

SCREENING

Introduction

Purpose of test: analysis of a blood sample taken at the time of veterinary pre-purchase examination or as a requirement due to the change of insurance company to indicate the presence of drugs to which the horse may have been exposed prior to the examination

Should any drug be indicated by this service it should be borne in mind that there could be several explanations for the source of that drug, e.g. legitimate recorded medication, inadvertent or unrecorded medication, accidental exposure due to environmental contamination (includes people, other horses, feed, physical environment).

Where appropriate IFHA International Screening and Residue limits will be applied, for all other drugs screening limits will be a function of the technical capability of LGC's methods at that time unless specified for individual substances by written agreement with the customer. This means that for many drugs the testing process will detect concentrations below that accepted for therapeutic effect, i.e. the test is designed to detect exposure rather than effect.

The nature of testing a single 'unknown' sample makes interpretation of any positive result difficult. There will be numerous theoretical scenarios that could give rise to the finding. These will depend on the amount of drug administered, the route of administration, the time since the administration and the individual horse's metabolism.

The initial screening test is designed to indicate the presence of hundreds of different substances, using comparison of analytical signals with databases. The test is designed to draw attention to a suspicious finding within the large number of normal (background) signals expected in blood. Any suspicious result from the screening test should therefore be viewed as indicative only as the test is not optimised for any single, specific substance. In order to increase the certainty of an indicative screening result a second, confirmatory analysis should be carried out. Confirmatory analysis is optimised for the individual substance under investigation, providing unequivocal identification based on the unique molecular structure of the substance. This type of testing is based on forensic principles to withstand legal scrutiny. A separate service level agreement for the confirmatory analysis service is available on request.

Technical Description of Screening Service

- All sample information is recorded, tracked and archived using LIMS (laboratory information management system)
- Separation of blood and testing plasma (where sufficient plasma is available)
- A screening protocol consisting of a number of different tests and analytical techniques is applied to each sample. Routine techniques are mass spectrometry (including accurate mass analysis)
- The sample testing process is performed in accordance with the ISO 17025 standard and the current ILAC-G7 Accreditation Requirements and Operating Criteria for Horseracing Laboratories

Substances covered by the Screening Service

The screening process covers a wide range of compounds and metabolites from various pharmaceutical classes, including but not limited to:

Non-steroidal Anti-inflammatory Drugs (NSAIDs) and Analgesics, such as:

Phenylbutazone, oxyphenbutazone, flunixin, meloxicam, firocoxib, carprofen, ketoprofen, meclufenamic acid, celecoxib, cinchophen, clonixin, diclofenac, felbinac, fenclofenac, fenoprofen, flufenamic acid, ibuprofen, naproxen, paracetamol, piroxicam, rofecoxib, tenoxicam, vedaprofen, codeine, morphine, fentanyl, pentazocine, phenazocine

Synthetic Corticosteroids, such as:

Dexamethasone, betamethasone, flumethasone, prednisolone, methylprednisolone, triamcinolone, triamcinolone acetonide

Local Anaesthetics, such as:

Mepivacaine, lidocaine, procaine

Sedatives, Tranquillisers, Anti-histamines and Beta blockers, such as:

Acepromazine, detomidine, diazepam, fluphenazine, ketamine, medetomidine, temazepam, propionylpromazine, promazine, reserpine, romifidine, xylazine, propranolol, metoprolol, diphenhydramine, orphenadrine, cyclizine, cetirizine

Stimulants and Bronchodilators, such as:

Amphetamine, ephedrine, methylenedexymethamphetamine, clenbuterol, salbutamol

Diuretics, such as:

Furosemide, hydrochlorothiazide, bumetanide

Substances not covered by the Screening Service

The screening process does not cover substances including, but not limited to anabolic steroids, bisphosphonates, EPO, cobalt and arsenic.

Sample Turnaround

Typical sample turnaround for a negative test is 7 working days from receipt of the sample at the laboratory. Notification of receipt of sample at the laboratory is part of the standard service.

Reporting Results

Results will also be reported directly to the practice by email. Hard copies of results will not be sent unless specifically requested.



Sample Disposal

Samples under the VDS scheme:

- Negative samples will be retained for the remainder of the storage period.
- Non-negative samples are retained until confirmatory analysis instructions are received; if no confirmatory analysis is performed the sample will be retained for the remainder of the storage period.

Samples not under the VDS scheme:

- Negative samples will be disposed of once results have been reported.
- Non-negative samples are retained until confirmatory analysis instructions are received; if no confirmatory analysis is performed the sample will be disposed of.

All samples reported to contain prohibited substances will be securely stored for six months. These samples will then be disposed **unless further instruction is received from the customer**. A further charge will be made for prolonged sample storage.

FEE SCHEDULE:

PRE-PURCHASE BLOOD TESTING

Service	Pre-purchase blood screen covers but is not limited to:	Price per sample * + VAT (if applicable)
Pre-purchase blood Screen SMAD00011	<i>NSAID, Sedatives, & Synthetic Corticosteroids</i>	£251
Fast-Track NSAIDs SMAD00036	<i>NSAID screening only – 4 working day turnaround time</i>	£251

* Prices Valid from 01/Apr/2020 until 31/Mar/2021

Should you wish to send a sample for immediate testing:

- Complete all fields of the VDS paperwork and tick to request immediate analysis
- Or complete all fields of the equine pre-purchase request form
- Ensure the sample is securely packaged and that paperwork is included with the package
- Receipts, results and invoices will be sent directly to your practice **by email**. Payment details will be included in the invoice.
 - **A receipt from the laboratory is our acknowledgement of your request for testing. Please contact the laboratory if you have not received a receipt within 4 working days of sample dispatch.**
 - **Hard copies of results will not be sent unless specifically requested.**

Should you wish a sample to be removed from storage for testing:

- From the practice email account, note your request, which **must** include the code (e.g. 1234ABC), and send to equine.submissions@lgcgroup.com
- Receipts, results and invoices will be sent directly to your practice **by email**. Payment details will be included in the invoice.
 - **A receipt from the laboratory is our acknowledgement of your request for testing. Please contact the laboratory if you have not received a receipt within 4 working days of sample dispatch.**
 - **Hard copies of results will not be sent unless specifically requested.**

General Terms and Conditions

Minimum blood volume required for pre-purchase blood screen - 6mls

NB: pre-spun plasma will not be accepted

Business transactions conducted according to LGC standard Terms and Conditions – a copy is available on request. All work will be undertaken in accordance with LGC's standard Terms and Conditions, a copy of which is available on request.