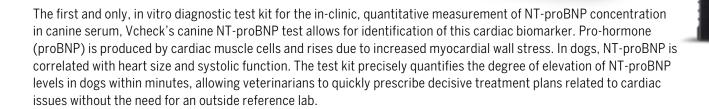




# **Quantitative Results are at the Heart of Canine Care**

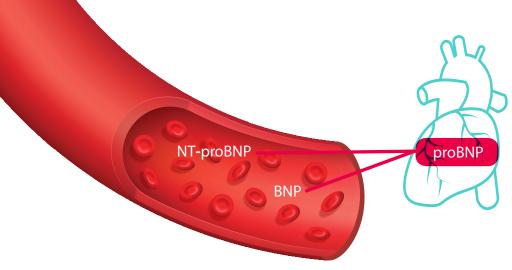


# **Clinical Applications**

- Early diagnosis of heart disease in dogs
- ► Distinguishes cardiac from respiratory disease
- ► Identifies dogs at high risk of congestive heart failure
- Chronic monitoring of dogs with MMVD
- Preanethesia screening
- ► General wellness visit screenings for pets predisposed to heart conditions

# A Closer Look: NT-proBNP

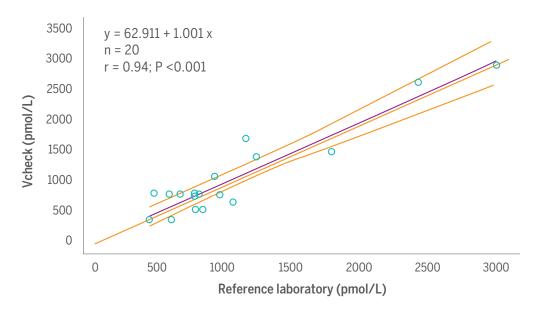
The pro-hormone (proBNP) is produced by the cardiac muscle cells and rises due to increased myocardial wall stress. Upon release in the blood, it is cleaved into BNP and NT-proBNP. Due to its longer half-life and stability, NT-proBNP is better suited as a diagnostic biomarker for the diagnosis of heart diseases in dogs.





# **Comparative Analysis**

When frozen samples were shipped using dry ice to a reference lab, analyzer comparison of the Vcheck in-clinic analysis to the reference lab analysis showed excellent correlation, with a slope of 1 and a mild positive bias of 63 pmol/L (r=.94,  $R^2=0.90$ ), as shown in the graph below. When samples were treated in a real-world, in-clinic setting, the  $R^2$  falls to 0.85 and the positive bias increases to >750 pmol/L. This positive bias of the in-house assay in comparison to the reference laboratory is consistent with sample degradation. When paired sample results are compared, these discrepancies are clinically significant in approximately 30% of the samples, with a resultant difference in diagnosis.



Dr. Kendal E. Harr DVM, MS, DACVP. (2021) Bionote Study: Veterinary Application of Bionote's N Terminal - pro Brain Natriuretic Peptide (NT-proBNP) Sample Handling and Significance of Temperature Control.

Collins, SA, Patteson, MW, Connolly, DJ, Brodbelt, DC, Torrance, AG, Harris, JD. Effects of sample handling on serum N-terminal proB-type natriuretic peptide concentration in normal dogs and dogs with heart disease. Journal of Veterinary Cardiology 2010;12:1;41-48.

## **Specifications**

**Species** Canine

Sample TypeSerum 100 μlMeasurementQuantitative

**Range** 500 - 10,000 pmol/L

**Testing Time** 15 minutes **Storage Condition** 2 - 8° C

# **Simple Testing Procedure**



## **Dilute Sample**

Use a 100 µl pipette to draw 100 µl of the serum and add to the assay diluent tube.



### Mix

Use the same pipette to mix the sample with diluent by pipetting 5 - 6 times.



### Measure

Add 100 µl of the mixed sample to the sample well of the test device and press [START].

Product Name	Product Number	Product Type	Packing Unit
Vcheck Canine NT-proBNP	VCF132DC	Device	5 Tests/Kit
Vcheck Canine NT-proBNP	VCF132DD	Device	10 Tests/Kit



For More Information on

Vcheck V200 or V2400

analyzers visit:

bionote.com customerservice@bionote.com 800-727-5169

