



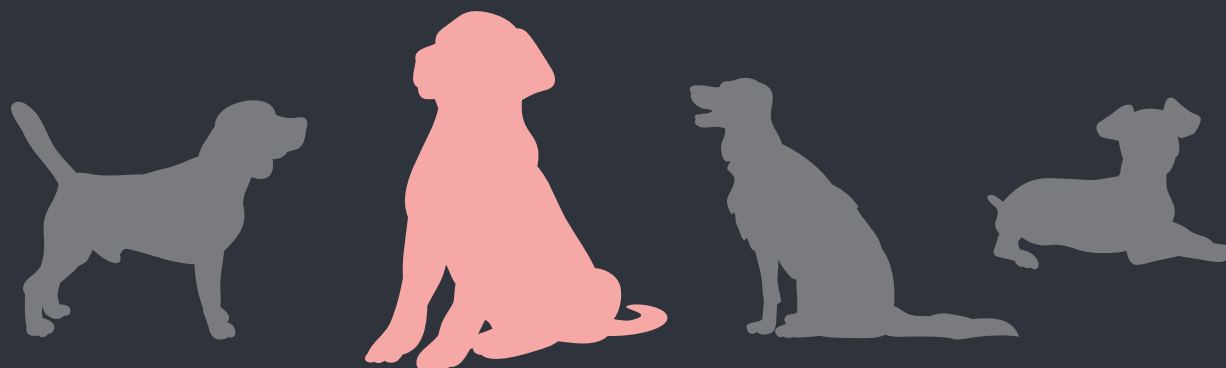
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Enable early detection for the most  
common cancers.

IDEXX Nu.Q® Canine Cancer Screen clinical reference guide

**IDEXX**

# Canine cancer is incredibly common.



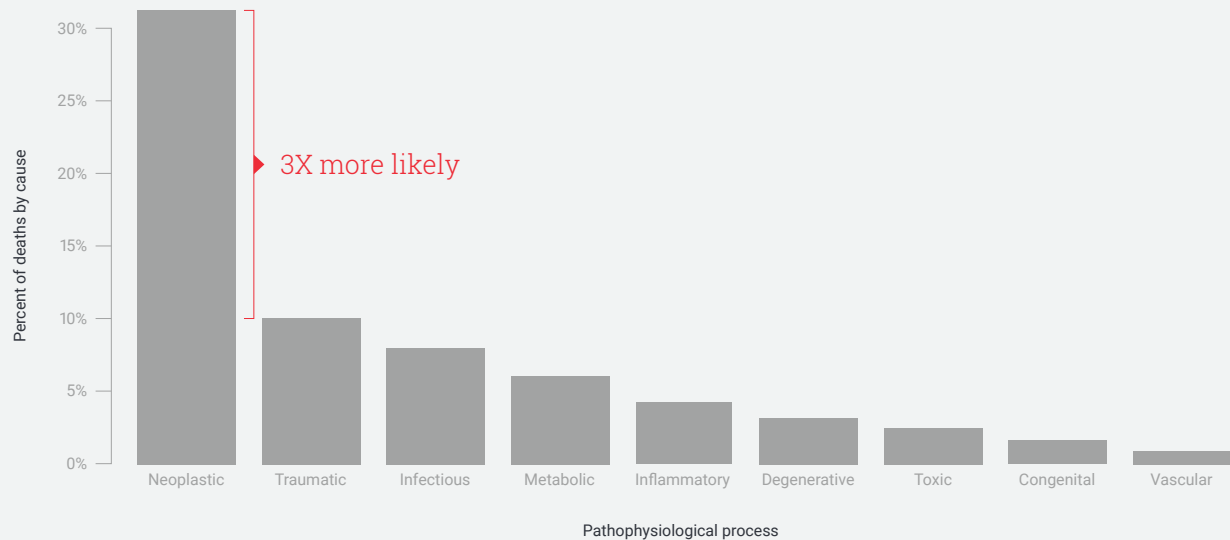
Approximately 1 in 4 dogs in the U.S. will be diagnosed with cancer in their lifetime.<sup>1</sup>



6 million dogs in the U.S. are diagnosed with cancer each year.<sup>2</sup>

## Cancer is the leading cause of death in adult dogs.<sup>3</sup>

For many cancers, patients aren't diagnosed until the later stages and clinical signs are present. These types of situations often lead to poorer outcomes and lower survival rates.



