LABMASTER LUCIA™ VET

Equine rapid tests

Quick and accurate results – with ease.

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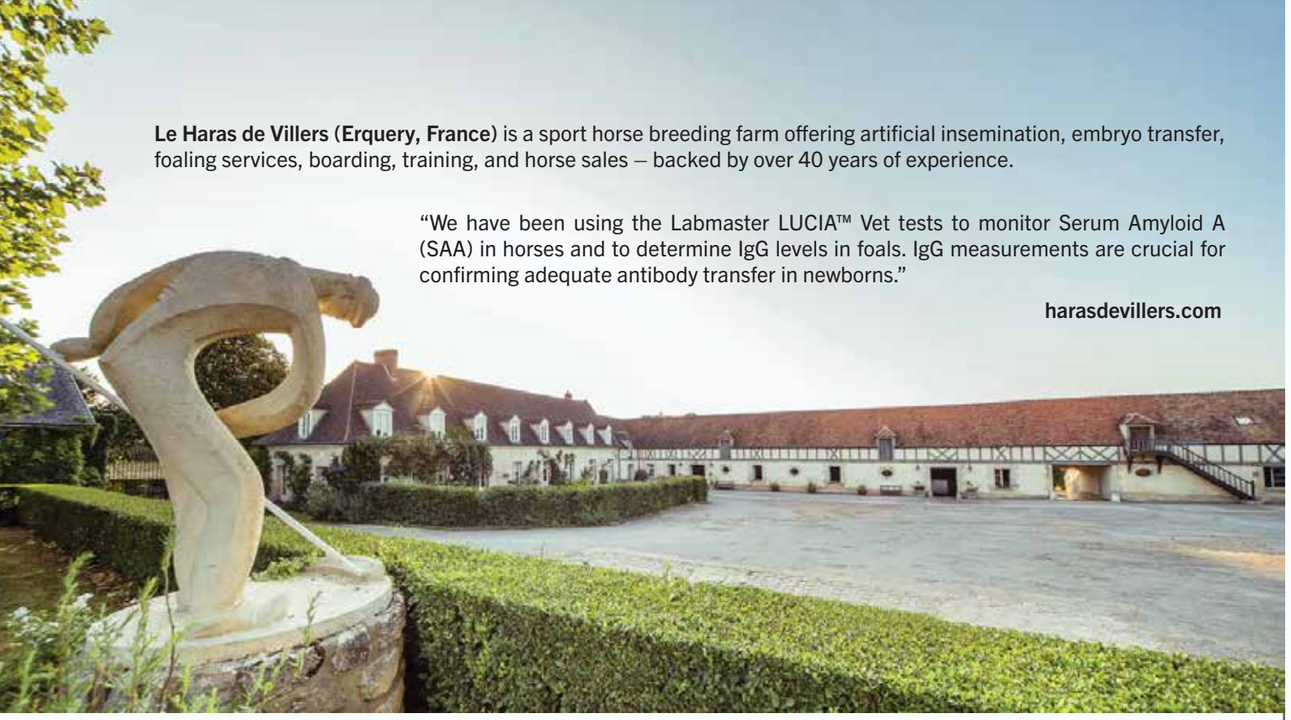
Labmaster Ltd is a privately owned company based in Kaarina, Finland, specializing in the development and production of innovative point-of-care diagnostics for both veterinary and human health applications. The versatile Labmaster LUCIA™ test system is powered by a proprietary cathodic electrochemiluminescence technology (LM-CECL), which offers superior performance in terms of sensitivity, accuracy, usability, and cost-efficiency. The technology enables rapid and reliable on-site testing – supporting informed decision-making in both clinical and field settings.

Photo: Sabrina Nicolai



Le Haras de Villers (Erquery, France) is a sport horse breeding farm offering artificial insemination, embryo transfer, foaling services, boarding, training, and horse sales – backed by over 40 years of experience.

