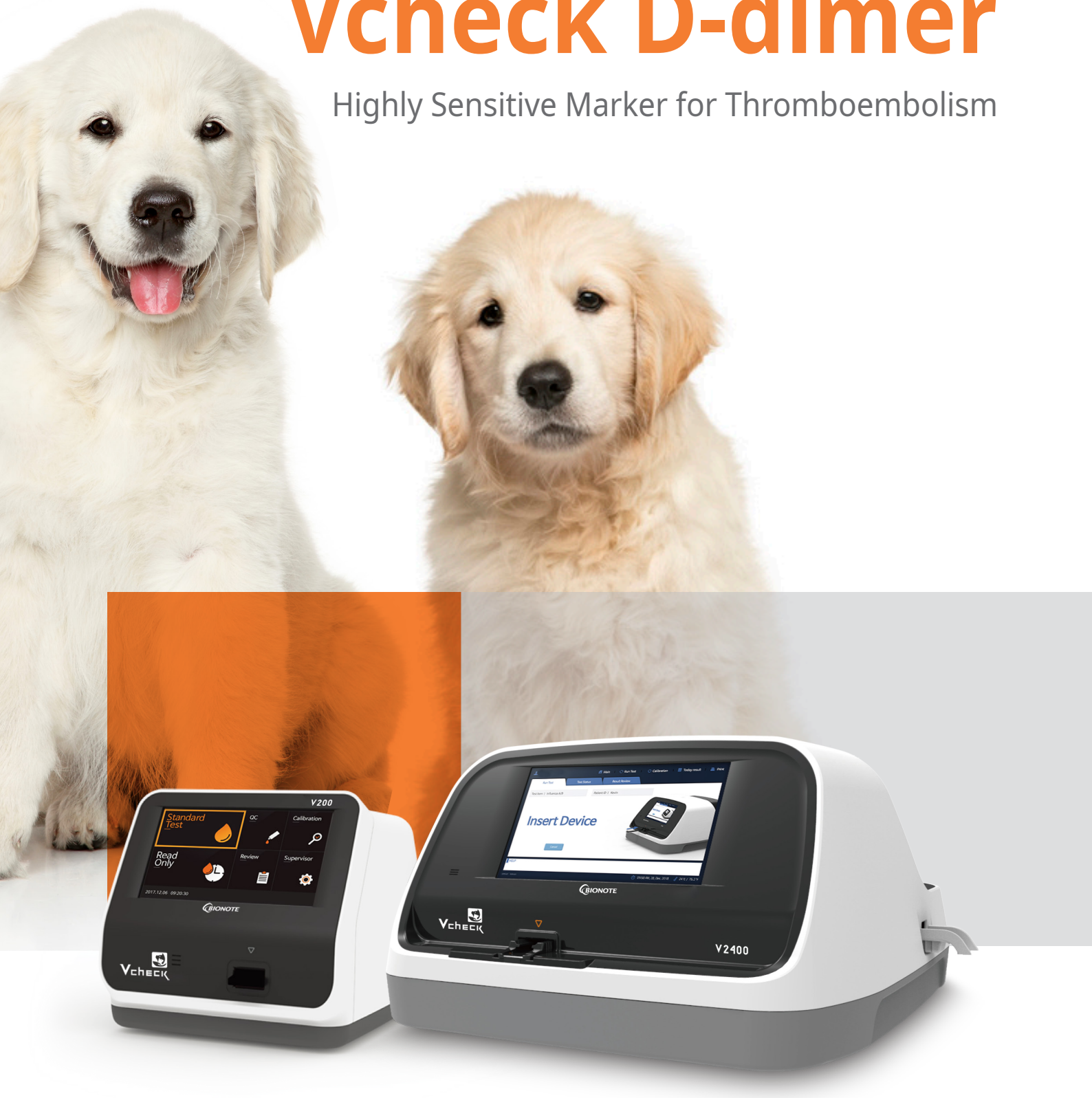
Vcheck D-dimer

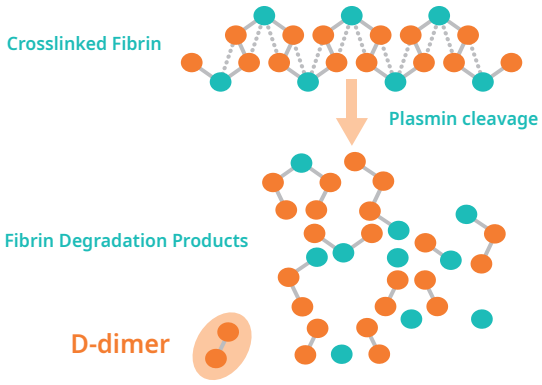
Highly Sensitive Marker for Thromboembolism



BIONOTE

What is D-dimer?

D-dimer is produced from degradation of crosslinked fibrin. Plasmin is the enzyme responsible for thrombolysis and acts on both fibrinogen and fibrin. Plasmin cleaves crosslinked fibrin resulting in a cleavage product consisting of 2 linked D domains or D-dimer.



When is it done?

- DIC
- Pulmonary Embolism
- Systemic Thrombosis
- Chronic Congestive Heart Failure

Known Risk Factors for Thromboembolism in Dogs

- Cancer
- Sepsis
- Pancreatitis
- Vascular diseases (i.e., heartworm)
- Congestive heart failure
- Protein-losing disease
- Immune-mediated disease
- End/Exogenous Corticosteroids

Run D-dimer every time you suspect thromboembolic disease

Clinical Algorithm

Algorithm for Pulmonary Thromboembolism (PTE) in dogs

Clinical Suspicion

↓

D-dimer concentration

↓

Negative → PTE ruled out

Positive → 1. D-dimer > 0.5 µg/ml ?
2. Known disease predilection ?
3. Significant pulmonary hypertension ?
4. Thoracic radiographs

→ Low Clinical Probability
→ Intermediate Clinical Probability
→ High Clinical Probability

J Am Anim Hosp Assoc 2005;41:145-149.

