

Nu.Q[®] Vet Cancer Test Technical Brochure





(979) 709-2348







"The Nu.Q® Vet Cancer Test turns 'early diagnosis' from a daunting task to a meaningful conversation between vets and pet parents."

The weighty concern in veterinary circles is cancer. Each year about 6 million pet dogs¹ face this reality.

Human medicine has benefited immensely from advanced screening tests, providing invaluable insights and early interventions. Yet, veterinary science is still catching up, with limited cancer screening tests for our canine companions.

It's not just about early detection but precise, evidence-backed detection. Accurate screenings can enhance a dog's life quality and the cherished moments they share with their owners. However, many dogs are identified only when the symptoms become painfully apparent.

Nu.Q® Vet Cancer Test, is our answer. Grounded in rigorous research, it offers vets an efficient means to screen dogs during routine checks, underscoring the significance of accurate and timely detection. The Nu.Q® Vet Cancer Test is a simple, affordable blood test designed for older dogs (7 years+) and younger ones (4 years+) at higher cancer risk, potentially due to lineage or breed specifics.

In a peer-reviewed and published case series, the Nu.Q® Vet Cancer Test was shown to detect 76% of systemic cancers; lymphoma (77%), hemangiosarcoma (82%), and histiocytic sarcoma (54%), and was able to identify approximately 50% of all cancers researched at 97% specificity².

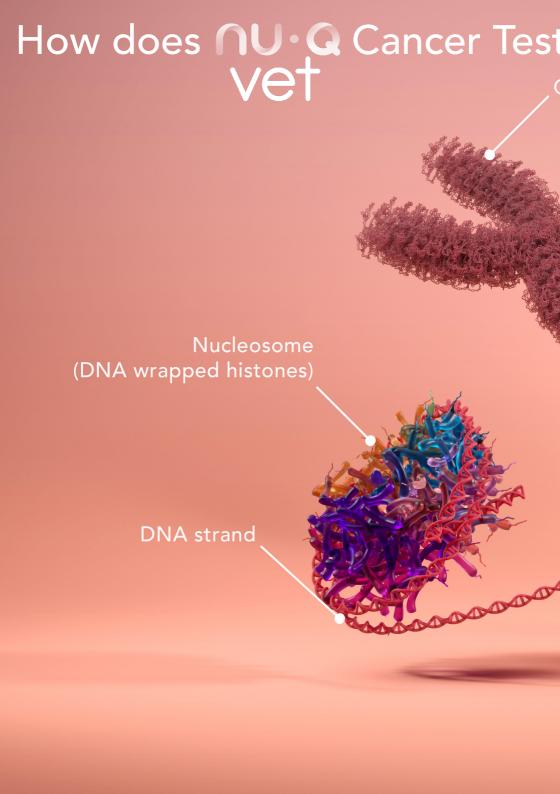
Lymphoma is the most common form of canine cancer and together with hemangiosarcoma make up approximately one-third of all cancers.

Every cellular phase, from health to metastatic cancer, unveils a story. The Nu.Q® Vet Cancer Test turns 'early diagnosis' from a daunting task to a meaningful conversation between vets and pet parents. When incorporated into wellness regimens, it complements preventive measures like routine checks, offering a comprehensive approach to canine health.

Central to our mission is the bond between pets and families, driving us to provide tools for a hopeful and informed journey.

Contents

How does the Nu.Q3 vet Cancer lest work!		7
Clinical Evidence		
	Evaluation of nucleosome concentrations in healthy dogs and dogs with cancer	7
	Characterizing circulating nucleosomes in the plasma of dogs with lymphoma	8
	Characterizing circulating nucleosomes in the plasma of dogs with hemangiosarcoma	9
	Evaluation of plasma nucleosomes concentrations in dogs with a variety of common cancer and in healthy dogs	10
	Monitoring plasma nucleosome concentrations to measure disease response and progression in dogs with hematopoietic malignancies	11
	Disease by diagnosis state: lymphoma	12
	Disease by diagnosis state: hemangiosarcoma	13
Case Studies		
	Otis	16
	Hank	18
	Belle	20
	Percy	22
Future Products in Development		24
Additional Case Series		25
Frequently Asked Questions		26



work?

