

Patient State Index.

Drover D., Ortega H.R. *Best Pract Res Clin Anaesthesiol.* 2006 Mar;20(1):121-8.

Abstract

The patient state index (PSI) is a clinically validated measure of the effect of anaesthesia and sedation. The PSI is calculated via a proprietary algorithm by a high-resolution 4-channel electroencephalograph (EEG) monitor after advanced artifact rejection. The PSI has been designed specifically for intra-operative and intensive care use to monitor patient sedation and drug effect. The algorithm relies on EEG power, frequency and phase information from anterior-posterior relationships of the brain as well as coherence between bilateral brain regions. The EEG monitor, initially called the PSA4000, is also the SEDLine monitor, the newest generation of the device. The SEDLine system provides the clinician the option of storing and downloading patient data for future use as well as monitoring bilateral brain function and symmetry with a density spectral array (DSA) display.