

Vcheck Canine NT-proBNP

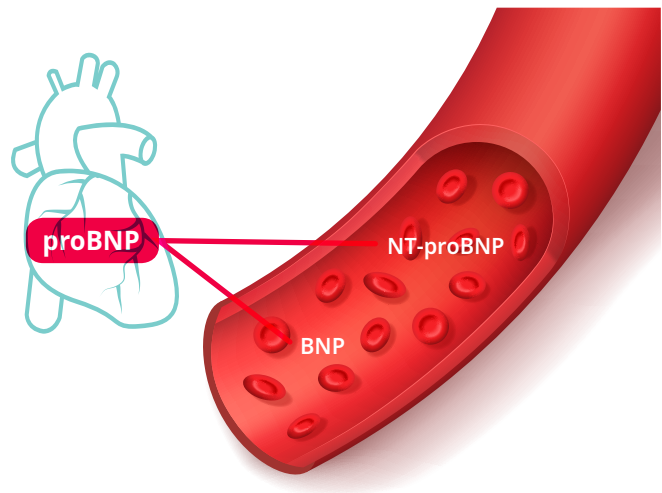
New Cardiac Biomarker for dogs



What is NT-proBNP?

The pro-hormone (proBNP) is produced by cardiac muscle cells and increases due to increased myocardial wall stress.

Upon release into the blood, it is cleaved into BNP and NT-proBNP. Due to its longer half-life and stability, NT-proBNP is better suited as a diagnostic biomarker for the diagnosis of heart diseases in dogs.



What NT-proBNP levels tell us

In dogs, NT-proBNP is correlated with heart size and systolic function, suggesting that the concentrations can be used to detect dogs with early disease.

Distinguishes cardiac from respiratory disease

- In dogs with dyspnea requiring emergency care
- Differentiates cardiac and respiratory causes of respiratory signs

Staging of Myxomatous Mitral Valve Degeneration (MMVD)

- Differentiates dogs with MMVD with and without congestive heart failure
- Ongoing monitoring in dogs with MMVD

Detects Dilated Cardiomyopathy (DCM) in Large Breeds

- Highly sensitive and specific for detecting occult DCM
- Predicts survival in Dobermans at high risk

NT-proBNP should be interpreted with other diagnostic techniques, such as echocardiography, thoracic radiography, history and clinical signs to improve the accuracy of diagnosis.

