



# SERVICE CATALOGUE

*with Recommended Patient Price (RPP)*

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# **Section A**

## **GENERAL INFORMATION**



## INTRODUCTION

With the recent development of evidence-based medicine, individualised or targeted therapy, and the advancement of biomedical sciences and technology, more efficient, sensitive and specific diagnostic tests are highly needed to help clinician to make accurate and efficient medical decisions. For these reasons, *Gnosis Laboratories* was established in Malaysia in year 2002, as part of the state-of-the-art medical laboratory by a network of medical laboratory professionals from Malaysia and Taiwan.

### History

*Lezen Reference Laboratories* founded in year 1979 in Taipei city by a team of medical laboratory professionals. Beside its headquarters in Taipei, Lezen have established regional laboratories in Kaoshiung and Taichung, and with numerous adjunct or satellite labs throughout Taiwan. In year 2002, *Lezen* expanded its network of medical laboratory services in Kuala Lumpur, Malaysia, with a new collaborated laboratory called *Gnosis Laboratories*, with the vision to expand its network and operation into Southeast Asia region.

### Expertise

Our group of laboratories consist of over 100 staffs in Malaysia with half are qualified Medical Lab Technologists & Scientists; some are doctorate and master degree holders in various disciplines. We also have a team of information technology specialists to develop and maintain our laboratory information management system and the real-time online test result access facility. We also established strategic collaboration in specific areas with world's leading medical and research laboratories.

### Advance

As a reference and research-lead medical laboratory, we focus on cutting-edge research and development of new assays. This includes refinement of existing diagnostic tests to produce assays with greater sensitivity, specificity, efficiency and clinical value for reliable and cost-effective clinical investigation. We pioneered nuclear medicine and radioimmunoassay technology in Taiwan. In year 1999, we have developed the molecular diagnostics services, which applied the latest technology available in molecular biology, such as polymerase chain reaction and genomic sequencing technology into clinical application. Thus, with these comprehensive clinical tests menu, we can support a wide range of clinical fields, namely Obstetrics & Gynaecology, Cardiology, Oncology, Haematology, Gastroenterology, Nephrology, Paediatrics, Endocrinology, Infectious Disease, Allergy & Immunology, Rheumatology, Neurology, Toxicology, Genetics and etc.

### Quality

Accurate and time efficient lab diagnostic results to support the medical providers in decision-making are our main concern. Therefore, all our activities are subjected to good laboratory practice and stringent quality assurance programs. The laboratories in Taiwan are accredited by Taiwan Accreditation Foundation (TAF) according to ISO 15189 standards. Likewise, *Gnosis Laboratories* in Malaysia recognises its responsibility to provide quality services to better satisfy the needs of our customers and to improve the management of our services, thus we have developed a management system that complies to the requirements of MS ISO 15189 standard, and we are in the process to seek accreditation for a wide range of our testing activities.

### Affordable

As an Asian pioneer medical laboratory, through years of experiences, we are able to develop cost-effective diagnostic tests with affordable price for the Asian market. These included those highly advanced and specialised assays, without compromising on our quality of test and service.

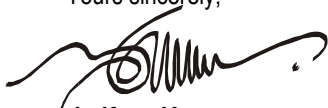
### Partnership

We strongly believed in working together and partnership with healthcare providers & institutions, various exteem diagnostic products manufacturers, not just meeting needs but to work alongside with them to achieve their missions, create greater values and bring out the best in their medical practise, professionalism and entrepreneurship.

## Our Mission

**Our mission is to provide comprehensive and advanced medical laboratory and diagnostic services and solutions with an unmatched level of reliability, service and support, to the healthcare providers and institutions, for the best of the patient care.**

Yours sincerely,



**Jo-Kuan Yee**

B. Biomedical Sc (Hons) (UKM), MIBMS (UK)

Laboratory Director

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## SERVICE NOTES

### SERVICE HOURS

| Day              | Routine Hours         | *On-Call Hours        |
|------------------|-----------------------|-----------------------|
| Monday to Friday | 9:00 a.m. – 5:30 p.m. | 5:30 p.m. – 7:00 p.m. |
| Saturday         | 9:00 a.m. – 1:00 p.m. | 1:00 p.m. – 3:00 p.m. |
| Sunday           | -                     | 9:00 a.m. - 3:00 p.m. |
| Public Holiday   | Close                 | To be notified        |

Overnight on-call or off days on-call can be honoured by special arrangement.

\* Surcharge is applicable on such services.

*Above service hours are applicable to HQ only. Please check with particular branch for the exact hour and working day.*

### TEST REQUEST & COLLECTION OF SPECIMEN

- Our courier will make the routine specimen collection **twice a day** (morning or afternoon) for normal working day. Please kindly inform us if you need different arrangement for routine specimen collection.
- Urgent Requests-** We will respond immediately to urgent requests during our routine hours. Urgent specimens should be packaged in our red coloured marked as Urgent packaging specimen bags. It is **ESSENTIAL** to tick the urgent box on the request form and that contact details are provided for results to be telephoned, fax or email when required. For urgent specimen collection, please phone our service line as stated above.
- During **On-Call Hours**, our laboratory will only respond to urgent tests. An extra **RM 4.00 Surcharge** for urgent tests will be charged per case send within On-Call Hours. If Sunday collection for non-urgent or routine tests, pre-arrangement is needed, please contact your service branch or service representative for such arrangement.
- Submission of requests for laboratory testing shall be accompanied by a GNOSIS request form. The **Request Form** must be filled-in clearly (type or hand printed). **Name, Sex, Age, IC number, Doctor/Clinic's stamp & Signature and date and time of Specimen Collection** are essential, **Time** of collection will be important for time sensitive parameters. **Clinically relevant information and drugs treated** would be most helpful in the interpretation of results, and for the lab to access the necessity for follow-up testing or alternative tests which are more indicative for a particular condition. Include the anatomic site o origin of specimen, where relevant.
- Gnosis **Tests Codes** should be clearly written on the Request Form to indicate the tests ordered. All phoned in verbal requests for additional test requests to be added to a written order should be followed by written confirmation as soon as possible.
- All specimen containers must be **labelled** with **patient's name** and a unique numerical identifier and accompanied with the Request Form. The specimen container must be tightly capped and put into the Biological Specimen Bag and zipped it. The Request Form shall be place into the "kangaroo" pocket.
- Use the **appropriate containers** for different types of tests and provide enough amount of sample. Specimen send in with incorrect container or improper/no labelling will be rejected. Refer to Gnosis Service Guide Guideline for further detail.
- If immediate delivery of specimen to laboratory is unavailable, please keep the specimens in the **suitable temperature**. Refer to Guideline for Specimen Collection & Handling and the Test List for suitable specimen storage conditions.
- If a test is ordered that can be performed by several **methodologies** and the method is not specified on the Test Request Form, the test will be performed by method which generally has the greatest clinical utility or availability.
- An **additional** or **follow-up test** can be ordered on a previously submitted specimen, provided there is sufficient specimen volume and the specimen still useable. In some cases, the laboratory personals may consult the referral physician and suggest a further investigational/differential/confirmatory test. In any case, written verification must be provided by fill-in the Test Request Form again with appropriate note and fax or courier to the laboratory.
- The laboratory will accept requests for **test cancellation** received prior to test set-up at no charge. Cancellation requests received after test set-up cannot be honoured; the test will be performed, a report will be issued, and the client will be charged appropriately.

## GUIDELINES FOR SPECIMEN COLLECTION & HANDLING

The quality of laboratory results depends greatly on the proper collection and handling of specimen.

### Collection of Blood Specimen

1. Red cells or white cells **haemolysis** in blood specimen may cause clinical invalid result. Always apply proper phlebotomy technique. Avoid water, alcohol or other agents to come in contact with the sampling needle or blood specimen. Do not apply sudden force in blood sampling or transferring; avoid transfer blood from syringe to blood tube through needle. It is advisable to use needle with gauge size 22G or larger (21G) to avoid haemolysis.
2. Avoid apply **prolong tourniquet**, prolonged venous stasis may cause increase in certain parameters.
3. Effect of **posture, medication, intravenous infusion** and **examination** of the prostate may alter or interfere with certain assays.
4. Blood specimen for electrolytes assay, especially potassium, blood for cytogenetics, leukocytes antigen, lymphocytic markers, cryoglobins and blood culture **should NOT keep refrigerated**. It should be delivered to lab as soon as possible.
5. Most hormones and enzymes will decrease in activity through time or in warm temperature. It should be **keep refrigerated** if immediate delivery to lab is unavailable.
6. An overnight (10 to 12 hour) fast is required for most **fasting** blood specimens.

### Type of Vacuum Blood Collection Tubes (as supplied by our labs, specification may change)

| Cap Colour                    | Type & Additives                                       | Vol. | Note                                                                                                                                                                                                                                                      |
|-------------------------------|--------------------------------------------------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Yellow                        | Plain SST (with Serum Separation Gel & Clot Activator) | 5 ml | No need mixing, avoid shaking. Mainly for most routine biochemistry assays, hormones, tumour markers, serology assays, virology assays etc. Preferably using this tube rather the total plain tube, for speedy processing, unless specifically indicated. |
| Red                           | Plain (without Gel)                                    | 7 ml | No need mixing, avoid shaking.                                                                                                                                                                                                                            |
| Lavender                      | EDTA (K2EDTA)                                          | 3 ml | <b>Gently Mix well.</b> For most haematology assays, blood lead assay. If ESR, need min 1.5 ml.                                                                                                                                                           |
| Grey                          | Fluoride (KF+Na2EDTA)                                  | 2 ml | <b>Mix well.</b> For glucose test. Min 1 ml, too little blood may cause blood haemolysis. Too much blood may reduce glycolytic inhibition.                                                                                                                |
| Green                         | Heparin (Na/Li Heparin)                                | 2 ml | <b>Mix well</b>                                                                                                                                                                                                                                           |
| Light Blue                    | Citrate (Buffered Citrate 3.2%)                        | 2 ml | <b>Fill to the marked line/specified volume and mix well.</b> Ensure citrate to blood ratio is 1:9. Not to draw first blood for coagulation tests, either use the first draw for other tube or discard the 1 <sup>st</sup> tube.                          |
| Royal Blue w Red Label        | Trace Element (TET) Plain                              | 7 ml | No need mixing. For trace element or heavy metal assays on serum or urine.                                                                                                                                                                                |
| Royal Blue w Lavender Label   | Trace Element (TET) EDTA                               | 7 ml | <b>Mix well.</b> For trace element or heavy metal assays on whole blood or red blood cells.                                                                                                                                                               |
| Royal Blue w Royal Blue Label | Trace Element (TET) Heparin                            | 7 ml | <b>Mix Well.</b> For trace element specially blood Aluminium assay.                                                                                                                                                                                       |

For vacuum blood collection system, the blood will fill to the stated volume automatically.

### Collection of Other Specimen

#### Sterile Universal Container:

For Urine, Stool/Faeces, Sputum, Body Fluid, Effusion, Aspirate, Seminal Fluid, Scrapping, Small Tissue and etc.

Seminal fluid must keep in room temperature, avoid light and dispatch to laboratory within 1 hour of collection.

Stool or Urine for detection of life parasites should keep in room temperature, if for culture should keep refrigerated to avoid overgrowth of normal flora if immediate delivery to lab is unavailable.

Specimen for routine Urinalysis, Biochemistry assays should keep refrigerated if immediate delivery to lab is unavailable.

Body fluids for culture should keep in room temperature.

**Glass Slide:** For fixed smear. e.g. PAP smear, direct smears for bacteria, parasite and etc.

**Swab, Plain:** For direct or fixed smear, e.g. Gram's stain, AFB stain. For nucleic acid (PCR) detection. Keep in 2 - 8°C and transport to lab as soon as possible.

**Swab, in Microbial Transport Medium:**

For transport of microbiological specimens for culture & sensitivity tests from wound, pubs and etc. And also for wet mount preparation for the detection of Monilia & Trichomonas. Keep and transport in **Room Temperature** to lab as soon as possible.

For bacterial nucleic acid (PCR) detection, keep in 2 - 8°C and transport to lab as soon as possible.

**Swab, in Viral Transport Medium:**

For transport of viral specimens for nucleic acid (PCR) detection or viral culture. Keep in 2 – 8°C and transport to lab as soon as possible. Recommended to use flocced tip made with synthetic fibre, do not use cotton fibre swab.

**Blood Culture Bottle (Aerobic or Anaerobic):**

For either Aerobic or Anaerobic bacterial culture & sensitivity tests. Specimens keep in room temperature, do not refrigerate.

**24 hr Urine Container:**

For collection of 24-hour urine. **Acid Preservative (normally in 25ml 6M HCL acid or 10g Boric Acid)** has to be added for specific assay **and/or keep refrigerated during collection period**. Patient should be informed of any additive added in the container. Proper instruction should be understanding by the patient. At 0-hr, the bladder is emptied completely; discard the urine. Collect all urine passed until the 24-hr. At 24-hr, the bladder is emptied completely by urinating *into the collection container*.

**Mid-Stream Urine (MSU):**

Clean the genital area with water. Discard the first void urine and only collect clean voided mid-stream urine into container. This is important to obtain a clinical relevant result for Urinalysis and Culture & Sensitivity test. Please keep specimen in refrigerator if immediate delivery to laboratory is unavailable.

**First Morning Urine (FMU) or First Void Urine (FVU):**

First or second urine in the early morning or first void/stream urine is important for detection of certain urine's parameters, as the concentration is higher in the early morning urine or in the first void/stream urine. Please keep specimen in refrigerator if immediate delivery to laboratory is unavailable.

**Special Collection Tube/Kit:**

Specific collection tube or kit is required for certain test. E.g. liquid-based PAP test, Fibrin Degradation Product (FDP), Urea Breath Test, Hair Heavy Metal assays, Urine Metabolic/Amino Acids assays etc.

All the above specimen containers, needles, swabs, spatulas, brushes, slides, slide holders, fixatives (for cytology), request forms, specimen bags and service catalogue are supplied free of charge if use it to collect specimen for testing in our labs. Please order with us using the **Supplies Request Form** before they are required. May fax or hand to our dispatch personnel to deliver to our labs.

**RESULT TURN-AROUND-TIME**

1. The **Turn-Around-Time (TAT)** in **normal working day(s)** stated in the list for Profile Tests (Section B) or Single Tests (Section C) is for general reference only, and it mainly apply to HQ Lab. For branch labs, it may require an extra day for transportation. If any particular profile/test is time critical, please notify the particular lab/branch for attention.

2. Generally, the TAT is as follow:

|                 | Type of test                                                                                                                                        | TAT (working day)                           |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| <b>Urgent</b>   | FBC, spot/rapid test for infection (Dengue, ASOT & WWF), common biochemistry (Liver Function Tests, Renal Function Tests, Glucose), Urine FEME, etc | Same day* or 1 day<br>* Surcharge may apply |
| <b>Routine</b>  | Common test for biochemistry, hormones, serology & tumour markers; Culture, routine coagulation tests, cytology & histology, etc.                   | 1 to 5 days                                 |
| <b>Esoteric</b> | Special hormones/proteins & serology, molecular diagnostic, AFB culture, etc.                                                                       | 7 days or more                              |

3. The **Laboratory Report** will be printed and send to you by our courier after all the results are available. Upon request, **Interim Report** for routine test may be delivers before esoteric test result is available. Final report will be delivers once all the results are available. Two copies are supplied, one for your record and one for the patient. *Please inform us if you need different arrangement for results reporting.*
4. All indicated urgent tests will be **email, fax or phone** as requested to attending doctor immediately after the results are available and the printed report will be sent to client on the next routine dispatch trip available. Any critical results will be conveyed to the ordering clinician as soon as possible.
5. **Urgent Tests & Surcharge:** Special courier trip for urgent pick-up of specimen and result inform back to client (via email, fax or phone) within shortest possible time can be arranged with surcharge applicable as blow:

| Tests/ Profiles                                                                             | TAT*    | Surcharge     |
|---------------------------------------------------------------------------------------------|---------|---------------|
| Full Blood Count, Full Blood Count w CRP, Dengue Fever Tests (DEN1, DEN2, DEN3), Urine FEME | 3 hours | <b>RM4.00</b> |
| Full Blood Picture w ESR, Febrile Studies (FEBA, FEBB)                                      | 4 hours | <b>RM4.00</b> |

*\*Above TAT are indicate for HQ only, for branches, please arrange with particular branch that serve your area.*

## CHARGING & BILLING POLICY

1. All Laboratory Fees listed in this catalogue are in **Malaysia Ringgit (RM)**. Whenever possible, prior notice will be given for fees revision. However, the company reserved the rights to adjust any fees with immediate effect or notify after the changes especially on non-routine test that referred out to other lab. The fees stated are not inclusive of any statutory or governmental taxes or charges, if such charges applied, it shall be added on in the billing.
2. The fees indicated as **Doctor's Fee** are fee chargeable to clinic or hospital, only inclusive for test analysis and report, specimen collection and delivery of report within local area and relevant specimen collection container (some are charge separately). It does not include specimen collection from patient or phlebotomy service for patient, out-station specimen collection & report delivery and interpretation of report to the patient. Any such service required shall be charged additionally.
3. The fees indicated as **Recommended Patient Price (RPP)** or **Patient's Fee** are recommended retail prices that our clients may charge on their patients. However, those are just recommended or indicative prices and our clients have full discretion on the actual price to charge on their patients, unless notified otherwise or impose by any statutory regulations.
4. Credit term is **30 days** from the date of invoice. The policy will be strictly enforced. It will be much appreciated if invoices are settled timely. Interests will be applied on overdue payment.
5. Please check your invoices upon receipt and notify us of any **discrepancy** within 10 days. Your statement will be re-process immediately or a separate credit/debit note will be given.
6. The payment should be made by crossed cheque or electronic transfer payable to name as indicate in the invoice:  
**GNOSIS LABORATORIES (M) SDN BHD** for Peninsular Malaysia.  
**GNOSIS LABORATORIES (SABAH) SDN BHD** for Sabah, Malaysia.  
**GNOSIS LABORATORIES (S) SDN BHD** for Sarawak, Malaysia.
7. Our service representative / marketing staffs and couriers are authorised to collect crossed cheque payment on behalf of the company.

Please kindly contact our Service Representative / Manager for any inquiries regarding pricing or any other client's service matters. For invoices, statement and payment can be directed to our account staffs on our service line within normal office hour.

