Understanding Cancer Prognosis Fact Sheet

This fact sheet is based on information provided by the National Cancer Institute.

Key Points

- A prognosis is an estimate of the likely course and outcome of a disease.
- Many factors affect the prognosis of an animal with cancer, including the type, location, and stage of the cancer.
- When estimating a patient’s prognosis, doctors usually use statistics based on data from groups of animals whose situations are most similar to that of the specific patient.
- Doctors cannot estimate with certainty what the outcome will be for an individual cancer patient.

1. **What is a prognosis?**

   A prognosis is an estimate of the likely course and outcome of a disease. The prognosis of a patient diagnosed with cancer is often viewed as the chance that the disease will be treated successfully and that the patient will recover.

2. **What factors affect a patient’s prognosis?**

   Many factors can influence the prognosis of an animal with cancer. Among the most important are the type and location of the cancer, the stage of the disease (the extent to which the cancer has spread in the body), and the cancer’s grade (how abnormal the cancer cells look under a microscope—an indicator of how quickly the cancer is likely to grow and spread).

   Other factors that affect prognosis include the biological and genetic properties of the cancer cells (these properties, which are sometimes called biomarkers, can be determined by specific lab and imaging tests), the patient’s age and overall general health, and the extent to which the patient’s cancer responds to treatment.

3. **How do statistics contribute to predicting a patient’s prognosis?**

   In estimating a cancer patient’s prognosis, doctors consider the characteristics of the animal’s disease, the available treatment options, and any health problems the animal may have that could affect the course of the disease or its ability to be treated successfully.

   The doctor bases the prognosis, in large part, on information researchers have collected over many years about hundreds of animals with the same type of cancer. When possible,
doctors use statistics based on groups of animals whose situations are most similar to that of the patient.

Because survival statistics are based on large groups of animals, they cannot be used to predict exactly what will happen to an individual patient. No two patients are entirely alike, and their treatment and responses to treatment can vary greatly. Also, because it may take years to see the impact of new treatments and diagnostic tests, the statistics a doctor uses to make a prognosis may not reflect the effectiveness of current treatments.

Nevertheless, the doctor may speak of a favorable prognosis if the information from large groups of animals suggests that the cancer is likely to respond well to treatment. A prognosis may be unfavorable if the cancer is likely to be difficult to control. It is important to keep in mind, however, that a prognosis is only an estimate. Again, doctors cannot be absolutely certain about the outcome for an individual patient.

4. **Is it helpful to know the prognosis?**

Cancer patients’ families face many unknowns. Understanding the disease and what to expect can help make decisions about treatment, supportive and palliative care. Seeking information about prognosis is an important matter.

Many people want to know the prognosis of their cancer-stricken pets. They find it easier to cope when they know the likely course of their pet’s disease. Some may ask their doctor about survival statistics or search for this information on their own. Other people find statistical information confusing and frightening, and they think it is too impersonal to be of value to them. It is up to each individual to decide how much information he or she wants.

An Oncologist who is most familiar with a patient’s situation is in the best position to discuss prognosis and explain what the statistics may mean.

5. **What is the prognosis if a patient decides not to have treatment?**

Because everyone’s situation is different, this question can be difficult to answer. Also, information used in making a prognosis often comes from studies that have compared new treatments with existing treatments rather than with “no treatment.” Therefore, it is not always easy for doctors to accurately estimate the prognosis of a patient who receives treatment. However, as mentioned above, an oncologist who is most familiar with a patient’s situation is in the best position to discuss prognosis.

There are many reasons why people may decide not to have treatment for their pets. Some may be concerned that the benefits of cancer treatments will be outweighed by the side effects. People should discuss this concern with their pet’s oncologist. Many medications are available to prevent or control the side effects caused by cancer treatments.
Some people may decide at some point not to have treatment if they know that their pet’s type and stage of cancer has a poor prognosis, despite treatment. People who choose not to have active cancer treatment for their pets should talk with their oncologist or primary care veterinarian to explore getting palliative treatment to help with the symptoms caused by the disease.

In these cases, pet owners may want to think about clinical trials. Clinical trials are research studies that involve animals diagnosed with cancer. They test new ways to prevent, detect, diagnose, or treat diseases. Animals who take part in cancer clinical trials have an opportunity to contribute to scientists’ knowledge about cancer and to help in the development of improved cancer therapies, not only for animals, but also for humans affected by cancer. They also receive state-of-the-art care from cancer experts.

6. **What is the difference between a cure and a remission?**

A cure means that treatment has successfully eradicated all traces of an animal’s cancer, and the cancer will never recur (return). A cure does not mean, however, that the animal will never have cancer again. It is possible that another cancer, even the same type of cancer, will develop in the animal’s body at some point in the future.

A remission means that the signs and symptoms of an animal’s cancer are reduced. Remissions can be partial or complete. In a complete remission, all signs and symptoms of cancer have disappeared.

If a patient remains in complete remission for 2 years or more, some oncologists may say that the patient is cured. However, some cancer cells can remain undetected in an animal’s body for years after apparently successful treatment, and these cells may eventually cause a recurrence. Although most types of cancer usually recur within the first 2 years after diagnosis and treatment, later recurrences always remain a possibility. Therefore, doctors cannot say with any certainty that an individual cancer patient is cured. The most they can say is that there are no signs of cancer at this time.

Because of the possibility of recurrence, doctors continue to monitor patients for many months or years and do tests to look for signs of cancer’s return. They will also look for signs of delayed adverse effects from the cancer treatments received.