Differentiation is important for diagnostics and therapy

In dogs with dyspnea requiring emergency care

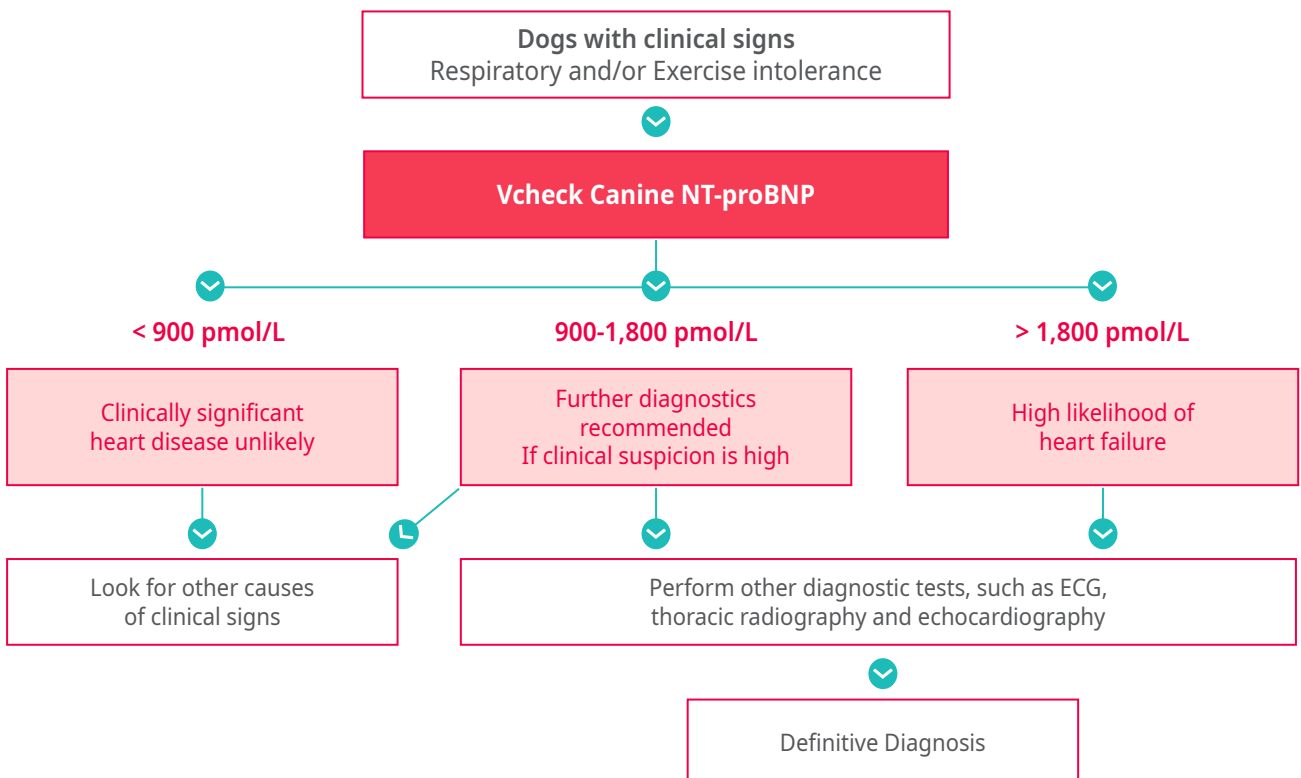


Treatment of cardiac and respiratory cases is very different

NT-proBNP provides insights to distinguish cardiac from non-cardiac respiratory distress

Clinical Algorithm

NT-proBNP testing in dogs



Vcheck Canine NT-proBNP

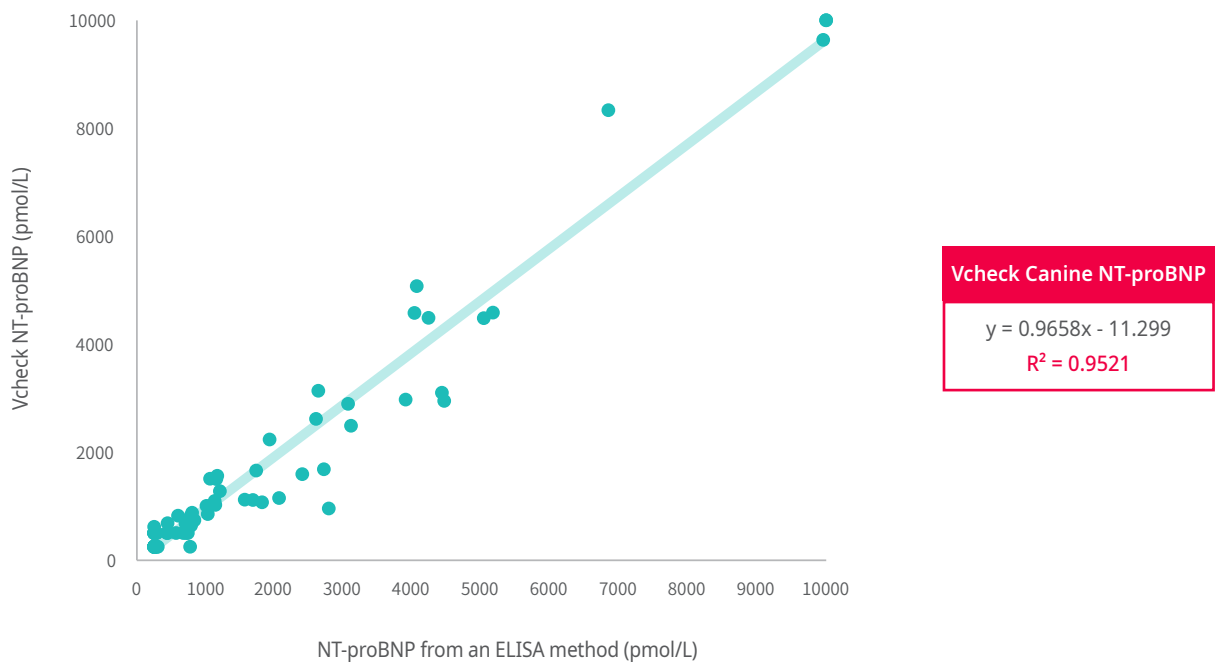
Key Features

- **Quantitative Analysis**
Numerical results not qualitative
- **Proven Accuracy and Reproducibility**
Correlated against a laboratory ELISA method
- **Rapid and accurate results**
Simple procedure and quick results within 15 min.