*\*For further guide details, please refer to **Gnosis Service Guide** or contact our clinician service representatives (medical sales representatives) or laboratory managers.*





**Section B**

**PROFILE TESTS**

## General Profiles Summary 2025 (Promotion effective 1 Jan 2025 till further notice)

| Test Name                                     | Code                                                                                                                | GEA | GE3 | GEB | GEF | GEM<br>M / F | GE72 | GE75<br>M / F | GQY3 | GHY3 | GQY5 | GQY8 | GHY8 |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|--------------|------|---------------|------|------|------|------|------|
| Full Blood Count                              |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Blood Group                                   | ABORH                                                                                                               |     |     |     |     |              |      |               | A    | A    | A    | A    | A    |
| Liver Functions                               |                                                                                                                     |     |     |     |     |              |      |               |      |      |      |      |      |
| Bilirubins                                    |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Total Protein                                 |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Albumin                                       |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Globulin                                      |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| ALP                                           |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| AST (SGOT)                                    |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| ALT (SGPT)                                    |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| γ-GT                                          |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Renal Functions, Diabetes & Metabolic         |                                                                                                                     |     |     |     |     |              |      |               |      |      |      |      |      |
| Urea                                          |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Creatinine                                    |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Uric Acid                                     |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Calcium                                       |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Phosphate                                     |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Magnesium                                     |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Electrolytes                                  |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| MicroAlb /Cre                                 | UMAL                                                                                                                |     |     | √   | √   |              |      | √             |      | √    |      |      | √    |
| Serum Iron                                    | SI                                                                                                                  |     |     | √   | √   | √            | √    | √             | AS   | AS   | √    | √    | AS   |
| Iron Status (Iron, Transferrin, %)            | IRST                                                                                                                |     |     |     |     |              |      |               |      |      |      |      |      |
| Glucose                                       |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| HbA1c                                         | A1C                                                                                                                 |     | √   | √   | √   | √            | √    | √             |      | √    |      |      | √    |
| Lipids, Inflammation & CVD Risks              |                                                                                                                     |     |     |     |     |              |      |               |      |      |      |      |      |
| Total Chol.                                   |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| HDL-Cholesterol                               |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| LDL-Chol.                                     |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Triglycerides                                 |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Total/HDL-Chol                                |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| hs-CRP                                        |                                                                                                                     | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| LDH                                           | LDH                                                                                                                 |     |     |     |     |              |      |               | R    | R    | R    | R    | R    |
| Apo-B & Apo-A1                                | APOP                                                                                                                |     |     |     |     |              |      |               |      |      |      |      |      |
| Homocysteine                                  | HCY                                                                                                                 |     |     |     |     |              |      |               |      |      |      |      |      |
| Hormones, Infections, Tumour Markers & Others |                                                                                                                     |     |     |     |     |              |      |               |      |      |      |      |      |
| TSH                                           | TSH                                                                                                                 |     |     |     | √   | √            | √    | √             |      |      |      |      |      |
| FT4                                           | FT4                                                                                                                 |     |     |     |     |              |      |               |      |      |      |      |      |
| FT3                                           | FT3                                                                                                                 |     |     |     |     |              |      |               |      |      |      |      |      |
| HBs Ag & Ab                                   | HBS                                                                                                                 |     |     |     | √   | √            | √    | √             |      |      |      |      |      |
| Anti-HAV                                      | HAV                                                                                                                 |     |     |     |     |              | √    | √             |      |      |      |      |      |
| HIV Ab+Ag                                     | HIV                                                                                                                 |     |     |     |     |              | √    | √             |      |      |      |      |      |
| √ TPAb (reflex RPR)                           | TPAB1                                                                                                               |     |     |     |     |              |      | √             |      |      |      |      |      |
| √ RPR Screen (reflex TPAb)                    | RPR                                                                                                                 |     |     |     |     |              | √    |               | V    | V    | V    | V    | V    |
| H. pylori IgG                                 | HPYG                                                                                                                |     |     |     |     |              |      |               |      |      |      |      |      |
| RF                                            | RF                                                                                                                  |     |     |     | √   | √            | √    | √             | RSV  | RSV  | RSV  | √    | RSV  |
| AFP                                           | AFP                                                                                                                 |     |     |     |     | √            | √    | √             |      |      |      |      |      |
| CEA                                           | CEA                                                                                                                 |     |     |     |     | √            |      | √             |      |      |      |      |      |
| PSA (for Male)                                | PSA                                                                                                                 |     |     |     |     | √ M          |      | √ M           |      |      |      |      |      |
| CA125 (Female)                                | 125                                                                                                                 |     |     |     |     | √ F          |      | √ F           |      |      |      |      |      |
| CA15-3                                        | 153                                                                                                                 |     |     |     |     |              |      |               |      |      |      |      |      |
| CA 19-9                                       | 199                                                                                                                 |     |     |     |     |              |      |               |      |      |      |      |      |
| EBV VCA IgA                                   | EBVA                                                                                                                |     |     |     |     |              |      |               |      |      |      |      |      |
| Urine FEME                                    | UFEM                                                                                                                | √   | √   | √   | √   | √            | √    | √             | √    | √    | √    | √    | √    |
| Option Test #                                 | A (ABSI): ABO & Iron, R (RFLD): RF & LDH, S (RFSI): RF & Iron, V (VDPR): RPR & RF                                   |     |     |     |     |              |      |               | 3    | 3    | 5    | 8    | 8    |
| Specimen for All                              | 5 ml Plain, 3 ml EDTA, 2 ml Fluoride, 20 ml MSU. (If profile with both ABO & HbA1c tests, need extra 1 EDTA sample. |     |     |     |     |              |      |               |      |      |      |      |      |

**Tag-On Tests for General Screening Profiles** *(Promotional effective 1<sup>st</sup> Jan 2025 until further notice)*

| Code                                                                     | Test Name                                           |  | Code  | Test Name                                              |  |
|--------------------------------------------------------------------------|-----------------------------------------------------|--|-------|--------------------------------------------------------|--|
| <b>Haematology &amp; Anaemia</b>                                         |                                                     |  |       |                                                        |  |
| IRST                                                                     | Iron Status (Serum Iron, Transferrin, % Saturation) |  | ABORH | ABO & Rh Blood Group                                   |  |
| FER                                                                      | Ferritin                                            |  | ABSI  | Blood Group & Serum Iron                               |  |
| SI                                                                       | Iron, Serum                                         |  | ESR   | Erythrocyte Sedimentation Rate                         |  |
| BFC                                                                      | Blood Film Comment                                  |  | HBE   | Hb Electrophoresis                                     |  |
| <b>Renal Functions, Liver, Cardiovascular, Inflammation &amp; Others</b> |                                                     |  |       |                                                        |  |
| A1C                                                                      | HbA1c                                               |  | UMAL  | Microalbumin & Cret. Ratio                             |  |
| HCRP                                                                     | C-Reactive Protein, high-sensitive (hsCRP)          |  | CYSC  | Cystatin C & eGFR cr-cys                               |  |
| HCY                                                                      | Homocysteine (separate serum a.s.a.p.)              |  | LDH   | Lactate Dehydrogenase (separate serum a.s.a.p.)        |  |
| APOP                                                                     | Apo-A1, Apo-B & Ratio                               |  | TNIH  | hs-Troponin I (w risk stratification, non-urgent only) |  |
| LPA                                                                      | Lipoprotein (a)                                     |  | SOD   | Superoxide Dismutase (SOD)                             |  |
| <b>Infectious Diseases</b>                                               |                                                     |  |       |                                                        |  |
| HIV                                                                      | HIV 1 & 2 Ab+Ag                                     |  | H1G   | HSV Type 1 IgG                                         |  |
| TPAB1                                                                    | Syphilis TP Ab (reflex RPR)                         |  | H2G   | HSV Type 2 IgG                                         |  |
| RPR                                                                      | Syphilis RPR (VDRL) Titter                          |  | CLG   | Chlamydia IgG                                          |  |
| HBS                                                                      | HBs Ag & HBs Ab                                     |  | HPYG  | H. pylori IgG                                          |  |
| EAB                                                                      | Anti-HBe                                            |  | HPYA  | H. pylori Abs (with Current Infection Marker)          |  |
| EAG                                                                      | HBe Ag                                              |  | UBT4  | 14C Urea Breath Test                                   |  |
| HAV                                                                      | HAV Ab (Anti-HAV)                                   |  | RG    | Rubella IgG                                            |  |
| HCV                                                                      | HCV Ab (Anti-HCV)                                   |  | VDRF  | Syphilis RPR & RF                                      |  |
| <b>Immunology &amp; Serology</b>                                         |                                                     |  |       |                                                        |  |
| RF                                                                       | Rheumatoid Factor                                   |  | ANAQ  | Anti-Nuclear Antibody (Quantitative)                   |  |
| ACCP                                                                     | Anti-CCP                                            |  | ADNA  | Anti-dsDNA (Quantitative)                              |  |
| ATPO                                                                     | Anti-Thyroid Peroxidase                             |  | RFLD  | RF & LDH                                               |  |
| ATAB                                                                     | Anti-Thyroglobulin Ab                               |  | RFSI  | RF & Serum Iron                                        |  |
| <b>Hormones &amp; Others</b>                                             |                                                     |  |       |                                                        |  |
| TSH                                                                      | Thyroid Stimulating Hormone (TSH)                   |  | TES   | Testosterone, total                                    |  |
| FT4                                                                      | Free T4                                             |  | SHBG  | Sex Hormone Binding Globulin                           |  |
| FT3                                                                      | Free T3                                             |  | HOMA  | Insulin with HOMA-IR                                   |  |
| E2                                                                       | Estradiol (E2)                                      |  | FOL   | Folic Acid (Folate)                                    |  |
| FSH                                                                      | Follicle Stimulating Hormone (FSH)                  |  | VB12  | Vitamin B12 (Cobalamin)                                |  |
| LH                                                                       | Luteinizing Hormone (LH)                            |  | VDT   | Vitamin D (25-OH), Total                               |  |
| PRL                                                                      | Prolactin                                           |  | HCG   | β-hCG                                                  |  |
| PRG                                                                      | Progesterone (P4)                                   |  | ALDS  | Aldosterone, Renin Concentration & Ratio               |  |
| <b>Tumour Markers</b>                                                    |                                                     |  |       |                                                        |  |
| AFP                                                                      | Alpha-Fetoprotein                                   |  | PSA   | Prostate Specific Ag                                   |  |
| CEA                                                                      | Carcino-Embryonic Ag                                |  | PSAF  | PSA, Free                                              |  |
| FOB                                                                      | Faecal Occult Blood                                 |  | 125   | CA 125                                                 |  |
| PAP                                                                      | PAP Smear                                           |  | 153   | CA 15-3                                                |  |
| PALP                                                                     | Liquid Based PAP Test                               |  | 199   | CA 19-9                                                |  |
| HPVD                                                                     | HPV Genotyping                                      |  | 724   | CA 72-4                                                |  |
| HPVS                                                                     | HPV DNA Screen (16, 18 & HR types)                  |  | SCC   | Squamous Cell Ca Ag                                    |  |
| CXC                                                                      | HPV Genotyping & Liquid PAP                         |  | 211   | CYFRA 21-1                                             |  |
| CXCQ                                                                     | HPV DNA Screen & Liquid PAP                         |  | NSE   | Neuron-Specific Enolase                                |  |
| EBVA                                                                     | EBV VCA IgA                                         |  |       |                                                        |  |
| EBA                                                                      | EBV EA+NA1 IgA                                      |  |       |                                                        |  |

| Code             | Test Description                                   | Specimen Type                           | TAT |
|------------------|----------------------------------------------------|-----------------------------------------|-----|
| GBS              | <b>General Chemistry Screen</b>                    | 5 ml Plain<br>2 ml Fluoride             | 1   |
|                  | <b>Liver Functions</b>                             | 13. Uric Acid                           |     |
|                  | 1. Bilirubin, Total                                | 14. Sodium                              |     |
|                  | 2. Bilirubin, Direct & Indirect (if TBil elevated) | 15. Potassium                           |     |
|                  | 3. Total Protein                                   | 16. Chloride                            |     |
|                  | 4. Albumin                                         | 17. Calcium                             |     |
|                  | 5. Globulin                                        | 18. Phosphorus                          |     |
|                  | 6. A/G Ratio                                       | <b>Lipids &amp; Cardiovascular Risk</b> |     |
|                  | 7. Alkaline Phosphates (ALP)                       | 19. Cholesterol, Total                  |     |
|                  | 8. AST (SGOT)                                      | 20. HDL-Cholesterol                     |     |
|                  | 9. ALT (SGPT)                                      | 21. LDL-Cholesterol                     |     |
|                  | 10. γ-Glutamyl Transpeptidase (GGT)                | 22. Triglycerides                       |     |
|                  | <b>Renal &amp; Metabolic</b>                       | 23. Total / HDL-Cholesterol Ratio       |     |
|                  | 11. Urea                                           | <b>Diabetes</b>                         |     |
|                  | 12. Creatinine                                     | 24. Glucose                             |     |
| FWM3<br>(Male)   | <b>Foreign Worker Screen – Male/Female</b>         | 5 ml Plain                              | 2   |
| FWF3<br>(Female) | 1. HIV 1&2 Ab+Ag                                   | 3 ml EDTA                               |     |
|                  | 2. HBs Ag                                          | 20 ml MSU                               |     |
|                  | 3. Syphilis RPR                                    |                                         |     |
|                  | 4. Malaria Parasite                                |                                         |     |
|                  | 5. Morphine / Heroin Derivatives, by EIA           |                                         |     |
|                  | 6. Cannabinoids, by EIA                            |                                         |     |
|                  | 7. Urine Glucose & Urine Albumin                   |                                         |     |
|                  | 8. Blood Group                                     |                                         |     |
|                  | 9. Urine Amphetamine (Metamphetamine)              |                                         |     |
|                  | 10. Anti-HCV                                       |                                         |     |
|                  | 11. Filariasis                                     |                                         |     |
|                  | 12. Urine Pregnancy Test ( <b>Female only</b> )    |                                         |     |
| FWM<br>(Male)    | <b>Pre-Employment Screen – Male/Female</b>         | 5 ml Plain                              | 2   |
| FWF<br>(Female)  | 1. HIV 1&2 Ab+Ag                                   | 3 ml EDTA                               |     |
|                  | 2. HBs Ag                                          | 20 ml MSU                               |     |
|                  | 3. Syphilis RPR                                    |                                         |     |
|                  | 4. Malaria Parasite                                |                                         |     |
|                  | 5. Morphine / Heroin Derivatives, by EIA           |                                         |     |
|                  | 6. Cannabinoids, by EIA                            |                                         |     |
|                  | 7. Urine FEME                                      |                                         |     |
|                  | 8. Blood Group                                     |                                         |     |
|                  | 9. Urine Pregnancy Test ( <b>Female only</b> )     |                                         |     |

| Code | Test Description                                                    | Specimen Type | TAT |  |
|------|---------------------------------------------------------------------|---------------|-----|--|
| ISSB | <b>International Student Screen</b>                                 | 5 ml Plain    | 2   |  |
|      | 1. HIV 1&2 Ab+Ag Screen                                             | 3 ml EDTA     |     |  |
|      | 2. HBs Ag                                                           | 20 ml MSU     |     |  |
|      | 3. Anti-HBs                                                         |               |     |  |
|      | 4. HCV Ab                                                           |               |     |  |
|      | 5. Syphilis TP-Ab (reflex RPR if +ve)                               |               |     |  |
|      | 6. Malaria Parasite                                                 |               |     |  |
|      | 7. Amphetamine, by EIA                                              |               |     |  |
|      | 8. Morphine / Heroin Derivatives, by EIA                            |               |     |  |
|      | 9. Cannabinoids, by EIA                                             |               |     |  |
|      | 10. Urine FEME                                                      |               |     |  |
| PMSM | <b>Pre-Marital Screen (Male)</b>                                    | 5 ml Plain    | 4   |  |
| PMSF | <b>Pre-Marital Screen (Female)*</b>                                 | 2x 3 ml EDTA  |     |  |
|      | 1. Full Blood Count & Film Comment                                  |               |     |  |
|      | 2. ABO & Rh                                                         |               |     |  |
|      | 3. Iron Status (Iron, Transferrin, TIBC & % Transferrin Saturation) |               |     |  |
|      | 4. Hb Electrophoresis                                               |               |     |  |
|      | 5. TP Ab (reflex RPR if reactive)                                   |               |     |  |
|      | 6. HBs Ag & Anti-HBs                                                |               |     |  |
|      | 7. HCV Ab                                                           |               |     |  |
|      | 8. HIV 1 & 2 Ag+Ab Screen                                           |               |     |  |
|      | * 9. Rubella IgG (for Female only)                                  |               |     |  |

## Cardiovascular

| Code  | Test Description                                                                                                                                                                                                                                                                                                                    | Specimen Type                                                                                                                    | TAT  |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------|
| APLS  | <b>Antiphospholipid Syndrome Studies</b><br>1. Anti Beta-2 Glycoprotein IgG<br>2. Anti-Cardiolipin IgG<br>3. Anti-Phospholipid IgG                                                                                                                                                                                                  | 5 ml Plain                                                                                                                       | 7-14 |
| APLSS | <b>Anti-Phospholipid Syndrome Studies</b><br>1. Anti-Beta-2 Glycoprotein IgG<br>2. Anti-Cardiolipin IgG<br>3. Anti-Phospholipid IgG<br>4. Lupus Anticoagulant (by LA-PTT & dRVVT)                                                                                                                                                   | 5 ml Plain<br>2 x 2* ml Citrate <i>*as specified on tube</i><br>(freeze plasma)<br>Stop heparin therapy<br>one day prior to test | 7-14 |
| ATRA  | <b>Atherogenic Risk Profile – A</b><br>1. Total Cholesterol<br>2. HDL-Cholesterol<br>3. LDL-Cholesterol<br>4. Triglycerides<br>5. Total/HDL-Cholesterol Ratio<br>6. High sensitive CRP (hs-CRP)<br>7. Homocysteine                                                                                                                  | 5 ml Plain<br>(refrigerated)<br>(separate serum a.s.a.p.)                                                                        | 3    |
| ATRB  | <b>Atherogenic Risk Profile – B</b><br>1. Urea<br>2. Uric Acid<br>3. Glucose<br>4. Total Cholesterol<br>5. HDL-Cholesterol<br>6. LDL-Cholesterol<br>7. Triglycerides<br>8. Total/HDL-Cholesterol Ratio<br>9. High sensitive CRP (hs-CRP)<br>10. Homocysteine<br>11. Apolipoprotein-A1<br>12. Apolipoprotein-B<br>13. Apo-B/A1 Ratio | 5 ml Plain<br>2 ml Fluoride<br>(refrigerated)<br>(separate serum a.s.a.p.)                                                       | 5-7  |
| ATRC  | <b>Atherogenic Risk Profile – C</b><br>1. Apolipoprotein-A1<br>2. Apolipoprotein-B<br>3. Apo-B/A1 Ratio<br>4. High sensitive CRP (hs-CRP)<br>5. Homocysteine<br>6. Lipoprotein (a)                                                                                                                                                  | 5 ml Plain<br>(refrigerated)<br>(Separate serum a.s.a.p.)                                                                        | 5-7  |

| Code | Test Description                                                                                                                                                                                                                                      | Specimen Type | TAT |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----|
| ATRD | <b>Atherogenic Risk Profile – D</b><br>1. Total Cholesterol<br>2. HDL-Cholesterol<br>3. LDL-Cholesterol<br>4. Triglycerides<br>5. Total/HDL-Cholesterol Ratio<br>6. High sensitive CRP (hs-CRP)                                                       | 5 ml Plain    | 2   |
| ATRF | <b>Atherogenic Risk Profile – F</b><br>1. Total Cholesterol<br>2. HDL-Cholesterol<br>3. LDL-Cholesterol<br>4. Triglycerides<br>5. Total/HDL-Cholesterol Ratio<br>6. High sensitive CRP (hs-CRP)<br>7. Troponin I, High Sensitive Quantitative (hsTnI) | 5 ml Plain    | 3   |
| CDMA | <b>Cardiac Markers - A</b><br>1. AST (SGOT)<br>2. LDH<br>3. CK<br>4. High-Sensitive Troponin I (cTnI), CMIA                                                                                                                                           | 5 ml Plain    | 1   |
| CDMC | Same as CDMA - No.4. High-Sensitive Troponin I (cTnI), FIA                                                                                                                                                                                            |               |     |
| CDMB | <b>Cardiac Markers - B</b><br>1. AST (SGOT)<br>2. LDH<br>3. CK<br>4. Troponin I (cTnI)                                                                                                                                                                |               | 1   |
| CRM  | <b>Cardiovascular Risk Markers</b><br>1. High sensitive CRP<br>2. Troponin I, High Sensitive Quantitative (hsTnI), CMIA<br>3. NT pro-BNP                                                                                                              | 5 ml Plain    | 5   |
| LIP  | <b>Lipids Profile</b><br>1. Total Cholesterol<br>2. HDL-Cholesterol<br>3. LDL-Cholesterol<br>4. Triglycerides<br>5. Total / HDL-Cholesterol Ratio                                                                                                     | 5 ml Plain    | 1   |
| LEP  | <b>Lipoprotein Electrophoresis</b><br>1. Alpha Lipoproteins<br>2. Pre-Beta Lipoproteins<br>3. Beta Lipoproteins<br>4. Chylomicrons                                                                                                                    | 5 ml Plain    | 5   |