Chromosome



- DNA is compacted within a cell's nucleus in the form of nucleosomes, which are bead like structures comprised of DNA coiling around a histone protein core.
- When a patient (human or canine) has cancer, nucleosomes from those cancer cells are released into the blood and can be measured using antibodies that are specific to nucleosomes.
- By measuring and analyzing nucleosomes, the Nu.Q® Vet Cancer Test can identify patients who may have cancer. This must be confirmed by follow up procedures to confirm the suspicion of cancer for example, a biopsy or scan.

Clinical Evidence

Evaluation of nucleosome concentrations in healthy dogs and dogs with cancer

Published in PLOS ONE | August 31, 2020

Characterizing circulating nucleosomes in the plasma of dogs with hemangiosarcoma

Published in BMC Research | June 29, 2021

Characterizing circulating nucleosomes in the plasma of dogs with lymphoma

Published in BMC Research | August 16, 2021

Evaluation of plasma nucleosome concentrations in dogs with a variety of common cancers and in healthy dogs

Published in BMC Research | August 31, 2022

Monitoring plasma nucleosome concentrations to measure disease response and progression in dogs with hematopoietic malignancies

Published in PLOS ONE | May 10, 2023

Evaluation of nucleosome concentrations in healthy dogs and dogs with cancer

Heather Wilson-Robles, Tasha Miller, Jill Jarvis, Jason Terrell, Nathan Dewsbury, Terry Kelly, Marielle Herzog, Thomas Bygott, Nathalie Hardat, Gaetan Michel

Study Summary:

- Samples were collected from healthy canine volunteers as well as dogs newly diagnosed with lymphoma.
- The blood was processed at a variety of times, under a variety of conditions in order to optimize the most appropriate sample collection procedures and to develop an appropriate process strategy.
- Nucleosomes could be detected using a variety of sample collection and processing protocols.
- Nucleosome signals were highest in EDTA plasma and serum samples and most consistent in plasma.
- Significantly elevated concentrations of nucleosomes were seen in a small cohort of dogs that had been newly diagnosed with lymphoma.
- When samples are collected and processed appropriately, the Nu.Q® platform can reliably detect nucleosomes in the plasma of dogs.



Characterizing circulating nucleosomes in the plasma of dogs with hemangiosarcoma

Heather Wilson-Robles, Tasha Miller, Jill Jarvis, Jason Terrell, Terry Kelly, Thomas Bygott, and Mhammed Bougoussa

Study Summary:

- Samples from 77 dogs with a confirmed diagnosis of hemangiosarcoma and 134 healthy controls were utilized for this study.
- A variety of breeds, weights and cancer stages were represented in the dataset.
- Elevated nucleosome concentrations were seen at all stages of disease and nucleosome concentrations increased with the stage of the disease.
- Dogs with confirmed HSA had a 6.6-fold increase in the median nucleosome concentration when compared to the healthy dogs.
- A receiver operator characteristic (ROC) curve was generated with the area under the curve (AUC) calculated at 92.9%.
- At a specificity of 97%, the sensitivity was 82% for all stages of hemangiosarcoma.



Characterizing circulating nucleosomes in the plasma of dogs with lymphoma

Christopher Dolan, Tasha Miller, Jarvis Jill, Jason Terrell, Terry Kelly, Thomas Bygott, and Heather Wilson-Robles

Study Summary:

- A total of 260 dogs (134 healthy and 126 LSA) were included in this study.
- All healthy dogs, and 10 dogs with lymphoma, were recruited from the Texas A&M University Veterinary Medical Teaching Hospital.
- The remaining were collected from the NCV Decision of Cancer Treatment and Diagnosis Canine Tumor repository.
- A variety of breeds, weights, and cancer stages were represented in the dataset.
- According to the receiver operator characteristic (ROC) curve, the area under the curve was 87.8%.
- Elevated nucleosomes concentrations were seen at all stages of disease and immunophenotypes.
- At a specificity of 97%, the sensitivity was 77% for all stages of lymphoma.



