

## **Quantitative Electroencephalographic Parameters for Measuring the Opioid Effect**

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The purpose of this study is to investigate the effect of opioid analgesics on patients through electroencephalographic(EEG) signal and its parameters. Qualified EEG parameters for this study are ApEn, CUP, and SEF. A patient was administered with various dose of opioid and one channel EEG signal was measured. Each parameter of EEG (ApEn, CUP, and SEF) was calculated for each dose of opioid. The result shows that these parameters have feasibility to monitor the variation of the opioid effect. Also, the compared result of commercial program (AcqKnowledge 4.2, BIOPAC) and our program shows that most of error was in confidence interval. Our program also provided the result in shorter amount of time compared to commercial program.

### **References**

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