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**Tallaght University Hospital (TUH)**

**Information for GP’s\external sources using the Laboratory Medicine service**

**at Tallaght University Hospital**

*Every effort has been made to ensure accuracy of the content of this guide to our services. Requirements have been updated due to the release of the new ISO15189 accreditation standards. From time to time, it may also be necessary to update the content for operational reasons.*

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# **1.0 LABORATORY MEDICINE CONTACTS**

**Email: gplabqueries@tuh.ie**

#### POSTAL ADDRESS:

Department of Laboratory Medicine,

Tallaght Hospital (TUH)

Dublin 24

Ireland

D24NR0A

#### Prefix (01) 414 for direct access from outside the hospital

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| **Laboratory Medicine** | **Contact no.** | **Opening Hours** | **Sample Deadlines** |
| Main Office | 2837/4703/4875 | Mon-Fri 9am-5pm |  |
| Central specimen reception | 3917 | Mon-Fri 9am-5pm  Sat 9am-11:30am | **Mon-Fri**  **GP samples must be received by 1pm** |

# 

# 2.0 QUALITY MANAGEMENT SYSTEM

The Department of Laboratory Medicine is committed to providing a high quality, efficient and comprehensive service to our patients and clinical users. Central to this commitment is the Quality Management System (QMS). The Laboratory is accredited to ISO 15189 by the Irish National Accreditation Board (INAB) and is compliant with the requirements of EU Blood directive 2002/98/EC. Refer to INAB website for the TUH scope document ref 330MT for a full list of accredited tests.

**Consent**

Consent for individual investigations may require prior agreement with the patient or guardian (e.g. for genetic testing). Users of the Laboratory Medicine Service are advised to familiarise themselves with the publication –HSE National consent policy. Samples submitted for analysis may be used anonymously for quality control purposes following completion of testing.

**Confidentiality**

All investigations and results produced by the laboratory are of a confidential nature in line with respecting the privacy of the patient / doctor relationship and the needs of the clinical staff providing the care. Access to testing information and results should be on the basis of need only. Strict access and usage criteria are enforced with prevailing Data Protection Legislation.

# 3.0 REQUIREMENTS FOR USE OF THE TUH LABORATORY MEDICINE GP SERVICE

* GP to contact Healthlinks to set up surgery on Healthlinks to receive electronic results [www.healthlink.ie](http://www.healthlink.ie/). Healthlink will contact TUH ICT to complete the set up.
* GP’s must provide an out of hours contact number to receive urgent\ critical patient results.
* **Positive Patient identification**: All specimens must be labelled in the presence of the patient so that they can confirm correct demographics. Patient details on sample and form must be correct.
* Patient address information must be kept up to date by practitioners. Contact [gplabqueries@tuh.ie](mailto:gplabqueries@tuh.ie) to update TUH patient record.
* In order to comply with Accreditation standards ISO15189;2022 the GP must comply with the transport conditions outlined in Section 7.2 Transport conditions
* Where available a patient addressograph labels should be used on both the samples and the request forms. *(exception BT refer to 4.2)*
* The GP practice stamp must be used on all sheets of the request form as it improves the transfer of accurate & clear information. Use TUH GP code and GP source code if possible.
* All GPs are strongly encouraged to use TUH Request forms*. These forms can be ordered from Central Specimen Reception along with the phlebotomy consumables (See Section 8 below).*
* Certain investigations may require additional information, e.g. appropriate clinical details, on the request form. These are detailed in each department’s section of the Laboratory User Manual [www.tuh.ie](http://www.tuh.ie)

# **4.0 PATIENT REQUEST FORMS AND SAMPLES**

* The Request Form accompanying the sample/specimen must be legibly written.
* The legibility of the manual request form is vital to ensure all patient details are accurate.
* A clearly typed or printed (use of block capitals) request form must be sent to reduce the risk of errors in patient identification, test selection or location.
* The laboratory expects the requesting Doctors/Phlebotomists who opt to use printed labels to have safe procedures in place for controlling and printing, affixing and checking patient details of such labels. If labels are affixed to the samples please ensure the corresponding label is attached to all pages of the request form.

