Glossary of Veterinary Oncology Terms

The terms used to describe cancer can be confusing. It is important to understand the terminology that the veterinarian uses to describe what is going on with your pet. Some of the common words used by veterinarians about cancer in pets include:

Aspirate: The process of using a needle to extract cells from tissue. These cells are places on a slide to be examined under the microscope.

Anaplastic/Undifferentiated: The change in tumor cells, when they no longer resemble the original cells. Tumors that are anaplastic are usually considered very malignant and aggressive.

Benign: opposite of malignant; benign tumors are unlikely to spread, and usually have a favorable outcome.

Biopsy: The removal and examination of tissue from the living body which is examined under the microscope. A biopsy is crucial in making a diagnosis of cancer.

Cancer: Uncontrolled growth of abnormal cells. Synonym: neoplasia

Carcinoma: A malignant growth made of epithelial cells tending to infiltrate the surrounding tissues and give rise to metastasis.

Chemotherapy: Treatment that kills cancer cells. There are many different types of chemotherapy drugs, the vet will assess the overall health and wellbeing of the patient to find the perfect treatment.

Cycle: chemotherapy drugs are often given in the same order on the same schedule repeatedly; the term "cycle" refers to the basic plan that gets repeated over and over again; the cycle is different for each chemotherapy protocol.

Cytology: this refers to the microscopic examination of cells that have been removed from the body (either by aspiration or by other techniques).

Epithelial Cells: Tissue that “line” the skin’s surface and all the glandular tissues of the body.

Grading: this term refers to the evaluation of microscopic features of a tumor that allows the pathologist to assign the tumor "a grade"; the grade of a tumor is important because it allows us to predict how aggressive a tumor will be.

Margins: this is a term used to refer to the edges of the surgical specimen; “clean margins” means that no tumor cells are visible at the edges (sometimes tumors come back despite clean margins); “dirty margins” means that tumor cells are visible at the edges (therefore, tumor cells have been left behind)

Malignant Tumor: one in which is no longer resembles the cells it was derived from, is invasive at the site where it starts and has the ability to metastasize (or spread) to other organs.

Metastasis: the process by which the tumor spreads from one location to another; the most common sites of metastasis are the lungs or lymph nodes; the most common routes of metastasis are the bloodstream and the lymphatics.

Metastatic Lesion: the term used for the site where the cancer has spread.
Oncoology/Oncologist: oncology is the field that deals with the diagnosis and treatment of cancer while an oncologist is a doctor that specializes in this field.

Primary site: this refers to the site where the tumor started; "the original tumor."

Prognosis: “a forecast as to the probable outcome of an attack of disease”; this refers to how we think a patient will do.
**Protocol:** we usually use this term to refer to the specific chemotherapy plan that is used.

**Palliative Radiation Treatment (PRT):** The most commonly radiation used in veterinary oncology. The goal of this treatment is to significantly reduce harmful affects the tumor may have on the animal’s body. Total elimination of the tumor is not always the goal. The main goal of PRT is to keep the animal as comfortable as possible while reducing the cancerous cells.

**Sarcoma:** malignant tumors of connective tissue origin such as cartilage, bone and muscle.

**Staging:** this term refers to the process of determining how advanced a cancer is and if it has spread; we “stage” an animal through the use of tests such as x-rays, ultrasound, blood work, lymph nodes aspirates and bone marrow aspirates; this is helpful because it allows us to determine the best treatment options and to predict the outcome of treatment.

**Tumor:** "a swelling"; a new growth of tissue in which the multiplication of cells is uncontrolled and progressive