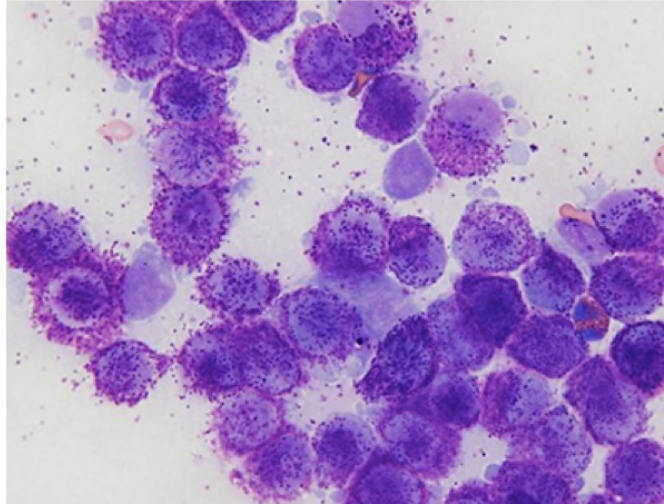




The Pet Oncologist

## FAQs: Mast Cell Tumours in Dogs



### ***What is a mast cell tumour?***

Mast cell tumours occur from the abnormal proliferation of mast cells which are allergy cells that lead to itchiness and swelling. It is one of the most common skin cancers in dogs. This cancer can occur in dogs of any age. However, certain breeds are more prone to developing mast cell tumours.

### ***What do mast cell tumours look like?***

Mast cell tumours typically present as a single mass in the skin. However, it can occur in any location in the body, and around 10-15% of dogs will have multiple skin masses. Mast cell tumours in the skin have extremely varied appearances that it can sometimes be mistaken as a fatty lump (i.e. lipoma) or noncancerous skin lesions. Occasionally, mast cell tumours wax and wane in size, redness and swelling, particularly after touching it.

### ***Will my dog be sick?***

Some dogs will show no apparent signs of illness. While other dogs present sick from the release of substances (e.g. histamine) from the mast cell tumours. Signs of illness include loss of appetite, vomiting, diarrhoea, black tarry stools, fever, swelling, and collapse.

### ***How do I check if my dog has a mast cell tumour?***

Diagnosis is usually confirmed with sampling the affected organ and lymph nodes by either cytology (fine needle aspirate samples). Sometimes a biopsy (tissue sample) is required.

Staging refers to how far cancer has grown and spread in the body. Staging is important to provide prognostic information on which to base decisions and identify unrelated problems that could affect treatment choices. Dogs are usually staged with abdominal ultrasound, blood and urine tests.

The results of these tests will allow veterinarians to develop individualised treatment recommendations for your dog.

### ***How do you treat dogs with mast cell tumours?***

There are many levels of treatment available for dogs with mast cell tumours, depending predominately on whether the cancer has spread and histologic grade (i.e. the appearance and aggressiveness of cancer cells in tissue biopsy specimens, which is assessed by a pathologist under a microscope).

If the mast cell tumour is amenable to surgery, the first aggressive surgery to remove the cancer is the treatment of choice. It gives the dog the best chance of obtaining a cure. The minimum recommended margins for aggressive surgery are usually more >2 cm around and one fascial layer deep to cancer. This is challenging and sometimes not possible, particularly if the cancer is located in the face or leg. In cases where it cannot be completely removed, further surgery can be performed around the scar tissue to prevent the cancer from growing back. Alternatively, radiation therapy may be recommended to prevent or delay the onset of the cancer growing back.

However, for dogs with mast cell tumours that have a high risk of cancer spread, chemotherapy is often recommended after surgery to prevent or slow down the rate of cancer spread. Chemotherapy, radiation therapy, or other anti-cancer medications can also be considered in mast cell tumours that are not amenable to surgery.