### Some of the canine cancers that veterinarians encounter:

- + **Lymphoma** up to 24% of all new canine cancers are lymphoma<sup>4</sup>
- + **Hemangiosarcoma** malignant tumors derived from the cells lining blood
- + **Osteosarcoma** most common primary bone tumor, accounts for 85% of all skeletal tumors and are quite aggressive<sup>4</sup>
- + **Mast cell tumors** most common skin tumors in dogs<sup>4</sup>
- + **Malignant melanoma** most commonly occurs on the skin, in the mouth, and on the toenails
- + **Histiocytic sarcoma** an uncommon, but especially aggressive cancer



# Cancer risk in dogs is greatly shaped by two factors: age and breed.

Studies show that the risk of cancer increases with age.<sup>5</sup>



The average age of dogs diagnosed with cancer.<sup>5</sup>

Cancer screenings are recommended for all dogs over the age of 7 as well as younger dogs ages 4 and older with an increased risk of cancer in these breeds:

- |                        |                         |
|------------------------|-------------------------|
| + Labrador retriever   | + Great Dane            |
| + French bulldog       | + Miniature schnauzer   |
| + Golden retriever     | + Siberian husky        |
| + German shepherd      | + Bernese mountain dog  |
| + Beagle               | + Mastiff               |
| + Rottweiler           | + Irish wolfhound       |
| + Boxer                | + Flat-coated retriever |
| + Pembroke Welsh corgi | + Scottish wolfhound    |





## Decrease the possibility of illness going undetected by expanding your preventive care offering.

Preventive care allows veterinarians to catch health issues earlier and help pets live healthy lives. With comprehensive diagnostics from IDEXX, you can get a deeper medical insight into your patients' health.

However, when it comes to cancer detection, the diagnosis often comes too late in the game. Until now, there has been no easy, affordable screening test that could be integrated into a wellness offering.





# Introducing the IDEXX Nu.Q® Canine Cancer Screen

**An accessible and affordable solution for early cancer detection.**

Help detect cancer as an additional component of your IDEXX Preventive Care diagnostics for all dogs over 7 years old and as early as 4 years old for breeds with increased risk of cancer.



# How it works.

A nucleosome is a bead-like structure comprised of DNA coiling around a histone protein core. When cells die, nucleosomes are released into the blood. The IDEXX Nu.Q® Canine Cancer Screen is an enzyme-linked immunosorbent assay (ELISA) containing a capture antibody directed at histone 3.1 and a nucleosome detection antibody. By measuring circulating nucleosomes, the IDEXX Nu.Q Canine Cancer Screen can identify patients who may have cancer.

## Conditions that result in increased circulating nucleosome concentration:

- + Cancer
- + Sepsis\*
- + Trauma\*
- + Immune-mediated disease\*
- + Systemic Inflammation\*
- + Patients not fasted a minimum of 4 hours before blood specimen collection\*

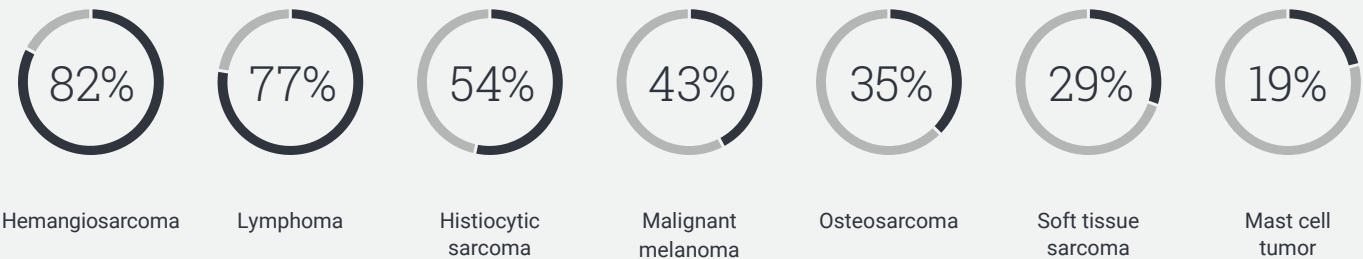
\*If these conditions are suspected, screening is not recommended

## Conditions that DO NOT result in increased circulating nucleosome concentration:

- + Chronic inflammatory conditions
- + Systemic inflammation being treated medically and not “flaring”
- + Hypothyroidism
- + Renal disease
- + Osteoarthritis
- + Mild/moderate pyoderma

In a peer-reviewed, published validation study, the IDEXX Nu.Q Canine Cancer Screen detected **49.8% of all cancers researched and 76% of systemic cancers at 97% specificity.**<sup>9</sup>

## Overall detection rate of 7 common canine cancers:<sup>6</sup>



# IDEXX Nu.Q® Canine Cancer Screen clinical workflow





## Follow these steps to ensure accuracy in specimen processing.

①



Patient must fast for a minimum of 4 hours prior to blood collection.