## 4.1 LABELLING REQUIREMENTS

|  |  |  |
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| **Sample/**  **Test Request** | **Minimum Sample Labelling Requirements** | **Minimum Request Form Requirements** |
| **Primary labelling requirements** | - First name and surname  (correct spelling, in the correct order, no abbreviations)  - Date of Birth  - First line of address  -Date and time of sampling  - Type and/or site of non-blood sample  -Signature of sample taker | -- First name and surname  (correct spelling, in the correct order, no abbreviations)  - Date of Birth  - Gender (state if transgender)  -- Address (if this has changed provide both addresses)  - Location of patient  -Date and time (if appropriate) of sampling  - Type and/or site of non-blood sample  -Signature of requesting Doctor  -contact number |
| **Additional** | Tests requested  Priority status | Tests requested  Priority status  Relevant clinical information |

***Note: Request forms and samples that fail to meet the minimum criteria (primary identifiers will be rejected for analysis and will not be processed.***

**Test requests will be rejected if the following situations apply:**

* Samples that do not have at least two acceptable identifiers.
* Significant differences between patient identifiers on sample and corresponding request form.
* Significant differences between patient details and previous patient record in TUH
* Blank or incomplete request forms and incorrectly labelled or unlabelled samples are not acceptable and will result in specimen rejection.

A repeat sample will be required which inconveniences your patients and delays test results.

## 4.2 BLOOD TRANSFUSION GP BLOOD TRANSFUSION REQUESTS

Positive Patient Identification must be carried out prior to phlebotomy.

A completed TUH Blood Transfusion request form is required for all Blood Grouping (Group & Save) requests. GP group & save requests are only performed for termination of pregnancy and following miscarriage.

GP forms are acceptable for DCT requests.

It is important to fill in details accurately and legibly. Addressograph labels are acceptable on the request form in the patient demographic section.

**Sample and request form minimum labelling requirements for GP blood transfusion requests**

|  |  |  |
| --- | --- | --- |
| **Sample/**  **Test Request** | **Minimum Sample Labelling Requirements** | **Minimum Request Form Requirements** |
| **GP**  **group & save**  **(Only performed for termination of pregnancy and following miscarriage)** | - Handwritten  - First name and surname  (spelt correctly, no abbreviations)  - Date of Birth  - MRN Hospital number if available or first line of address  -Signature of sample taker | - TUH Blood Transfusion Request Form only  - First name and surname  (spelt correctly, no abbreviations)  - Date of Birth  - MRN Hospital number (if known)  - Address  - Location, name and contact number of GP practice  - Gender  - Date/time of sampling  - Signature of requesting Doctor  - Clinical details must be provided i.e. TOP/miscarriage, gestation (weeks) and if any Anti-D administrations within last 3 months. |

**Note:** If sample and request forms do not conform to these requirements testing will not be possible.

# 5.0 SPECIMEN GUIDE AND ORDER OF DRAW

## 5.1 BLOOD SPECIMENS

The common specimen requirements are heparinised plasma, serum (from whole blood which has clotted), fluoride-oxalate plasma, and EDTA whole blood or plasma. For most biochemical and endocrine tests the preferred specimen tube is a 3.5mL heparinised tube.

**Order of Draw:**

**Please take separate blood samples for each Discipline.**

|  |  |
| --- | --- |
| Tri-Sodium Citrate Solution (Blue cap) | HAEMATOLOGY-  Coagulation Screen, INR,Fibrinogen  Please fill to line on the bottle - under or over filled tubes CANNOT be used |
| ESR Tubes (Black) | HAEMATOLOGY- ESR  Please put **one** form of Patient identification here on the top i.e. Name or DOB or Hospital No. (if known). Please label here (outside container) with two Patient identifiers: Full Name + DOB / Hospital No. (if known) / Address. Please **do not** put addressograph labels here, this area must be kept clear for optical reading. |
| Clotting Accelerator (Red cap) -Serum    Please take separate blood samples for each Discipline. | IMMUNOLOGY – Serum required for all immunology tests.  BIOCHEMISTRY - LDH, SPEP, Lithium, Vitamin D, HCG - separate sample for each request is required.  HAEMATOLOGY - B12, FERRITIN, FOLATE, INTRINISIC FACTOR ANTIBODY  MICROBIOLOGY-Hepatitis A,B,C, HIV, ASOT, Farmers lung antibodies, Aspergillus fumigatus antibody, Avian precipitants, Syphilis. |
| Lithium Heparin (Green cap) | GENERAL BIOCHEMISTRY - Amylase , Bone profile, CK, CRP ,EGFR, FSH, LH, Lipid profile, Liver profile, Progesterone, Prolactin, PSA, Renal profile, TPO Urate, Urea, Testosterone, Iron & Transferrin Sat %, Carbamazepine, Valproate, Phenytoin  CA125- If clinically indicated – details must be required |
| EDTA (Purple cap) | HAEMATOLOGY – FBC (& Film), Reticulocyte Count, Sickle Cell, Haemoglobinopathy investigation, Malaria Parasites  BIOCHEMISTRY – HBA1C, PTH - require a separate sample for each request.  MICROBIOLOGY- PCR for CMV, EBV,HIV,HSV 1,2  BLOOD TRANSFUSION – DCT |
| EDTA (Pink cap) | BLOOD TRANSFUSION Group & Screen (for termination of pregnancy only) - Handwritten Details only, must be signed.  NO Addressograph **NO Exceptions.** TUH request card required.  Direct Coombs Test – Handwritten or addressograph label. GP request form acceptable. |
| Fluoride (Grey cap) | Blood Sugar Glucose Levels State time on sample and form and state whether sample is FASTING or RANDOM |

