk at discharge and need assistance for mobility^{4,5}
- Twice the odds of becoming dependent for personal activities of daily living⁶
- A 50% greater risk for developing any complication in the hospital⁷
- Two to four times the odds of dying in the hospital^{6,8}
- Two and a half to five times the odds of dying within six months^{5,6,8}

Postoperative delirium is:

- Independently associated with decreased quality of life⁶
- Independently associated with an increased length of stay of 2.1 days in the ICU and 7.7 days in the hospital⁹

DRUG SAVINGS



Prospective, randomized studies demonstrated reductions in the use of hypnotic anesthetics (propofol, isoflurane, desflurane and sevoflurane) ranging from 15% to 40% compared to standard clinical practice.¹⁰⁻¹⁵

In a meta-analysis of the impact of the BIS™ sensors in ambulatory anesthesia, sensor use resulted in a net additional cost of only \$5.55 per patient.¹⁶

FASTER WAKE-UPS



Patients monitored with BIS™ technology wake up 30% to 40% faster (overall average of three to six minutes faster in the OR).^{10,11,17}

The number of patients who take an extended time (15 minutes) to wake up is reduced from 16% to 5%.¹⁰

The BIS™ system:

- Allows effective titration of sedatives to maintain a suitable level of consciousness, while reducing procedure time.¹⁸
- Correlates with the Observer's Assessment of Alertness/Sedation, providing an objective measure of sedation during endoscopy.¹⁹



SHORTER PACU STAY

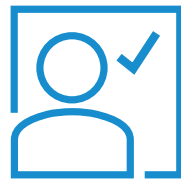


When monitored with BIS™ technology:

- Patients are eligible for PACU discharge 16% sooner.¹⁰
- 87% more patients are fully awake and oriented on PACU arrival, facilitating implementation of phase 1 PACU bypass programs.^{10,20}

A study of more than 1000 general surgery patients showed that BIS™ monitor titration reduced the occurrence of patients still intubated on arrival to the PACU by 55%.²¹

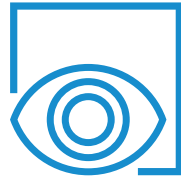
IMPROVES PATIENT SATISFACTION



BIS™ technology use with desflurane anesthesia is associated with improved patient satisfaction.¹⁴

Patients undergoing general anesthesia for outpatient surgery and monitored using the BIS™ system reported significantly less postoperative nausea and vomiting.¹⁶

REDUCES THE RISK OF AWARENESS WITH RECALL



The use of BIS™ monitoring reduces the incidence of intraoperative awareness with recall by 80%.^{22,23}

A hospital achieved a 78% reduction in patient recall by integrating BIS™ monitoring of ICU patients receiving continuous infusions of paralytics.²⁴

Awareness Prevention Guarantee

If one of your patients experiences a case of anesthesia awareness while using BIS™ technology, and the electronic record shows the index value was below 60 at that time, Medtronic will reimburse the hospital for that case according to terms of the partnership agreement your hospital has with Medtronic.



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