



WHY BLOOD ANALYSIS MATTERS

The wellbeing and performance of your equine athletes is of greatest importance to you – and your veterinarian. Routine blood analysis is recommended as part of a complete clinical evaluation of the equine athlete.

THE IMPORTANCE OF BLOOD ANALYSIS FOR THE EQUINE ATHLETE



General wellness baseline

Routine blood analysis allows your veterinarian to obtain an accurate record of your individual animal's normal baseline levels allowing subsequent comparison and evaluation throughout its lifetime. It also allows for pre-screening and early detection of disease or inflammation, as well as monitoring response to treatment.



Monitoring of medication

When managing treatment protocols and patient progress, blood analysis helps to provide information about how well the treatment protocol is working and the impact of the medications on the body.



Early clinical conditions in foals

A newborn foal has its own specific testing recommendations to ensure transfer of passive immunity via colostrum and to screen for early signs of inflammation caused by infection, as common early clinical conditions may have similar presentations that can be identified with routine bloodwork.



Poor performance

For athletes not performing to expected standards, or acute concerns, blood analysis quickly helps to evaluate general health and rule out conditions of inflammation caused by infection or other subclinical disease.



Critical or emergency cases

Immediate point-of-care blood analysis can enable reliable results, aiding in appropriate diagnosis and treatment in as little as 2 minutes, when every second counts.



Infectious disease

For the hospitalized patient with infectious disease, rapid results allowing the ability to monitor over the course of treatment are vital to providing proper care.



Pre-purchase examination

When purchasing a new horse, point-of-care testing can help to identify any subclinical disease prior to purchase.



Senior horses

Regular quantitative evaluation and early disease detection extends the length and quality of life for the geriatric patient.



Pre- and post-performance evaluation

Testing can allow for the monitoring of specific biomarkers indicative of infection, as well as the effect on vital organs pre and post competition.



High standard of care

Routine blood analysis allows your veterinarian to care for your equine athlete according to best practice – and ensure the highest quality of care.

UNDERSTANDING EQUINE BLOOD ANALYSIS



ZOETIS DIAGNOSTICS

In the hospital or stall-side, the Zoetis Diagnostics point-of-care laboratory analyzers deliver accurate blood testing results for your equine athlete. 1.2.3.4

Blood analysis can be separated into two areas that include:

- The complete blood count (CBC), which measures the cellular components of blood
- Blood chemistry, which measures organ function and other internal body processes

THE CBC IS PERFORMED BY THE VETSCAN® HM5 HEMATOLOGY ANALYZER

The HM5 provides information about the number, size and capacity of red blood cells, white blood cells and platelets.

- Red blood cells (RBC) help determine the oxygen carrying capacity of the blood in the athlete
- White blood cells (WBC) play a major role in immune system function
- Platelets are crucial components of the blood clotting system. Adequate numbers must be present to stop/prevent bleeding issues

THE BLOOD CHEMISTRY PROFILE IS PERFORMED BY THE VETSCAN VS2 CHEMISTRY ANALYZER

The blood chemistry results provide information which helps your veterinarian to evaluate organ function and other internal processes in the body of the equine athlete, such as:

- Kidney function
- Liver function
- Muscle injury
- Electrolyte levels
- Protein levels

ADDITIONAL SPECIALTY TESTS CAN BE PERFORMED BY THE I-STAT® ALINITY V ANALYZER

The i-STAT Alinity v analyzer delivers accurate blood gas and acid base analysis, as well as, electrolyte and specialty testing such as lactate and ionized Ca++.2

SERUM AMYLOID A (SAA) CAN BE ACCURATELY MEASURED BY Stablelab

SAA is an acute phase response protein produced by the liver. Measurement of SAA is a reliable biomarker in horses for inflammation caused by infection. It can indicate the severity of infection and how the body is coping with it.⁵

FIBRINOGEN TESTING CAN BE PERFORMED BY THE VETSCAN VSpro

Fibrinogen is an inflammatory indicator in the equine patient.

Blood analysis enables your veterinarian to perform the full clinical evaluation that is needed for maximizing performance and longevity of your equine athletes.



TALK TO YOUR VETERINARIAN ABOUT THE IMPORTANCE OF EQUINE BLOOD ANALYSIS TO UNDERSTAND MORE

REFERENCES: 1. Abaxis, Inc (February 2009). VetScan VS2 Operator's Manual. 2. Abaxis, Inc (January 2018). i-STAT Alinity v User Manual. 3. Abaxis, Inc (November 2011). VetScan VSPro Operator's Manual. 4. Abaxis, Inc (July 2018) VetScan HM5 Operator's Manual. 5. Jacobsen, Stine. Review of equine Acute-Phase proteins. AAEP Proceedings vol 53 2007. Pages 230-235.