



# INVOS™ Cerebral/Somatic Oximeter

## Clinical Guide

**Healthy Cerebral rSO<sub>2</sub>: 58% - 82%**

**Intervention Threshold: ≤50 points (or ~20% from baseline)**

**Critical Threshold: ≤40 points (or ~25% from baseline)**

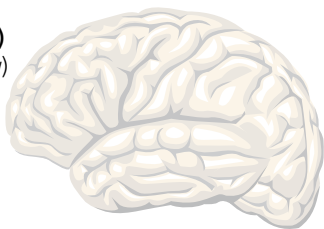
### Interventions to improve Cerebral rSO<sub>2</sub>:

#### Rule out mechanical cause

- Head position
- Cannula position

#### Increase supply (oxygen delivery)

- Increase cardiac output (pump flow)
- Increase blood pressure
- Increase CO<sub>2</sub> to physiologic level
- Increase PaCO<sub>2</sub>
- Vasodilate cerebral blood vessels
- Increase hematocrit



#### Decrease demand (cerebral metabolism)

- Increase anesthetic
- Decrease temperature

These guidelines are not designed to replace clinical judgment or individual patient needs.

#### References

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Yao FS, Tseng CC, Ho CY, Levin SK, Illner P. Cerebral oxygen desaturation is associated with early postoperative neuropsychological dysfunction in patients undergoing cardiac surgery. *J Cardiothorac Vasc Anesth*. 2004;18(5):552-558.

Edmonds HL Jr, Ganzel BL, Austin EH 3rd. Cerebral oximetry for cardiac and vascular surgery. *Semin Cardiothorac Vasc Anesth*. 2004;8(2):147-166.

Kim MB, Ward DS, Cartwright CR, Kolano J, Chlebowski S, Henson LC. Estimation of jugular venous O<sub>2</sub> saturation from cerebral oximetry or arterial O<sub>2</sub> saturation during isocapnic hypoxia. *J Clin Monit Comput*. 2000;16(3):191-199.