## Endocrinology & Metabolic

| Code | Test Description                                                                                                                                                                                                                                   | Specimen Type                                | TAT |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-----|
| ADRE | <b>Adrenal Evaluation</b><br>1. Aldosterone<br>2. Cortisol<br>3. ACTH                                                                                                                                                                              | 5 ml Plain<br>3 ml EDTA (refrigerate plasma) | 5   |
| AGEA | <b>Ageing Evaluation - A</b><br>1. IGF-1<br>2. DHEA-S<br>3. Cortisol<br>4. Estradiol (E2)<br>5. Total Testosterone<br>6. Insulin<br>7. TSH<br>8. FT4<br>9. FT3                                                                                     | 5 ml Plain                                   | 5-7 |
| AGEB | <b>Ageing Evaluation - B</b><br>1. IGF-1<br>2. DHEA-S<br>3. Cortisol<br>4. Estradiol (E2)<br>5. Total Testosterone<br>6. SHBG<br>7. Free Androgen Index<br>8. Insulin<br>9. TSH<br>10. FT4<br>11. FT3                                              | 5 ml Plain                                   | 5-7 |
| AGEC | <b>Ageing Evaluation - C</b><br>1. IGF-1<br>2. DHEA-S<br>3. Cortisol<br>4. Estradiol (E2)<br>5. Total Testosterone<br>6. SHBG<br>7. Free Androgen Index<br>8. Insulin<br>9. TSH<br>10. FT4<br>11. FT3<br>12. ACTH<br>13. Prolactin<br>14. Beta-HCG | 2 x 5 ml Plain<br>1 x 3ml EDTA (plasma)      | 5-7 |

| Code | Test Description                                                                                                                                                 | Specimen Type                                                                                                                        | TAT  |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------|
| ALDS | <b>Aldosteronism Studies</b><br>1. Aldosterone<br>2. Renin Concentration, Total<br>3. Aldosterone / Renin Ratio                                                  | 5 ml Plain<br>3 ml EDTA (refrigerate plasma)<br>(Specify patient's posture. Normal sodium intake & stop medication for 2 days)       | 7    |
| BAM  | <b>Basal Metabolic Profile</b><br>1. Sodium<br>2. Potassium<br>3. Chloride<br>4. Calcium<br>5. Urea<br>6. Creatinine<br>7. Glucose                               | 5 ml Plain<br>2 ml Fluoride<br>(fasting / non-fasting)                                                                               | 1    |
| BOM  | <b>Bone Markers</b><br>1. C-Telopeptide Crosslinks (CTX)<br>2. Osteocalcin                                                                                       | 2x 3 ml EDTA Plasma<br>(fasting, morning sample)                                                                                     | 5-7  |
| CAT  | <b>Catecholamine Fractions (by HPLC)</b><br>1. Epinephrine<br>2. Norepinephrine<br>3. Dopamine                                                                   | 24 hr Urine<br><i>in Acid preservative and Refrigeration</i><br>If possible, discontinue all medication prior to specimen collection | 7-14 |
| DDA  | <b>Diabetes Diagnostic - A</b><br>1. HbA1c<br>2. Glucose, fasting<br>3. Glucose, 2 hr postprandial/Glucose load                                                  | 3 ml EDTA<br>2x 2 ml Fluoride<br>- Fasting & 2 hr                                                                                    | 2    |
| DDB  | <b>Diabetes Diagnostic - B</b><br>1. HbA1c<br>2. Glucose<br>3. C-Peptide                                                                                         | 3 ml EDTA<br>2 ml Fluoride<br>5 ml Plain                                                                                             | 7    |
| DDC  | <b>Diabetes Diagnostic - C</b><br>1. HbA1c<br>2. Glucose                                                                                                         | 3 ml EDTA<br>2 ml Fluoride                                                                                                           | 2    |
| DFS  | <b>Diabetic Function Studies</b><br>1. Sodium<br>2. Potassium<br>3. Chloride<br>4. Calcium<br>5. Urea<br>6. Creatinine<br>7. Glucose<br>8. HbA1c<br>9. C-Peptide | 3 ml EDTA<br>2 ml Fluoride<br>5 ml Plain                                                                                             | 7    |

| Code | Test Description                           | Specimen Type                           | TAT  |
|------|--------------------------------------------|-----------------------------------------|------|
| DCP  | <b>Diabetic Care Profile</b>               | 3 ml EDTA                               | 2    |
|      | 1. Glucose                                 | 2 ml Fluoride                           |      |
|      | 2. HbA1c                                   | 5 ml Plain                              |      |
|      | 3. Cholesterol, Total                      | 20 ml Urine                             |      |
|      | 4. HDL-Cholesterol                         |                                         |      |
|      | 5. LDL-Cholesterol                         |                                         |      |
|      | 6. Triglycerides                           |                                         |      |
|      | 7. Total / HDL-Cholesterol Ratio           |                                         |      |
|      | 8. C-Reactive Protein, high-sensitive      |                                         |      |
|      | 9. Urea                                    |                                         |      |
|      | 10. Creatinine                             |                                         |      |
|      | 11. Uric Acid                              |                                         |      |
|      | 12. Sodium                                 |                                         |      |
|      | 13. Potassium                              |                                         |      |
|      | 14. Chloride                               |                                         |      |
|      | 15. Urine Microalbumin, Creatinine & Ratio |                                         |      |
| PRT  | <b>Parathyroid Evaluation</b>              | 5 ml Plain                              | 7    |
|      | 1. Calcium                                 | 3 ml EDTA, Fasting morning              |      |
|      | 2. Phosphate                               |                                         |      |
|      | 3. Urea                                    |                                         |      |
|      | 4. Creatinine                              |                                         |      |
|      | 5. Alkaline Phosphatase                    |                                         |      |
|      | 6. PTH-Intact                              |                                         |      |
| PIT  | <b>Pituitary Evaluation</b>                | 5 ml Plain                              | 5-10 |
|      | 1. FSH                                     | (note time of collection and            |      |
|      | 2. LH                                      | fasting/stimulation/suppression for GH) |      |
|      | 3. Prolactin                               |                                         |      |
|      | 4. TSH                                     |                                         |      |
|      | 5. Growth Hormone                          |                                         |      |
| TASA | <b>Thyroid Autoimmune Studies – A</b>      | 5 ml Plain                              | 7    |
|      | 1. TSH (ultra-sensitive)                   |                                         |      |
|      | 2. Free T4                                 |                                         |      |
|      | 3. Free T3                                 |                                         |      |
|      | 4. Anti-Thyroid Peroxidase (Anti-TPO)      |                                         |      |
|      | 5. Anti-Thyroglobulin Ab (ATAB)            |                                         |      |
| TASB | <b>Thyroid Autoimmune Studies – B</b>      | 5 ml Plain                              | 7-10 |
|      | 1. TSH (ultra-sensitive)                   |                                         |      |
|      | 2. Free T4                                 |                                         |      |
|      | 3. Free T3                                 |                                         |      |
|      | 4. Anti-Thyroid Peroxidase (Anti-TPO)      |                                         |      |
|      | 5. Anti-Thyroglobulin Ab (ATAB)            |                                         |      |
|      | 6. TSH Receptor Ab                         |                                         |      |

| Code               | Test Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Specimen Type               | TAT  |  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------|--|
| TFA                | <b>Thyroid Function Tests - A</b><br>1. TSH (ultra-sensitive)<br>2. Free T4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5 ml Plain                  | 2    |  |
| TFB                | <b>Thyroid Function Tests - B</b><br>1. TSH (ultra-sensitive)<br>2. Free T4<br>3. Free T3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 5 ml Plain                  | 2    |  |
| AGECRF<br>(Female) | <b>Comprehensive Rejuvenation Profile Female / Male</b><br>1. Full Blood Count, Blood Film Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3 ml EDTA<br>2 x 5 ml Plain | 7-10 |  |
| AGECRM<br>(Male)   | 2. Lipids Profile, Liver Function, Renal Functions,<br>3. Calcium, Phosphate, Magnesium<br>4. Iron Status (Total Iron, % Transferrin & TIBC)<br>5. Hs-CRP<br>6. Homocysteine<br>7. Glucose, HbA1C<br>8. Insulin<br>9. Urine Microalbumin / Creatinine<br>10. Vitamin D<br>11. TSH<br>12. FT4<br>13. FT3<br>14. IGF-1<br>15. SHBG<br>16. Testosterone & Free Testosterone Index<br>17. Estradiol (E2)<br>18. FSH<br>19. LH<br>20. Progesterone<br>21. Prolactin<br>22. DHEA-S<br>23. Cortisol<br>24. Hep A Ab<br>25. HBs Ag & Ab<br>26. HIV 1 & 2 Ag+Ab<br>27. TP Ab (reflex RPR if +ve)<br>28. H. Pylori Ab<br>29. AFP<br>30. CEA<br>31. CA19-9<br>32. CA125 (for Female)<br>33. CA15-3 (for Female)<br>34. PSA (for Male)<br>35. Urine FEME | 2 ml Fluoride<br>20 ml MSU  |      |  |

## Gynaecology & Reproductive

| Code | Test Description                                                                                                                                                                                              | Specimen Type           | TAT   |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------|
| AME  | <b>Amenorrhoea Studies - A</b><br>1. TSH (ultra-sensitive)<br>2. Prolactin<br>3. Follicle Stimulating Hormone (FSH)<br>4. Luteinising Hormone (LH)<br>5. Testosterone, Total                                  | 5 ml Plain              | 5     |
| AMEB | <b>Amenorrhoea Studies - B</b><br>1. TSH (ultra-sensitive)<br>2. Prolactin<br>3. Follicle Stimulating Hormone (FSH)<br>4. Luteinising Hormone (LH)<br>5. Estradiol (E2)                                       | 5 ml Plain              | 5     |
| AHE  | <b>Androgen Hormons Evaluation</b><br>1. Androstenedione (ASD)<br>2. Testosterone, Total<br>3. Testosterone, Free<br>4. Dihydrotestosterone (DHT)<br>5. Sex Hormone Binding Globulin (SHBG)                   | 5 ml Plain              | 10-14 |
| ATB  | <b>Antenatal Screen – B</b><br>1. Full Blood Count<br>2. Blood Group<br>3. Syphilis TP-Ab (reflex RPR titre if TP-Ab +)<br>4. HBs Ag<br>5. Anti-HBs<br>6. HIV 1&2 Ab+Ag Screen                                | 3 ml EDTA<br>5 ml Plain | 2     |
| ATC  | <b>Antenatal Screen – C</b><br>1. Full Blood Count<br>2. Blood Group<br>3. Syphilis TP-Ab (reflex RPR titre if TP-Ab +)<br>4. HBs Ag<br>5. Anti-HBs<br>6. HIV 1&2 Ab+Ag Screen<br>7. HCV Ab<br>8. Rubella IgG | 3 ml EDTA<br>5 ml Plain | 2     |

| Code | Test Description                                | Specimen Type     | TAT  |  |
|------|-------------------------------------------------|-------------------|------|--|
| ATD  | <b>Antenatal Screen – D</b>                     | 3 ml EDTA         | 2    |  |
|      | 1. Full Blood Count                             | 5 ml Plain        |      |  |
|      | 2. Blood Group                                  |                   |      |  |
|      | 3. Syphilis TP-Ab (reflex RPR titre if TP-Ab +) |                   |      |  |
|      | 4. HBs Ag                                       |                   |      |  |
|      | 5. Anti-HBs                                     |                   |      |  |
|      | 6. HIV 1&2 Ab+Ag Screen                         |                   |      |  |
|      | 7. Rubella IgG                                  |                   |      |  |
| ATE  | <b>Antenatal Screen – E</b>                     | 3 ml EDTA         | 2    |  |
|      | 1. Full Blood Count                             | 5 ml Plain        |      |  |
|      | 2. Blood Group                                  |                   |      |  |
|      | 3. Syphilis TP-Ab (reflex RPR titre if TP-Ab +) |                   |      |  |
|      | 4. HIV 1&2 Ab+Ag Screen                         |                   |      |  |
| ATF  | <b>Antenatal Screen – F</b>                     | 3 ml EDTA         | 2    |  |
|      | 1. Full Blood Count                             | 5 ml Plain        |      |  |
|      | 2. Blood Group                                  |                   |      |  |
|      | 3. Syphilis TP-Ab (reflex RPR titre if TP-Ab +) |                   |      |  |
|      | 4. HBs Ag                                       |                   |      |  |
|      | 5. Anti-HBs                                     |                   |      |  |
| ATG  | <b>Antenatal Screen – G</b>                     | 3 ml EDTA         | 2    |  |
|      | 1. Full Blood Count                             | 5 ml Plain        |      |  |
|      | 2. Blood Group                                  | 3 ml Fluoride     |      |  |
|      | 3. Glucose                                      |                   |      |  |
|      | 4. Syphilis TP-Ab (reflex RPR titre if TP-Ab +) |                   |      |  |
|      | 5. HBs Ag                                       |                   |      |  |
|      | 6. Anti-HBs                                     |                   |      |  |
|      | 7. HIV 1&2 Ab+Ag Screen                         |                   |      |  |
|      | 8. Rubella IgG                                  |                   |      |  |
| ATJ  | <b>Antenatal Screen – J</b>                     | 3 ml EDTA         | 2    |  |
|      | 1. Full Blood Count                             | 5 ml Plain        |      |  |
|      | 2. Blood Group                                  |                   |      |  |
|      | 3. TSH                                          |                   |      |  |
|      | 4. Syphilis TP-Ab (reflex RPR titre if TP-Ab +) |                   |      |  |
|      | 5. HBs Ag                                       |                   |      |  |
|      | 6. Anti-HBs                                     |                   |      |  |
|      | 7. HIV 1&2 Ab+Ag Screen                         |                   |      |  |
|      | 8. Rubella IgG                                  |                   |      |  |
| CXC  | <b>Cervical Cancer Risk - A</b>                 | Cervical brush in | 7-10 |  |
|      | 1. HPV DNA Genotyping (All types)               | Collection vial   |      |  |
|      | 2. Liquid-based PAP Test                        |                   |      |  |

| Code | Test Description                                                                                                                                | Specimen Type                        | TAT |  |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----|--|
| CXCQ | <b>Cervical Cancer Risk - B</b><br>1. HPV DNA Screen – 16, 18 & other 13 high risk types<br>2. Liquid-based PAP Test                            | Cervical brush in<br>Collection vial | 5-7 |  |
| HIR  | <b>Hirsutism Studies</b><br>1. DHEA-S<br>2. Testosterone, Total<br>(consider adding 17-OH-Progestrone)                                          | 5 ml Plain                           | 5   |  |
| IFFA | <b>Fertility Hormonal Studies – Female A</b><br>1. Prolactin<br>2. FSH<br>3. LH<br>4. Progesterone (P4)<br>5. Estradiol (E2)                    | 5 ml Plain                           | 3   |  |
| IFFB | <b>Fertility Hormonal Studies – Female B</b><br>1. FSH<br>2. Progesterone (P4)<br>3. Prolactin                                                  | 5 ml Plain                           | 3   |  |
| IFFC | <b>Fertility Hormonal Studies – Female C</b><br>1. FSH<br>2. LH<br>3. Prolactin                                                                 | 5 ml Plain                           | 3   |  |
| IFFD | <b>Fertility Hormonal Studies – Female D</b><br>1. FSH<br>2. LH<br>3. Progesterone (P4)<br>4. Estradiol (E2)<br>5. Anti-Mullerian Hormone (AMH) | 5 ml Plain                           | 7   |  |
| IFM  | <b>Fertility Hormonal Studies – Male</b><br>1. Prolactin<br>2. FSH<br>3. LH<br>4. Total Testosterone                                            | 5 ml Plain                           | 3   |  |
| MEHA | <b>Menopausal Hormone Studies – A</b><br>1. FSH<br>2. LH<br>3. Estradiol (E <sub>2</sub> )<br>4. Prolactin<br>5. TSH (ultra-sensitive)          | 5 ml Plain                           | 3   |  |

| Code | Test Description                                                                                                         | Specimen Type | TAT |  |
|------|--------------------------------------------------------------------------------------------------------------------------|---------------|-----|--|
| MEHB | <b>Menopausal Hormone Studies – B</b><br>1. FSH<br>2. LH<br>3. Estradiol (E <sub>2</sub> )                               | 5 ml Plain    | 3   |  |
| OFE  | <b>Ovarian Function Evaluation</b><br>1. FSH<br>2. LH<br>3. LH/FSH Ratio                                                 | 5 ml Plain    | 5   |  |
| MCS  | <b>Menstrual Cycle Studies</b><br>1. FSH<br>2. LH<br>3. Estradiol (E <sub>2</sub> )<br>4. Progesterone (P <sub>4</sub> ) | 5 ml Plain    | 5   |  |

| <b>Prenatal &amp; Hereditary Genetic Assay:</b> |                                                                                                                                            | <i>*Use Prenatal &amp; Genetic Test Requisition Form</i>                         |       |  |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------|--|
| CYTOOA                                          | <b>Chromosomal Microarray Analysis (CMA) ~ CytoOneArray (Prenatal / Postnatal)</b><br>Detect 327 chromosomal abnormalities                 | Prenatal:<br>15ml Amniotic Fluid<br>Postnatal:<br>2x 3 ml EDTA Blood /Cord Blood | 7-14  |  |
| FE1P                                            | <b>Foetal Screen- 1<sup>st</sup> Trimester Test</b><br>1. PAPP-A<br>2. βhCG, Free<br>3. NT measurement (by physician)<br>4. Risk Profiling | 5 ml plain<br>Taken between 11-13 wks<br>of gestation                            | 12-14 |  |
| FE4P                                            | <b>Foetal Screen- 2<sup>nd</sup> Trimester Quadruple Test</b><br>1. AFP<br>2. βhCG, Total<br>3. uE3<br>4. Inhibin A<br>5. Risk Profiling   | 5 ml Plain<br>Taken between 15-20 wks<br>of gestation                            | 12-14 |  |

| Code  | Test Description                                                                                                                                                                                                                                   | Specimen Type                                         | TAT   |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------|
| FEPRE | <b>Pre-Eclampsia Risk at 1st Trimester</b><br>1. PAPP-A<br>2. PIGF<br>3. Risk profiling for Pre-eclampsia & IUGR                                                                                                                                   | 5 ml Plain<br>Taken between 11-13 wks<br>of gestation | 12-14 |
| FE1PR | <b>Pre-Eclampsia Risk &amp; Foetal Screen for 1st Trimester</b><br>1. $\beta$ hCG, free<br>2. PAPP-A<br>3. PIGF<br>4. Risk Profiling for Trisomy 21, 18, 13, Pre-Eclampsia & IUGR                                                                  | 5 ml Plain<br>Taken between 11-13 wks<br>of gestation | 12-14 |
| FEPR2 | <b>Pre-Eclampsia Risk at 2nd &amp; Late Trimester</b><br>1. sFlt-1<br>2. PAPP-A<br>3. Risk Profiling for Pre-Eclampsia                                                                                                                             | 5 ml Plain<br>Taken between 15-20 wks<br>of gestation | 12-14 |
| GHRA  | <b>Genetic Hereditary Risk Profile - A</b><br>1. Fragile X Syndrome (FXS) Genetic Assay<br>2. Spinal Muscular Atrophy (SMA) Genetic Assay<br>3. Huntington's Disease Genetic Assay<br>4. Methylenetetrahydrofolate reductase (MTHFR) Genetic Assay | 2x 3 ml EDTA Blood                                    | 7-14  |

