

Introduction

LGC Ltd offers a screening service designed to test for the presence of a wide range of drugs. Screening is the first stage of a two-stage doping control programme and is offered as part of a pre-purchase examination, for a change of insurance company or to facilitate horse exportation only. Any suspicious result from the screening test should be viewed as indicative only which needs to be confirmed by a second, rigorous confirmatory analysis as determined by the AORC criteria for identification of a prohibited substance. Analysis is performed in accordance with LGC's ISO 17025 flexible scope of accreditation and in compliance with the current ILAC Accreditation Requirements ILAC-G7 04/2021 <https://ilac.org/?download=123697>.

SCREENING

- All sample information is recorded, tracked and archived using LIMS.
- 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 include accurate mass analysis. The LGC methodology used is Basic Drugs in Plasma (SOP4093) and General Screen for Plasma (SOP4110).
- Where appropriate, IFHA International Screening Limits and Residue Limits will be applied.
- Any specific requirements for individual substances are by written agreement with the customer.

Substances covered

The screening process covers a wide range of compounds and metabolites from various pharmaceutical classes, including but not limited to: Analgesics, antihistamines, beta-blockers, bronchodilators, diuretics, local anaesthetics, non-steroidal anti-inflammatory drugs (NSAIDs), sedatives, stimulants, synthetic corticosteroids and tranquilisers.

Substances not covered

The screening process does not cover substances including, but not limited to anabolic steroids, bisphosphonates, EPO, elemental compounds.

CONFIRMATORY

Confirmatory analysis is designed to give a definitive result for the qualitative presence of the suspected drug (or drugs), to a standard of legal proof. The confirmatory analysis is the second stage of the recommended doping control programme.

Key features are

- Named individual scientist supervises and reports the analysis.
- Sample analysis in isolation of others.
- Additional blank and reference samples analysed alongside the test sample.
- Identification of substance based on molecular structure usually using mass spectrometry.
- Quantitative measurement of concentration of a prohibited substance is only carried out for substances where there is an Internationally agreed regulatory threshold.
- Full documentation to support the analytical findings is available.
- Expert analytical advice and testimony evidence where necessary (may be subject to additional charge)

Application of decision limits for the reporting of quantitative results for international threshold compounds.

For quantitative methods used at the confirmatory stage for determining if the concentration of an analyte has breached an international threshold, the decision limit for reporting a sample as positive will be the sum of the international threshold + LGC's validated method uncertainty of measurement. If the resulting concentration of analyte is determined to be below the international threshold, then the result will simply be issued as 'negative'.

However, if the concentration of analyte is greater than the international threshold then the relevant of the following two options will be used for reporting, depending on whether the concentration exceeds the threshold + uncertainty of measurement.

Positive certificate of analysis wording (measured concentration exceeds threshold + uncertainty): The concentration of drug X was measured at XX ng/ml, which is deemed to have exceeded the international threshold of XX ng/ml since it is greater than the international threshold + LGC's method uncertainty of measurement (resulting decision limit of XX ng/ml).

Negative certificate of analysis (measured concentration exceeds threshold, but not threshold + uncertainty): The concentration of drug X was measured at XX ng/ml, which was not deemed to have exceeded the international threshold of XX ng/ml since it is lower than the international threshold + LGC's method uncertainty of measurement (resulting decision limit of XX ng/ml).

Submitting a sample for immediate analysis

- Complete all fields of the paperwork and tick to request immediate analysis.
- 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.
 - A receipt acknowledges the request for analysis. Screening analysis turnaround time 7 working days. Confirmatory analysis turnaround time is 10 working days from acknowledgement to proceed.
 - The certificate of analysis is emailed in the form of a PDF attachment.

Requesting analysis of a sample held in storage

- From the practice email account, note your request, include the code (e.g., 1234ABC) and horse name, and send to equine.submissions@lgcgroup.com
- Receipts, results, and invoices will be sent directly to your practice by email.
 - A receipt acknowledges the request for analysis. Screening analysis turnaround time 7 working days. Confirmatory analysis turnaround time is 10 working days from acknowledgement to proceed.
 - The certificate of analysis is emailed in the form of a PDF attachment.

Sample Disposal

Samples under a pre-purchase agreement

- 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 a pre-purchase agreement

- 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

Service	Detail of Service	Price ex VAT GBP	Price ex VAT EUR
Pre-purchase blood Screen SMAD00011	<i>NSAIDs, Sedatives, & Synthetic Corticosteroids</i>	£290	€377
Fast-Track NSAIDs SMAD00036	<i>NSAIDs screening only – 4 working day turnaround time</i>	£290	€377
Export Screen SMAD00132	<i>NSAIDs, Sedatives, & Synthetic Corticosteroids</i>	£290	€377
Admin fee SMAD00106	<i>Cancellation of testing</i>	£110	€132
Extended Storage SMAD00013	<i>Additional 6 months storage</i>	£83	€102
Sample Return	<i>Return of samples unsuitable for storage/analysis</i>	£25	€30
Qualitative Confirmatory	<i>Qualitative identification of a prohibited substance</i>	£1075	€1392
Quantitative Confirmatory	<i>Qualitative identification of a prohibited substance (substances with Internationally agreed thresholds)</i>	£2006	€2603

Prices Valid from 01/Apr/2023 until 31/Mar/2024

General Terms and Conditions

Minimum blood volume required for screening - 6mls. **NB pre-spun plasma will not be accepted.**

All work will be undertaken in accordance with the current LGC T&Cs, a copy of which is available on request.

Customer Acceptance Please sign and return via email.

Provision of Pre-purchase analysis

Signed for and on behalf of Customer.

SIGNATURE _____ DATE _____

NAME _____

POSITION _____