

# INTRAVENOUS (TIVA) VS. INHALATION ANESTHESIA

	Intravenous Anesthesia	Inhalational Anesthesia
Method of measurements	<b>Blood concentration</b> (not easily obtained)	<b>Minimum alveolar concentration</b> - concentration of an inhaled agent in the alveoli required to prevent movement in response to a surgical stimulus in 50 percent of patients
Common Agents	Propofol (sedative agent) <b>WITH</b> Opioid analgesic (fentanyl, remifentanyl, etc.)	<ul style="list-style-type: none"> <li>Sevoflurane</li> <li>Desflurane</li> <li>Haloflurane</li> <li>Isoflurane</li> <li>Nitrous oxide</li> </ul>
Advantages	<ul style="list-style-type: none"> <li>Decreased postoperative nausea and vomiting (PONV) compared to inhalational anesthesia</li> <li>Smooth emergence experience, with less of a hangover effect</li> <li>Decreased cognitive impairment issues with propofol</li> <li>Rapid titration ability with propofol</li> <li>Better patient experience with propofol</li> <li>Shorter recovery room times</li> <li>Quicker extubation</li> <li>Clinicians are not exposed to operating room contamination from inhaled gas</li> </ul>	<ul style="list-style-type: none"> <li>Ease of administration</li> <li>Greater analgesia</li> <li>End-tidal anesthetic concentration (ETAC) monitoring</li> </ul>
Disadvantages	<ul style="list-style-type: none"> <li>No equivalent to end-tidal anesthetic concentration (ETAC) monitoring</li> <li>Increased risk for anesthesia awareness</li> </ul>	<ul style="list-style-type: none"> <li>Confound evoked potential monitoring</li> <li>Increased risk for postoperative nausea and vomiting (PONV)</li> </ul>
Real time monitor of anesthetic concentration	No	Yes