



November 20, 2024

Veterinary intoxication laboratory testing criteria and sampling protocol

Overview

To improve ongoing and future indications, validation, and understanding of the efficacy for hemoperfusion prescriptions, it is recommended appropriate samples be taken prior to, during, and after extracorporeal decontamination of toxic exposures. AimaLojic is committed to this effort by covering laboratory costs on a case-by case basis for intoxications where the most knowledge can be derived. The following criteria and protocols have been established to ensure the funds and efforts applied result in the highest potential for consistent quality data.

Please check with your AimaLojic representative to determine eligibility.

Patient inclusion criteria

- Toxins of interest:
 - Rare or novel – check with AimaLojic
 - Biologic – environmental, envenomation, poisonous plant or animal
 - Any intoxication managed with appropriate sampling procedures
- Supplement to ongoing clinical studies:
 - NSAID's
 - Highly lipophilic toxins with or without administration of intravenous lipid emulsions (ILE)
 - Precisely known toxic exposure and time of a recent ingestion
- Estimated toxic exposure exceeds known CNS or lethal concentration
- Likelihood of exposure / accuracy of estimated dose:
 - How certain is the client/doctor of the exposure and estimated dose? The greater the certainty, the greater consideration for inclusion.
- Specific toxin considerations:
 - Generally, the shorter time of exposure will have higher consideration.
 - Toxins with high volume of distribution, long half-life, and large dose may increase the funding opportunity.
- Blood priming typically disqualifies a candidate

Recommended Sampling protocols

- Blood samples should be taken upon admission, start of treatment, at treatment blood volume intervals of 1, 3, 5, 10, 15 and 20, immediately at the end of treatment, and 12 - 18 hours post hemoperfusion treatment. Interval samples should be collected both pre and post HP column (inlet and return). If a dialyzer is employed, samples should be collected post dialyzer as well. Blood flow rate should be recorded at each sampling interval.
- If patient blood volume or staffing doesn't allow the above sampling intervals and volume of blood collection, minimum intervals of pre, 5BV inlet, immediate post treatment, and 12-18hr post treatment may still be of value and interest.
- Unless otherwise directed, serum samples should be collected in a red top tube.
- Storage should be at -80° C.
- Some drugs are very unstable in storage (e.g. 5-FU due to enzymatic degradation) and need special preparation (contact AimaLojic for instruction).
- Sample labels and accompanying documentation should clearly identify the patient, collection site, blood volume interval, blood flow rate and time into treatment. The labels and ink used must withstand storage and shipping.
- Samples must be packaged and shipped according to laboratory requirements
<https://cvm.msu.edu/vdl/submit-a-sample/shipping-requirements-for-submitting-specimens>
<https://tvmdl.tamu.edu/testing/submit-a-sample/shipping/#packing-the-shipment>

Reporting

Samples most frequently are sent to the Veterinary Diagnostic Laboratory at Texas A&M or Michigan State depending upon the toxin. Private or other academic laboratories may also be used for rare toxins. Please consult with AimaLojic directly for analytic recommendations. Laboratory costs are billed directly to AimaLojic and reports are sent to the company and shared with the collaborating doctor. Data ownership

typically is reserved by the company, but the doctor or institution may be granted publication rights.

A toxin reporting form must be completed and submitted for analytic consideration. A toxin reporting form is requested for all patients treated with hemoperfusion for toxin exposure to support a better understanding of therapeutic recommendations for extracorporeal decontamination therapies.

Toxin reporting form can be found at <https://www.aimalojic.com/wp-content/uploads/2024/12/Toxin-reporting-form.pdf>