Evaluation of plasma nucleosome concentrations in dogs with a variety of common cancers and in healthy dogs

H.M. Wilson-Robles, T. Bygott, T.K. Kelly, T.M. Miller, P. Miller, M. Matsushita, J. Terrell, M. Bougoussa, and T. Butera

Study Summary:

- A total of 662 dogs (134 healthy and 528 with cancer) were included in this study.
- A variety of breeds, weights and cancer stages were represented in the dataset
- 7 cancers evaluated in this study:
 - Lymphoma
 - Hemangiosarcoma
 - Osteosarcoma
 - Soft tissue sarcoma
- Malignant melanoma
- Mast cell tumors
- Histiocytic sarcoma
- The top 4 malignancies detected by the test included lymphoma, hemangiosarcoma, histiocytic sarcoma, and malignant melanoma.
- At a specificity of 97%, 50% of all cancers were detected and 76% of systemic cancers were detected (lymphoma, hemangiosarcoma, and histiocytic sarcoma).
- Localized tumors such as soft tissue sarcomas are less likely to cause elevations in plasma nucleosomes.



Monitoring plasma nucleosome concentrations to measure disease response and progression in dogs with hematopoietic malignancies

H.M. Wilson-Robles, E. Warry, T. Miller, J. Jarvis, M. Matsushita, P. Miller, M. Herzog, J.V. Tueratsinze, T.K. Kelly, S.T. Butera, G. Michel

Study Summary:

- A total of 40 dogs with lymphoma, acute myelogenous leukemia, and multiple myeloma were included in this study.
- Circulating plasma nucleosomes were evaluated at diagnosis, throughout treatment, and during remission monitoring.
- C-reactive protein and thymadine kinase-1 levels were recorded.
- Plasma nucleosome concentrations were significantly higher at diagnosis and progressive disease then they were when dogs were in remission.
- Dogs with the highest plasma nucleosome concentrations had a significantly shorter first progression free survival than dogs with lower plasma nucleosome concentrations at diagnosis.
- Plasma nucleosome concentrations correlated better with disease response and progression than either thymadine kinase or C reactive protein.



Diagnosis by Disease Type/Stage: Lymphoma

At 97% specificity, the Nu.Q® Vet Cancer Test was able to detect 77% of lymphoma

Stage I:

Cases detected: 7 of 11

63.6%

Stage II:

Cases detected: 1 of 7

14.3%

Stage III:

Cases detected: 28 of 37

75.7%

Stage IV:

Cases detected: 31 of 39

81.6%

Stage V:

Cases detected: 27 of 33

81.8%

B cell lymphoma

Cases detected: 41 of 43

95.3%

T cell lymphoma

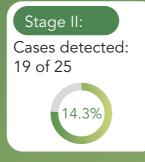
Cases detected: 10 of 18

55.6%

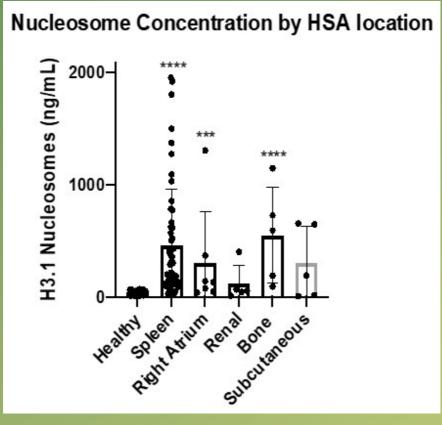
Diagnosis by Disease Type/Stage: Hemangiosarcoma

At 97% specificity, the Nu.Q® Vet Cancer Test was able to detect 82% of hemangiosarcoma













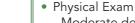
Otis

12 year-old MN Catahoula mix



History of subcutaneous hemangiosarcoma • Presenting for an annual recheck removed 2 years ago

- and doing well at home
- TPR within normal limits



- Moderate dental tartar
- Grade 1 murmur (new)
- Mild arthritic changes to hips and elbows
- As part of Wellness Exam, you run blood work (minimum database) as well as the Nu.Q® Vet Cancer Test



- CBC:
 - Stress leukogram
 - Slightly low platelets at 192,000
- Chemistry panel:
 - Mild elevation in globulins 4.6
- HW test and Fecal float:
 - Negative
- UA:
 - No significant findings





Result



High Risk



Interpretation:

Plasma nucleosome concentrations in the orange level are consistent with an increased risk of cancer in healthy animals over the age of 1 year, and all genders.