### ***The word 'chemotherapy' sounds scary, and I do not think I want to go down this path.***

#### ***What now?***

That is a common initial response from pet owners when they hear the word 'chemotherapy'. However, chemotherapy in pets is much different to people. It is essential to understand the difference between chemotherapy treatment in human and veterinary medicine. In human medicine, the main objective of chemotherapy is to eliminate all cancer cells to try to obtain a cure. Usually, it is administered aggressively and has more chances of developing side effects. Curing cancer in veterinary medicine is desirable (and feasible for some cancers). However, due to the less aggressive approach (for example, lower dosages), pets usually tolerate chemotherapy far better than humans. The primary goals of chemotherapy are to minimise discomfort associated with cancer growth or slow the progression of cancer while striving to maintain or improve the pet's quality of life.

Pets experience fewer and less severe side effects than humans. Approximately 80% to 90% of dogs that receive chemotherapy experience no side effects. About 10% to 20% of dogs experience a chemotherapy side effect (such as lower energy levels, nausea, loss of appetite, vomiting or diarrhoea), which can often be managed with supportive home medications. Approximately 5% of pets experience a chemotherapy side effect that requires hospitalisation. For example, when the neutrophil count drop to a critically low value and dogs experience sepsis or infection. Less than 1% of chemotherapy side effects unexpectedly results in death. Occasionally dogs will require dose reductions or treatment breaks to tolerate chemotherapy.

If you decide to proceed with chemotherapy in your dog, any side effect he or she experiences is unacceptable. Please notify your veterinarian to make changes in future treatments to try to avoid these side effects from recurring and impacting your dog's quality of life.

### ***What if I have financial limitations?***

If you have limited funds, it is still important to discuss all the available treatment options and associated costs with your veterinarian or a pet cancer specialist. At The Pet Oncologist, I work directly with your veterinarian to provide individualised treatment recommendations for each pet. I will review all the medical information submitted via the online submission form, and provide your veterinarian with a comprehensive written report within 12-24 hours. I will provide an interpretation of results, specific details about the cancer's biologic behaviour, prognosis, and multiple treatment options to cater to the individual needs of each pet and pet owner. I will also comment on whether further testing is required and address any specific questions or concerns. I can also provide chemotherapy protocols and client handouts to pet owners about the specific cancer and chemotherapy medications, to help pet owners make an informed decision. Unfortunately, due to legal reasons, I cannot provide online pet cancer advice directly to pet owners. However, your veterinarian will be able to discuss all these options with you before you consider treatment and can contact The Pet Oncologist with any questions or concerns.

### ***Can I use Palladia® to treat my dog's mast cell tumour?***

Palladia® is an oral anti-cancer medication that can be used to treat mast cell tumours in dogs. It is often recommended when the mast cell tumour cannot be removed by surgery, or when dogs have evidence of cancer spread.

Palladia® works by targeting a particular type of mutation found in some mast cell tumours called *c-kit* mutation. Furthermore, Palladia® stimulates the immune response against cancer and suppress blood vessel growth associated with cancer. If cancer loses their blood vessel supply, it will eventually starve itself of oxygen and nutrients, and thus die. Although Palladia® is an anti-cancer medication, it is not chemotherapy, which directly results in cancer cell killing. Palladia® is an attractive treatment option for many owners because they can administer the medication to their dogs at home, three times a week. However, it has the potential to cause a variety of side effects. If you elect to proceed with Palladia®, it is crucial to alert your veterinarian of any side effects (even if mild).

### ***Can I use prednisolone to treat my dog's mast cell tumour?***

Prednisolone is a steroid anti-inflammatory medication that can make a sick dog with mast cell tumours feel much better within one to two days of administration. Occasionally dogs will go into complete remission (i.e. the disappearance of all signs of cancer) with prednisolone alone. However, remission duration is often short-lived and lasts on average of around one to two months. Therefore, prednisolone can be used by itself or in combination with other treatment options (such as radiation therapy or chemotherapy) to treat mast cell tumours.