



i-STAT® 1

Handheld Clinical Analyzer



Heska's Solution.

Heska Corporation now introduces a new in-hospital test for the measurement of Cardiac Troponin I (cTnI). Radiography, echocardiography and/or electrocardiography are currently the necessary diagnostic measures to assess potential cardiac damage beyond the physical exam.

Now the convenience, versatility and decisiveness of the i-STAT® 1 Handheld Clinical Analyzer brings you the capability of measuring cTnI to assess cardiac damage in 10 minutes, with one drop of whole blood, using a venous sample.

cTnI is the current industry standard for measurement of myocardial infarction in humans. Because cTnI is conserved across species, the human immunoassay can be used reliably in veterinary medicine. The i-STAT® 1 analyzer cTnI test provides valuable information for the care of your veterinary patients in the following situations:

1. Assessing severity of disease in dogs with subaortic stenosis (SAS), mitral valve disease (MVD), and cardiomyopathy (CM).¹
2. Monitoring response to therapy.^{1,3}
3. Assessing cardiac damage due to extra-cardiac disease (GDV and HBC).¹
4. Assessing severity of disease in cats with CM.¹



New cTnI Cartridge for use with the i-STAT® 1 Analyzer

How does Cardiac Troponin I work?

cTnI is a protein that regulates the interaction of myosin and actin which contribute to the control of cardiac muscle contraction. Damage to a cardiac muscle cell causes cTnI to detach from the troponin complex. Once cTnI is released into circulation it becomes a measurable marker.

Following acute cardiac injury, cTnI levels peak on the first day, remain elevated for 7 days, and return to baseline by 3 weeks after injury.² Prolonged elevation of cTnI indicates ongoing damage and a poorer prognosis.

Cardiac Troponin I testing on the i-STAT® 1 Analyzer.

- As with other i-STAT® analyzer products, the cTnI cartridge has a proven track record in human medicine providing fast, accurate and reliable results.
- cTnI measurement upon patient presentation and as a follow-up ensures superior monitoring and care in suspect veterinary cardiac and trauma patients.
- 10 minutes to results!



The NEW i-STAT® 1 Analyzer



Normal Reference Ranges for cTnI.

	Canine	Feline	Equine
Reference Range ng/mL	0.00–0.11	0.00–0.09	0.00–0.06

The cTnI reportable range on the i-STAT® 1 analyzer is 0.00–50.00 ng/mL.

How do you interpret an elevated cTnI concentration?

cTnI is a marker of myocyte injury and as such, the blood concentration of cTnI is increased in various cardiac and noncardiac conditions. Examples include, but are not limited to: dilated CM, degenerative MVD, SAS, GDV and blunt thoracic trauma. Elevated concentrations of cTnI indicate a more thorough cardiac work-up is warranted.

The i-STAT® 1 Handheld Clinical Analyzer—IN YOUR PRACTICE.

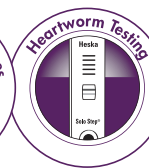
- **Be prepared:**
 - Emergency situations
 - Complex medical conditions
 - Generally sick patients
 - Monitoring
 - Wellness evaluations
- **Just 2 minutes to rapid results:**
 - Acid-Base
 - Blood gases
 - Electrolytes
 - Renal function
 - Basic chemistries
 - Basic hematology
 - Lactate
- **Assess your patients:**
 - In the operating room
 - In the field
 - In the exam room

References

1. Oyama, MA. Evaluation of heart function using blood-based tests: current use and future applications. www.ivis.org/proceedings/scivac/2006.
2. Ricchiutti, V, Sharkey, SW, Murakami, MM, Voss, EM, Apple, FS. Cardiac Troponin I and T Alterations in Dog Hearts with Myocardial Infarction. *Am J Clin Pathol* 1998;110:241-247.
3. Sleeper, MM, Clifford, CA, Laster, LL. Cardiac Troponin I in the Normal Dog and Cat. *J Vet Intern Med* 2001; 15:501-503.



SMART SOLUTIONS IN YOUR PRACTICE



Call **1-800-GO HESKA** or one of Heska's Authorized Distributors for complete details and purchase options.