## **Directory of cancer terms**

Tumours are named based on our understanding of how cells and tissues arise.

Tissues are comprised of cells and cell products. New cells arise from pre-existing cells that have gone through a process of division. It is when the cells divide more than they should or not die when they should that abnormal tissue forms called a *tumour*.

The original group of abnormal cell growth is where the cancerous process begins and this is called the *primary tumour*.

If the cancerous cells spread to other areas of the body and begin to divide this is called *metastasis*. The metastatic tumour contains cells which are similar to the primary tumour.

Tumours which grow in one area without invading into local tissues are classified as *benign*.

Tumours which grow and invade local tissues and have the potential to metastasize to other areas of the body are classified as *malignant*.

Each of the tumours listed below are named using specific terminology to denote the tissue type or cell origin of the tumour and also if the tumour is classified as benign or malignant.

For more information on a specific tumour or cancer type please see the information sheets by clicking on the bolded items.

Adenocarcinoma A form of cancer which arises from cells that line internal organs

and organs that have gland-like or secretory properties. This is a

malignant type of cancer.

Adenoma A tumour which arises in gland-like cells of the epithelial tissues

(cells that line body cavities and body surfaces). These tumours are

classified as benign.

Astrocytoma This tumour can be benign or malignant and it arises in small cells

of the brain or spinal cord called astrocytes.

Carcinoma A tumour which arises in the skin or tissues which line or cover the

internal organs. These tumours are classified as malignant.

Chondroma A benign tumour which contains elements of cartilage in its

structure.

Chondrosarcoma A malignant type of cancer arising from areas containing cartilage.

Cystadenoma A tumour arising from gland-like cells of epithelial tissue. This

tumour is benign and forms a distinct membrane or enclosing sac which causes an abnormality in the body cavity or structure it arises.

Dysgerminoma This tumour can be benign or malignant and arises from

undifferentiated embryonic germ cells.

Erythroid Leukaemia This type of cancer is characterized by an abnormal increase in the

number of red blood cells in the body tissues. It can be acute and malignant or chronic with an unknown cause (in animals) and

involves the blood producing organs.

Fibroma A tumour of fibrous tissue. This tumour type is benign.

Fibrosarcoma A type of soft tissue sarcoma, this tumour arises from spindle cells of

fibrous tissue which hold bone, muscles and other organs in place. It is a malignant tumour but tends to be locally invasive with a low

metastatic rate.

Granulosa Cell Tumour A tumour arising in the epithelial lining cells of the ovary which

secretes estrogen. This tumour is classified as benign.

Haemangioma This tumour arises from blood vessels. It is classified as benign and

usually affects the skin in the form of a red elevated lesion.

Haemangiosarcoma This is a malignant tumour arising in the blood vessels.

Haemangiosarcomas are commonly found in the spleen, liver and in

the right atrium (chamber) of the heart.

Leiomyoma This is a tumour of smooth muscle such as the uterus or

gastrointestinal tract. This is a benign tumour and can also be of a

fibroid type.

Leiomyosarcoma This is a malignant tumour of the smooth muscle. The affected

smooth muscle cells can arise from any place in the body but

typically occur in the uterus or abdominal organs.

Leydig Cell Tumour This is a tumour of the interstitial tissue of the testes which is

responsible for the production of testosterone. This tumour is

classified as benign.

Lipoma This is a very common, benign tumour in dogs. It arises from the

adipocytes or fat cells, hence it is a tumour of fatty tissue.

Liposarcoma A type of soft tissue sarcoma arising from immature adipocytes (fat

cells). This tumour is classified as malignant.

Lymphoblastic Leukaemia A malignant type of cancer affecting the lymphoblasts (immature

lymphocytes) a type of white blood cell. The lymphoblasts are seen

in abnormally increased numbers.

Lymphocytic Leukaemia A malignant type of cancer of the blood where the bone marrow is

producing abnormally increased amounts of white blood cells,

primarily lymphocytes.