The Nu.Q® Vet Cancer Test identifies patients who may have cancer, however, confirmatory diagnostics should be used to confirm the suspicion of cancer.

Please refer to the Nu.Q® Vet Pathway for procedures that may be included in the diagnostic process.

Please Note: Nucleosome spikes may occur when patients have not been fasted for a minimum of 4 hours, as well as conditions such as immune-mediated disease, systemic inflammation, sepsis, and trauma.

What to do next?

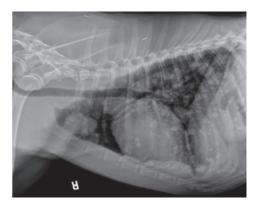
Was Otis fasted?

Yes, he fasted so proceed to a full work up.

Imaging:

- Chest radiograph
- Abdominal ultrasound
- Refer / advanced imaging like full body CT

Result



Metastatic hemangiosarcoma was confirmed via histopathology in this case.

Hank

10 year-old Great Dane Mix



- Presenting for 3-day history of right forelimb lameness
- TPR within normal limits



- Physical Exam
 - Firm painful mass associated with right carpus
 - Toe touching lame
 - Res of PE unremarkable

Suspicion – Osteosarcoma

- Owner agrees to minimum database, Nu.Q® Vet Cancer Test, and sedation for carpal radiographs
- CBC:
 - Stress leukogram
 - Mild increase in platelets: 479,000
- Chemistry:
 - Mild elevation in Alk Phos: 283 mg/dL
- UA:
 - Few lipid droplets
 - 2+ protein
 - USG 1.040



Result



Low Risk

Interpretation:

Nu.Q® Vet Cancer Test results at the green level are consistent with those found in healthy animals over the age of 1 year, and all genders.

The Nu.Q® Vet Cancer Test identifies patients who may have cancer, however, not all neoplastic conditions are detectable using elevated plasma nucleosomes.

Please refer to the Nu.Q® Vet Pathway for procedures that may be included in the diagnostic process.



Aggressive lytic boney lesion found

What to do next?

- If appropriate start anti-fungal therapy
- Perform FNA or biopsy to get definitive diagnosis

Result

Suspicion: Osteosarcoma.

Note: Localized tumors are less likely to cause elevated plasma nucleosomes, and this test is not able to differentiate severe/systemic inflammation from cancer.

Belle

5 year-old Golden Retriever FS





- Presenting for annual wellness exam
- Owner reports doing well at home, a little more tired since they got a new puppy
- TPR WNL
- PE- No significant findings
- Owner agrees to minimum database and Nu.Q® Vet Cancer Test
- CBC:
 - Mildly low platelets at 190,000
 - Otherwise, normal
- Chemistry:
 - Mild elevation in Alk Phos- 143 mg/dL
- UA:
 - No significant findings



Result



High Risk

What to do next?

- Owner agrees to an abdominal ultrasound and chest film
- Cranial mediastinal mass on chest rads
- Perform FNA to get definitive diagnosis

Result

Unfortunately, LSA.

Interpretation:

Plasma nucleosome concentrations in the orange level are consistent with an increased risk of cancer in healthy animals over the age of 1 year, and all genders.

The Nu.Q® Vet Cancer Test identifies patients who may have cancer, however, confirmatory diagnostics should be used to confirm the suspicion of cancer.

Please refer to the Nu.Q® Vet Pathway for procedures that may be included in the diagnostic process.

Please Note: Nucleosome spikes may occur when patients have not been fasted for a minimum of 4 hours, as well as conditions such as immune-mediated disease, systemic inflammation, sepsis, and trauma.

