



*"for versatile and clinically relevant research results"*

## UTUCAL clinical laboratory in compliance with Good Laboratory Practice (GLP)

Our laboratory offers hematology, clinical chemistry, coagulation factors, urine analyzes and consultation services for rodents and other laboratory animals.



### Good Laboratory Practice (GLP)

UTUCAL is the only Finnish university-based test facility that operates in compliance with the OECD Principles of Good Laboratory Practice (GLP) and EU Directive 2004/10/EC. It is included in the National GLP Compliance Programme in Finland and inspected on regular basis by FIMEA.

### HEMATOLOGY

- ✓ Samples are analyzed by VetScan HM5 hematological analyzer.
- ✓ Minimum required sample volume: 100 µl EDTA-blood



### CLINICAL CHEMISTRY

- ✓ Samples are analyzed by VetScan VS2 analyzer.
- ✓ Sample volume 100 µl / sample profile.
  - Serum, Li-heparin whole blood or Li-heparin plasma



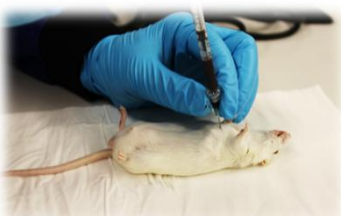
### COAGULATION ANALYZES

- ✓ Required sample volume: 500 µl citrate plasma

### URINE ANALYSIS

- ✓ Metabolic cages are available for urine collection

- ★ All our laboratory analyzes are validated to fulfill the requirements of the Good Laboratory Practice.



More information about parameters is presented on the next page.

Clinical veterinarian (Emrah Yatkin, [emryat@utu.fi](mailto:emryat@utu.fi)) is available for consultation.

For more information about laboratory analysis, sampling and inquiries please contact Medical Laboratory Technologist Joonas Khabbal ([joonas.khabbal@utu.fi](mailto:joonas.khabbal@utu.fi)) or Research Coordinator Ella Kyläinpää ([elmaky@utu.fi](mailto:elmaky@utu.fi)).

### Parameters for clinical chemistry:

Most commonly used profile is Comprehensive Diagnostic Profile which contains following parameters:  
ALB , ALP, ALT, AMY, BUN, CA, CRE, GLOB, GLU, K+, NA+, PHOS, TBIL, TP

### Other available profiles:

Prep Profile (6 P): ALP, ALT, BUN, CRE, GLU, TP

Critical Care Profile: ALT, BUN, CL<sup>-</sup>, CRE, GLU, K<sup>+</sup>, NA<sup>+</sup>, tCO<sub>2</sub>

T4/Cholesterol Profile: T4/CHOL

Mammalian Liver Profile: ALB, ALP, ALT, BA, BUN, CHOL, GGT, TBIL

### All parameters:

ALB (Albumin), ALP (Alkaline Phosphatase), ALT (Alanine aminotransferase), AMY (Amylase), AST (Aspartate aminotransferase), BA (Bile acids), BUN (Blood Urea Nitrogen (urea)), CA (Total Calcium), CL<sup>-</sup> (Chloride), CHOL (Total Cholesterol), CK (Creatine Kinase), CRE (Creatinine), GGT (Gamma Glutamyl Transferase), GLOB (Globulins), GLU (Glucose), Mg (Magnesium), K<sup>+</sup> (Potassium), PHOS (Phosphorus), NA<sup>+</sup> (Sodium), TBIL (Total Bilirubin), TP (Total Protein), tCO<sub>2</sub> (Total Carbone Dioxide), T4 (Thyroxine), UA (Uric Acid)

### Parameters for hematology (Complete Blood Count, CBC):

WBC (White Blood Cells), RBC (Red Blood Cells), HGB (Hemoglobin), HCT (Hematocrit), MCV (Mean Cell Volume), MCH (Mean cell hemoglobin), MCHC (Mean Corpuscular Hemoglobin Concentration), RDWc (Red Cell Distribution Width %), RDWs (fL), PLT (Platelets), PCT (Plateletcrit), MPV (Mean Platelet Volume), PDW (Platelet Distribution Width), lymphocytes (absolute # and % relative counts), monocytes (# and %), granulocytes (# and %)

In addition, microscopic evaluation of differential white blood cell count can be performed.

### Parameters for coagulation analyses

PT (Prothrombin Time), APTT (Activated Partial Thromboplastin Time)

### Parameters for urine analysis:

Specific gravity, pH, leukocytes, nitrite, protein, glucose, ketone, uribilinogen, bilirubin, erythrocytes