## Haematology & Coagulation

| Code | Test Description                                 | Specimen Type | TAT |  |
|------|--------------------------------------------------|---------------|-----|--|
| AEA  | <b>Anaemia Studies – A</b>                       | 3 ml EDTA     | 3   |  |
|      | 1. Full Blood Picture                            | 5 ml Plain    |     |  |
|      | 2. Serum Iron                                    |               |     |  |
|      | 3. Transferrin                                   |               |     |  |
|      | 4. TIBC                                          |               |     |  |
|      | 5. % Transferrin Saturation                      |               |     |  |
|      | 6. Ferritin                                      |               |     |  |
| AEB  | <b>Anaemia Studies – B</b>                       | 3 ml EDTA     | 5-7 |  |
|      | 1. Full Blood Picture                            | 5 ml Plain    |     |  |
|      | 2. Serum Iron                                    |               |     |  |
|      | 3. Transferrin                                   |               |     |  |
|      | 4. TIBC                                          |               |     |  |
|      | 5. % Transferrin Saturation                      |               |     |  |
|      | 6. Ferritin                                      |               |     |  |
|      | 7. Vitamin B12                                   |               |     |  |
| AEC  | <b>Anaemia Studies – C</b>                       | 3 ml EDTA     | 5-7 |  |
|      | 1. Full Blood Picture                            | 5 ml Plain    |     |  |
|      | 2. Vitamin B12                                   |               |     |  |
|      | 3. Folic Acid                                    |               |     |  |
| IRO  | <b>Iron Status Evaluation</b>                    | 5 ml Plain    | 5   |  |
|      | 1. Serum Iron                                    |               |     |  |
|      | 2. TIBC                                          |               |     |  |
|      | 3. Transferrin                                   |               |     |  |
|      | 4. % Transferrin Saturation                      |               |     |  |
| FBC  | <b>Full Blood Count</b>                          | 3 ml EDTA     | 1   |  |
|      | 1. Haemoglobin (Hb)                              |               |     |  |
|      | 2. Red Blood Count (RBC)                         |               |     |  |
|      | 3. Haematocrit (Hct/PCV)                         |               |     |  |
|      | 4. Mean Corpuscular Volume (MCV)                 |               |     |  |
|      | 5. Mean Corpuscular Hb (MCH)                     |               |     |  |
|      | 6. Mean Corpuscular Hb Conc. (MCHC)              |               |     |  |
|      | 7. Red Cell Distribution Width (RDW)             |               |     |  |
|      | 8. White Blood Cell Count (WBC)                  |               |     |  |
|      | 9. White Blood Cell Differential Count (5 parts) |               |     |  |
|      | 10. Platelet Count (PLT)                         |               |     |  |
| FBCC | <b>Full Blood Count with CRP (titter)</b>        | 3 ml EDTA     | 1   |  |
|      | 1. Full Blood Count                              | 2 ml Plain    |     |  |
|      | 2. High-Sensitive C-Reactive Protein             |               |     |  |

| Code                                           | Test Description                                                                                                    | Specimen Type                                            | TAT   |  |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-------|--|
| FBPC                                           | <b>Full Blood Picture with CRP (titter)</b>                                                                         | 3 ml EDTA                                                | 1     |  |
|                                                | 1. Full Blood Count                                                                                                 | 2 ml Plain                                               |       |  |
|                                                | 2. High-Sensitive C-Reactive Protein                                                                                |                                                          |       |  |
|                                                | 3. Blood Film Comment*                                                                                              |                                                          |       |  |
|                                                |                                                                                                                     |                                                          |       |  |
| FBP                                            | <b>Full Blood Picture with ESR</b>                                                                                  | 3 ml EDTA (min. 2 ml)                                    | 1     |  |
|                                                | 1. Full Blood Count                                                                                                 |                                                          |       |  |
|                                                | 2. Erythrocyte Sedimentation Rate (ESR)                                                                             |                                                          |       |  |
|                                                | 3. Blood Film Comment*                                                                                              |                                                          |       |  |
| BFCH                                           | <i>* If Blood film refer to &amp; comment by Haematologist</i>                                                      |                                                          | 3-5   |  |
|                                                |                                                                                                                     |                                                          |       |  |
| THLA                                           | <b>Thalassaemia Studies – A</b>                                                                                     | 2x 3 ml EDTA                                             | 5     |  |
|                                                | 1. Full Blood Picture                                                                                               | 5 ml Plain                                               |       |  |
|                                                | 2. Serum Iron                                                                                                       |                                                          |       |  |
|                                                | 3. Transferrin                                                                                                      |                                                          |       |  |
|                                                | 4. TIBC                                                                                                             |                                                          |       |  |
|                                                | 5. % Iron Saturation                                                                                                |                                                          |       |  |
|                                                | 6. Haemoglobin Electrophoresis                                                                                      |                                                          |       |  |
|                                                | 7. Comment and Interpretation by Consultant Haematologist                                                           |                                                          |       |  |
|                                                |                                                                                                                     |                                                          |       |  |
| THLB                                           | <b>Thalassaemia Studies – B</b>                                                                                     | 2x 3 ml EDTA                                             | 5     |  |
|                                                | 1. Full Blood Picture                                                                                               | 5 ml Plain                                               |       |  |
|                                                | 2. Serum Iron                                                                                                       |                                                          |       |  |
|                                                | 3. Transferrin                                                                                                      |                                                          |       |  |
|                                                | 4. TIBC                                                                                                             |                                                          |       |  |
|                                                | 5. % Iron Saturation                                                                                                |                                                          |       |  |
|                                                | 6. Ferritin                                                                                                         |                                                          |       |  |
|                                                | 7. Haemoglobin Electrophoresis                                                                                      |                                                          |       |  |
| 8. Comment and Interpretation by Haematologist |                                                                                                                     |                                                          |       |  |
|                                                |                                                                                                                     |                                                          |       |  |
| THLD                                           | <b>Thalassaemia DNA Analysis (both Alpha &amp; Beta)</b><br>(for couples of suspected carrier if MCV <80 & MCH <25) | 2x 3 ml EDTA (Cord Blood for neonate)                    | 7-14  |  |
|                                                | 1. Hb Electrophoresis                                                                                               | 5 ml Plain                                               |       |  |
|                                                | 2. Serum Ferritin                                                                                                   | <i>*Use Prenatal &amp; Genetic Test Requisition Form</i> |       |  |
|                                                | 3. Genetic detection of abnormalities for both alpha & beta-thalassaemia                                            |                                                          |       |  |
|                                                |                                                                                                                     |                                                          |       |  |
| THLDA                                          | <b>Thalassaemia DNA Analysis, Alpha (7 mutations)</b>                                                               | 2x 3 ml EDTA (Cord Blood for neonate)                    | 7-14  |  |
| THLDB                                          | <b>Thalassaemia DNA Analysis, Beta (22 mutations)</b>                                                               | 2x 3 ml EDTA (Cord Blood for neonate)                    | 7-14  |  |
|                                                |                                                                                                                     |                                                          |       |  |
| COA                                            | <b>Coagulation Studies</b>                                                                                          | 2x 2 ml Citrate (1:9)                                    | 2     |  |
|                                                | 1. Platelet Count                                                                                                   | 3 ml EDTA                                                |       |  |
|                                                | 2. Prothrombin Time (PT)                                                                                            |                                                          |       |  |
|                                                | 3. Activated Partial Thromboplastin Time (APTT)                                                                     |                                                          |       |  |
|                                                |                                                                                                                     |                                                          |       |  |
| TBPS                                           | <b>Thrombophilia Screen</b>                                                                                         | 2x 2 ml Citrate (1:9)                                    | 14-21 |  |
|                                                | 1. Anti-Thrombin III                                                                                                | (double spin, freeze plasma)                             |       |  |
|                                                | 2. Protein C                                                                                                        |                                                          |       |  |
|                                                | 3. Protein S                                                                                                        |                                                          |       |  |

## Hepatobiliary & Gastrointestinal

| Code | Test Description                                                                                                                                                                                                                               | Specimen Type             | TAT   |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------|
| ALDA | <b>Autoimmune Liver-Disease (ALD) Antibody Panel</b><br>Included Antibodies:<br>AMA-M2 (Anti-Mitochondrial Antibody)<br>LKM-1 (Liver Kidney Microsomal type 1)<br>LC-1 (Liver Cytosol type 1)<br>SLA/LP (Soluble Liver Antigen/Liver Pancreas) | 5 ml Plain                | 14-16 |
| COLS | <b>Colitis Studies</b><br>1. Stool Culture<br>2. <i>C. difficile</i> Culture & Toxins<br>3. ANCA & pattern<br>4. Faecal Occult Blood                                                                                                           | Fresh Stool<br>5 ml Plain | 5-10  |
| DIAR | <b>Diarrhoea Studies</b><br>1. Stool Culture<br>2. Faecal Ova & Parasite<br>3. Rotavirus Ag                                                                                                                                                    | Fresh Stool               | 3-5   |
| DYSP | <b>Dyspepsia Studies</b><br>1. Full Blood Count<br>2. <i>H. pylori</i> IgG<br>3. Amylase<br>4. Liver Function Tests<br>(may consider adding Gastrin)                                                                                           | 3 ml EDTA<br>5 ml Plain   | 3     |
| HABC | <b>Hepatitis ABC Screen</b><br>1. Anti-HAV (HAV IgG)<br>2. HBs Ag<br>3. Anti-HBs<br>2. Anti-HCV                                                                                                                                                | 5 ml Plain                | 2     |
| HBC  | <b>Hepatitis B Carrier Studies – A</b><br>1. AST<br>2. ALT<br>3. AFP<br>4. HBe Ag<br>5. Anti-HBe                                                                                                                                               | 5 ml Plain                | 4     |
| HBCB | <b>Hepatitis B Carrier Studies – B</b><br>1. AST<br>2. ALT<br>3. AFP<br>4. HBs Ag, <b>Quantitative</b><br>5. HBe Ag<br>6. Anti-HBe                                                                                                             | 5 ml Plain                | 5     |

| Code | Test Description                                                                                                                                                                                                                                                                   | Specimen Type                    | TAT  |  |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------|--|
| HBS  | <b>Hepatitis B Screening</b><br>1. HBs Ag<br>2. Anti-HBs                                                                                                                                                                                                                           | 5 ml Plain                       | 2    |  |
| HBT  | <b>Hepatitis B Treatment Monitoring</b><br>1. AST<br>2. ALT<br>3. AFP<br>4. HBe Ag<br>5. Anti-HBe<br>6. HBV DNA Viral Load                                                                                                                                                         | 5 ml Plain<br>3 ml EDTA (Plasma) | 7-10 |  |
| HCT  | <b>Hepatitis C Treatment Monitoring</b><br>1. AST<br>2. ALT<br>3. AFP<br>4. HCV-RNA Viral Load                                                                                                                                                                                     | 5 ml Plain<br>3 ml EDTA (Plasma) | 7-14 |  |
| HIS  | <b>Hepatitis Immune Status Profile</b><br>1. HBs Ag<br>2. Anti-HBs<br>3. Anti-HAV (HAV IgG)                                                                                                                                                                                        | 5 ml Plain                       | 2    |  |
| LFT  | <b>Liver Function Test</b><br>1. Bilirubin, Total<br>2. Bilirubin, Direct & Indirect (if T.Bil elevated)<br>3. Total Protein<br>4. Albumin<br>5. Globulin<br>6. A/G Ratio<br>7. Alkaline Phosphates (ALP)<br>8. AST (SGOT)<br>9. ALT (SGPT)<br>10. γ-Glutamyl Transpeptidase (GGT) | 5 ml Plain                       | 1    |  |
| MALS | <b>Malabsorption Studies</b><br>1. Full Blood Count<br>2. Ferritin<br>3. Folic Acid, Serum<br>4. Vitamin B12<br>5. Calcium<br>6. Liver Function Tests                                                                                                                              | 3 ml EDTA<br>5 ml Plain          | 7    |  |

| Code | Test Description                                         | Specimen Type | TAT |  |
|------|----------------------------------------------------------|---------------|-----|--|
| PEP  | <b>Protein Electrophoresis, Serum</b>                    | 5 ml Plain    | 5   |  |
| UPEP | <b>Protein Electrophoresis, Urine</b>                    | 20 ml FMU     | 5   |  |
|      | 1. Total Protein                                         |               |     |  |
|      | 2. Albumin                                               |               |     |  |
|      | 3. Alpha 1 Globulin                                      |               |     |  |
|      | 4. Alpha 2 Globulin                                      |               |     |  |
|      | 5. Beta Globulin                                         |               |     |  |
|      | 6. Gamma Globulin                                        |               |     |  |
|      | (consider Immunofixation Ep if paraprotein is suspected) |               |     |  |
| VHD  | <b>Viral Hepatitis Diagnostic</b>                        | 5 ml Plain    | 2-5 |  |
|      | 1. Liver Function Tests                                  |               |     |  |
|      | 2. HAV IgM                                               |               |     |  |
|      | 3. HBs Ag                                                |               |     |  |
|      | 4. HBc IgM (If HBs Ag Positive)                          |               |     |  |
|      | 5. Anti-HCV                                              |               |     |  |

## Infectious Diseases

| Code | Test Description                                                                                                                                                                                                                                        | Specimen Type                                                                                                                                                          | TAT  |  |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|
| DEN1 | <b>Dengue Antigen &amp; FBC</b><br>(recommend if fever within 1-5 days)<br>1. Full Blood Count<br>2. Dengue NS1 Antigen                                                                                                                                 | 3 ml EDTA<br>5 ml Plain                                                                                                                                                | 1    |  |
| DEN2 | <b>Dengue Duo Tests</b><br>(recommend if fever within 1-14 days)<br>1. Full Blood Count<br>2. Dengue NS1 Antigen<br>3. Dengue IgG & IgM                                                                                                                 | 3 ml EDTA<br>5 ml Plain                                                                                                                                                | 1    |  |
| DEN3 | <b>Dengue IgG/IgM &amp; FBC</b><br>(recommend if fever within 5-14 days)<br>1. Full Blood Count<br>2. Dengue IgG & IgM, rapid test                                                                                                                      | 3 ml EDTA<br>5 ml Plain                                                                                                                                                | 1    |  |
| FEBA | <b>Febrile Studies - A</b><br>1. Full Blood Count & Blood Film<br>2. Hs-CRP<br>3. Malarial Parasites<br>4. Widal Test (Typhoid)<br>5. Weil Felix Test (Typhus)<br>6. Monospot (Infectious Mononucleosis)<br>7. Urine FEME                               | 3 ml EDTA<br>5 ml Plain<br>20 ml Urine                                                                                                                                 | 1    |  |
| FEBB | <b>Febrile Studies – B</b><br>1. Full Blood Count & Blood Film<br>2. Hs-CRP<br>2. Malarial Parasites<br>3. Widal Test (Typhoid)<br>4. Weil Felix Test (Typhus)<br>5. Monospot (Infectious Mononucleosis)<br>6. Urine FEME<br>7. Dengue IgG & IgM, rapid | 3 ml EDTA<br>5 ml Plain<br>20 ml Urine                                                                                                                                 | 1    |  |
| HIVM | <b>HIV Monitoring</b><br>1. CD4 & CD8 Count<br>2. HIV RNA Viral Load (by RT-PCR)                                                                                                                                                                        | 3x 3 ml EDTA<br><b>Call Lab</b>                                                                                                                                        | 7-14 |  |
| STDA | <b>STD Studies –A</b> ( <i>asymptomatic screen</i> )<br>1. Syphilis TP-Ab (reflex RPR if Pos)<br>2. HIV 1&2 Ab+Ag Screen<br>3. HSV type 1 IgG<br>4. HSV type 2 IgG<br>5. <i>Chlamydia trachomatis</i> DNA<br>6. <i>Neisseria gonorrhoeae</i> DNA        | 5 ml Plain<br><br>Female & Male (prefer):<br>1x Genital / Urethral Swab, Plain<br>(Use plain flocked swab without medium, avoid cotton swab)<br>Male: First Void Urine | 2-5  |  |

| Code | Test Description                                                                                                                                                                                                                             | Specimen Type                                                                                                                                                       | TAT  |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| STDB | <b>STD Studies - B</b><br><i>(with lesions, lymph nodes enlargement)</i><br>1. Syphilis TP-Ab (reflex RPR if Pos)<br>2. <i>Treponema pallidum</i> DNA<br>3. Herpes simplex virus DNA type 1 & 2                                              | 5 ml Plain<br><br>Swab/ Scraping from lesions                                                                                                                       | 2-5  |
| STDC | <b>STD Studies - C</b><br><i>(with discharge, dysuria)</i><br>1. Gram's Stain for Gonococcus/Candida<br>2. Wet Mount for Trichomonas<br>3. Swab C & S, Genital<br>4. <i>Chlamydia trachomatis</i> DNA<br>5. <i>Neisseria gonorrhoeae</i> DNA | 2x Genital / Urethral Swab in<br>Medium (avoid cotton swab)<br>1x Genital / Urethral Swab, Plain<br>(Use plain flocked swab without<br>medium, avoid cotton swab)   | 2-5  |
| STDD | <b>STD Studies – D (Female Only)</b><br><i>(suspect pelvic inflammatory disease)</i><br>1. C-Reactive Protein, quantitative<br>2. <i>Chlamydia trachomatis</i> DNA<br>3. <i>Neisseria gonorrhoeae</i> DNA<br>4. Swab C & S, Cervical         | 5 ml Plain<br><br>1x Genital Swab in 1x in<br>Medium (avoid cotton swab)<br>1x Genital Swab, Plain<br>(Use plain flocked swab without<br>medium, avoid cotton swab) | 1-5  |
| STDE | <b>STD Studies – E (common screening)</b><br>1. Syphilis TP-Ab (reflex RPR if Pos)<br>3. HIV 1&2 Ab+Ag Screen<br>4. Hepatitis Bs Ag<br>5. Hepatitis Bs Ab                                                                                    | 5 ml Plain                                                                                                                                                          | 2    |
| STDG | <b>STD Studies - G</b><br>1. Syphilis TP-Ab (reflex RPR if Pos)<br>3. HIV 1&2 Ab+Ag Screen<br>4. HSV type 1 IgG<br>5. HSV type 2 IgG<br>6. <i>Chlamydia</i> IgG                                                                              | 5 ml Plain                                                                                                                                                          | 2-5  |
| STPA | <b>STD PCR Profile – A</b><br>1. Human papillomavirus (HPV) DNA Screen (type 16, 18 & HR)<br>2. <i>Chlamydia trachomatis</i> DNA<br>3. <i>Neisseria gonorrhoeae</i> DNA<br>4. Herpes simplex type 1 & 2 DNA                                  | Female & Male (prefer):<br>1x Genital / Urethral Swab, Plain<br>(Use plain flocked swab without<br>medium, avoid cotton swab)<br>Male: First Void Urine             | 7-14 |

| Code | Test Description                                                                                                                                                                                                                                                                                                                                                       | Specimen Type                                                                                                                                                             | TAT |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| STPB | <b>STD PCR Profile – B</b><br>1. Herpes simplex type 1 & 2 DNA<br>2. <i>Chlamydia trachomatis</i> DNA<br>3. <i>Neisseria gonorrhoeae</i> DNA<br>4. <i>Treponema pallidum</i> DNA with<br>5. Syphilis TP-Ab (reflex RPR if Pos)                                                                                                                                         | 5 ml Plain<br><br>Female & Male (prefer):<br>1x Genital / Urethral Swab, Plain<br>(Use plain flocked swab without<br>medium, avoid cotton swab)<br>Male: First Void Urine | 5-7 |
| STPC | <b>STD PCR Profile – C</b><br>1. <i>Chlamydia trachomatis</i> DNA<br>2. <i>Neisseria gonorrhoeae</i> DNA<br>3. <i>Trichomonas vaginalis</i> DNA<br>4. <i>Mycoplasma hominus</i> DNA<br>5. <i>Mycoplasma genitalium</i> DNA<br>6. <i>Ureaplasma urealyticum</i> DNA<br>7. <i>Ureaplasma parvum</i> DNA                                                                  | Female & Male (prefer):<br>1x Genital / Urethral Swab, Plain<br>(Use plain flocked swab without<br>medium, avoid cotton swab)<br>Male: First Void Urine                   | 7   |
| UPRD | <b>STD PCR Profile – 3-in-1 Mycoplasma Test (TMT Test)</b><br>1. <i>Mycoplasma hominus</i> DNA<br>2. <i>Mycoplasma genitalium</i> DNA<br>3. <i>Ureaplasma urealyticum</i> DNA                                                                                                                                                                                          | Female & Male (prefer):<br>1x Genital / Urethral Swab, Plain<br>(Use plain flocked swab without<br>medium, avoid cotton swab)<br>Male: First Void Urine                   | 7   |
| STPD | <b>STD PCR Profile – D</b><br>1. Human papillomavirus (HPV) DNA Screen (type 16, 18 & HR)<br>2. <i>Chlamydia trachomatis</i> DNA<br>3. <i>Neisseria gonorrhoeae</i> DNA<br>4. Herpes simplex type 1 & 2 DNA<br>5. <i>Trichomonas vaginalis</i> DNA<br>6. <i>Candida albicans</i> DNA<br>7. <i>Treponema pallidum</i> DNA with<br>8. Syphilis TP-Ab (reflex RPR if +ve) | 5 ml Plain<br><br>Female & Male (prefer):<br>1x Genital / Urethral Swab, Plain<br>(Use plain flocked swab without<br>medium, avoid cotton swab)<br>Male: First Void Urine | 7   |
| TOR  | <b>TORCH Infection</b><br>1. Toxoplasma IgM<br>2. Rubella IgM<br>3. CMV IgM<br>4. HSV type 1 IgM<br>5. HSV type 1 IgM<br>6. TP-Ab (reflex RPR if Pos)                                                                                                                                                                                                                  | 5 ml Plain                                                                                                                                                                | 3-5 |
| TOS  | <b>TORCH Screen</b><br>1. <i>Toxoplasma</i> IgG<br>2. Rubella IgG<br>3. CMV IgG<br>4. HSV type 1 IgG<br>5. HSV type 2 IgG<br>6. TP-Ab (reflex RPR if Pos)                                                                                                                                                                                                              | 5 ml Plain                                                                                                                                                                | 3   |

| <i><b>Paediatric</b></i> |                                                                                                                                                                                                                  |                                                                              |            |  |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|--|
| <b>Code</b>              | <b>Test Description</b>                                                                                                                                                                                          | <b>Specimen Type</b>                                                         | <b>TAT</b> |  |
| NNJA                     | <b>Neonatal Jaundice Studies A</b><br>1. Bilirubin, total<br>2. Bilirubin, direct & indirect                                                                                                                     | 1 ml Plain (paediatric vial)<br>(avoid light)                                | 1          |  |
| NNJB                     | <b>Neonatal Jaundice Studies B</b><br>1. Bilirubin, total<br>2. Bilirubin, direct & indirect<br>3. Full Blood Count & Film Comment<br>4. Coomb's Test, direct                                                    | 1 ml Plain (paediatric vial)<br>(avoid light)<br>1 ml EDTA (paediatric vial) | 1          |  |
| NNA                      | <b>Neonatal Screen A</b><br>1. ABO & Rh Blood Group<br>2. G6PD Screen<br>3. TSH                                                                                                                                  | 3 ml EDTA<br>5 ml Plain<br>(Neonate's blood<br>or Cord blood)                | 1          |  |
| NNB                      | <b>Neonatal Screen B</b><br>1. ABO & Rh Blood Group<br>2. G6PD Screen<br>3. TSH<br>4. Syphilis TP-Ab (reflex RPR if Pos)                                                                                         | 3 ml EDTA<br>5 ml Plain<br>(Neonate's blood<br>or Cord blood)                | 1          |  |
| NNC                      | <b>Neonatal Screen C</b><br>1. ABO & Rh Blood Group<br>2. G6PD Screen<br>3. TSH<br>4. Neonatal IgE (Low range) for Allergy Risk                                                                                  | 3 ml EDTA<br>5 ml Plain<br>(Neonate's blood<br>or Cord blood)                | 5          |  |
| NHS                      | <b>Neonatal Health Screen</b><br>1. ABO & Rh Blood Group<br>2. G6PD (Quantitative)<br>3. TSH<br>4. Neonatal IgE (Low range) for Allergy Risk<br>5. Amino Acid Analysis (22 types) for Inborn Error of Metabolism | 3 ml EDTA<br>5 ml Plain<br>(Neonate's blood<br>or Cord blood)                | 7-10       |  |