Percy

8 year-old FS Bichon Frise





- Presenting for an annual recheck and doing well at home
- TPR within normal limits
- Physical Exam
 - Moderate dental tartar
 - SQ mass over left later flank that is soft and moveable
 - No other significant findings
- As Dr. Sue Cancer Vet says,
 "see something, do something!"
 so #WhyWaitAspirate. If size of a pea
 and been there more than a month
 then aspirate
- Also, as part of Wellness Exam, you run blood work (minimum database) as well as the Nu.Q[®] Vet Cancer Test

Suspicion: Lymphoma

Result



"Gray Zone"

Interpretation:

Plasma nucleosome concentrations in the yellow level have a number of contributing factors.

If the patient has not been fasted, and is otherwise healthy, we recommend repeating the test at your earliest

repeating the test at your earliest convenience.

If the patient has been fasted, and is otherwise healthy, we recommend testing in 2-4 weeks.

If the Nu.Q® score remains elevated after retest, refer to the Nu.Q® Vet Pathway for procedures that may be included in the diagnostic process.

If the Nu.Q® score returns to the low risk level after retest, repeat test in 6-12 months as part of routine wellness screening.

Please Note: Nucleosome spikes may occur when patients have not been fasted for a minimum of 4 hours, as well as conditions such as immune-mediated disease, systemic inflammation, sepsis, and trauma.

What to do next?

Was Percy fasted?

No, repeat the test the following morning.

Retest Result



Low Risk

Interpretation:

Plasma nucleosome concentrations in the green level are consistent with those found in healthy animals over the age of 1 year, and all genders.

The Nu.Q® Vet Cancer Test identifies patients who may have cancer, however, not all neoplastic conditions are detectable using elevated plasma nucleosomes.

Please refer to the Nu.Q® Vet Pathway for procedures that may be included in the diagnostic process.

Cytology Result

Epithelial hyperplasia or benign neoplasia with mild mixed inflammation - Great News!

Next steps

Repeat test at next Wellness visit.

Future Products in Development:

Point of Care Test

By providing results within 10 minutes, point-of-care testing will expedite the clinical decision-making process. Enabling a future where veterinarians can detect, treat, and monitor, in-clinic, using the Nu.Q® Vet Cancer Test on the Element i+ is what we work towards. The chance to save lives through early cancer screening is why we work.

- Volition Veterinary has entered a licensing agreement with Heska to offer the Nu.Q[®] Vet Cancer Test in clinic, at the point of care.
- We are in the process of developing the point of care test, and anticipate a launch in 2023.

Differential Diagnosis

- We are currently working on developing additional assays to add to the Nu.Q® test to better differentiate inflammatory and other conditions from cancer.
- Studies are underway at several leading university hospitals to collect data comparing a variety of concomitant conditions including inflammatory conditions, immune mediated disease and endocrinopathies.

Cats

 Volition Veterinary is committed to the saving the lives of all your furry family members through early detection and have begun research on a Nu.Q[®] Vet Cancer Test for our feline friends. We hope to report data in the coming months.

Additional Case

Circulating nucleosomes as potential cancer biomarker in canine splenic lesions: preliminary results

Valeria Martini, Sara Meazzi, Marina Aralla, Luca Licenziato, Laura Marconato, Matteo Olimpo, Paola Roccabianca, Silvia Sabattini, Heather Wilson - Robles, Riccardo Zaccone, Luca Aresu

Study Summary:

- 25 dogs with single or multiple splenic lesions were prospectively enrolled.
- The cohort included 9 HSAs, 4 round cell tumors, 1 stromal sarcoma, and 11 non-neoplastic lesions (9 lymphoid hyperplasia, 1 necrotic splenitis, 1 hematoma).
- Nucleosome concentration was significantly higher in dogs with neoplasia than in dogs with non-neoplastic lesions
- No differences were observed between dogs with HSA and other tumor histotypes.
- Plasma nucleosome concentration represents a promising marker in dogs to differentiate between neoplastic and nonneoplastic splenic lesions.
- Histopathologic examination remains mandatory to differentiate between the neoplastic histotype.
- These results warrant confirmation using a larger cohort of dogs, also considering possible confounding effects of concomitant or systemic diseases.

Frequently Asked Questions

Patient Eligibility for the Nu.Q® Vet Cancer Test

What species can this test be used on?

