As veterinary medicine advances, ensuring the safety and wellbeing of our pet companions during surgeries is crucial. One critical aspect of this relates to perioperative anesthesia. In this issue, Dr. Tamara Grubb provides a guide for veterinarians on perioperative anesthesia complications in dogs and cats (p. 42). While artificial intelligence (AI) can already assist with radiographic and cytologic interpretation, could AI also play a role in identifying perioperative anesthesia problems? AI algorithms have the ability to analyze vast datasets, including a pet’s medical history, breed-specific factors, and responses to anesthesia. AI systems could predict potential complications based on this data. This would allow veterinarians to tailor anesthesia protocols to each patient’s unique characteristics. Continuous monitoring during surgery is crucial for early detection of complications. AI monitoring systems could analyze parameters simultaneously and provide real-time insights into a patient’s vital signs. Any deviations from the norm could trigger alerts. AI’s capabilities could even extend beyond the operating room. Automated systems could monitor pets postoperatively, tracking recovery progress and identifying signs of complications. While there could be tremendous benefits, the question remains: Are we ready to trust the machines to this extent?