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**SAMPLE VOLUMES**

* It is preferable that blood tubes, especially those containing preservatives, are filled to their stated capacity. This avoids any risk of insufficiency or interferences from excess concentrations of preservative.
* This is mandatory for some tests, e.g. PTH, where the increased EDTA concentration that results from under filling would invalidate the test.
* EDTA tubes for PTH must be filled to the mark.
* Coagulation tubes must be filled to the mark.
* It is usually possible to process smaller samples where the tube is at least half filled i.e. 2mls or, in the case of paediatric tubes, 0.7ml. A limited chemistry profile can usually be obtained on such samples.
* In the case of very short samples please indicate those tests that are of highest priority.

**Additional information**

* Please ensure samples reach the laboratory in as short a time as possible post phlebotomy as delays may impact on the ability to perform certain analyses, and/or the quality of results; please refer to the individual department sections for information specific to tests you may wish to request.
* If you have an urgent request, please contact the laboratory section in advance and tick the urgent box on the request form.

## **5.2 NON BLOOD SPECIMENS**

All non-blood specimens e.g. urines, swabs, sputum, faeces etc. must be fully labelled according to the table in Section 4. Sample type and site sample was taken should be stated.

Eg.24hour urine collections require First name, Surname with the correct spelling, DOB, first line of address, collection start time and collection finish time. Matching request form with First name, surname DOB, address and tests requested required.

Tissue samples for histology must be placed in 10% formalin, pre-filled containers are available from the laboratory.

An andrology service (post vasectomy and semen analysis for fertility studies) is available from the cellular pathology lab by appointment only. Contact [gplabqueries@tuh.ie](mailto:gplabqueries@tuh.ie) for details.

# 6.0 CENTRIFUGATION (if applicable)

Centrifuge pilot currently running with selected GP practices. Only pre-spun samples from these practices are acceptable. SLA with GP practice is required.

# 7.0 TRANSPORTATION OF SAMPLES

## 7.1 PACKAGING OF SAMPLES

The laboratory does not process leaking, unlabelled or mislabelled specimens.

* Samples must be placed in a biohazard bag with request form placed separately in the pouch provided.

**DO NOT PLACE SAMPLE AND FORM TOGETHER IN THE SAME POUCH IN BIOHAZARD BAG**

* Always use approved in-date sample collection containers and ensure lids are securely closed
* Use approved sample collection biohazard bags which can contain any spills or leaks within the bag when properly sealed
* Do not transport broken or leaking samples
* Always dispose of sharps appropriately
* Always supply clinical information including known infection risk with each request.

## 7.2 TRANSPORT CONDITIONS

**To comply with the new ISO 15189\_2022 accreditation standards (7.2.5)**

* Blood samples should be transported in approved transport boxes to the Laboratory at ambient temperature 15-22°C within 6 hours of collection. e.g. courier transport boxes. Other samples should be transported 4-6°C and arrive the same day.
* Temperature of samples during transport should be monitored. e.g. temperature tracking.

* Samples should be received the same day. If patient samples and materials are to be stored they should be stored in conditions that ensure the continuing integrity samples and in a manner that prevents cross contamination and deterioration. Fridge Temperature should be monitored. Please inform laboratory of storage conditions used as this may affect sample results.
* If GP is organising a Taxi\GP Practice staff member drop off, GPs are to ensure samples transported to the Laboratory are in line with prevailing ADR transport regulations.
* In the case where patients are requested to drop in samples to the laboratory, it is important that the same level of care is taken with the identification and packaging of specimens.
* Please ensure that samples are transported in the correct condition to the Laboratory.

If the integrity of a sample has been compromised and there is a health risk, the organisation responsible for the transport of the sample shall be notified immediately and action taken to reduce the risk and to prevent recurrence. A non-conformance is raised.