Currently, the Nu.Q® Vet Cancer Test is validated exclusively for dogs. However, we're always pushing the boundaries of research. Do stay connected for updates on additional species validations in the future.

When should dogs be tested?

The Nu.Q® Vet Cancer Test is ideal for regular wellness checks, particularly in senior dogs aged 7 years and older. For breeds with a higher cancer risk, dogs as young as 4 years can benefit from this test. Breeds like Labrador Retrievers, French Bulldogs, and Golden Retrievers, to name a few, can greatly benefit from the preventive insights this test provides.

Is the Nu.Q® Vet Cancer Test suitable for patients with concurrent disease or on medications?

Concurrent Diseases: As a screening tool, the Nu.Q® Vet Cancer Test is suited for healthy, asymptomatic patients during routine wellness visits. However, it's worth noting that certain conditions, such as immune-mediated diseases or trauma, can influence test results. Thus, when evaluating patients with recent diagnoses or those presenting unstable conditions, these factors should be carefully considered prior to testing.

Medications: Based on our data, common medications such as Trazodone and NSAIDs (e.g., Rimadyl or carprofen) do not impact the test's accuracy. However, for glucocorticoids like prednisone, we recommend the patient be steroid-free for a period of 7-10 days prior to testing.

For any uncertainties or specific queries about patient scenarios and drug interactions, our dedicated team is here to support you. Reach out to us via the AskNu.Q® Vet Inbox at asknu.qvet@volition.com or call the AskNu.Q® Vet Hotline at 979.709.2348.

Are there any medications that interfere with the Nu.Q® Vet Cancer Test results?

Certain medications have been identified to potentially impact the Nu.Q® score by affecting nucleosome concentrations. In the context of lymphoma and other hematopoietic tumors, medications like prednisone and dexamethasone can decrease these concentrations. If a patient is on prednisone, it's recommended that they be off the medication for 10-14 days prior to drawing a sample. For dexamethasone, ensure it's administered at least 48 hours before testing if obtaining a sample beforehand isn't feasible.

Do pre-existing or other clinical conditions impact the results of the Nu.Q® Vet Cancer Test?

Our current research suggests managed conditions like chronic inflammation or hypothyroidism, for example, do not influence the $Nu.Q^{\otimes}$ Vet Cancer Test results. It's always recommended to consider the complete health profile of the patient for the most comprehensive understanding.

Unpacking the Test: How it Works and What it Measures

What does the Nu.Q® Vet Cancer Test measure?

The Nu.Q® Vet Cancer Test quantifies the circulating nucleosome levels in the blood. When cancer is present, these nucleosomes—originating from the cancer cells—enter the bloodstream. Our test captures these using antibodies tailored specifically to detect nucleosomes.

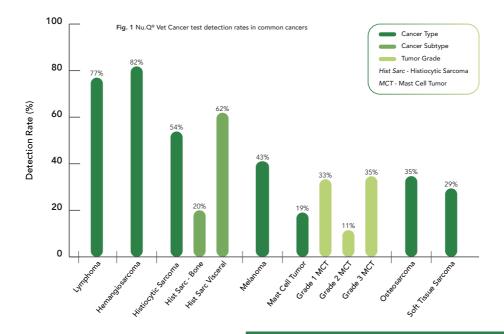
Does the baseline Nu.Q® score offer any prognostic insights?

The Nu.Q® Vet Cancer Test as a screening tool isn't intended to serve as a prognostic for cancer. It's crucial to understand that a "high" Nu.Q® score doesn't imply advanced disease or predict a shorter survival span.

Will this test specify the type of cancer my dog might have?

At 97% specificity the Nu.Q® Vet Cancer Test is adept at detecting a significant percentage of systemic cancers. For instance, it identifies lymphoma at 77%, hemangiosarcoma at 82%, and histiocytic sarcoma at 54% (Fig 1.).

Research is ongoing to determine cancer type.



For study summary, and to read/download the full publication please refer to page 10.

Before the Test: What You Need to Know

Is there any risk to having this test done?

