



Clients frequently bring up concerns about anesthesia whenever we discuss surgery, even for commonplace procedures like spaying and neutering. These concerns are absolutely valid and we do not take anesthesia lightly.

In an effort to minimize the risks of anesthesia even more, we now offer preoperative, in-house blood testing for young patients undergoing elective procedures. This blood work can be done the morning of surgery to give us an accurate look at your pet's well-being the day of surgery. These tests are an extension of your pet's physical exam and can help your medical team make any necessary adjustments to his/her anesthetic plan.

The blood panel includes screenings of your pet's liver, kidneys, blood sugar and protein levels. This information guides us to use or avoid certain medications, assesses your pet's hydration status, and gives us a good baseline for future reference. In the event that we uncover a serious medical concern, we will postpone your pet's procedure until the issue is addressed.

**Albumin:** An important regulator of osmotic equilibrium in the body and is also a carrier for highly protein-bound substances.

**Globulin:** Produced in the liver and also by the cells of the immune system. Have many vital roles in the body including maintenance of osmotic balance, immune system function, and the inflammatory response.

**Albumin:Globulin Ratio**

**BUN:** Produced in the liver, excreted by the kidneys. It is a marker for both liver and kidney dysfunction.

**Creatinine:** A breakdown product of muscle. It is removed by the kidneys and is an indicator of renal function.

**BUN:Creatinine Ratio**

**Alkaline Phosphatase:** Primarily an indicator of cholestatic liver disease.

**ALT:** A cellular enzyme released in response to injury of liver cells. ALT can also increase mildly with muscular injury and gastrointestinal disease.

**Total Protein:** Primarily composed of albumin and globulins (see individual interpretive summaries) with a minor contribution from coagulation proteins and fibrinogen.

**Glucose:** Or blood sugar. This is the basic energy source for the body.

As medicine develops and testing becomes more advanced, we strive to offer you the highest standard of quality medicine at an affordable price. These tests do provide your medical team with valuable information, but this preoperative blood panel is NOT a requirement to have surgery at our hospital. IF you have questions or concerns, please feel free to have a discussion with your Doctor or any of the staff at Mt. Pleasant Animal Hospital.

Dr. Sawdai, Dr. Hall, and Dr. Wendy