## Renal & Urinary

| Code  | Test Description                                                          | Specimen Type                   | TAT  |  |
|-------|---------------------------------------------------------------------------|---------------------------------|------|--|
| DIM1  | <b>Dialysis Indices Monitor – 1</b>                                       | 3 ml EDTA                       | 2    |  |
|       | 1. Full Blood Count                                                       | 5 ml Plain (Pre-Dialysis)       |      |  |
|       | 2. hs-CRP                                                                 | 3 ml Plain (Post-Dialysis)      |      |  |
|       | 3. Liver Function Test                                                    | 3 ml Fluoride                   |      |  |
|       | 4. Renal Function Test (Creatinine Enzymatic method) with Pre & Post Urea |                                 |      |  |
|       | 5. Calcium w corrected Ca                                                 |                                 |      |  |
|       | 6. Phosphorus                                                             |                                 |      |  |
|       | 7. Glucose                                                                |                                 |      |  |
| DIM2  | <b>Dialysis Indices Monitor - 2</b>                                       | 3 ml EDTA                       | 2    |  |
|       | 1. Full Blood Count                                                       | 5 ml Plain (Pre-Dialysis)       |      |  |
|       | 2. hs-CRP                                                                 | 3 ml Plain (Post-Dialysis)      |      |  |
|       | 3. Liver Function Test                                                    | 3 ml Fluoride                   |      |  |
|       | 4. Renal Function Test (Creatinine Enzymatic method) with Pre & Post Urea |                                 |      |  |
|       | 5. Calcium w corrected Ca                                                 |                                 |      |  |
|       | 6. Phosphorus                                                             |                                 |      |  |
|       | 7. Glucose                                                                |                                 |      |  |
|       | 8. Iron Status (Iron, Transferrin, % Saturation & TIBC)                   |                                 |      |  |
|       | 10. Ferritin                                                              |                                 |      |  |
|       | 11. Treponema pallidum Ab (TP-Ab) (reflex RPR titter)                     |                                 |      |  |
|       | 12. Hep. B Ag & Ab                                                        |                                 |      |  |
|       | 13. Hep. C Ab                                                             |                                 |      |  |
|       | 14. HIV 1&2 Ag+Ab                                                         |                                 |      |  |
| DIM3  | <b>Dialysis Indices Monitor - 3</b>                                       | 3 ml EDTA X 2                   | 5    |  |
|       | As DIM2 plus                                                              | 5 ml Plain (Pre-Dialysis)       |      |  |
|       | 15. I-PTH                                                                 | 3 ml Plain (Post-Dialysis)      |      |  |
|       |                                                                           | 3 ml Fluoride                   |      |  |
| DIM4  | <b>Dialysis Indices Monitor - 4</b>                                       | Same as above                   | 5    |  |
|       | As DIM3 plus                                                              |                                 |      |  |
|       | 16. HbA1c                                                                 |                                 |      |  |
|       | <b>Tag-on for DIM Profiles</b>                                            |                                 |      |  |
| ABORH | ABO & RH Group                                                            |                                 | 1    |  |
| IRST  | Iron Status (Iron, Transferrin , % & TIBC)                                |                                 | 2    |  |
| FER   | Ferritin                                                                  |                                 | 3    |  |
| A1C   | HbA1c                                                                     |                                 | 2    |  |
| GALB  | Glycated Albumin                                                          |                                 | 3    |  |
| IPTH  | i-PTH                                                                     |                                 | 5    |  |
| EPO   | Erythropoietin                                                            |                                 | 7    |  |
| ALU   | Serum Aluminum                                                            | 3 ml Trace Element Tube Heparin | 7-10 |  |
| DIVA  | <b>Dialysis Virology Screen - A</b>                                       | 5 ml Plain                      | 2    |  |
|       | 1. Hepatitis Bs Ag & Ab                                                   |                                 |      |  |
|       | 3. HCV Ab                                                                 |                                 |      |  |
|       | 4. HIV 1&2 Ab+Ag Screen                                                   |                                 |      |  |
|       | 5. Treponema pallidum Ab (TP-Ab) (reflex RPR titter)                      |                                 |      |  |

| Code  | Test Description                                                                                                                                                                                                                                                | Specimen Type                              | TAT  |  |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------|--|
| GNS   | <b>Glomerulonephritis Serology</b><br>1. Anti-Neutrophil Cytoplasmic Ab (ANCA) with pattern<br>2. Glomerular Basement Membrane Ab (Anti-GBM)<br>3. Anti-Nuclear Ab (ANA) with pattern<br>4. Immunoglobulin A (IgA)<br>6. Complement C3<br>7. ASOT, Quantitative | 5 ml Plain                                 | 7-14 |  |
| RFT   | <b>Renal Function Test</b><br>1. Urea<br>2. Creatinine w eGFR<br>3. Uric Acid<br>4. Sodium<br>5. Potassium<br>6. Chloride                                                                                                                                       | 5 ml Plain                                 | 1    |  |
| RFS   | <b>Renal Function Studies</b><br>1. Urea<br>2. Creatinine w eGFR<br>3. Uric Acid<br>4. Sodium<br>5. Potassium<br>6. Chloride<br>7. Albumin<br>8. Phosphorus<br>9. Calcium with corrected Ca<br>10. Urine FEME                                                   | 5 ml Plain<br>20 ml MSU                    | 1    |  |
| GFRCY | <b>Estimated Glomerular Filtration Rate (with Cystatin C)</b><br>1. Serum Creatinine<br>2. Serum Cystatin C<br>3. eGFR cr-cys (with CKD-EPI 2012 calculation)                                                                                                   | 5 ml Plain<br>(Provide Age, Race & Gender) | 5    |  |

### ***Rheumatology, Immunology & Allergy***

| <b>Code</b> | <b>Test Description</b>                                                                                                  | <b>Specimen Type</b> | <b>TAT</b> |  |
|-------------|--------------------------------------------------------------------------------------------------------------------------|----------------------|------------|--|
| ARSA        | <b>Arthritis Screen - A</b>                                                                                              | 3 ml EDTA            | 3          |  |
|             | 1. Full Blood Count                                                                                                      | 5 ml Plain           |            |  |
|             | 2. ESR                                                                                                                   |                      |            |  |
|             | 3. C-Reactive Protein, high sensitive                                                                                    |                      |            |  |
|             | 4. Rheumatoid Factor                                                                                                     |                      |            |  |
|             | 5. Uric Acid                                                                                                             |                      |            |  |
|             | 6. Anti-Nuclear Abs (CLIA Quantitative)                                                                                  |                      |            |  |
|             | 7. ASOT (latex agglutination)                                                                                            |                      |            |  |
| ARSAF       | <b>Note: Substitute No.6 ANAQ with ANA by IFA</b>                                                                        |                      | 10         |  |
| ARSB        | <b>Arthritis Studies - B</b>                                                                                             | 3 ml EDTA            | 3          |  |
|             | 1. Full Blood Count                                                                                                      | 5 ml Plain           |            |  |
|             | 2. ESR                                                                                                                   |                      |            |  |
|             | 3. C-Reactive Protein, high sensitive                                                                                    |                      |            |  |
|             | 4. Calcium                                                                                                               |                      |            |  |
|             | 5. Phosphorous                                                                                                           |                      |            |  |
|             | 6. Uric Acid                                                                                                             |                      |            |  |
|             | 7. Creatine Kinase (CK)                                                                                                  |                      |            |  |
|             | 8. Rheumatoid Factor                                                                                                     |                      |            |  |
|             | 9. Anti-CCP                                                                                                              |                      |            |  |
|             | 10. Anti-Nuclear Abs (CLIA Quantitative)                                                                                 |                      |            |  |
|             | 11. ASOT (latex agglutination)                                                                                           |                      |            |  |
|             | 12. TP-Ab (reflex RPR if Pos)                                                                                            |                      |            |  |
| ARSBF       | <b>Note: Substitute No.10 ANAQ with ANA by IFA</b>                                                                       |                      | 10         |  |
|             | (Recommend adding Synovial Fluid FEME/C&S for Gout/Infection, HLA-B27 for Ankylosing Spondylitis and Reactive Arthritis) |                      |            |  |
| IGEV        | <b>Immunoglobulins Evaluation</b>                                                                                        | 5 ml Plain           | 7          |  |
|             | 1. IgA                                                                                                                   |                      |            |  |
|             | 2. IgG                                                                                                                   |                      |            |  |
|             | 3. IgM                                                                                                                   |                      |            |  |
|             | 4. IgD                                                                                                                   |                      |            |  |
|             | 5. IgE                                                                                                                   |                      |            |  |
|             | (may consider Immunofixation Electrophoresis)                                                                            |                      |            |  |

| Code | Test Description                                                 | Specimen Type                          | TAT   |  |
|------|------------------------------------------------------------------|----------------------------------------|-------|--|
| IFE  | <b>Immunofixation Electrophoresis (Serum)</b>                    | 5 ml Plain                             | 10-14 |  |
| IFEU | <b>Immunofixation Electrophoresis (Urine/CSF)</b>                | 50 ml FMU / 24hr Urine<br>or 10 ml CSF | 10-14 |  |
|      | 1. IgA                                                           |                                        |       |  |
|      | 2. IgG                                                           |                                        |       |  |
|      | 3. IgM                                                           |                                        |       |  |
|      | 4. Kappa Light Chain                                             |                                        |       |  |
|      | 5. Lambda Light Chain                                            |                                        |       |  |
|      | 6. Interpretation                                                |                                        |       |  |
| LUS  | <b>Lupus Screening</b>                                           | 5 ml Plain                             | 7     |  |
|      | 1. Full Blood Count                                              | 3 ml EDTA                              |       |  |
|      | 2. ESR                                                           |                                        |       |  |
|      | 3. C-Reactive Protein, high sensitive                            |                                        |       |  |
|      | 4. Anti-Nuclear Abs (CLIA Quantitative)                          |                                        |       |  |
|      | 5. Anti-dsDNA                                                    |                                        |       |  |
| LUSF | <b>Note: Substitute No.6 ANAQ with ANA by IFA</b>                |                                        |       |  |
| LES  | <b>Lupus Erythematous Studies</b>                                | 5 ml Plain                             | 7     |  |
|      | 1. Full Blood Count                                              | 20 ml MSU                              |       |  |
|      | 2. ESR                                                           | 3 ml EDTA                              |       |  |
|      | 3. C-Reactive Protein, high sensitive                            |                                        |       |  |
|      | 4. Albumin                                                       |                                        |       |  |
|      | 5. Urea                                                          |                                        |       |  |
|      | 6. Creatinine                                                    |                                        |       |  |
|      | 7. Creatine Kinase (CK)                                          |                                        |       |  |
|      | 8. Coombs Test, Direct                                           |                                        |       |  |
|      | 10. Anti-Nuclear Abs (CLIA Quantitative)                         |                                        |       |  |
|      | 11. Anti-dsDNA                                                   |                                        |       |  |
|      | 12. Complement C3                                                |                                        |       |  |
|      | 13. Complement C4                                                |                                        |       |  |
|      | 14. Urine FEME                                                   |                                        |       |  |
|      | (may consider adding Anti-ENA)                                   |                                        |       |  |
| LESF | <b>Note: Substitute No.6 ANAQ with ANA by IFA</b>                |                                        |       |  |
| MCG  | <b>Monoclonal Gammopathy Studies</b>                             | 5 ml Plain                             | 5     |  |
|      | 1. Serum Protein Electrophoresis                                 | 20 ml FMU                              |       |  |
|      | 2. Bence-Jones Protein (agglutination)                           |                                        |       |  |
|      | 3. Beta-2 Microglobulin, Serum                                   |                                        |       |  |
|      | (may consider Serum or Urine Immunofixation Electrophoresis IFE) |                                        |       |  |
| RHES | <b>Rheumatoid Screen</b>                                         | 5 ml Plain                             | 3-5   |  |
|      | 1. Rheumatoid Factor, Quantitative                               |                                        |       |  |
|      | 2. Anti-CCP                                                      |                                        |       |  |

| Code             | Test Description                                                                                                                                                                                                                                                                                                          | Specimen Type                 | TAT |  |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----|--|
| IGE              | <b>Total IgE</b><br>For allergy screening, but low sensitivity and specificity for atopic allergy.                                                                                                                                                                                                                        | 5 ml Plain                    | 5   |  |
| IGEC             | <b>Total IgE Low Range (Neonatal)</b><br>Low range detection, for allergy risk in neonate.                                                                                                                                                                                                                                | 3 ml EDTA Cord Blood (Plasma) | 5   |  |
| ECP              | <b>Eosinophil Cationic Protein</b><br>For asthma monitoring                                                                                                                                                                                                                                                               | 5 ml Plain                    | 5   |  |
| PHAD             | <b>Phadiatop (Screening)</b><br>To differentiate between atopic and non-atopic patients. Results indicate probability for atopy. A negative result indicates that the symptoms are not caused by common environmental allergens, and the physician may explore other possibilities.<br>Sensitivity: 93%, Specificity: 89% | 5 ml Plain                    | 5-7 |  |
| <b>MIX PENAL</b> |                                                                                                                                                                                                                                                                                                                           |                               |     |  |
| fx2              | <b>fx2 Sea Food Mix</b><br>Fish, shrimp, blue mussel, tuna, salmon                                                                                                                                                                                                                                                        | 5 ml Plain                    | 7   |  |
| fx3              | <b>fx3 Grain Mix</b><br>Wheat, Oat, Maize, Sesame seed, Buckwheat                                                                                                                                                                                                                                                         | 5 ml Plain                    | 7   |  |
| fx5              | <b>fx5 Common Food Mix</b><br>Egg white, milk, fish, wheat, peanut, soya bean                                                                                                                                                                                                                                             | 5 ml Plain                    | 7   |  |
| fx7              | <b>fx7 Vegetable Mix</b><br>Tomato, Yeast, Garlic, Onion, Celery                                                                                                                                                                                                                                                          | 5 ml Plain                    | 7   |  |
| fx30             | <b>fx30 Fruit Mix</b><br>Kiwi, Mango, Banana, Avocado, Papaya                                                                                                                                                                                                                                                             | 5 ml Plain                    | 7   |  |
| hx2              | <b>hx2 House Dust Mix</b><br>House dust (Hollister-Stier Labs), <i>D. pteronyssinus</i> , <i>D. farina</i> , <i>Batella germanica</i>                                                                                                                                                                                     | 5 ml Plain                    | 7   |  |
| ex2              | <b>ex2 Animal Epidermal Mix</b><br>Cat dander, Dog dander, Guinea pig epithelium, Rat, Mouse                                                                                                                                                                                                                              | 5 ml Plain                    | 7   |  |
| mx2              | <b>mx2 Microorganisms Mix</b><br><i>Penicillium notatum</i> , <i>Cladosporium herbarum</i> , <i>Aspergillus fumigates</i> , <i>Candida albicans</i> ,<br><i>Alternaria tenuis</i> , <i>Helminthosporium halodes</i>                                                                                                       | 5 ml Plain                    | 7   |  |

| Code                                                                                                                                                                     | Test Description                          | Specimen Type         | TAT                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------|------------------------------|
| <b>Specific IgE for Individual Allergen:</b>                                                                                                                             |                                           |                       |                              |
| <b>Single Allergen</b> – Select code & allergen below                                                                                                                    |                                           | 5 ml Plain            | 7-14*                        |
| Select from any allergen below. *TAT may be delayed depends on availability of reagent stock. <b>Call Lab</b> for availability on the list below or any other allergens. |                                           |                       |                              |
| <b>Code</b>                                                                                                                                                              | <b>Allergens</b>                          | <b>Code</b>           | <b>Allergens</b>             |
| <b>MITES &amp; HOUSE DUST</b>                                                                                                                                            |                                           | <b>MICROORGANISMS</b> |                              |
| d1                                                                                                                                                                       | <i>D. pteronyssinus</i> (House dust mite) | m1                    | <i>Penicillium notatum</i>   |
| d2                                                                                                                                                                       | <i>D. farinae</i> (House dust mite)       | m2                    | <i>Cladosporium herbarum</i> |
| d201                                                                                                                                                                     | <i>Blomia tropicalis</i> (Storage mite)   | m3                    | <i>Aspergillus fumigatus</i> |
| h1                                                                                                                                                                       | House Dust (Greer Labs)                   | m5                    | <i>Candida albicans</i>      |
|                                                                                                                                                                          |                                           | m6                    | <i>Alternaria tenuis</i>     |
| <b>INSECTS</b>                                                                                                                                                           |                                           | <b>POLLENS</b>        |                              |
| i6                                                                                                                                                                       | Cockroach                                 | w1                    | Common ragweed               |
| <b>EPIDERMAL &amp; ANIMAL PROTEINS</b>                                                                                                                                   |                                           | g2                    | Bermuda grass                |
| e1                                                                                                                                                                       | Cat dander                                |                       |                              |
| e5                                                                                                                                                                       | Dog dander                                |                       |                              |
| e85                                                                                                                                                                      | Chicken feathers                          |                       |                              |
| <b>FOODS</b>                                                                                                                                                             |                                           |                       |                              |
| f1                                                                                                                                                                       | Egg White                                 | f27                   | Beef                         |
| f2                                                                                                                                                                       | Cow Milk                                  | f33                   | Orange                       |
| f3                                                                                                                                                                       | Fish (Cod)                                | f45                   | Yeast                        |
| f4                                                                                                                                                                       | Wheat                                     | f47                   | Garlic                       |
| f7                                                                                                                                                                       | Oat                                       | f48                   | Onion                        |
| f8                                                                                                                                                                       | Maize, corn                               | f49                   | Apple                        |
| f10                                                                                                                                                                      | Sesame seed                               | f75                   | Egg yolk                     |
| f11                                                                                                                                                                      | Buckwheat                                 | f83                   | Chicken                      |
| f13                                                                                                                                                                      | Peanut                                    | f84                   | Kiwi                         |
| f14                                                                                                                                                                      | Soybean                                   | f85                   | Celery                       |
| f17                                                                                                                                                                      | Hazel nut                                 | f87                   | Melon                        |
| f18                                                                                                                                                                      | Brazil nut                                | f92                   | Banana                       |
| f20                                                                                                                                                                      | Almond                                    | f93                   | Cacao (Cocoa)                |
| f23                                                                                                                                                                      | Crab                                      | f259                  | Grape                        |
| f24                                                                                                                                                                      | Shrimp                                    | f284                  | Turkey meat                  |
| f25                                                                                                                                                                      | Tomato                                    |                       |                              |
| f26                                                                                                                                                                      | Pork                                      |                       |                              |

