

# Operational Guidelines for the Laboratory Animal

## Hematological Analysis Service

Article 1 The Operational Guidelines for the Laboratory Animal Hematological Analysis Service were established to maximize the utility and effectiveness of the device mentioned herein.

Article 2 Details of the device are as follows:

1. Brand and type: IDEXX Hematology Analyzer (ProCyte Dx™)
2. Performance:
  - (1) Laser flow cytometry, optical fluorescence, and laminar flow impedance are integrated for analysis.
  - (2) The device features 24 hematological parameters, five-part white blood cell differential count, and absolute reticulocyte count.
  - (3) Analysis results of a sample can be obtained within 2 minutes.

Article 3 The device is located in the Laboratory Animal Center on the first floor of the Back Building of the United Medical Building.

Article 4 The main service targets of the device are researchers from Taipei Medical University and its three associated hospitals.

Article 5 Service items of this device consist of the following 24 hematological parameters:

Analytical item	Acronym	Full name
血容比	HCT	hematocrit
紅血球	RBC	Red Blood Cell
血紅素	HGB	hemoglobin
網狀紅血球	RETIC	Reticulocyte % and count
紅血球平均體積	MCV	Mean corpuscular volume
網狀紅血球分佈寬度	RDW	Red blood cell distribution width
平均紅血球血紅蛋白濃度	MCHC	mean corpuscular hemoglobin concentration
平均紅血球血紅蛋白含量	MCH	mean corpuscular hemoglobin
血小板	PLT	platelet
平均血小板體積、分佈寬度、容積比	MPV、PDW、PCT	mean platelet volume, platelet distribution width, plateletcrit
白血球	WBC	White blood cell
單核球(百分比和計數)	MONO	Monocyte % and count

淋巴球(百分比和計數)	LYM	lymphocyte % and count
嗜中性球(百分比和計數)	NEU	Neutrophil % and count
嗜酸性球(百分比和計數)	Eos	Eosinophil % and count
嗜鹼性球(百分比和計數)	Baso	Basophil % and count

Article 6 **Reservation methods:**

1. Please register use of the device in the reservation systems of the Core Facility Center or Laboratory Animal Center 1–10 days prior to the prescheduled service day. The Laboratory Animal Center technician provides services according to actual reservation situations.
2. Technical service time: Monday to Friday, 09:00 a.m. to 05:00 p.m.

Article 7 The guidelines for using the device are as follows:

1. Analysis reports of this service are provided in digital formats. **Users should prepare a USB storage device to download reports.**
2. The hematology analyzer (ProCyte) uses whole blood samples for testing. The basic sample volume is 30  $\mu$ L. The only acceptable sample type is that preserved using a lavender-top tube (K<sub>3</sub>EDTA); samples treated using other anticoagulation methods will be rejected to prevent causing damage to the device or test value deviations.
3. After the whole blood samples are collected in lavender-top tubes, they are stored at 4°C. Sample testing should be completed within 24 hours of collection. Users must manage the sampling and operation times appropriately to avoid compromising test values.

Article 8 The charging standard of this device is determined to ensure optimal service quality and extend the effective service duration of the device. Upon resolution of a Meeting of the Office of Research and Development, individuals or units that use the device must pay for necessary consumables, maintenance, and operator services.

1. Charging standard: NT\$350 per sample.
2. Payment method: The Laboratory Animal Center calculates technical service uses and relevant fees every month and sends payment notices to users. Users must pay and verify the technical service fees within 3 months of the payment notice being issued. Users can visit the Cashier Section of Taipei Medical University to pay the fees, or have their expenditures charged from research project funds or school budgets.

Article 9 Device contact person:

Laboratory Animal Center technician: Wang, Chueh-Yi, extension: 7153

Article 10 These Guidelines shall be implemented upon approval by an Office Meeting of the Office of Research and Development; the same procedure applies to any amendment.