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### LASER SURGERY

### What is a laser?

Laser is an acronym for Light Amplification by the Stimulated Emission of Radiation.

### What is a CO<sub>2</sub> surgical laser?

The carbon dioxide (CO<sub>2</sub>) laser emits a colorless, infrared light at a specific wavelength of 10,600 microns, which has an extremely high affinity for the intercellular water of cells.

## How does a CO<sub>2</sub> surgical laser work?

The main constituent of cells (water) absorbs the wavelength of light produced by the CO<sub>2</sub> surgical laser. This allows the laser to coagulate, cut, char, or ablate/vaporize tissue depending on the power density and the energy level applied by the surgeon. Laser energy seals nerve endings and small blood vessels as it incises or ablates tissue, reducing bleeding, swelling and postoperative pain.

## Why should I choose laser surgery for my pet?

A summary of the benefits the laser will provide you and your pet are:

- Less pain
- Less bleeding
- Less swelling
- Extreme precision
- · Reduced risk of infection
- Quicker recovery

With the associated laser benefits, your pet will recover quicker and return home sooner.

# What type of procedures can a surgical laser perform?

A laser is ideal for a wide variety of procedures for dogs, cats, birds, reptiles, horses and other animals. The most widely recognized procedure amongst pet owners is the feline laser declaw. Additional procedures include but are not limited to spay/neuter, the removal of cysts, tumors and warts, as well as specialized internal procedures.