* GP\Laboratory staff must ensure that the time between collection and receipt in the Laboratory is appropriate for the requested examinations. GPs must record the date and time of collection on sample. Request forms will be dated and time stamped on arrival in Central Specimen Reception Laboratory Medicine. An audit will be carried out to check if transport times are appropriate.

* Refer to specific instructions in individual department sections for transport of samples which require special conditions or handling. If in any doubt please contact the relevant department by telephone

# **8.0 LABORATORY MEDICINE SPECIMEN RECEPTION SERVICES**

The specimen reception area in the Laboratory provides the following functions:

* **Reception, collation and registration of specimens from GP patients.**
* Supply of blood tubes, sample containers, request forms, & bags.
* Point of contact for patients – sample drop off.

**Patient details on sample must be correct.**

***Specimen Reception Patient Sample Drop in***

***Hours of opening***

***Monday to Friday 9:00am to 1:00pm***

***Saturday 9:00am to 11:30am (urgent samples only)***

**COLLECTION OF CONTAINERS / phlebotomy consumables ORDERS**

* Patients can collect specific sample containers e.g. 24hour urine collection containers, from specimen reception staff, who will also supply instructions (verbal and written) in the use of such containers.
* GPs may arrange supplies by using the dedicated GP Stock requisition email, GPSTOCKORDERS@TUH.IE, and the GP Stock requisition form (LM-LF-0020C).

Copies of this form may be obtained by sending an email to the aforementioned email address.

Requisitions must be received **by Thursday** for processing and collection the following Monday.

Due to storage restrictions, any orders not collected by the end of the week will be returned to stock and a new order will be required to be submitted.

Orders for large numbers of items may not be completely filled due to our own stock constraints.

# **9.0 GP REPORTS**

Laboratory Medicine TUH is a paperless laboratory and test results are sent by ICT (via secure FTP) to Healthlinks at regular intervals throughout the day.

* For GP patients, the patient location is defined as the GP surgery from which the request is received.
* Patients’ results requested by TUH consultants can be requested by their GP and sent via Healthlinks.
* Where GP samples are being referred to us from another hospital, reports will be returned to this hospital. .

**Further details on sample types and turnaround times please refer to the discipline information in the main Laboratory User Manual which can be found on the TUH website**

<https://www.tuh.ie/Healthcare-Professionals/Contacts-Information-/Laboratory-Medicine.html>

# **10.0 ADULT PHLEBOTOMY SERVICE (**Phlebotomy Services at TUH)

TUH provides a limited phlebotomy service for GP referred patients. Access to this SwiftQueue service is by appointment only. Patients need to make a booking online by accessing the TUH website [www.tuh.ie](http://www.tuh.ie) and selecting Tallaght University Hospital **Book GP bloods- Adults.**

[](https://www.swiftqueue.com/amnch.php)

Note: Patients who schedule appointments through the TUH OUTPATIENT CLINIC will not be accommodated at their designated appointment time.

The following information is required:

* The patient must have a GP request form signed by a GP or health link referral letter / email to avail of this service.

The Adult Phlebotomy (Blood Tests) Department offers two types of services

* GP Referral Service
* Out-Patient Clinic Referral Service

**Opening Hours** - **(Adults)**

GP Referral Service 08.00 to 16.45hrs Monday to Friday.

Out-Patient Clinic Referral Service 08.00hrs to 16.40hrs. Monday to Friday.

**Directions to Adult Patient Blood Tests Area:** Enter via the main entrance and take the second left. The phlebotomy department is located in the Rynd unit at the end of the main corridor.  
Patients are requested to Check- in at the swift queue self-service kiosk on their arrival. Registering at the kiosk will notify the phlebotomist of your arrival.

**ADULT PHLEBOTOMY DEPARTMENT STARTING TIMES / HOURS OF SERVICE**

|  |  |  |
| --- | --- | --- |
| **WARD** | **ALL**  **O.P.D.**  **REFER.** | **ALL**  **G.P.**  **REFER.** |
| **Mon-Fri** | 8.00hrs -16:45hrs | 8.00hrs -16:45hrs |
| **Sat** | N/A | N/A |
| **Sun &**  **Bank**  **Hols.** |

**The Phlebotomy Manager for adult phlebotomy service may be contacted at 3040/Bleep 6249.**

Paediatric Phlebotomy is managed by the Children’s Hospital Ireland (CHI). To book blood tests for children under 16 years please use the link below. <https://www.childrenshealthireland.ie/outpatients/blood-tests>

# **11.0 GP COMMUNICATION**

* Communication between Tallaght Hospital and GPs is by direct contact by phone or healthmail to [gplabqueries@tuh.ie](mailto:gplabqueries@tuh.ie)
* In the event an urgent report is required, the user must alert the laboratory by telephone to clearly state the nature of the urgency and must ensure it is clearly indicated on the Request Form. The laboratory administration team is not resourced to issue routine laboratory results by phone except in emergency situations.
* In the event of an urgent critical result Laboratory staff will attempt to contact the GP by phone. If staff are unable to contact the GP a healthmail alert notification will be sent while we continue to try to contact the GP.