Lymphoma Previously known as lymphosarcoma, this is a malignant tumour of

the lymphoid tissue. This cancer starts in the cells of the immune system, affecting the lymphocytes. There are two different types of

lymphoma: T-cell and B-cell originating.

(see the Lymphoma in Dogs information sheet) (see the Lymphoma in Cats information sheet)

Malignant Histiocytosis A malignant tumour of histiocytes, which are cells that originate

from the white blood cells (monocytes and macrophages). This tumour can involve lymph nodes, lungs and other abdominal organs.

Melanocytoma A benign tumour involving the melanocytes.

Melanoma This is a malignant tumour of the melanocytes (a cell in the skin

which is responsible for making the pigment melanin.)

Mast Cell Tumour This is a malignant tumour arising from the mast cells which are a

type of inflammatory cell. These tumours can affect the subcutaneous tissue, muscle, lymph nodes and other organs. This

type of tumour is very commonly seen in dogs. (see the Mast Cell Tumour information sheet)

Meningioma A tumour that arises in the meninges which are tissue layers that

cover and protect the brain and spinal cord. This tumour is slow growing and benign, but can cause compression to the brain / spinal

cord.

Mesothelioma This tumour can be benign or malignant and arises from the lining

cells of the pleural (chest) cavity or peritoneal (abdominal) cavity.

Multiple Myeloma A type of cancer which arises in the plasma cells which are white

blood cells that produce antibodies. This is a malignant cancer often

involving the bone marrow.

Myeloid Leukemia A malignant leukemia of the blood cells or myeloid tissue (bone

marrow). A proliferation of myeloid cells (non-lymphoid cells).

Oligodendroglioma A slow growing and benign tumour arising in the cells which cover

and protect the neurons (nerve cells) in the brain and spinal cord

called oligodendrocytes.

Osteoma A tumour arising in the bone tissue which is benign.

Osteosarcoma A tumour arising in the bone tissue which is malignant. This tumour

usually affects the long bones of the limbs, but can affect any bone

and rarely soft tissue structures.

(see the Osteosarcoma information sheet)

Plasmacytoma Mostly seen as a benign type of cancer that begins in the plasma

cells (a type of white blood cell that produced antibodies).

Rhabdomyoma A benign tumour that arises from striated skeletal muscle fibers.

Rhabdomyosarcoma A malignant tumour that arises from striated skeletal muscle fibers.

Seminoma A benign or malignant tumour of the germ cells in the testes.

Sertoli Cell Tumour A tumour arising in the elongated striated cells in the seminiferous

tubules of the testes. This tumour type is benign.

Soft Tissue Sarcoma A malignant type of cancer that arises in the mesenchymal tissue

(a type of supportive tissue within the body) such as: fat, blood vessels, muscle, connective tissue and bones. These tumours can

also include nerve sheath tumours and fibrosarcomas.

Squamous Cell Carcinoma A tumour arising from the squamous cells which are cells that are

located on the surface of the skin, line the hollow organs in the body (such as bladder, kidney, uterus) and the passages of the respiratory and gastrointestinal tracts. This cancer is seen more commonly in cats, especially light coloured cats, occurring on the

ears and nose.

Squamous Papilloma A wart like growth which is a type of benign tumour arising from

an overgrowth of epithelial tissue on the surface of the skin.

Synovial Cell Sarcoma A tumour that arises from the cells that line the joint capsules.

This type of tumour is malignant.

Thymoma A type of tumour of the thymus which is an organ located in the

chest behind the sternum. The thymus is part of the lymphatic system and produces thymocytes (T-lymphocytes). Encapsulated thymoma is classified as benign. Invasive thymoma is classified as

malignant and spreads to other areas of the body.

Transitional Cell Carcinoma A tumour arising from the transitional epithelial cell origin. A

transitional cell has the ability to change shape and be stretched without breaking apart. These tumours are malignant an commonly occur in the lining of organs such as the bladder, prostate and

ureters.

Please note that this cancer terminology cites the <u>Cancer Dictionary</u> of the US National Cancer Institute (NCI) and the US National Institute of Health (NIH).