Performance

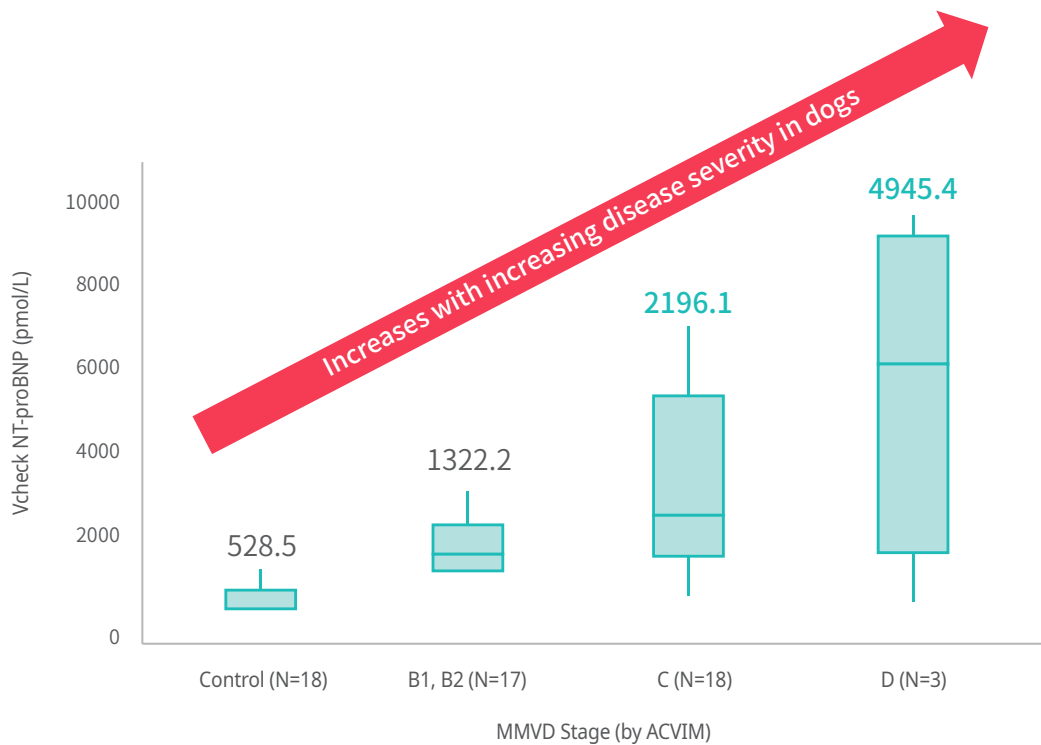
- Strong correlation ($R^2=0.952$, $N=80$) with an ELISA method (from company 'T' laboratories)



Vcheck Canine NT-proBNP

Performance

- Vcheck NT-proBNP levels based on stages of ACVIM Consensus Classification



	Control	Stage B1, B2	Stage C	Stage D
ACVIM Stage	Control	Asymptomatic (-/+ Left heart volume increased)	CHF signals	Terminal stage

Ordering Information

Product No.	Product Name	Product Type	Packing Unit
VCF132DC	Vcheck Canine NT-proBNP	Device	5 Tests/Kit

Vcheck Canine NT-proBNP

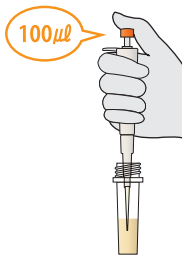
Specifications

- Species : Dog
- Sample : Serum 100 μ l
- Testing Time : 15 minutes
- Measurement : Quantitative
- Measurement Range : 500 – 10,000 pmol/L
- Storage Condition : 2 - 8 $^{\circ}$ C

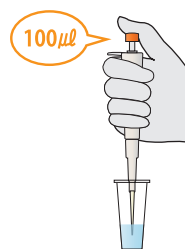


Test Procedure

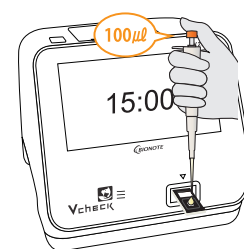
- 1 Add 100 μ l of the sample to the assay diluent tube



- 2 Mix well by using a 100 μ l pipette



- 3 Add the mixed sample (100 μ l) into the test device



**Samples should be centrifuged and tested immediately after collection.
Alternatively, refrigerate and use within 24 hours or freeze.**

* * Degradation of NT-proBNP may occur if stored at room temperature or refrigerated for more than 24 hours, causing false negative results.

Reference Ranges

< 900 pmol/L	900 – 1,800 pmol/L	> 1,800 pmol/L
Normal	Suspected* Additional diagnostics are recommended	Abnormal* Additional diagnostics are recommended

* 'Abnormal' or 'Suspected' NT-proBNP test results should always be interpreted in combination and other diagnostic findings such as an echocardiogram.

** Concentration over 735 pmol/L in Doberman Pinschers indicates an increased risk for occult dilated cardiomyopathy.