

BIS™ Advance monitor

Perfecting your art. Advancing patient care.

Postoperative delirium can be prevented.
Let's work together to reduce the risk.



Common occurrence. Significant risk.

Postoperative delirium (POD) is a serious complication of surgery – described as “equal to an acute brain failure, and should be considered comparable to other postoperative organ failures.”¹ Postoperative delirium is common though the prevalence varies significantly between surgical populations.²



In high-risk surgery, such as trauma and cardiac surgery, **36-40%** of adult patients develop POD³

Risk increases **up to 87%** depending on the age of patients and the type of surgery²

With an upsurge in the number of patients ages 60 and older undergoing anesthesia and surgery, these numbers are projected to rise.⁴

- Postoperative delirium is independently associated with decreased quality of life⁵
- Patients with postoperative delirium have 2 to 4 times greater odds of dying in the hospital and up to 5 times greater odds of dying within 6 months⁶⁻⁸
- Complications include dementia, loss of independence, and poor cognitive and functional outcomes⁹

BIS™ technology-guided anesthetic dosing may:

- Reduce risk of postoperative delirium^{1,2,5,11}
- Improve emergence and recovery times^{1,2,5,11}
 - Promote faster wake-up, recovery, and discharge from the PACU¹¹
- Reduce primary anesthetic delivery by as much as 38%^{1,16,17}

Studies show that using less anesthetic agent improves outcomes when using TIVA anesthetic approach, when following protocols Supporting adoption of Enhanced Recovery after surgery guidelines, and in elderly patient populations at risk for postoperative neurocognitive disorders.^{2,11} In addition, brain monitoring is recommended in multiple society guidelines.^{7,14,15}



1

POD is preventable in up to **40% of cases**^{3,9}

2

Peer-reviewed, published data associates **the levels and type of anesthesia as risk factors for POD**^{9,11}

3

BIS™ index-guided anesthetic dosing may **reduce POD by up to 29%**¹⁶

4

Use up to **38% less anesthetic agents**^{1,17,18}

5

Patients monitored with BIS™ technology **wake up 27-53% faster in the OR**²

Easy to use. Easy output.

The completely redesigned BIS™ Advance monitor is engineered to help make your workflow more efficient while giving you the insight you need with:

- A large, high-resolution, touchscreen monitor that's simple to read
- Data output protocols that enable connectivity to electronic medical records (EMRs)
- Configurable data and settings so you can see just the information you want
- Color-coordinated data to quickly review readings
- The ability to track total suppression time detected during the procedure
- Built-in troubleshooting guides with information on clinical parameters and data significance
- Ability to maintain continuous monitoring when moving between care settings

Now, using BIS™ monitoring makes personalizing anesthesia easier than ever.



To request a full clinical demo of the BIS™ Advance monitor, contact your Medtronic representative.

POD takes more resources. Increases costs.



Patients with POD have a **50% higher risk** for developing any complication in the hospital⁸



National healthcare cost burden of POD is estimated at **\$32.9 billion per year**, similar to cardiovascular disease and diabetes¹⁰



Additional cost for patients with POD can be as high as **\$20,327¹⁰**

Personalize dosing. Reduce risk of postoperative delirium.

Postoperative delirium poses a serious complication, consumes more resources, and increases costs.^{1,8,10} Fortunately, postoperative delirium is preventable in up to 40% of cases with a proper screening program, the identification of risk factors, and the implementation of evidence-based monitoring methods within the OR.³

To help minimize risk of postoperative delirium, you need a direct measurement of the anesthetic effect on your patient's brain. With its validated algorithm, BIS™ technology accurately reflects the anesthetic effect on your patient's brain, so you can personalize dosing throughout a procedure.





The BIS™ monitoring system should not be used as the sole basis for diagnosis or therapy and is intended only as an adjunct in patient assessment. Reliance on the BIS™ monitoring system alone for intraoperative anesthetic management is not recommended.

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Important: Please refer to the package insert for complete instructions, contraindications, warnings and precautions.

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