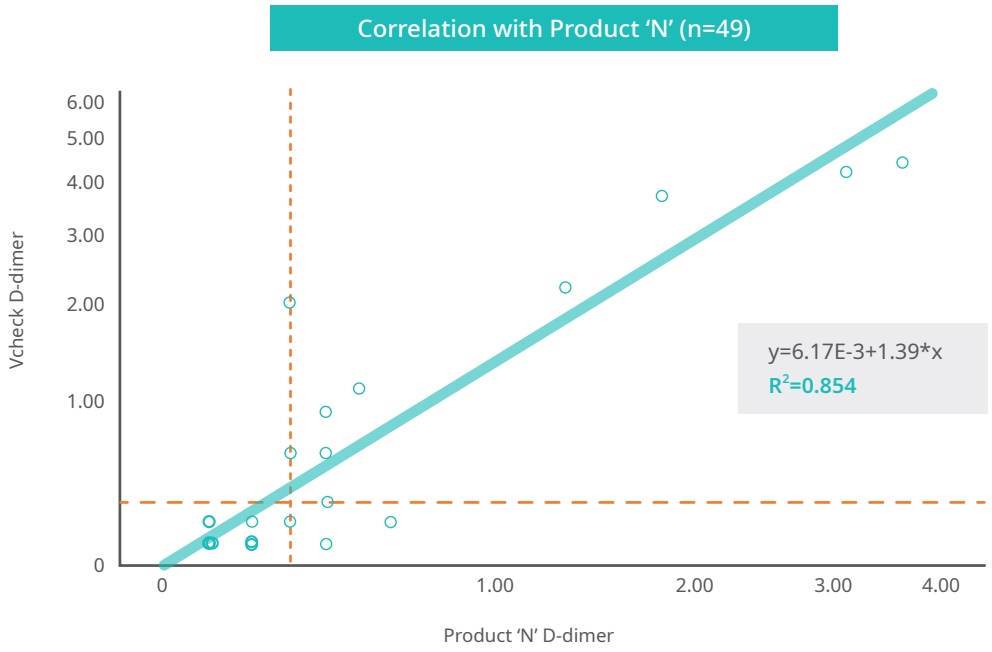
Vcheck D-dimer

Performance

Excellent Clinical Utility

- Stronger Correlation with clinical signs
- High correlation with product 'N' (R^2=0.854)

Researched by Haemaru Small Animal Clinical Research Institute & Referral Animal Hospital

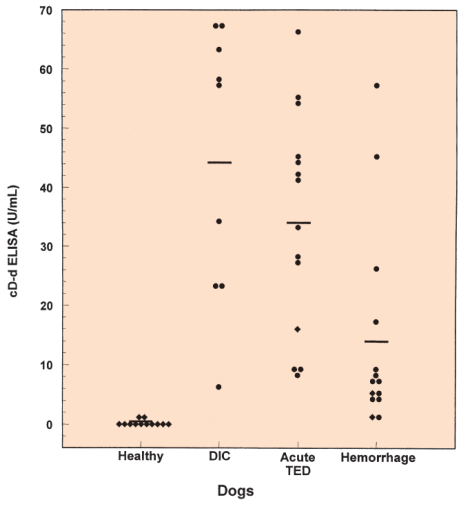


Applications

- A Good Screening Test For
  - DIC (Disseminated intravascular coagulation)
  - Acute Thromboembolic Disease

- Assessment of Pulmonary Thromboembolism
- Monitoring of Antithrombotic therapy
- Prediction of Survival Prognosis after Surgery

AJVR, 64(12), 1562-1569, December 2003

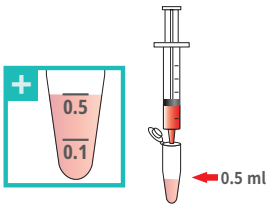
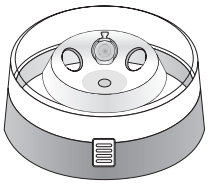


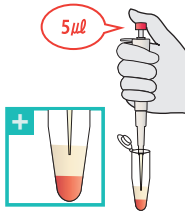
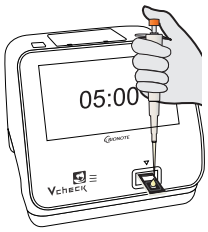
Vcheck D-dimer

Specifications

- Species : Dog
- Sample : Plasma (only Sodium Citrate)
- Testing Time : 5 minutes
- Measurement Range : 0.1 – 10 μg/ml
- Storage Condition: 2 - 8°C

Test Procedure

Sodium citrate	Whole blood	Mix & Centrifuge
		
Add sodium citrate 50 μl to a 1.5 ml tube	Add whole blood 450 μl to the line of 0.5 ml	Mix the tube gently using a wrist snap making an 8-character shape. And centrifuge at 3,000 rpm for 15 min.

Dilute Sample	Mix	Measure
		
Draw plasma 5 μl and add it into an assay diluent tube	Mix well 5-6 times by using a 100 μl pipetting	Add all of mixture in the sample hole of the test device

Reference Ranges

< 0.3 μg/ml	≥ 0.3 μg/ml
Normal	Abnormal TED/DIC* probable

* TED: Thromboembolic disease,
DIC: Disseminated intravascular coagulation

Ordering Information

Product No.	Product Name	Product Type	Packing Unit
VCF107DD	Vcheck D-dimer	Device	10 Tests/Kit

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Rev.2