



Veterinary Cancer  
Specialists  
of New England

www.vcsnewengland.com  
(508) 276-0836

## What to Expect with Chemotherapy Treatment

Any course of cancer treatment, including chemotherapy, begins with us first understanding what type of cancer your pet has and how far it has progressed.

This information will help us recommend the best treatment protocol—what type of drugs, dosage, and schedule—for your cat or dog. We will explain and discuss our recommendation with you, including any potential limitations or side effects.

### When we choose chemotherapy

Chemotherapy may be the primary treatment for your pet or we may use it in conjunction with radiation and/or surgery. This depends mainly on the type of cancer we are dealing with. Situations where we may recommend chemotherapy include:

- Tumors that are sensitive to chemotherapy
- Tumors occurring at more than one site (*multicentric disease*)
- Cancer that has already spread (*metastatic disease*)
- Tumors that cannot be removed surgically (*non-resectable disease*)
- As follow-up therapy after surgery and/or radiation therapy when we are treating tumors that typically spread (*metastasize*) in the course of the disease
- As follow-up therapy after surgery when the tumor has not or cannot be completely removed



## Chemotherapy side effects

Compared to people treated with chemotherapy, we see fewer side effects in cats and dogs who receive these drugs because we use lower doses and do not combine drugs as often. The risk of significant side effects is less than 10% and may include gastrointestinal upset (vomiting or diarrhea) and/or low white blood cell counts.

*Less than 10% of all pets receiving chemotherapy will experience severe vomiting or diarrhea requiring hospitalization and fluid therapy.*

Most chemotherapy drugs we use are not only toxic to cancer cells but to all rapidly dividing cells. Normal cells of the body that are rapidly dividing include cells in the bone marrow, intestinal lining and hair follicles. This means that they are more likely to be damaged by chemotherapy which is why we may see side effects secondary to chemotherapy.

Most pets don't lose hair in chemotherapy the way humans do because animals' coats grow differently, however whiskers may fall out in both cats and dogs, and hair that has been clipped during chemotherapy will grow back slower. We typically only see hair loss in non-shedding dog breeds, where we may see thinning of the coat and excessive hair loss. Their hair will begin to grow again when chemotherapy treatment has ended.

The most common side effects are lethargy, poor appetite, vomiting, diarrhea and/or bone marrow

suppression. Some drugs have side effects specific to that drug, so we'll discuss them with you if your animal is to receive one of these drugs.

Your cat or dog may have increased susceptibility to infections because bone marrow suppression may cause a drop in the white blood cell count 7-14 days after treatment, depending on the drug administered. We take complete blood counts on a regular basis to monitor this. If your pet has a low white blood cell counts but isn't experiencing symptoms, we may give him or her prophylactic oral antibiotics. If there is evidence of a systemic infection (sepsis), we may need to provide supportive care including intravenous fluids and antibiotics for 24-48 hours, depending on the situation.

Three to five days after chemotherapy, your pet may experience gastrointestinal side effects that are mild, moderate, or severe, so we may prescribe oral anti-nausea and/or anti-diarrheal drugs, which often helps them feel better. Switching to a bland diet or even withholding food may be effective for mild and moderate symptoms.

Less than 10% of all pets receiving chemotherapy will experience severe vomiting or diarrhea requiring hospitalization and fluid therapy. Even for those who do, with proper management most animals recover within a few days. We may also lower the next dose of that drug, skip that drug entirely, or change to a different drug in an attempt to avoid future complications.

Most of our patients experience only mild side effects such as temporary nausea, lethargy, reduced appetite and/or diarrhea for a few days after treatment. These side effects are usually resolve within one to two days. If your pet is treated with drugs known to cause side effects, we will give you instructions on what to do if and when there is a problem.



## **Administering chemotherapy**

Chemotherapy drugs can be administered as pills you give at home or brief injections or intravenous infusions given at the hospital. Most of the time it's given on an outpatient basis during a 30-minute appointment. Only a few chemotherapy agents need to be given as an infusion over 4-6 hours. We will discuss scheduling appointments based on the chemotherapy protocol to be used. The treatments are usually repeated on a weekly to every-third-week basis, depending on the diagnosis as well as your schedule and ability to bringing your pet in for therapy. The duration of chemotherapy depends on the type of cancer and stage of

the disease. Some animals require chemotherapy for the rest of their lives while others may need it only for weeks or months if the cancer is in remission (i.e. there is no detectable evidence of disease). Chemotherapy is usually resumed when there is tumor recurrence.

If your pet's cancer is visible, like a measurable mass or lymph node, we will need to treat him or her for 4-6 weeks before we can determine if that particular drug is effective—unless the tumor gets larger during treatment. If the drug does not seem to be effective against the cancer we will discuss other treatment options.

## **Chemotherapy and quality of life**

Based on veterinary literature and our years of experience working with a variety of cancers in pets, we may be able to give you a prognosis regarding life expectancy with and without treatment, but that may not always be the case. And, unfortunately, sometimes we are not able to cure our cancer patients.

No matter what your cat or dog is facing, his or her quality of life is the most important factor we consider, and we may be able to provide palliative therapy with treatment—prolonging their life and slowing down the progression of disease while maintaining a good quality of life at home.