Chemotherapy FAQ

Chemotherapy is the treatment of disease by using chemical agents that are toxic to cancer cells. These agents work by killing actively dividing cells, which by nature are cancer cells. The susceptibility of the cells to treatment depends on the type of cancer itself. Chemotherapy is often used in conjunction with procedures such as surgery and/or radiation therapy, but in some cases it may be the only form of treatment needed.

**How is chemotherapy given?**

Chemotherapy is most often given by injection, but in some instances it may be given in the form of pills that can be swallowed. The injections are performed as either quick injections into the patient's vein (intravenous; IV), muscle (intramuscular; IM), skin (subcutaneous; SQ), or as a slow IV drip.

**How successful is treatment?**

The primary goal of treatment is to improve and extend each patient’s quality of life for as long as possible. In general, the success rates of chemotherapy alone or chemotherapy combined with other procedures vary depending on the type of cancer and the patient.

**How long will my pet be on chemotherapy?**

The number of treatments given depends on the type of cancer, the chemotherapy protocol and your pet’s responsiveness to treatment. There are various protocols available, and the success and prognosis associated with each protocol differ. In a few cases, long-term maintenance chemotherapy may be recommended. Your pet’s veterinary oncologist will explain the chemotherapy options available to treat your pet’s cancer, along with the expected outcomes, schedule, and potential side effects of each.

**Will my pet require hospitalization?**

This means that your pet will spend several hours during the day at the hospital, but usually will not need to stay overnight.

**How much does chemotherapy cost?**

Cancer treatment can be expensive. Your pet will be receiving care from highly skilled staff and will benefit from board-certified specialists with years of training and experience in oncology. The cost of treatment depends on many variables including the cancer type, chemotherapy protocol, patient size, treatment duration, and any necessary hospitalization or additional procedures. There also may be a need to amend the chemotherapy protocol depending on your pet’s response to treatment. Ask your veterinary oncologist for a written estimate for all of the known treatments, procedures, supportive medications, and potential complications.
How does chemotherapy affect my pet’s routine care?

Your pet's daily routine should be as normal and uninterrupted as possible. You can continue giving your pet heartworm, flea and tick preventives. Because chemotherapy affects the immune system, annual vaccinations need to be discussed with your oncologist prior to administration. We will also consult with your family veterinarian regarding vaccinations and other routine care.

Side effects

Almost all chemotherapy agents have the potential to induce side effects, but they would not be used if their potential benefits did not outweigh the possible risks. Unlike people receiving chemotherapy, the vast majority (80-90%) of dogs and cats have minimal to no side effects. However, a small number of patients may have moderate to severe side effects. In rare cases, side effects may be life-threatening to a patient.

Chemotherapy side effects occur as a result of the toxic effects that chemotherapy agents have on the normal cells in the body. The majority of the normal cells that may be affected are found in the lining of the intestines (GI tract) and in the bone marrow. There may be other specific toxicities associated with various chemotherapy agents on particular organs, and these will be discussed when indicated.

The common side effects associated with the GI tract include vomiting, diarrhea and nausea/loss of appetite. The common side effects associated with the bone marrow include a decrease in the white blood cell count leading to immunosuppression (a compromised ability for the body to fight infection), and less commonly decreases in platelets (clotting cells) and red blood cells. Patients with decreased blood cell counts may sometimes experience loss of appetite and lethargy. It is rare to affect other bone marrow-derived cells such as the platelets and red blood cells.

Many side effects, such as those associated with the GI tract, are not immediate and become evident three to five days after chemotherapy. In the majority of cases the side effects are limited to no more than 24 to 48 hours. Medications to treat nausea, loss of appetite, and diarrhea may be prescribed. The white cell count is typically at its lowest point 7 to 10 days after treatment, and the cells naturally rebound quickly. If needed, antibiotics may be prescribed to help protect your pet from infection while white blood cell counts are low.

Here is what to do at home if your pet experiences the following side effects

These are general recommendations. Please consult with your pet's oncologist for specific recommendations about your pet's condition.

For vomiting, nausea, inappetance

- If medications for vomiting and nausea were dispensed please give as directed at the first sign of chemotherapy side effects. Signs of nausea can include loss of appetite, aversion to food, increased salivation, and smacking the lips.
- Call our hospital if the condition persists, especially if vomiting continues in spite of anti-nausea medications.
For loss of appetite, without vomiting, add broth, treats, and favorite foods to increase flavor and appeal. Warm the food or try bland, boiled chicken or hamburger.

For diarrhea
• If medications for diarrhea were prescribed please give a dose at the first sign of loose stools after chemotherapy.
• Keep water available at all times.
• Add plain rice or a small amount of canned sweet potato to the regular diet.

Call the hospital if your pet:
• Is lethargic or collapses
• Is vomiting, inappetant, or having diarrhea for over 24-48 hours
• Has a rectal temperature over 103 F
• Has any changes to their breathing (increased respiratory rate or effort)
• Has any other changes that you are concerned about

Patient Scheduling for Chemotherapy
Chemotherapy is the cornerstone of treatment for many types of veterinary cancer. Our chemotherapy protocols are designed to maintain your pet's excellent quality of life while providing the most effective therapy against cancer. All chemotherapy appointments include physical examinations performed by the oncologist, blood work evaluation to ensure that your pet can safely receive chemotherapy, and administration of the appropriate chemotherapy drugs tailored specifically to your pet's individual needs. This entire process may take several hours, or sometimes can take all day. Please ask about options for dropping your pet off for the day for your convenience. Your pet can usually go home on the same day they receive chemotherapy.