The $Nu.Q^{\otimes}$ Vet Cancer Test is non-invasive and requires just a peripheral blood draw. This means blood can be taken from any peripheral site, including, but not limited to, the jugular vein. Given the simplicity of a blood draw, the test poses minimal risk to the dog, and no recovery time is necessary afterward.

Can I still use the sample if the patient has not been fasted?

Non-fasted samples, specifically those taken less than 4 hours after eating, may show elevated levels, which could misclassify a healthy dog into the moderate to high-risk zone. If elevated levels are observed and you suspect it's due to recent feeding:

- 1. Schedule a retest for a date 2-4 weeks from the initial test.
- 2. On the day of the retest, ensure the dog has been fasted for at least 4 hours before sample collection.

If levels remain elevated even after these precautions, doctors should consider interpreting the results in tandem with the patient's broader clinical history and any other relevant diagnostic findings.

Getting the Sample Right: Collection and Handling

What is the minimal required volume of plasma for the assay?

To run the assay, we need a minimum of 0.5 mL of plasma. Typically, drawing 2-5 mL of blood produces between 0.5-1.5 mL of plasma, meeting our requirements. Although we do prefer a larger sample for contingencies, like repeated assays, the baseline is 0.5 mL (Fig 2.).

What if I let the tube sit for more than 60 minutes before spinning?

Delaying centrifugation can result in artificially increased nucleosome levels in the sample. If over 60 minutes have passed since the blood draw, it's best to collect a fresh sample. Ensure you spin it down at 1600xg for 10 minutes within that 60-minute window.



Fig 2 Photo representation of ideal color and volume of a sample post-centrifugation and plasma extraction plasma extraction.

Explanation: This plasma sample is clear with no visible hemolysis.

These samples offer the best accuracy, reducing the need for reprocessing.

Can I use serum instead of plasma?

We exclusively recommend the use of plasma for the Nu. Q^{\oplus} Vet Cancer Test. Serum samples are not accepted.

What if my sample is hemolyzed after centrifugation?

Mild to moderate hemolysis won't interfere with the test's accuracy. In human assays, hemoglobin levels up to 500 mg/dL showed no interference. However, for samples exhibiting 3+ or higher hemolysis, it's advisable to collect and process a new sample (Fig 3.).

What kind of tubes can I send the plasma sample in?

Please ensure the plasma is sent in a sterile non-additive tube. Suitable tubes include red top tubes, white top tubes in some clinics, cryovials, or top test tubes.

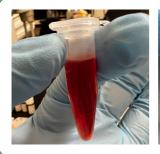




Fig 3 Photo representation of samples with visible hemolysis or discoloration.

Explanation: While mild to moderate hemolysis won't interfere with the test's accuracy, samples exhibiting strong hemolysis might.

It's advisable to collect new sample in such cases to ensure test accuracy.



Fig 4 Photo representation of a sample of intermediate quality.

Explanation: While this sample is not as compromised as a severely hemolyzed sample, it is not ideal.

Given its cloudiness, consider a rerun to ensure test accuracy.

After the Test: Understanding Results

When can I expect results from the lab?

You can typically anticipate results within 1-3 days after the sample collection. However, turnaround times may vary, so it's always a good practice to consult with your preferred diagnostic lab for specific timing.

We understand the importance of timely results and appreciate your patience as we ensure accuracy in every analysis.



Detect | Treat | Monitor

Why Screen for Cancer?

When it comes to canine cancer, knowledge is your ally. The Nu.Q® Vet Cancer Test isn't just another test; it's a science-backed tool that offers you the time and insight for a proactive care approach, allowing you to make data-driven decisions and guide pet owners with increased confidence.

Bridging Conversations

A test result is more than just a data point; it opens the door for veterinarians to engage in meaningful conversations with pet owners. From treatment options and lifestyle changes to ongoing health monitoring, the Nu.Q® Vet Cancer Test serves as a catalyst for more personalized, compassionate care.

Flevate Your Practice

Integrating this innovative test into wellness plans complements existing preventive measures like vaccines and routine bloodwork. You're not just adopting a new procedure; you're enriching your toolkit for a nuanced, holistic approach to canine wellness.

Where to Find the Nu.Q® Vet Cancer Test



