

## Heska® Nu.Q®—Frequently Asked Questions

### What does the Heska Nu.Q® test measure?

The Heska Nu.Q® test measures the level of nucleosomes that are circulating in the blood. When a patient has cancer, nucleosomes from those cancer cells are released into the blood and can be measured using antibodies that are specific to nucleosomes.

### When should I use the Heska Nu.Q® test?

The Heska Nu.Q® test is best suited to be performed with annual wellness checks for healthy, older dogs (7 years and older) as well as for younger dogs (4 years and older) with an increased risk for developing cancer in their lifetimes, such as those with familial history and/or certain breeds, *e.g.*, Labrador Retriever, French Bulldog, Golden Retriever, German Shepard, Beagle, Rottweiler, Boxer, Pembroke Welsh Corgi, Great Dane, Miniature Schnauzer, Siberian Husky, Bernese Mountain Dog, Mastiff, Irish Wolfhound, Flat Coated Retriever, and Scottish Wolfhound.

### Can I run this test on a patient showing signs of illness?

Inflammatory diseases such as immune mediated disease, systemic inflammation, sepsis and trauma can also cause elevated nucleosome levels. This test will not differentiate between patients sick with systemic inflammatory mediated illness from those sick with cancer. For this reason, we do not recommend using the Heska® Nu.Q® test to screen for cancer in patients that could have these types of diseases. Chronic inflammatory conditions, systemic inflammation that is being treated medically and not 'flaring', hypothyroidism, renal disease, osteoarthritis, mild or moderate pyoderma, or other such minor illnesses are less likely to impact the results of the Nu.Q® Canine Cancer Screening test.

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

Yes, although dogs who have not been fasted for 4 hours may have slightly elevated levels when compared to fasted samples in the same dog. If a "Moderate Suspicion" or "High Suspicion" result returns for a non-fasted patient, it is recommended to collect a new sample after the recommended 4 hour fast and repeat the test. If the level remains elevated, then additional testing may be necessary.

### What types of cancer has the Heska Nu.Q® test been able to detect?

The Heska Nu.Q® test was shown to detect 76% of systemic cancers (lymphoma (77%), hemangiosarcoma (82%), and histiocytic sarcoma (54%)) at 97% specificity. Data also suggests the Heska Nu.Q® test can detect some instances of mast cell tumors, osteosarcoma, oral melanoma, and soft tissue sarcoma, and may have benefits in the monitoring of cancer patients over time.

### Will the Heska Nu.Q® test tell me what type of cancer my patient has?

The Heska Nu.Q® test does not provide a definitive cancer diagnosis. The primary purpose is to screen for the possible presence of cancer. If there is a suspicion of cancer, it is recommended to continue down the diagnostic pathway to confirm and locate the patient's cancer. Refer to the section below on interpreting results for additional information.

### Is the baseline Heska Nu.Q® test level prognostic?

The Heska Nu.Q® test is not a prognostic test. The numerical level of a positive Heska Nu.Q® test result does not necessarily have a direct correlation to severity of disease.

### What if I have questions about the results when I get them?

If you have any questions about the results you have received, please contact Heska's Medical & Technical Consultants team at [MTCV@Heska.com](mailto:MTCV@Heska.com) or call 800.464.3752, option 5, or Live Chat at [heska.com/support](https://heska.com/support) and select "Allergy testing/Immunotherapy/Nu.Q/ Case Consult" option from the Live Chat tool.

## How do I interpret the results?

Reference Range	Flag	Interpretation	
≤50 ng/ml		Low Suspicion	This patient has low risk for active neoplasia in the classes of tumors screened for by the Heska Nu.Q® test. Continue routine annual or bi-annual screening.
51–80 ng/ml	*M	Moderate Suspicion	This patient's results are in the "gray zone" of moderate suspicion and further testing should be considered. Patient may have low-levels of circulating nucleosomes due to certain early-stage neoplasia. Repeat testing with a fasted sample after 2–4 weeks or when convenient to evaluate trends in results if patient is otherwise healthy.
≥81 ng/ml	*H	High Suspicion	This patient has risk for active neoplasia in the classes of tumors screened for by the Heska Nu.Q® test, warranting further screening for the presence of neoplasia. This may include additional laboratory testing such as repeating the Heska Nu.Q® test in 2 weeks, radiographs, ultrasound, fine needle aspirates and/or biopsies, depending on the clinical presentation and physical examination findings for this patient.
Other Considerations			
*Inflammatory diseases such as immune mediated disease, systemic inflammation, sepsis, and trauma can also cause elevated nucleosome levels. This test will not differentiate between patients sick with systemic inflammatory mediated illness from those sick with cancer.			



For further assistance, please call Heska's Medical and Technical Consultants at 800.464.3752, option 5.