"We have been using the Labmaster LUCIA™ Vet tests to monitor Serum Amyloid A (SAA) in horses and to determine IgG levels in foals. IgG measurements are crucial for confirming adequate antibody transfer in newborns."

harasdevillers.com

SERUM AMYLOID A (SAA)

Serum Amyloid A (SAA) is a highly sensitive inflammatory marker in horses.

In healthy animals, SAA levels are very low. However, they can increase rapidly and dramatically, even up to 1000 times higher, in response to inflammation, infection, tumors or tissue damage.

Due to its short half-life, SAA responds quickly to inflammatory changes, making it ideal for early diagnosis, treatment monitoring, and follow-up. Elevated levels have been observed in gastrointestinal, respiratory, and reproductive diseases, as well as after surgery.

The test provides quantitative results in just 6 minutes to support:

- Early detection of inflammation
- Monitoring treatment response
- Post-operative follow-up
- Evaluating a horse's condition prior to training or competition

SPECIFICATION OF THE TEST

SAMPLE TYPE	Whole blood, Serum/Plasma
SAMPLE VOLUME	10 µL
MEASURING TIME	6 minutes
MEASURING RANGE	10–3200 mg/L (Whole blood) 10–1920 mg/L (Serum/Plasma)
STORAGE	+2 – +8 °C

FIBRINOGEN

Fibrinogen is an acute-phase protein involved in inflammation, trauma, stress responses, and blood clotting.

Fibrinogen levels typically begin to rise 24–72 hours after the onset of inflammation and peak between 72 and 144 hours. Elevated levels are often associated with inflammation and tissue damage.

Fibrinogen has been successfully used to monitor the course of bacterial infections such as those caused by Escherichia coli endotoxins (i). It is also useful in the early detection of Rhodococcus equi infections in foals (ii), and in monitoring training-related health changes in horses (iii).

Serial fibrinogen measurements are especially valuable for assessing the dynamics of the inflammatory response and evaluating the effectiveness of treatment.

(i) Burrowes 1981 (ii) Heidmann et al. 2006 (iii) Anhold et al. 2014

SPECIFICATION OF THE TEST

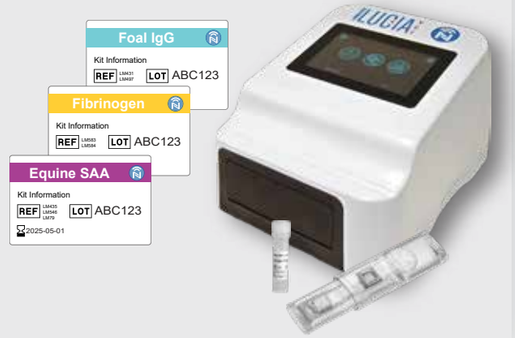
SAMPLE TYPE	Whole blood, Plasma
SAMPLE VOLUME	10 µL
MEASURING TIME	6 minutes
MEASURING RANGE	100–5000 mg/dL (Whole blood) 100–3600 mg/dL (Plasma)
STORAGE	+2 – +8 °C

Labmaster LUCIA™ Vet Rapid Tests
Reliable Quantitative Result in 6 Minutes

Point-of-Care (POC) testing supports early disease recognition and helps determine the need for further laboratory investigations.

The Labmaster LUCIA™ Vet Analyzer measures whole blood, serum, or plasma samples and delivers quantitative results in just minutes – directly on-site at clinics, practices, or stables.

Compact and portable, the analyzer supports rapid decisions right at the point of need.



FOAL IgG

The Labmaster LUCIA™ Foal IgG Test measures the IgG concentration in newborn foals to assess passive transfer of immunity.

Foals are born without infection-fighting antibodies in their blood, so the absorption of antibodies from the mare's colostrum during the first hours of life is essential. Failure of passive transfer (FPT) occurs in approximately 10–20% of foals (i), leaving them vulnerable to infections.

It is recommended to measure IgG levels 18–24 hours after birth to ensure that sufficient antibodies have been absorbed.