④



Centrifuge the specimen within 60 minutes of collection (1,600 x g for 10 minutes).

⑥



Store the specimen in a refrigerator until submission, and ship it with a cold pack to IDEXX Reference Laboratories using your clinic's routine submission method.

②



Draw 2–5 mL of blood from peripheral vein.

⑤



Transfer spun plasma specimen to a nonadditive tube (be careful to not disturb buffy coat).

⑦



View results in VetConnect® PLUS alongside preventive care diagnostics for a holistic view of a patient's health.

③



Immediately fill lavender-top tube (LTT; EDTA) with the blood specimen.

## Run alongside IDEXX Preventive Care Simple Start profiles and other wellness profiles.

### IDEXX Nu.Q® Canine Cancer Screen (test code 8993)

For cancer, this may include one or more of the following: 3-view chest radiographs, ultrasonography, computed tomography, MRI, or endoscopy. Appropriate specimens should be collected for pathology testing to achieve a definitive cancer diagnosis.



# Get the support you need when there's no time to waste.

Diagnosing cancer can be difficult, but the expanded cancer offering at IDEXX Reference Laboratories can help.

The cancer diagnostics test and service menu at IDEXX Reference Laboratories can help identify cancer, understand personalized genetic markers, and determine diagnostics for therapy management and monitoring.



## Personalized guidance from diagnosis to treatment.

Get the support that you need from the largest global network of veterinary pathologists and medical consultants at IDEXX Reference Laboratories:

- + Clinical support for routine and complex pathology cases
- + Easy access to your case's pathologist by phone and email, and consistency with a dedicated pathologist from start to finish
- + Education on when and which diagnostics are best for personalized medicine
- + Evaluation of surgical margins
- + Internal case review and collaboration
- + Comments about biological behavior and etiology
- + Cytology interpretation from a board-certified clinical pathologist in 2 hours or less, 24/7/365, with IDEXX Digital Cytology™\*



# Expand your pathology insights with VetConnect PLUS

Everything you need for faster, effective clinical decisions  
all in one place:

- + High-resolution digital images of your cytology and biopsy cases included at no charge, exclusively with VetConnect® PLUS
- + Access to each patient's comprehensive diagnostic information (CBC, chemistry profile, urinalysis, digital radiography) in one place for a holistic view in VetConnect PLUS



## Our comprehensive diagnostic portfolio gives you clarity.

The cancer diagnostics test and service menu gives you the answers you need, when you need them:

### **NEW** Cancer screening for at-risk dogs

IDEXX Nu.Q® Canine Cancer  
Screen (test code 8993)

### Genomic test for cancer detection

Liquid biopsy for Suspect Cancer  
(OncoK9®) (test code 8972)

### Genomic test for treatment selection suggestions

FidoCure® DNA Sequencing Panel  
Add-on to Biopsy (test code 8978)

### Cancer identification

- + Digital cytology\*
- + Priority cytology
- + Priority biopsy
- + Bone Marrow Cytology  
and Biopsy with  
Microscopic Description  
(test code 6070)

### Cancer characterization

- + Mast cell tumor prognostic panel
- + Immunocytochemical staining as  
recommended by pathology
- + Immunohistochemistry as  
recommended by pathology
- + Lymphoma clonality (PARR)

### Treatment monitoring

- + Cancer Baseline Profile with  
Urinalysis (test code 8975)
- + Cancer Baseline Profile and SediVue  
Dx® Urinalysis† (test code 8975S)
- + Chemotherapy Recheck Profile  
(test code 8976)
- + Chemotherapy Recheck Profile  
with Urinalysis (test code 8977)

\*Requires the in-house IDEXX Digital Cytology™ instrument.

†Urinalysis is performed on the IDEXX SediVue Dx® Urine Sediment Analyzer.



## References

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# IDEXX

**IDEXX**

One IDEXX Drive  
Westbrook, ME 04092  
United States

> [idexx.com/cancerscreening](https://idexx.com/cancerscreening)

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