### Allergy and Food Intolerance Packages

| v  | AE64 (IgE)            | AE107 (IgE) including AE64 (except in *)       | AG08 (IgG) | AG90 (IgG)        |               |
|----|-----------------------|------------------------------------------------|------------|-------------------|---------------|
| 1  | Total IgE             | Alder                                          | Gluten     | Cow's Milk        | Asparagus     |
| 2  | House Dust            | Birch                                          | Soy bean   | Goat's Milk       | Bamboo Shoots |
| 3  | D. Pteronyssinus      | Oak                                            | Cow milk   | Cheddar Cheese    | Broccoli      |
| 4  | D. Farinae            | Japanese hop                                   | Peanut     | Yogurt            | Cabbage       |
| 5  | Cat dander            | Mugwort                                        | Egg        | Egg White         | Carrot        |
| 6  | Dog dander            | Cladosporium Herbarum                          | Beef       | Egg Yolk          | Cauliflower   |
| 7  | Cockroach             | Crab                                           | Cod Fish   | Abalone           | Celery        |
| 8  | Rye                   | Mackerel                                       | Shrimp     | Cod               | Cucumber      |
| 9  | Common Ragweed        | Sweet Vernal/ Orchard grass/ Common reed/ Bent |            | Crab              | Eggplant      |
| 10 | Timothy Grass         | Bermuda grass                                  |            | Clam              | Green onion   |
| 11 | Alternaria Alternata  | Willow                                         |            | Cuttlefish        | Leek          |
| 12 | Aspergillus fumigatus | Cotton wood                                    |            | Eel               | Lettuce       |
| 13 | P. Notatum            | White pine                                     |            | Kelp              | Onion         |
| 14 | Candida Albicans      | Japanese cedar                                 |            | Oyster            | Peas          |
| 15 | Olive                 | Ox-eye daisy                                   |            | Salmon            | Peppers       |
| 16 | Bee Venom             | Dandelion                                      |            | Sharks Fin        | Potato        |
| 17 | Horse                 | Plantain                                       |            | Shrimp            | Spinach       |
| 18 | Mouse / Rat           | Russian Thistle                                |            | Tuna              | String Bean   |
| 19 | Rabbit                | Golden rod                                     |            | Buckwheat         | Sweet Potato  |
| 20 | Wool                  | Common pig weed                                |            | Gluten/Wheat Bran | Taro          |
| 21 | Acarus Siro           | Latex                                          |            | Corn              | Tomato        |
| 22 | T. Putrescentiae      | Wasp venom                                     |            | Rice              | Mushroom      |
| 23 | Acacia                | Guniea pig                                     |            | Oat               | Chilli Pepper |
| 24 | White ash             | Hamster                                        |            | Wheat             | Garlic        |
| 25 | CCD                   | Horse                                          |            | Adlay             | Ginger        |
| 26 | Yeast's baker         | Tuna/ Salmon                                   |            | Kidney Bean       | Pepper        |
| 27 | Almond                | Plaice/ Anchovy/ Alaska pollock                |            | Mung Bean         | Yeast         |
| 28 | Hazelnut              | Lobster/ Pacific squid                         |            | Soya Bean         | Honey         |
| 29 | Coconut *             | Blue mussel / Oyster/ Clam/ Scallop            |            | Sunflower seed    | Vanilla       |
| 30 | Egg white             | Silkworm Pupa                                  |            | Almond            | Coffee        |
| 31 | Egg yolk *            | Buckwheat                                      |            | Walnut            | Tea           |
| 32 | Milk                  | Citrus mix                                     |            | Sesame Seed       |               |
| 33 | Cheese                | Sweet chestnut                                 |            | Cocoa bean        |               |
| 34 | Peanut                | Almond/ Pine nut/ Sunflower                    |            | Peanut            |               |
| 35 | Soybean               | Cocoa                                          |            | Apple             |               |
| 36 | Wheat                 |                                                |            | Banana            |               |
| 37 | Shrimp                |                                                |            | Grape             |               |
| 38 | Lobster               |                                                |            | Grapefruit        |               |
| 39 | Codfish               |                                                |            | Guava             |               |
| 40 | Barley                |                                                |            | Kiwi Fruit        |               |
| 41 | Rice                  |                                                |            | Lemon             |               |
| 42 | Pea *                 |                                                |            | Longans           |               |
| 43 | Sesame                |                                                |            | Mango             |               |
| 44 | Apple                 |                                                |            | Olive             |               |
| 45 | Mango / Banana        |                                                |            | Orange            |               |
| 46 | Peach                 |                                                |            | Papaya            |               |
| 47 | Strawberry            |                                                |            | Peach             |               |
| 48 | Tomato                |                                                |            | Pear              |               |
| 49 | Corn                  |                                                |            | Pineapple         |               |
| 50 | Carrot                |                                                |            | Cherry            |               |
| 51 | Potato                |                                                |            | Strawberry        |               |
| 52 | Garlic / Onion        |                                                |            | Watermelon        |               |
| 53 | Pumpkin *             |                                                |            | Coconut           |               |
| 54 | Eggplant *            |                                                |            | Avocado           |               |
| 55 | Cucumber              |                                                |            | Beef              |               |
| 56 | Orange *              |                                                |            | Chicken           |               |
| 57 | Pork                  |                                                |            | Lamb              |               |
| 58 | Beef                  |                                                |            | Pork              |               |
| 59 | Chicken               |                                                |            | Duck              |               |
| 60 | Lamb meat             |                                                |            |                   |               |

| Profile Code |  |
|--------------|--|
| AE64         |  |
| AE107        |  |
| AG08         |  |
| AG90         |  |

| Profile Combination |            |  |
|---------------------|------------|--|
| AE64                | AE64+AG08  |  |
| AE107               | AE107+AG08 |  |
| AG08                | AE64+AG90  |  |
| AG90                | AE107+AG90 |  |

**Sample Requirement:**

2 months min of age  
3 ml plain tube

**TAT:** 3-5 working days

| <b><i>Tumour Markers</i></b> |                                                                                                                                         |                                      |            |  |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------|--|
| <b>Code</b>                  | <b>Test Description</b>                                                                                                                 | <b>Specimen Type</b>                 | <b>TAT</b> |  |
| TMF                          | <b>Tumour Markers For Female (General)</b><br>1. AFP<br>2. CEA<br>3. CA 125<br>4. CA 15-3<br>5. CA 19-9<br>6. CA 72-4<br>7. EBV VCA IgA | 5 ml Plain                           | 5          |  |
| TMM                          | <b>Tumour Markers For Male (General)</b><br>1. AFP<br>2. CEA<br>3. PSA<br>4. CA19-9<br>5. CA 72-4<br>6. EBV VCA IgA                     | 5 ml Plain                           | 5          |  |
| TMBR                         | <b>Tumour Markers - Breast</b><br>1. CA 15-3<br>2. CEA<br>3. Tissue Polypeptide Ag (TPA)                                                | 5 ml Plain                           | 10         |  |
| TMCX                         | <b>Tumour Markers - Cervical</b><br>1. SCC Ag<br>2. CEA<br>(consider CXC Cervical Cancer Risk profile for screening)                    | 5 ml Plain                           | 5          |  |
| CXC                          | <b>Cervical Cancer Risk - A</b><br>1. HPV DNA genotyping (All genotypes)<br>2. Liquid-based PAP Test                                    | Cervical brush in<br>Collection vial | 7-10       |  |
| CXCQ                         | <b>Cervical Cancer Risk - B</b><br>1. HPV DNA Screen – 16, 18 & other high risk types<br>2. Liquid-based PAP Test                       | Cervical brush in<br>Collection vial | 5-7        |  |
| TMCP                         | <b>Tumour Markers - Colorectal</b><br>1. CEA<br>2. CA 19-9<br>3. CA 72-4<br>4. Faecal Occult Blood (human-Hb specific)                  | 5 ml Plain<br>Fresh Stool            | 5          |  |
| TMLI                         | <b>Tumour Markers - Liver</b><br>1. AFP<br>2. CEA                                                                                       | 5 ml Plain                           | 2          |  |

| Code | Test Description                                                                                                                                                        | Specimen Type                                                              | TAT  |  |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------|--|
| TMLS | <b>Tumour Markers - Lung (Small Cell)</b><br>1. NSE<br>2. CEA<br>3. Calcitonin                                                                                          | 5 ml Plain                                                                 | 10   |  |
| TMLN | <b>Tumour Markers - Lung (Non-Small Cell) &amp; Oesophagus</b><br>1. CYFRA 21-1<br>2. SCC Ag                                                                            | 5 ml Plain                                                                 | 5    |  |
| TML  | <b>Tumour Marker For Lung</b><br>1. CYFRA 21-1<br>2. NSE<br>3. SCC Ag                                                                                                   | 5 ml Plain                                                                 | 5    |  |
| TMNE | <b>Tumour Markers - Neuroblastoma</b><br>1. Catecholamine Fractions<br>2. Homovanillic Acid (HVA)<br>3. Vanillylmandelic Acid (VMA)<br>4. Neuron-Specific Enolase (NSE) | 24 hr Urine<br><i>in Acid preservative and Refrigeration</i><br>5 ml Plain | 7-14 |  |
| TMNP | <b>Tumour Markers - Nasopharyngeal</b><br>1. EBV VCA IgA<br>2. EBV EB+NA1 IgA                                                                                           | 5 ml Plain                                                                 | 5-7  |  |
| TMOV | <b>Tumour Markers - Ovary</b><br>1. CA 125<br>2. CEA<br>3. CA 72-4                                                                                                      | 5 ml Plain                                                                 | 7    |  |
| ROMA | <b>Risk of Ovarian Malignancy Algorithm (ROMA)</b><br>1. Human Epididymis Protein 4 (HE4)<br>2. CA 125<br>3. Risk Calculation                                           | 5 ml Plain                                                                 | 7-10 |  |
| TMPR | <b>Tumour Markers - Prostate</b><br>1. PSA, total<br>2. PSA, free<br>3. Total/Free PSA Ratio<br>4. Acid Phosphatase, Prostatic                                          | 5 ml Plain                                                                 | 5    |  |
| PHI  | <b>Prostate Health Index</b><br>1. PSA, total<br>2. PSA, free<br>3. % Free PSA<br>4. [-2]proPSA Isoform (p2PSA) & PHI Risk                                              | 5 ml Plain                                                                 | 5    |  |

| Code | Test Description                                                                     | Specimen Type | TAT |  |
|------|--------------------------------------------------------------------------------------|---------------|-----|--|
| TMST | <b>Tumour Markers – Stomach &amp; Pancreas</b><br>1. CA 72-4<br>2. CEA<br>3. CA 19-9 | 5 ml Plain    | 5   |  |
| TMTE | <b>Tumour Markers - Testis</b><br>1. AFP<br>2. $\beta$ -hCG                          | 5 ml Plain    | 5   |  |
| TMTH | <b>Tumour Markers - Thyroid</b><br>1. Thyroglobulin<br>2. Calcitonin<br>3. CEA       | 5 ml Plain    | 10  |  |



# **Section C**

## **SINGLE TESTS**



### Single Tests – Alphabetical Index

| Code     | Test Description                                                                               | Specimen Type                                                                                                                                                                                                           | TAT   |
|----------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 17AO     | <b>17-Hydroxyprogesterone (17-OHP)</b>                                                         | 5 ml Plain, <i>Separate serum &amp; freeze.</i><br><i>Specify the age, sex, and phase of the cycle. For women, the sample must be taken at the start of the follicular phase.</i>                                       | 10    |
| 17KS     | <b>17-Ketosteroids (17-KS)</b>                                                                 | 24hr Urine, <i>in Acid preservative or Refrigeration</i>                                                                                                                                                                | 10    |
| 5HI      | <b>5-Hydroxyindoleacetic Acid (5-HIAA)</b>                                                     | 24hr Urine, <i>in Acid preservative or Refrigeration</i>                                                                                                                                                                | 17    |
| <b>A</b> |                                                                                                |                                                                                                                                                                                                                         |       |
| ACH      | <b>Acetylcholine Receptor Ab (AchR Ab)</b>                                                     | 5 ml Plain, <i>Separate serum and freeze</i>                                                                                                                                                                            | 7-14  |
|          | <b>Acid Fast Bacilli (AFB) Culture &amp; Sensitivity</b><br>(refer to Culture)                 |                                                                                                                                                                                                                         |       |
| AFBC     | <b>Acid Fast Bacilli (AFB) Concentrated (Membrane-base Smear)</b>                              | Sputum/ Plural Fluid/ FMU/ CSF/ Swab<br><i>Significant higher sensitivity than direct smear.</i>                                                                                                                        | 2     |
| AFBS     | <b>Acid Fast Bacilli (AFB) ZN Stain (Direct Smear)</b>                                         | Sputum/ Plural Fluid/ FMU/ CSF/ Swab<br><i>Collect fresh sputum recommended on three consecutive days or early morning urine or pleural fluid, CSF, swab.</i>                                                           | 2     |
| ACPP     | <b>Acid Phosphatase, Prostatic</b>                                                             | 5 ml Plain                                                                                                                                                                                                              | 7     |
| APTT     | <b>Activated Partial Thrombin Time (APTT)</b>                                                  | 2 ml Citrate<br><i>If possible, please specify if the patient is on an anticoagulation treatment as well as the clinical context.</i>                                                                                   | 2     |
| D208     | <b>Additive Drugs (188 types) Qualitative Screening in Food/Medication (by HPLC)</b>           | <b>Call Lab</b>                                                                                                                                                                                                         | 14    |
| ADA      | <b>Adenosin Deaminase (ADA), pleural fluid</b>                                                 | Pleural Fluid                                                                                                                                                                                                           | 10-14 |
| ADENO    | <b>Adenovirus DNA (by PCR)</b>                                                                 | Discharge/ Aspirate/ Swab                                                                                                                                                                                               | 7     |
| ACTH     | <b>Adrenocorticotrophic Hormone (ACTH)</b>                                                     | 3 ml EDTA (Plasma)<br><i>Not to be performed on haemolysed sample. Sample on a cooled tube at 4°C, centrifuge a.s.a.p and freeze the plasma.</i>                                                                        | 7     |
| ALT      | <b>Alanine Aminotransferase (ALT/SGPT)</b>                                                     | 5 ml Plain                                                                                                                                                                                                              | 1     |
| ALB      | <b>Albumin</b>                                                                                 | 5 ml Plain                                                                                                                                                                                                              | 1     |
| FALD     | <b>Aldosterone, Urine</b>                                                                      | 24hr Urine, <i>in Acid preservative or Refrigeration</i>                                                                                                                                                                | 7     |
| ALD      | <b>Aldosterone, Serum</b>                                                                      | 5 ml Plain<br><i>Do not refer haemolysed or lipaemic samples.</i><br><i>Specify upright or reclined (Sampling in upright position after 1 hr walking; sampling in reclined position after 1 hr in supine position).</i> | 7     |
| ALKP     | <b>Alkaline Phosphatase (ALP)</b>                                                              | 5 ml Plain                                                                                                                                                                                                              | 1     |
| ALPB     | <b>Alkaline Phosphatase - Bone (BAP)</b>                                                       | 5 ml Plain, <i>Separate serum and freeze</i>                                                                                                                                                                            | 5-7   |
| ALPE     | <b>Alkaline Phosphatase Isoenzymes Electrophoresis</b><br>- Liver, Bone, Intestine, Fast Liver | 5 ml Plain                                                                                                                                                                                                              | 7-14  |
|          | <b>Allergy Tests</b> (refer to Allergy Section in Profile Tests)                               |                                                                                                                                                                                                                         |       |
| A1A      | <b>Alpha-1 Antitrypsin</b>                                                                     | 5 ml Plain                                                                                                                                                                                                              | 7     |
| A1AS     | <b>Alpha-1 Antitrypsin, Stool</b>                                                              | Fresh Stool                                                                                                                                                                                                             | 15    |
| AFP      | <b>Alpha-Fetoprotein (AFP)</b>                                                                 | 5 ml Plain                                                                                                                                                                                                              | 2     |

| Code                                    | Test Description                                                                                                 | Specimen Type                                                                                                                                                                                                  | TAT  |  |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|
| AMOE                                    | <b>Amoebic Antibody (<i>E histolytica</i>)</b>                                                                   | 5 ml Plain                                                                                                                                                                                                     | 7    |  |
| AMY                                     | <b>Amylase</b>                                                                                                   | 5 ml Plain                                                                                                                                                                                                     | 2    |  |
| UAM                                     | <b>Amylase (Diastase), Urine</b>                                                                                 | 20 ml Urine                                                                                                                                                                                                    | 7    |  |
| ASD                                     | <b>Androstenedione (ASD)</b>                                                                                     | 5 ml Plain, <i>Separate serum and freeze</i>                                                                                                                                                                   | 15   |  |
|                                         | <b>Antibody Screen</b> (refer to Coombs' Test, Indirect)                                                         |                                                                                                                                                                                                                |      |  |
| ABMZ                                    | <b>Anti-Basement Membrane Zone Abs (Anti-BMZ)</b>                                                                | 5 ml Pain                                                                                                                                                                                                      | 15   |  |
| ABGPG                                   | <b>Anti Beta-2 Glycoprotein-I IgG</b>                                                                            | 5 ml Plain                                                                                                                                                                                                     | 7-10 |  |
| ABGPM                                   | <b>Anti Beta-2 Glycoprotein-I IgM</b>                                                                            | 5 ml Plain                                                                                                                                                                                                     | 7-10 |  |
| ACAG                                    | <b>Anti-Cardiolipin IgG (ACA IgG)</b><br>(a type of Antiphospholipid Ab)                                         | 5 ml Plain                                                                                                                                                                                                     | 8    |  |
| ACAM                                    | <b>Anti-Cardiolipin IgM (ACA IgM)</b><br>(a type of Antiphospholipid Ab)                                         | 5 ml Plain                                                                                                                                                                                                     | 8    |  |
| ACCP                                    | <b>Anti-Cyclic Citrullinated Peptide Ab (Anti-CCP)</b>                                                           | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 5    |  |
| ADNA                                    | <b>Anti-double stranded DNA (Anti-dsDNA)</b>                                                                     | 5 ml Plain                                                                                                                                                                                                     | 7    |  |
| ENAT                                    | <b>Anti-Extractable Nuclear Antigen (Anti-ENA), Total (Quatitative)</b>                                          | 5 ml Plain                                                                                                                                                                                                     | 7    |  |
| ENA6                                    | <b>Anti-ENA, 6 types:</b> RNP Ab, Sm Ab, SS-A Ab, SS-B Ab, Scl-70 Ab & Jo-1 Ab                                   | 5 ml Plain                                                                                                                                                                                                     | 7-10 |  |
| RNP<br>SM<br>SSA<br>SSB<br>SCL70<br>JO1 | <b>Single Antibody of Anti-ENA:</b><br>- RNP Ab<br>- Sm Ab<br>- SS-A Ab<br>- SS-B Ab<br>- Scl-70 Ab<br>- Jo-1 Ab | 5 ml Plain                                                                                                                                                                                                     | 7-10 |  |
| GPCA                                    | <b>Anti-Gastric Parietal Cell Abs (APCA)</b>                                                                     | 5 ml Plain                                                                                                                                                                                                     | 7-14 |  |
| GBM                                     | <b>Anti-Glomerular Basement Membrane Abs (Anti-GBM)</b>                                                          | 5 ml Plain                                                                                                                                                                                                     | 7-14 |  |
| INTAB                                   | <b>Anti-Intercellular Substance Abs</b>                                                                          | 5 ml Plain                                                                                                                                                                                                     | 7-14 |  |
|                                         | <b>Anti-Liver Kidney Microsomal 1 Ab (Anti-LKM1)</b> (refer to profile Autoimmune Liver Disease)                 |                                                                                                                                                                                                                |      |  |
|                                         | <b>Anti-Microsomal Ab (AMA)</b> (see Anti-TPO)                                                                   |                                                                                                                                                                                                                |      |  |
| AMIA                                    | <b>Anti-Mitochondrial Ab</b>                                                                                     | 5 ml Plain                                                                                                                                                                                                     | 12   |  |
| AMH                                     | <b>Anti-Mullerian Hormone (AMH)</b>                                                                              | 5 ml Plain                                                                                                                                                                                                     | 5-7  |  |
| ANCA                                    | <b>Anti-Neutrophil Cytoplasmic Ab (ANCA) w pattern (by IFA method)</b>                                           | 5 ml Plain                                                                                                                                                                                                     | 12   |  |
| ANAQ                                    | <b>Anti-Nuclear Abs (Qunatitative)</b>                                                                           | 5 ml Plain                                                                                                                                                                                                     | 5    |  |
| ANA                                     | <b>Anti-Nuclear Abs (ANA) w pattern (by IFA)</b>                                                                 | 5 ml Plain                                                                                                                                                                                                     | 5    |  |
| APSG                                    | <b>Anti-Phosphatidylserine IgG</b>                                                                               | 5 ml Plain                                                                                                                                                                                                     | 7-10 |  |
| ASMA                                    | <b>Anti-Smooth Muscle Ab (ASMA)</b>                                                                              | 5 ml Plain                                                                                                                                                                                                     | 12   |  |