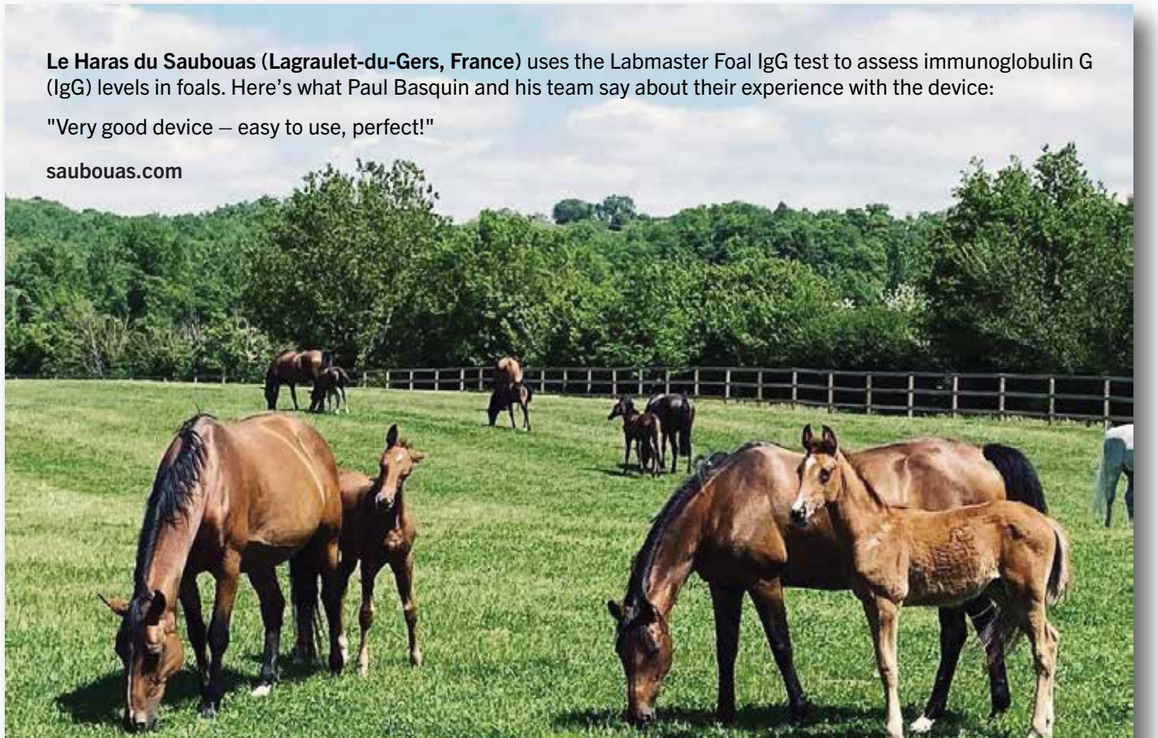
- ≥800 mg/dL – Adequate passive transfer
- 400–800 mg/dL – Partial transfer
- <400 mg/dL – Inadequate transfer (ii)

The test provides quantitative results in just 6 minutes and can be performed conveniently at the stable, enabling fast decisions and timely treatment.

(i) see e.g. McGuire, T. et al. (1977) (ii) Metzger, N. et al. (2020)

SPECIFICATION OF THE TEST

SAMPLE TYPE	Whole blood, Serum/Plasma
SAMPLE VOLUME	10 µL
MEASURING TIME	6 minutes
MEASURING RANGE	100–2500 mg/dL (Whole blood) 100–1500 mg/dL (Serum/Plasma)
STORAGE	+2 – +8 °C



Le Haras du Saubouas (Lagraulet-du-Gers, France) uses the Labmaster Foal IgG test to assess immunoglobulin G (IgG) levels in foals. Here's what Paul Basquin and his team say about their experience with the device:

"Very good device – easy to use, perfect!"

saubouas.com