

CHEMOTHERAPY FACT SHEET

As in people, many cancers in pets are treated with surgery, radiation therapy, chemotherapy, immunotherapy or some combination of these modalities. Chemotherapy is used to treat tumors that have high likelihood of spreading throughout the body, or for cancers where surgery or radiation therapy cannot be done.

Chemotherapy carries a negative impression, especially with our understanding of chemotherapy in human medicine. Our approach to chemotherapy in veterinary medicine is focused on limiting severe side effects and providing increased quality of life. Doses are adjusted and your pet is monitored to limit severe side effects.

What is chemotherapy?

Chemotherapy is drug therapy designed to kill or slow the growth of cancers. Many of the drugs used to treat cancer are derived from natural substances such as plants or trees or even bacteria. The drugs used to treat cancers in pets are often the same drugs used in people. There are several veterinary specific oncology treatment options as well.

What is a chemotherapy drug protocol?

A chemotherapy protocol refers to a set schedule of drug(s) given in a specific time frame. Chemotherapy protocols can incorporate one or several drugs. Some protocols have more than one drug given on the same day, while others alternate drugs over time. Protocols are designed to optimize anti-cancer benefits and adherence to the planned schedule is of utmost importance. Your veterinary oncologist will let you know if/when it's appropriate to alter the protocol.

How is chemotherapy given?

The most common ways chemotherapy is administered is intravenously or orally. Drugs can also be injected under the skin (subcutaneously) or into a muscle. In some cases, the drug may be injected directly into the tumor itself. Most intravenous injections of chemotherapy are administered over a few seconds to minutes and most pets require little more than gentle restraint and some loving attention to sit still. Some infusions of chemotherapy last a few hours or longer. In rare cases, a mild sedative will be administered to help facilitate administration of a treatment.

Some oral chemotherapy drugs can be given at home. These medications cannot be crushed or split and capsules cannot be broken open. If you are giving chemotherapy at home, you will be instructed on the proper way to administer medications and what precautions to take to protect yourself from exposure. Women who are pregnant or breastfeeding and immunocompromised individuals should not handle chemotherapy.

Many owners incorrectly believe oral chemotherapy drugs are less toxic than injectable drugs. However, the side effect profiles for most chemotherapy drugs are the same, therefore it's important to discuss any concerns you have about treatment with your veterinary oncologist before deciding on a plan.

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How should I handle body fluids while my pet is on chemotherapy?

If your pet urinates or defecates or vomits within 24-72 hours after receiving chemotherapy, we recommend you wear gloves and clean the area with disposable items (e.g. paper towels) and detergent first, then a disinfectant. Do not spray the affected area with cleaner – this can cause aerosolizing of particles and increase risk of exposure. It is better to pour cleaner over the affected area. All items that come into contact with the fluids should be disposed in the trash. Wash your hands thoroughly when you are finished cleaning. In general, it is recommended that any fabric that comes into contact feces, urine or vomitus within 24 -72 hours of chemotherapy administration should be washed in hot water, twice, and separately from other laundry.

How often is chemotherapy given?

Treatment protocols vary. Some drugs are given daily while others are administered once per week or every 2-4 weeks. Your veterinary oncologist will work with you to devise the best plan for your pet's treatment that also works with your schedule.

How long will my pet receive chemotherapy?

Most protocols have a set number of treatments and may last a few months in duration. Following completion of a planned protocol, we recommend periodic monitoring to ensure no progression of disease is seen, or if detected, that we know about it as quickly as possible. In patients with advanced disease, chemotherapy may be continued as long as it is controlling the cancer and the patient has a good quality of life.

What happens when chemotherapy no longer controls the cancer?

Some pets are cured with treatment while others have their disease controlled for a period of months or years. When disease returns, the cells can be resistant to therapy (in much the same way bacteria can become resistant to antibiotics). Different chemotherapy drugs can be tried, but in some cases, cancer develops resistance to all drugs. At this point, your pet's clinician will discuss ways to keep your pet comfortable for the remainder of his/her life.

May my pet receive vaccinations while on chemotherapy?

Studies show it is safe to give your pet vaccines while they are receiving chemotherapy, however the response may not be optimal. If your pet is due for vaccines while receiving chemotherapy, be sure to discuss this with your veterinary oncologist to optimize the timing of their administration.

What sort of side effects may my pet have with chemotherapy?

Side effects are treatment associated but most commonly including gastrointestinal upset such as vomiting or diarrhea. Decreased appetite and mild lethargy may also occur. Because these side effects are expected, your pet may be prescribed supportive medications for nausea (should decreased appetite, or increased salivation, drooling occur) and diarrhea. It is best to be proactive with these medications and provide these as soon as symptoms are noted. Chemotherapy can also cause temporary lowering of white blood cell counts, which can leave a pet more susceptible to infection. Bloodwork performed immediately before treatment and periodically afterwards will help assess for this risk. Hair loss is not common, except in breeds with continuously growing hair coats (e.g. poodles, Sheepdogs, etc.) Other side effects are possible but are often unique to individual drugs and would be discussed in more detail should that be a part of your pet's treatment plan.

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