

# OmniChek™-SAA – Be Sure, OmniChek It!

## OmniChek™-SAA

OmniChek™-SAA is a rapid test to assess the immune health status of your dog that is easy to use and simple to interpret. With just a pin prick of blood you can detect and track acute inflammatory conditions in less than 10 minutes.

## Serum Amyloid A – How it Works

Serum Amyloid A (SAA) is the most sensitive biomarker available for rapid point of care detection of inflammation in your dog. When a dog's immune system is challenged, for example because of an infection, it causes changes in the blood (signals) to activate response mechanisms.

SAA is one of those signals, rising significantly within hours of the challenge. SAA offers significant advantages over traditional tests like a full blood count or even CRP. SAA shows a broader range and a significantly superior overall diagnostic performance when compared to CRP<sup>1</sup>.

## Applications\*

OmniChek™-SAA is a useful diagnostic marker for assessing the general health and wellness of your dog. An elevated level is a clear indication of an underlying pathology. Typical applications include:

- Confirming the presence of an active systemic inflammatory condition.
- Detection of sub – clinical inflammation where there is a suspicion something is wrong.
- Detection of infection.
- Real time monitoring of recovery of disease activity.
- An (early) indicator of more sinister disease conditions, such as cancer, or a prompt for more detailed diagnostic testing.

## Interpretation of Results



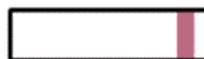
3 Lines  
< 10 µg/ml



2 Lines  
10 – 50 µg/ml



1.5 Lines  
50 – 400 µg/ml



1 Line  
>400 µg/ml



\*A definitive clinical diagnosis should only be made after all clinical and laboratory findings have been considered.

## Technical Data

- Sample type: Whole blood (serum or plasma can also be used although the test is designed to avoid the necessity for blood separation)
- Sample volume: 5 µl of whole blood or 3 µl of serum or plasma
- Test time: Results are visible in as little as 2-3 minutes although the recommended test time is 10 minutes. The more familiar you become with the test, you can see results appearing as the test is still running.
- Measuring range: OmniChek™-SAA will detect SAA in the range 0-400 µg/ml.
- Absence of false positives: Unlike other rapid tests, for example CRP, there is no possibility of any false low results. With OmniChek™-SAA, when its low, you know for sure it is low.

## Sensitivity and Specificity Data

Blood samples were collected from 196 dogs routinely referred to a hospital based veterinary clinic. Physical examinations, blood counts as well as a range of follow up diagnostic investigations were performed depending on the decision of the vet. All samples were run on an OmniChek™-SAA test at the time of sampling. In addition, blood samples were taken, and serum samples were stored for subsequent analysis on an ELISA.

- Sensitivity: 94.1 %
- Specificity: 97. 9%
- Accuracy: 96. 4%

## White Cell Counts vs SAA in Assessment of Inflammation

Analysis of white blood cells are routinely used as a means of assessing inflammation in dogs. However, several publications have shown a poor correlation between inflammation and white cell counts, yet they are still used to assess inflammation. Using SAA helps to overcome this uncertainty.<sup>2</sup>

The data in *Fig 1* shows the white cell count in normal dogs- vs- dogs with inflammation. In comparison, the data in *Fig 2* shows the SAA levels in normal dogs -vs -dogs with inflammation. The data presented demonstrates the power of SAA in enabling a clear distinction between dogs that have no inflammatory condition from those with an acute inflammatory condition, in contrast to the use of white blood cells.

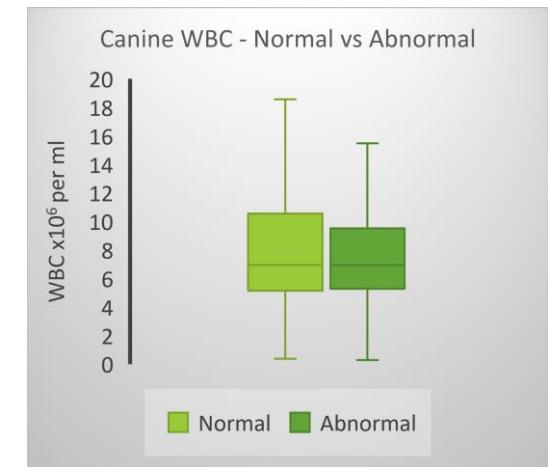
### References

1. Comparison of serum amyloid A and C-Reactive Protein as diagnostic markers of systemic inflammation. MB Christensen et al. Can Vet J, 2014; 55: 161-168
2. Ceron JJ, Eckersall PD, Marynez-Subiela S. Acute phase proteins in dogs and cats: Current knowledge and future perspectives. Vet Clin Pathol 2005; 34:85-99



## Data Showing the Benefits of using SAA in Comparison to White Blood Cells

*Fig 1*



*Fig 2*