| Code  | Test Description                                                                     | Specimen Type                                                                                                                                                                                                  | TAT   |
|-------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| ASA   | Anti-Sperm Ab, Circulating                                                           | 5 ml Plain                                                                                                                                                                                                     | 7-10  |
| ASOT  | Anti-Streptolysin O Titre (ASOT), Spot test                                          | 5 ml Plain                                                                                                                                                                                                     | 2     |
| AT3   | Anti-Thrombin III                                                                    | 2x 2 ml Citrate<br><i>Always specific the treatment and clinical context of the test prescription: Unfractionated heparin may induce a weak decrease in antitrombin level.</i>                                 | 15-20 |
| ATAB  | Anti-Thyroglobulin Ab (ATA)                                                          | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 5     |
| ATPO  | Anti-Thyroid Peroxidase (Anti-TPO)                                                   | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 5     |
| APOA  | Apolipoprotein A1 (Apo-A1)                                                           | 5 ml Plain                                                                                                                                                                                                     | 3     |
| APOB  | Apolipoprotein B (Apo-B)                                                             | 5 ml Plain                                                                                                                                                                                                     | 3     |
| APOP  | Apo- A1, Apo-B & Ratio                                                               | 5 ml Plain <i>Fasting sample.</i>                                                                                                                                                                              | 3     |
| APOEG | Apolipoprotein E genotyping (by PCR)                                                 | 3 ml EDTA                                                                                                                                                                                                      | 7-14  |
| AQP4  | Aquaporin 4 Abs (Neuromyelitis Optica Abs)                                           | 5 ml Plain                                                                                                                                                                                                     | 30    |
| AQMO  | Aquaporin 4 (AQP4) Abs & Myelin Oligodendrocyte Glycoprotein (MOG) Abs               | 5 ml Plain                                                                                                                                                                                                     | 30    |
| AST   | Aspartate Aminotransferase (AST/SGOT)                                                | 5 ml Plain                                                                                                                                                                                                     | 1     |
|       | Aspirate Culture & Sensitivity (refer to Culture)                                    |                                                                                                                                                                                                                |       |
| B     |                                                                                      |                                                                                                                                                                                                                |       |
| BJP   | Bence-Jones Protein (by heat test)<br>(consider Immunofixation Ep)                   | 20 ml FMU, <i>Refrigeration, without preservative and acid</i>                                                                                                                                                 | 5     |
| B2M   | Beta-2 Microglobulin, Serum                                                          | 5 ml Plain, <i>Always indicated the beginning or end of dialysis</i>                                                                                                                                           | 5     |
| UB2M  | Beta-2-Microglobulin, Urine                                                          | 20 ml FMU                                                                                                                                                                                                      | 5     |
| HCG   | Beta-Human Chorionic Gonadotropin, Total (β-hCG)                                     | 5 ml Plain                                                                                                                                                                                                     | 2     |
| HCGF  | β-hCG, Free                                                                          | 5 ml Pain                                                                                                                                                                                                      | 7     |
| BILA  | Bile Acid / Salt                                                                     | 5 ml Plain                                                                                                                                                                                                     | 7-10  |
| BID   | Bilirubin, Direct/Conjugated *                                                       | 5 ml Plain, <i>Wrap or Store away from light.</i>                                                                                                                                                              | 1     |
| BIT   | Bilirubin, Total *                                                                   | 5 ml Plain, <i>Wrap or Store away from light.</i>                                                                                                                                                              | 1     |
|       | Blood Culture & Sensitivity (refer to Culture)                                       |                                                                                                                                                                                                                |       |
|       | Blood Film Comment (refer Full Blood Picture)                                        |                                                                                                                                                                                                                |       |
| ABORH | Blood Grouping & Rhesus (ABO & Rh)                                                   | 3 ml EDTA                                                                                                                                                                                                      | 1     |
| BBBGH | Blood Grouping & Indirect Coombs Test (for Blood Transfusion) *                      | 3 ml EDTA, 5 ml Plain                                                                                                                                                                                          | 1*    |
| BRCA  | BRCA 1 & 2 Gene Mutation Analysis<br>Genetic risk marker for breast & ovarian cancer | 2x 3 ml EDTA<br><i>Attach the current clinical and therapeutic data</i>                                                                                                                                        | 14    |
| BNPF  | B-type Natriuretic Peptide (NT pro-BNP)                                              | 3 ml EDTA (Plasma)                                                                                                                                                                                             | 5     |

| Code     | Test Description                                                                                                             | Specimen Type                                                                                                                                                                                                                                         | TAT   |
|----------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <b>C</b> |                                                                                                                              |                                                                                                                                                                                                                                                       |       |
| 125      | <b>CA 125</b> (Ovarian cancer)                                                                                               | 5 ml Plain                                                                                                                                                                                                                                            | 2     |
| 153      | <b>CA 15-3</b> (Breast cancer)                                                                                               | 5 ml Plain                                                                                                                                                                                                                                            | 2     |
| 199      | <b>CA 19-9</b> (Pancreatic, gastric cancer)                                                                                  | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i>                                        | 2     |
| 724      | <b>CA 72-4 (TAG-72)</b> (Gastrointestinal, Breast cancer)                                                                    | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i>                                        | 5     |
| CAC      | <b>Calcitonin</b>                                                                                                            | 5 ml Plain<br><i>Collect sample away from meal in order to avoid hypergastrinemia. In case of proton pumps treatment, recommend to collect sample after intake. Or please collect sample 2 weeks after treatment stopped. Separate serum, freeze.</i> | 6-8   |
| CA       | <b>Calcium</b>                                                                                                               | 5 ml Plain                                                                                                                                                                                                                                            | 1     |
| CAF      | <b>Calcium, Free (Ionized)</b>                                                                                               | 5 ml Heparin (whole blood)                                                                                                                                                                                                                            | 7-14  |
| UCA      | <b>Calcium, Urine</b>                                                                                                        | 24 hr Urine, in Acid preservative and Refrigeration                                                                                                                                                                                                   | 5     |
| CALPR    | <b>Calprotectin, Faecal (Quantitative FIA)</b>                                                                               | Fresh Stool                                                                                                                                                                                                                                           | 1-2   |
| CAD      | <b>Candida albicans DNA (by PCR)</b>                                                                                         | Genital Swab / FVU                                                                                                                                                                                                                                    | 7     |
| CEA      | <b>Carcino-Embryonic Antigen (CEA)</b>                                                                                       | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i>                                        | 2     |
|          | <b>Carcinoid Syndrome</b> (refer to 5-HIAA)                                                                                  |                                                                                                                                                                                                                                                       |       |
| CARNI    | <b>Carnitine, Free &amp; Total</b>                                                                                           | 3 ml EDTA                                                                                                                                                                                                                                             | 20-25 |
| CD48     | <b>CD4 / CD8 Count</b>                                                                                                       | 3 ml EDTA <b>Call Lab</b>                                                                                                                                                                                                                             | 5     |
| COELA    | Coeliac Disease IgA assay –<br>Anti-tissue Transglutamine (anti-tTG) IgA &<br>Anti-deaminated Gliadin Peptide (Anti-dGP) IgA | 5 ml Plain                                                                                                                                                                                                                                            | 35    |
| COELG    | Coeliac Disease IgG assay –<br>Anti-tissue Transglutamine (anti-tTG) IgG &<br>Anti-deaminated Gliadin Peptide (Anti-dGP) IgG | 5 ml Plain                                                                                                                                                                                                                                            | 35    |
| CER      | <b>Ceruloplasmin</b>                                                                                                         | 5 ml Plain                                                                                                                                                                                                                                            | 5     |
| CHIM     | <b>Chikungunya IgM</b>                                                                                                       | 5 ml Plain                                                                                                                                                                                                                                            | 2     |
| CLPM     | <b>Chlamydia pneumoniae IgM</b>                                                                                              | 5 ml Plain                                                                                                                                                                                                                                            | 7-10  |
|          | <b>Chlamydia Ag</b> (refer to Chlamydia DNA PCR)                                                                             |                                                                                                                                                                                                                                                       |       |
| CLA      | <b>Chlamydia trachomatis IgA</b>                                                                                             | 5 ml Plain                                                                                                                                                                                                                                            | 5     |
| CLG      | <b>Chlamydia trachomatis IgG</b>                                                                                             | 5 ml Plain                                                                                                                                                                                                                                            | 5     |
| CLM      | <b>Chlamydia trachomatis IgM</b>                                                                                             | 5 ml Plain                                                                                                                                                                                                                                            | 5     |
| CTNG     | <b>Chlamydia trachomatis &amp; Neisseria gonorrhoeae DNA (by PCR)</b>                                                        | Genital Swab / FVU                                                                                                                                                                                                                                    | 5     |
|          | <b>Chloride (Cl)</b> (refer to Electrolytes)                                                                                 |                                                                                                                                                                                                                                                       |       |
|          | <b>Chloride, Urine</b> (refer to Electrolytes)                                                                               |                                                                                                                                                                                                                                                       |       |
| CHO      | <b>Cholesterol, Total</b>                                                                                                    | 5 ml Plain                                                                                                                                                                                                                                            | 1     |
| CGA      | <b>Chromogranin A (CgA)</b>                                                                                                  | 5 ml Plain<br><i>Centrifuge without delay, separate the supernatant and freeze. PPIs should be stopped 2-3 weeks before test.</i>                                                                                                                     | 7-10  |

| Code                                                                        | Test Description                                                                                                           | Specimen Type                                                                                                                                                                                                                          | TAT   |  |
|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--|
| CYTOOA                                                                      | <b>Chromosomal Microarray Analysis (CMA) ~ CytoOneArray (Prenatal / Postnatal)</b><br>Detect 327 chromosomal abnormalities | Prenatal:<br>15ml Amniotic Fluid /CVS<br>Postnatal:<br>2x 3 ml EDTA Blood / Cord Blood                                                                                                                                                 | 7-14  |  |
| CHAA                                                                        | <b>Chromosome Analysis (Karyotype), Amniotic Fluid</b>                                                                     | 15 ml Amniotic Fluid ( <i>room temperature</i> )                                                                                                                                                                                       | 7     |  |
| CDPCR                                                                       | <b><i>Clostridium difficile</i> DNA (by PCR)</b>                                                                           | Fresh Stool in steril container                                                                                                                                                                                                        | 3     |  |
| HCO2                                                                        | <b>CO2 Total / Bicarbonate</b>                                                                                             | 5 ml Plain                                                                                                                                                                                                                             | 5     |  |
| CF9                                                                         | <b>Coagulation Factor IX</b>                                                                                               | 2x 2 ml Citrate                                                                                                                                                                                                                        | 14    |  |
| CF8                                                                         | <b>Coagulation Factor VIII</b>                                                                                             | 2x 2 ml Citrate                                                                                                                                                                                                                        | 14    |  |
| COLA                                                                        | <b>Cold Agglutinin</b>                                                                                                     | 5 ml Plain, <i>Keep warm before serum separation.</i>                                                                                                                                                                                  | 5     |  |
| C3                                                                          | <b>Complement 3 (C3)</b>                                                                                                   | 5 ml Plain                                                                                                                                                                                                                             | 5     |  |
| C4                                                                          | <b>Complement 4 (C4)</b>                                                                                                   | 5 ml Plain                                                                                                                                                                                                                             | 5     |  |
| COOD                                                                        | <b>Coombs' test, Direct</b>                                                                                                | 3 ml EDTA                                                                                                                                                                                                                              | 5     |  |
| COOI                                                                        | <b>Coombs' test, Indirect</b>                                                                                              | 3 ml EDTA                                                                                                                                                                                                                              | 5     |  |
| <b>Coronavirus Infectious Disease 2019 (COVID-19) (refer to SARS-CoV-2)</b> |                                                                                                                            |                                                                                                                                                                                                                                        |       |  |
| UFC                                                                         | <b>Cortisol, Free, Urine</b>                                                                                               | 24 hr Urine, <i>in Acid preservative and Refrigeration</i>                                                                                                                                                                             | 10    |  |
| CORSA                                                                       | <b>Cortisol, Free, Saliva</b>                                                                                              | 3 ml Saliva                                                                                                                                                                                                                            | 7     |  |
| CORT                                                                        | <b>Cortisol, Serum</b>                                                                                                     | 5 ml Plain, <i>Sample collect between 7am and 10am, or according to the instruction from prescribing party.</i>                                                                                                                        | 5     |  |
| CPE                                                                         | <b>C-Peptide</b>                                                                                                           | 5 ml Plain                                                                                                                                                                                                                             | 8     |  |
| HCRP                                                                        | <b>C-Reactive Protein, high-sensitive (hsCRP)</b>                                                                          | 5 ml Plain                                                                                                                                                                                                                             | 2     |  |
| CK                                                                          | <b>Creatine Kinase (CK)</b>                                                                                                | 5 ml Plain                                                                                                                                                                                                                             | 1     |  |
| CKE                                                                         | <b>Creatine Kinase (CK) Isoenzyme Electrophoresis (CK-Total, MM, MB, BB)</b>                                               | 5 ml Plain                                                                                                                                                                                                                             | 7     |  |
| CRE                                                                         | <b>Creatinine</b>                                                                                                          | 5 ml Plain                                                                                                                                                                                                                             | 1     |  |
| CCT                                                                         | <b>Creatinine Clearance Test &amp; Rate</b>                                                                                | 5 ml Plain & 24hr Urine                                                                                                                                                                                                                | 2     |  |
| UCRE                                                                        | <b>Creatinine, Urine</b>                                                                                                   | 20 ml Urine                                                                                                                                                                                                                            | 2     |  |
| 24UCRE                                                                      | <b>Creatinine, 24 hrs Urine</b>                                                                                            | 24 hrs Urine, <i>in refrigeration</i>                                                                                                                                                                                                  | 2     |  |
| CYFG                                                                        | <b>Cryofibrinogen (Qualitative)</b>                                                                                        | 2x 2 ml Citrate (fasting)<br><i>Keep warm 37°C before plasma separation.</i>                                                                                                                                                           | 5-10  |  |
| CYGLO                                                                       | <b>Cryoglobulins (Qualitative)</b>                                                                                         | 5 ml Plain (fasting)<br><i>Keep warm 37°C before serum separation.</i>                                                                                                                                                                 | 10-14 |  |
| CRYA                                                                        | <b><i>Cryptococcus</i> Antigen</b>                                                                                         | 1 ml CSF / 5 ml Plain                                                                                                                                                                                                                  | 3-5   |  |
| <b>CSF Culture &amp; Sensitivity (refer to Culture)</b>                     |                                                                                                                            |                                                                                                                                                                                                                                        |       |  |
| CFEM                                                                        | <b>CSF FEME - Cell count, Gram's stain, India ink stain, glucose &amp; protein</b>                                         | Min 2 ml CSF                                                                                                                                                                                                                           | 2     |  |
| CTX                                                                         | <b>C-Telopeptide Crosslinks (CTx) (beta-CrossLaps)</b>                                                                     | 3 ml EDTA Plasma (Fasting Morning)<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 5-7   |  |

| Code | Test Description                                                    | Specimen Type         | TAT |
|------|---------------------------------------------------------------------|-----------------------|-----|
| 211  | <b>CYFRA 21-1 (Cytokeratin 19)<br/>(non-small cell lung cancer)</b> | 5 ml Plain            | 5   |
| CYSC | <b>Cystatin C</b>                                                   | 5 ml Plain            | 5   |
| CMVD | <b>Cytomegalovirus (CMV) DNA Detection</b>                          | Swab/ FVU /CSF/ Serum | 7   |
| CMVL | <b>Cytomegalovirus (CMV) DNA Viral Load</b>                         | 5 ml Plain            |     |
| CMVG | <b>Cytomegalovirus (CMV) IgG</b>                                    | 5 ml Plain            | 3-5 |
| CMVM | <b>Cytomegalovirus (CMV) IgM</b>                                    | 5 ml Plain            | 3-5 |

#### Culture & Sensitivity ~ Culture, Microscopy & Sensitivity tests

|       |                                                                                                                                                                       |                                                                                 |         |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------|
| CAFB  | <b>AFB/Mycobacterium Culture (include Identification &amp; 1<sup>st</sup> line Drug Sensitivity tests if positive)<br/>(may consider Mycobacterium DNA PCR assay)</b> | Sputum/ FMU/ CSF/ Swab                                                          | 6-8 Wks |
| CASP  | <b>C&amp;S Aspirate</b>                                                                                                                                               | Aspirate in sterile-capped syringe/tube/ bottle<br>(specify source of specimen) | 3-5     |
| CASC  | <b>~ C&amp;S Aspirate w Chemistry (Protein, Glu &amp; LDH)</b>                                                                                                        | As above                                                                        | 3-5     |
| CASJ  | <b>~ C&amp;S Aspirate w Chemistry (Protein, Glu &amp; RF)</b>                                                                                                         | As above                                                                        | 3-5     |
| CBAE  | <b>~ C&amp;S Blood, Aerobic<br/>(w/o supply of Broth)</b>                                                                                                             | Blood/ Pus/ Fluid in blood culture broth (aerobic)                              | 10-12   |
| CBAN  | <b>~ C&amp;S Blood, Anaerobic<br/>(w/o supply of Broth)</b>                                                                                                           | Blood/ Pus/ Fluid in blood culture broth<br>(anaerobic)                         | 10-12   |
| CCSF  | <b>~ C&amp;S CSF</b>                                                                                                                                                  | CSF in sterile-capped syringe/tube                                              | 4-7     |
| CCSC  | <b>~ C&amp;S CSF w Chemistry (Pro, Glu)</b>                                                                                                                           | As above                                                                        | 4-7     |
| CMRS1 | <b>MRSA C&amp;S (single swab from a side)</b>                                                                                                                         | Nose, groin or axilla swabs in transport medium                                 | 3-5     |
| CMRS3 | <b>MRSA C&amp;S (3 swabs from 3 sides)</b>                                                                                                                            | Nose, groin or axilla swabs in transport medium                                 | 3-5     |
| CSTOB | <b>~ C&amp;S Stool for <i>Salmonella</i>, <i>Shigella</i> &amp; <i>E. Coli</i> only</b>                                                                               | Fresh Stool/Rectal Swab                                                         | 3-5     |
| CSTO  | <b>~ C&amp;S Stool for <i>Salmonella</i>, <i>Shigella</i> &amp; <i>Vibrio cholera</i> only</b>                                                                        | Fresh Stool/Rectal Swab                                                         | 3-5     |
| CSPU  | <b>~ C&amp;S Sputum (non-Mycobacterium only)</b>                                                                                                                      | Sputum (wash mouth, avoid saliva)                                               | 3-5     |
| CSWA  | <b>~ C&amp;S Swab</b>                                                                                                                                                 | Swab in transport medium (specify source of specimen)                           | 3-5     |
| CURI  | <b>~ C&amp;S Urine w Chemistry</b>                                                                                                                                    | 20 ml MSU                                                                       | 3-5     |

