

OUR LABORATORY POLICIES

Specimens

Walk in patients	Requests for laboratory investigations can be made through the NUH Referral Laboratory. NRL Client Services can be contacted at (65) 6778 5171
Medico-legal Testing	Medico-legal specimens will be referred to the Centre for Forensic Medicine of the Health Sciences Authority (HSA). Only in-house samples will be accepted.
Tests Referral	Our Department may refer out tests that we do not perform in-house to other local or overseas laboratories.
Clinical Trials and Projects	Research projects will be approved on an individual basis.
Animal Specimens	We do not accept animal specimens for laboratory testing except by special arrangement as a project.

Turnaround times

Each test listed in the test catalog has indicated the test frequency and turnaround time. Please allow an additional one to two days if the scheduled run falls on a public holiday. Turnaround times for STAT tests can be found [here](#).

For tests that are sent out to referral laboratories, the average turnaround time will vary from 7 to 14 days.

Unacceptable Specimens

Specimens will be rejected if the following conditions are unacceptable:

Specimen	<ul style="list-style-type: none"> • Insufficient volume • Incorrect specimen type (Plasma, Serum etc) • Mislabeled specimen • Unlabelled specimen
Specimen Container	<ul style="list-style-type: none"> • Incorrect specimen container (Metal-free, sterile etc) • Transport medium
Patient information	<ul style="list-style-type: none"> • Insufficient information • Incorrect information
Transport condition	<ul style="list-style-type: none"> • Temperature (in ice, frozen, ambient etc) • Protected from light

Note:

For patient safety reasons, unlabelled or mislabeled specimens will strictly be rejected and a fresh sample should be collected again.

Verification of “precious” samples are subjected to approval on a case-to-case basis. The doctor –in-charge is required to come to the laboratory personally to verify the correct patient identification and sign an incident form, stating that he/she will be held responsible for any consequences that may follow. An eHOR will be raised to Medical Affairs as well.

The following samples are considered “precious”

- Cerebrospinal Fluid (CSF)
- Blood culture
- Cord blood
- Stimulation tests

Laboratory Information Handling

Patient confidentiality is of utmost importance to the Laboratory. All patient information or laboratory results are treated as confidential and patient information can only be released to authorised personnel and with patient’s consent.

HIV Results

HIV results are displayed on the Institutional Electronic Medical Records (EMR) – either Computerised Clinician Order Entry (CCOE_RM) or Computerised Patient Support System 2 (CPSS2) via an additional second login. For HIV positive case, the reports are sealed in an envelope and dispatched to the Doctor-in-charge.

Personal Data Protection Act (PDPA)

In some situations, the Laboratory may be required to provide patient’s data to local or overseas referral laboratories for tests which are not performed in NUH. Under the PDPA, it is NUH’s responsibility to ensure patient’s consent is taken before providing the information to the referral laboratory and all the referral laboratories will use patient’s information for the sole purpose of conducting the blood test on behalf of NUH.

Critical Result Reporting

The Healthcare Messaging System (HMS) has been deployed for critical result routing to expedite NUH patients' critical lab results notification to Doctors via SMS.

Critical Result Routing (CRR) involves the delivery of critical results retrieved from the laboratory Information System (LIS) and patient information from the Nauticus System (SAP), to Doctors' mobile phone. Routing rules are incorporated to trigger the message delivery. Doctors are required to message reply within 10 minutes using one of 3 options below:

1. Correct doctor and acting on it.
2. Wrong doctor but acting on it.
3. Wrong doctor and not acting on it.

When option 1 and 2 is used, no further action is required by the laboratory staff. When option 3 or no response is received, a manual intervention by a Call Centre operator will take place. They will connect the next most suitable doctor to the laboratory staff for the reporting of the results.

A Critical Result Routing log is available in the clinical mode of the HMS application. Laboratory staff will retain this documentation log for 2 years.

You can see the list of reported critical results [here](#).

Laboratory Result Reporting

Paperless reporting flow has been implemented for all NUH Wards and Clinics. Patient's laboratory results are released from LIS to NUH CCOE_RM/CPSS upon result verification in Laboratory Information System (LIS). Doctors may view and verify patient's laboratory results from CCOE_RM/CPSS and generate hardcopy reports from this application if required.

There are some exceptions to the paperless reporting flow:

Special reports	<p>Some results such as Bone Marrow reports, Cytogenetics reports, Flow Cytometry reports and some Molecular Diagnosis reports etc, may not be reported through our LIS or a summary report may be reported instead.</p> <p>The detailed version of such reports will be distributed through the normal delivery channels and a copy of the report is retained in the laboratory.</p>
Referral test reports	<p>Lengthy or complex result of selected referral tests will not be transcribed into LIS.</p> <p>Instead, the report from the referral laboratory will be scanned and uploaded onto Specialist Results System (SRS) which is integrated with CPSS2 for doctors to view and verify.</p>
External clients via NRL	<p>Paper reporting flow is still available for NUH Referral Laboratory clients and hardcopy results will be generated via LIS.</p>

Test Amendment

Test results may be amended after completion due to various reasons:

- Laboratory error (Processing error, instrument error etc)
- Unsuitable specimen drawn
- Specimen was drawn from incorrect patient

Results will be amended or invalidated in LIS according to individual circumstance. Amended result released from LIS will overwrite previous erroneous result displayed in CCOE_RM or CPSS2. Such results are generally indicated with C result status (Correction status). The previous erroneous result and reason for amendment can also be seen in the result comment.

Note:

For patient safety reasons, transferring and transcribing of results is strictly not allowed if the specimen is drawn from an incorrect patient. Such request will not be accepted by the Laboratory. A fresh specimen will need to be collected and sent to the Laboratory for reanalysis.

Test Add-ons

We strongly discourage additional tests to be requested on samples drawn earlier due to sample degradation and evaporation.

Requests for test add-ons must be submitted using [Test Add-on request form](#). Verbal orders are not acceptable. Please call the laboratory to verify sample availability and integrity before sending the Test Add-on request form.

Test Cancellations / Charge Waiver

Cancellations received prior to test set-up will be honoured at no charge. However, cancellation requests received following test set-up or completion cannot be honoured unless there are extenuating circumstances. The location requesting for test cancellation will be billed for such tests.

Requests for test cancellations must be submitted using [Test Cancellation / Charge Waiver form](#) to the laboratory. The Test Cancellation form must state clearly the following information and signed off by authorized personnel.

1. Patient's particulars
2. Test details
3. Reasons for cancellation
4. Cost centre to bill

For patients from Specialist Outpatient Clinics (SOCs), charges for cancelled tests will require manual credits to be posted by staff from that location into the patient's account.