

# Entropy: A key measurement for personalized anesthesia

# Intraoperative awareness facts

26,000 cases

of **intraoperative awareness** in the U.S. per year and 400,000 globally<sup>1</sup>



**444**PTSD

Experience of awareness with explicit recall of surgical events can potentially lead to post-traumatic stress disorder (PTSD)<sup>2</sup>

# **Entropy to assess depth of anesthesia**





Entropy use is associated with a 30% reduction in Sevoflurane/ Isoflurane and a 15% reduction in Propofol<sup>4,5,6</sup>

Studies have shown that when caring for adults, using Entropy may help hospitals...



### **Avoid UNDER and OVER dosing**

Entropy may help anesthesiologists assess the effect of certain anesthetics on the patient's brain<sup>3</sup>



### Accelerate recovery & discharge

Entropy may result in faster emergence from anesthesia and may help clinicians in their goal to increase patient throughput<sup>4</sup>



# Decrease drug consumption

Entropy may help save hospitals' money and support an environmentally conscious anaesthesia<sup>5</sup>



# Improve hemodynamic stability

Multiple randomized controlled outcome studies report significant reduction in hemodynamic fluctuations, especially avoidance of hypotension<sup>6,7</sup>

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- Optimised Anaesthesia to Reduce Post Operative Cognitive Decline (POCD) in Older Patients Undergoing Elective Surgery, a Randomised Controlled Trial, Clive Ballard, Emma Jones, Nathan Gauge, Dag Aarsland, Odd Bjarte Nilsen, Brian K. Saxby, David Lowery, Anne Corbett, Keith Wesnes, Eirini Katsaiti, James Arden, Derek Amaoko, Nicholas Prophet, Balaji Purushothaman, and David Green, published online 2012 Jun 15
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- 6. El Hor T, Van Der Linden P, De Hert S, Mélot C, Bidgoli J. Impact of entropy monitoring on volatile anesthetic uptake. Anesthesiology. 2013 Apr;118(4):868-73. doi: 10.1097/ALN.0b013e3182850c36. PMID: 23337606.
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