# **12.0 USER FEEDBACK**

As part of our continual improvement process we would welcome your feedback, positive or negative, on our GP service. Please contact the Laboratory manager by email at ciaran.love@tuh.ie or by phone at 01-4143905.

# APPENDIX 1: LIST OF LABORATORY TESTS ROUTINELY AVAILABLE TO GPS

(available on Healthlink)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Biochemistry** | | **Haematology** | **Immunology** | **Microbiology** | **Blood Transfusion** |
| Thyroid Function (Free T4/TSH) **SUPPLY CLINICAL DETAILS – e.g. on T4?** | Urate | Vitamin B12/Folate/  Ferritin | Anti-CCP | Culture & Sensitivity | Group & Save (for TOP only) |
| LH & FSH | Amylase | Rheumatoid Factor | Fungal Culture | DCT |
| PSA (Supply Clinical details)  Indications as per National Guideline | Magnesium | Infectious Mononucleosis screen | Intrinsic factor | Mycobacterial investigation | HLA B27 (referral test) |
| Oestradiol | Creatine Kinase | Coagulation screen | Tissue Transglutaminase antibody (tTg) | Stool investigation |  |
| Progesterone | Iron studies | INR (Warfarin) |  | Ova & Parasites (based on clinical details) |  |
| Prolactin | Digoxin | FBC | Connective Tissue Disease (CTD) Screen | Chlamydia / Gonorrhoea |  |
| Testosterone | Carbamazepine | ESR | Only 3 Allergy tests permitted:   * Animal Disorders (allergy) * House dust mite (allergy) * Peanut Allergy * Mixed Grass pollen (allergy) | Herpes Simplex Virus |  |
| Lithium | Phenobarbitone | Thrombophilia Screen | Varicella Zoster Virus (VZV) IgG (Immune status) \*\* |  |
| CA 125 **Indications as per National Guideline** | Phenytoin | Lupus Anticoagulant | STI screen (syphilis, HIV, HBsAg) |  |
| Glucose (2hr PP) | HCG | Haemachromatosis Screen (signed patient consent essential) | Measles/Mumps/Rubella IgG screen |  |
| Haemoglobin A1c | Theophylline | Sickle cell/ Thalassaemia | Viral Hepatitis B & C screen (HBsAg + anti-HCV) |  |
| IgG/A/M Protein Electrophoresis | Valproate | Malaria screen (must contact lab) | Anti-phospholipid antibodies (Anti-Cardiolipin and Anti -B2 glycoprotein I) | Hepatitis B Infection status (HBsAg, anti-HBc) |  |
| Lipid Profile (fasting) | C Reactive Protein (CRP) | Antiphospho lipid screen |  | Hepatitis A IgG (HAV IgG) |  |
| Liver Profile | Lactate Dehydrogenase |  |  | Hepatitis B surface Antigen (HBsAg) |  |
| Glucose (random) | **NT Pro-BNP Indications as per National Guideline** |  |  | Hepatitis B surface Antibody (Post vaccination) |  |
| Glucose (fasting) | **Vitamin D Indications as per National Guideline** |  |  | Hepatitis C Antibody (anti-HCV core IgG) |  |
| Thyroid Peroxidase Autoantibodies (TPO) – ONCE ONLY PER PATIENT | **Renal Profile (must be received and separated within 2 hours)**  **Renal Profile (no electrolytes)** |  |  | Hepatitis C PCR (HCV RNA; current infection) |  |
| Myeloma “Screen”  Protein Electrophoresis  Meeting TUH criteria  UPEP is required but cannot be delivered for primary care?  Over age 40 (otherwise by discussion | Bone Profile |  |  | Syphilis serology |  |
| Protein/Creatinine Ratio | Albumin/Creatinine Ratio |  |  | HIV Ag/An Combo assay |  |
|  |  |  |  | Individual serology screens (HIV, Hep B, Hep C, Hep A) |  |
|  |  |  |  | Individual Molecular screens (HSV PCR) |  |
|  |  |  |  |  |  |