#### Culture Only (without Sensitivity tests)

|      |                                                                                                                    |                                |             |
|------|--------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------|
| CSSH | <b>~ Stool for <i>Salmonella</i> &amp; <i>Shigella</i> only</b>                                                    | Fresh Stool/Rectal Swab        | 3-5         |
| CSAU | <b>~ Stool for <i>Staphylococcus aureus</i> only</b>                                                               | Fresh Stool/Rectal Swab        | <b>Call</b> |
| CSVC | <b>~ Stool for <i>Vibrio cholera</i> only</b>                                                                      | Fresh Stool/Rectal Swab        | 3-5         |
|      | <b>~ Stool for <i>Clostridium difficile</i> Culture &amp; Toxins</b> (refer <i>Clostridium difficile</i> PCR test) |                                |             |
| CFUN | <b>~ Fungus/ Yeast w Microscopy</b>                                                                                | Relevant specimen, Skin Scraps | 14-21       |

| Code     | Test Description                                                      | Specimen Type                                                                                                                                                                                                  | TAT  |  |
|----------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|
| <b>D</b> |                                                                       |                                                                                                                                                                                                                |      |  |
| DDI      | <b>D-Dimer (Quantitative)</b> (may also consider FDP)                 | 2 ml Citrate (1:9)                                                                                                                                                                                             | 5    |  |
| DHEAS    | <b>Dehydroepiandrosterone Sulfate (DHEA-S)</b>                        | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 7    |  |
| DENGM    | <b>Dengue Serology (IgG &amp; IgM), Rapid Test</b>                    | 5 ml Plain                                                                                                                                                                                                     | 1    |  |
| DENAG    | <b>Dengue NS1 Antigen</b> (intended for 1st -5th days)                | 5ml plain                                                                                                                                                                                                      | 1    |  |
| DHT      | <b>Dihydrotestosterone (DHT)</b>                                      | 5 ml Plain<br><i>Separate serum &amp; freeze.</i>                                                                                                                                                              | 7-10 |  |
|          | <b>Dilantin</b> (refer to Phenytoin in Toxicology section)            |                                                                                                                                                                                                                |      |  |
| DNAF     | <b>DNA Profiling for Paternity</b><br>(for non-legal proceeding only) | 3 ml EDTA<br><i>Specimen each from child, mother &amp; alleged father. Use Specific Form</i>                                                                                                                   | 14   |  |
| DNA1     | ~ Add each additional child                                           |                                                                                                                                                                                                                |      |  |
|          | <b>Down Syndrome Screen</b> (refer to Foetal Screen in Profile Test)  |                                                                                                                                                                                                                |      |  |
| <b>E</b> |                                                                       |                                                                                                                                                                                                                |      |  |
| ELT      | <b>Electrolytes (Na, K &amp; Cl), Serum</b>                           | 5 ml Plain                                                                                                                                                                                                     | 1    |  |
| UFLT     | <b>Electrolytes (Na, K &amp; Cl), Urine</b>                           | 24 hr Urine, <i>in Refrigeration without acid preservative</i>                                                                                                                                                 | 1    |  |
| EVR      | <b>Enteroviruses RNA</b>                                              | Swab                                                                                                                                                                                                           | 7    |  |
| EV71R    | <b>Enterovirus Type 71 (EV71) RNA Detection</b>                       | Swab                                                                                                                                                                                                           | 7    |  |
| ELAL     | <b>Endotoxin, LAL Assay</b>                                           | Water/ Dialysate                                                                                                                                                                                               | 7    |  |
|          | <b>Entamoeba histolytica Ab</b> (refer to Amoebic Ab)                 |                                                                                                                                                                                                                |      |  |
| ECP      | <b>Eosinophil Cationic Protein (ECP)</b>                              | 5 ml Plain                                                                                                                                                                                                     | 5    |  |
| EBVL     | <b>Epstein-Barr virus (EBV) DNA Viral Load</b>                        | Serum/ Swab/ Fluid                                                                                                                                                                                             | 7    |  |
| EBVD     | <b>Epstein-Barr virus (EBV) DNA Detection</b>                         | Serum/ Swab/ Fluid                                                                                                                                                                                             | 7    |  |
| EBA      | <b>EBV EA+NA1 IgA</b> (for NPC)                                       | 5 ml Pain                                                                                                                                                                                                      | 5    |  |
| EBEG     | <b>EBV Early Ag (EA) IgG</b> (for IM/NPC)                             | 5 ml Plain                                                                                                                                                                                                     | 5    |  |
| EBVA     | <b>EBV Viral Capsid Ag (VCA) IgA</b> (for NPC)                        | 5 ml Plain                                                                                                                                                                                                     | 3    |  |
| EBVG     | <b>EBV Viral Capsid Ag (VCA) IgG</b> (for IM)                         | 5 ml Plain                                                                                                                                                                                                     | 8    |  |
| EBVM     | <b>EBV Viral Capsid Ag (VCA) IgM</b> (for IM)                         | 5 ml Plain                                                                                                                                                                                                     | 8    |  |
| ESR      | <b>Erythrocyte Sedimentation Rate (ESR)</b>                           | 3 ml EDTA                                                                                                                                                                                                      | 1    |  |
| EPO      | <b>Erythropoietin (EPO)</b>                                           | 5 ml Plain, <i>Sample in morning (variations during day). Separate serum &amp; freeze.</i>                                                                                                                     | 7    |  |
| E2       | <b>Estradiol (E2)</b> (Ovarian Function)                              | 5 ml Plain                                                                                                                                                                                                     | 3    |  |
| E3U      | <b>Estriol, Free (uE3)</b> (Pregnancy Monitoring)                     | 5 ml Plain                                                                                                                                                                                                     | 7    |  |
| <b>F</b> |                                                                       |                                                                                                                                                                                                                |      |  |
| FOB      | <b>Faecal Occult Blood</b> ( <i>human-Hb specific</i> )               | Fresh Stool                                                                                                                                                                                                    | 2    |  |
|          | <b>Faeces Culture &amp; Sensitivity</b> (refer to Culture)            |                                                                                                                                                                                                                |      |  |

| Code     | Test Description                                                                                                         | Specimen Type                                                                                                                                           | TAT   |
|----------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| FFEM     | <b>Faeces FEME-</b> <i>for Amoeba/Ova/Cyst</i>                                                                           | Fresh Stool                                                                                                                                             | 2     |
| FER      | <b>Ferritin</b>                                                                                                          | 5 ml Plain                                                                                                                                              | 5     |
| FHB      | <b>Foetal Haemoglobin (APT Test)</b>                                                                                     | Stool/ Vomitus                                                                                                                                          | 5     |
|          | <b>Foetal Abnormalities Risk Screening 1<sup>st</sup> &amp; 2<sup>nd</sup> Trimester</b> (refer to Profile Test Page 18) |                                                                                                                                                         |       |
| FDP      | <b>Fibrin Degradation Products (FDP)</b><br>(may also consider D-Dimer)                                                  | 2x 2 ml Citrate                                                                                                                                         | 5     |
| MFP      | <b>Filaria / Microfilaria Parasite (Smear)</b>                                                                           | 3 ml EDTA                                                                                                                                               | 1     |
| FPAB     | <b>Filaria Antibodies</b>                                                                                                | 5 ml Plain / 3 ml EDTA                                                                                                                                  | 1     |
| FIB      | <b>Fibrinogen</b>                                                                                                        | 2x 2 ml Citrate                                                                                                                                         | 5     |
| FOLR     | <b>Folic Acid (Folate), RBC</b>                                                                                          | 3 ml EDTA, <i>wrap and avoid light</i>                                                                                                                  |       |
| FOL      | <b>Folic Acid (Folate), Serum</b>                                                                                        | 5 ml Plain, <i>Fasting sample.</i>                                                                                                                      | 5     |
| FSH      | <b>Follicle Stimulating Hormone (FSH)</b>                                                                                | 5 ml Plain                                                                                                                                              | 3     |
| FXSG     | <b>Fragile X Syndrome (FXS) Genetic Assay</b>                                                                            | 3 ml EDTA                                                                                                                                               |       |
| FRUC     | <b>Fructosamine</b>                                                                                                      | 5 ml Plain                                                                                                                                              |       |
| FBC      | <b>Full Blood Count- Hb, RBC indices, PLT, TWDC</b>                                                                      | 3 ml EDTA                                                                                                                                               | 1     |
| FBCC     | <b>Full Blood Count with CRP (titter)</b>                                                                                | 3 ml EDTA                                                                                                                                               | 1     |
| FBP      | <b>Full Blood Picture with ESR</b><br>- FBC, Blood Film Comment & ESR                                                    | 3 ml EDTA                                                                                                                                               | 1     |
| FBPC     | <b>Full Blood Picture with CRP</b><br>- FBC, Blood Film Comment & CRP                                                    | 3 ml EDTA<br>5 ml Plain                                                                                                                                 | 1     |
| FBPH     | <b>Full Blood Picture with Blood Film Comment by Haematologist</b>                                                       | 3 ml EDTA                                                                                                                                               | 3     |
|          | <b>Fungus Culture</b> (refer to Culture)                                                                                 |                                                                                                                                                         |       |
| FUNG     | <b>Fungus Microscopic</b>                                                                                                | Skin Scraps                                                                                                                                             | 2     |
| <b>G</b> |                                                                                                                          |                                                                                                                                                         |       |
| G6PD     | <b>G6PD Screening</b>                                                                                                    | Blotted blood on paper or 3 ml EDTA                                                                                                                     | 2     |
| G6PQ     | <b>G6PD, Quantitative</b>                                                                                                | 3 ml EDTA                                                                                                                                               | 3-5   |
| GGT      | <b>gamma-Glutamyl Transferase (GGT)</b>                                                                                  | 5 ml Plain                                                                                                                                              | 1     |
| GAS      | <b>Gastrin</b>                                                                                                           | 5 ml Plain, <i>Fasting minimum 10 – 12 hours. After removing the coagulated mass, quickly centrifuge the sample to separate the serum &amp; freeze.</i> | 7     |
| GLU      | <b>Glucose, Fasting</b>                                                                                                  | 2 ml Fluoride, <i>Fasting</i>                                                                                                                           | 1     |
| GTT2     | <b>Glucose Tolerance Test (2 Points)</b><br>(w/o Glucose supply)                                                         | 2x 2 ml Fluoride<br><i>Fasting &amp; 2 hours Post-Glucose</i>                                                                                           | 1     |
| GTT3     | <b>Glucose Tolerance Test (3 Points)</b><br>(w/o Glucose supply)                                                         | 3x 2 ml Fluoride<br><i>Fasting, 1 &amp; 2 hours Post-Glucose</i>                                                                                        | 1     |
| 75GL     | ~ 75g Glucose Load supply                                                                                                |                                                                                                                                                         |       |
| GLU2     | <b>Glucose, 2 hrs Post-Glucose Load</b>                                                                                  | 2x 2 ml Fluoride, <i>Fasting &amp; 2 hours Post-Glucose</i>                                                                                             | 1     |
| GAD      | <b>Glutamic Acid Decarboxylase AutoAbs (GAD AutoAbs)</b>                                                                 | 5 ml Plain                                                                                                                                              | 15-20 |
|          | <b>Glutathione Peroxidase</b>                                                                                            |                                                                                                                                                         |       |

| Code  | Test Description                                                                       | Specimen Type                                                                                                                                                                                                                                                          | TAT  |
|-------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| GALB  | <b>Glycated Albumin (GA)</b> (diabetic monitoring)                                     | 5 ml Plain                                                                                                                                                                                                                                                             | 3-5  |
|       | <b>Glycated Haemoglobin</b> (refer to HbA1c)                                           |                                                                                                                                                                                                                                                                        |      |
| GRAM  | <b>Gram's Stain Examination</b>                                                        | Swab / Smear / Urine                                                                                                                                                                                                                                                   | 1    |
| HGH   | <b>Growth Hormone (hGH)</b>                                                            | 5 ml Plain, <i>Separate serum &amp; freeze.</i><br><i>Note time of collection &amp; fasting / stimulation / suppression.</i>                                                                                                                                           | 7    |
| H     | <b>Haemoglobin (Hb)</b> (refer to Full Blood Count)                                    |                                                                                                                                                                                                                                                                        |      |
| A1C   | <b>Haemoglobin A1c (HbA1c)</b>                                                         | 3 ml EDTA                                                                                                                                                                                                                                                              | 1    |
| HBE   | <b>Haemoglobin Electrophoresis + FBC + Comment and Interpretation by Haematologist</b> | 3 ml EDTA                                                                                                                                                                                                                                                              | 7    |
| HAPG  | <b>Haptoglobin</b>                                                                     | 5 ml Plain                                                                                                                                                                                                                                                             | 5    |
| HDEP  | <b>HDL, LDL, VLDL Electrophoresis</b>                                                  | 5 ml Plain                                                                                                                                                                                                                                                             | 5    |
| HDLC  | <b>HDL-Cholesterol (Direct Method)</b>                                                 | 5 ml Plain                                                                                                                                                                                                                                                             | 1    |
| HPYG  | <b><i>H. pylori</i> IgG (semi-quantitative)</b>                                        | 5 ml Plain                                                                                                                                                                                                                                                             | 2    |
| HPYA  | <b><i>H. pylori</i> Abs (with Current Infection Marker)</b>                            | 5 ml Plain                                                                                                                                                                                                                                                             | 2    |
| UBT4  | <b><i>H. pylori</i> <sup>14</sup>C-Urea Breath Test</b>                                | Breath in card<br><i>Resting patient, fasting for a minimum of 6 hours (no drink, no food, no smoke). No antibiotic treatment for 4 weeks. No Proton-pump inhibitor treatment for 2 weeks. No antacids and gastro-intestinal protectants 24 hours before the test.</i> | 3    |
| HAV   | <b>Hepatitis A IgG (Anti-HAV)</b>                                                      | 5 ml Plain                                                                                                                                                                                                                                                             | 1    |
| AVM   | <b>Hepatitis A IgM (HAV IgM)</b>                                                       | 5 ml Plain                                                                                                                                                                                                                                                             | 5    |
| BCG   | <b>Hepatitis B core Abs (Anti-HBc)</b>                                                 | 5 ml Plain                                                                                                                                                                                                                                                             | 5    |
| BCM   | <b>Hepatitis B core IgM (HBc IgM)</b>                                                  | 5 ml Plain                                                                                                                                                                                                                                                             | 5    |
| BCAG  | <b>Hepatitis B core-related Antigen (HBcr Ag), Quantitative</b>                        | 5 ml Plain                                                                                                                                                                                                                                                             | 7-10 |
| EAB   | <b>Hepatitis B envelope Ab (Anti-HBe)</b>                                              | 5 ml Plain                                                                                                                                                                                                                                                             | 3    |
| EAG   | <b>Hepatitis B envelope Ag (Hbe-Ag)</b>                                                | 5 ml Plain                                                                                                                                                                                                                                                             | 3    |
| SAB   | <b>Hepatitis B surface Ab (Anti-HBs)</b>                                               | 5 ml Plain                                                                                                                                                                                                                                                             | 1    |
| SAG   | <b>Hepatitis B surface Ag (HBs-Ag)</b>                                                 | 5 ml Plain                                                                                                                                                                                                                                                             | 1    |
| SAGQ  | <b>Hepatitis B surface Ag, Quantitative</b>                                            | 5 ml Plain                                                                                                                                                                                                                                                             | 5    |
| HBVPC | <b>HBV Pre-core (PreC) Mutant</b>                                                      | 5 ml EDTA (Plasma), <i>Separate plasma &amp; freeze</i>                                                                                                                                                                                                                | 7-14 |
| HBVPS | <b>HBV Pre-surface (PreS) Mutant</b>                                                   | 5 ml EDTA (Plasma), <i>Separate plasma &amp; freeze</i>                                                                                                                                                                                                                | 7-14 |
| HBVY  | <b>HBV Drug Resistance Analysis</b>                                                    | 5 ml EDTA (Plasma), <i>Separate plasma &amp; freeze.</i><br><i>Please specify the date and result of the last viral load. The minimum viral load is 100 IU.</i>                                                                                                        | 7-14 |
| HBVG  | <b>HBV-DNA Genotyping</b>                                                              | 5 ml EDTA (Plasma), <i>Separate plasma &amp; freeze.</i><br><i>Please specify the date and result of the last viral load. The minimum viral load is 100 IU.</i>                                                                                                        | 7-14 |
| HBVL  | <b>HBV-DNA Viral load (by qPCR)</b>                                                    | 5 ml EDTA (Plasma), <i>Separate plasma &amp; refrigerate</i>                                                                                                                                                                                                           | 7-10 |
| HCV   | <b>Hepatitis C Ab (Anti-HCV)</b>                                                       | 5 ml Plain                                                                                                                                                                                                                                                             | 2    |
| HCVG  | <b>HCV-RNA Genotyping</b>                                                              | 3 ml EDTA (Plasma), <i>Separate plasma &amp; freeze.</i><br><i>Please specify the date and result of the last viral load. The minimum viral load is 500 IU.</i>                                                                                                        | 7-14 |
| HCVR  | <b>HCV-RNA Viral load (qPCR)</b>                                                       | 3 ml EDTA (Plasma), <i>Separate plasma &amp; refrigerate</i>                                                                                                                                                                                                           | 7-10 |

| Code                                     | Test Description                                                                                | Specimen Type                                                                                                                                                                                                  | TAT   |
|------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| H1G                                      | Herpes Simplex Virus (HSV) Type 1 IgG                                                           | 5 ml Plain                                                                                                                                                                                                     | 5     |
| H2G                                      | HSV Type 2 IgG                                                                                  | 5 ml Plain                                                                                                                                                                                                     | 5     |
| H12M                                     | HSV Type 1 & 2 IgM                                                                              | 5 ml Plain                                                                                                                                                                                                     | 5     |
| HSVD                                     | HSV DNA type 1 & 2 DNA                                                                          | Swab/ Urine/ CSF                                                                                                                                                                                               | 7-14  |
| HCY                                      | Homocysteine, total (tHcy)                                                                      | 3 ml Plain, <i>Fasting, refrigerated, separate serum a.s.a.p.</i>                                                                                                                                              | 3     |
| HVA                                      | Homovanillic Acid (HVA)                                                                         | 24 hr Urine, <i>in Acid preservative and refrigeration</i>                                                                                                                                                     | 5-7   |
| HVAR                                     | Homovanillic Acid/ Creatinine Ratio                                                             | 20 ml Urine                                                                                                                                                                                                    | 5-7   |
| HIVDR                                    | HIV Drug Resistant Analysis                                                                     | 2x 3 ml EDTA (Plasma) Separate plasma & refrigerate                                                                                                                                                            | 10-14 |
| HIV                                      | Human Immunodeficiency Virus (HIV) 1&2 Ab+Ag Screen (HIV 1&2 Ab+p24 Ag)                         | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 2     |
| HIVCT                                    | HIV 1 & 2 Confirmation Test (ICA)<br>- identify both type 1 & 2                                 | 5 ml Plain                                                                                                                                                                                                     | 7     |
| HIVL                                     | HIV-RNA Viral load (RT-PCR)                                                                     | 2x 3 ml EDTA (Plasma), <i>Separate plasma &amp; refrigerate</i>                                                                                                                                                | 7     |
| Human Leukocyte Ag (HLA) Typing (by NGS) |                                                                                                 |                                                                                                                                                                                                                |       |
| B27                                      | HLA Typing - B27                                                                                | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| B1502                                    | HLA Typing - B1502                                                                              | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| B5701                                    | HLA Typing - B5701                                                                              | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| B5801                                    | HLA Typing - B5801                                                                              | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLAA                                     | HLA Typing – HLA-A                                                                              | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLAB                                     | HLA Typing – HLA-B                                                                              | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLAC                                     | HLA Typing – HLA-C                                                                              | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLADPA1                                  | HLA Typing – DPA1                                                                               | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLADPB1                                  | HLA Typing – DPB1                                                                               | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLADQA1                                  | HLA Typing – DQA1                                                                               | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLADQB1                                  | HLA Typing – DQB1                                                                               | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLADRB1                                  | HLA Typing – DRB1                                                                               | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLADRB3                                  | HLA Typing – DRB3                                                                               | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLADRB4                                  | HLA Typing – DRB4                                                                               | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HLADRB5                                  | HLA Typing – DRB5                                                                               | 3 ml EDTA                                                                                                                                                                                                      | 14-18 |
| HPVD                                     | Human Papilloma Virus (HPV) DNA Genotyping - detect & report 32 major high & low risk genotypes | Cervical Brush in collection kit                                                                                                                                                                               | 7-10  |
| HPVS                                     | Human Papilloma Virus (HPV) DNA Screen – detect 16, 18 and 13 other high-risk genotypes         | Cervical Brush in collection kit                                                                                                                                                                               | 7     |
| CXC                                      | HPV DNA Genotyping (32 types) & Liquid Based PAP                                                | As above                                                                                                                                                                                                       | 7-10  |
| HTLVAB                                   | Human T-Lymphotropic Virus Type-1 & 2 (HTLV-1/2) Ab                                             | 5 ml Plain                                                                                                                                                                                                     | 7     |
| HTLVT                                    | HTLV 1 & 2 RNA Typing                                                                           | 5 ml Plain                                                                                                                                                                                                     | 7     |
| HTLVQ                                    | HTLV 1 & 2 RNA Viral Load                                                                       | 5 ml Plain                                                                                                                                                                                                     | 7-10  |
| CXCQ                                     | HPV DNA Screen & Liquid Based PAP                                                               | As above                                                                                                                                                                                                       | 7-10  |
| HDGA                                     | Huntington's Disease Genetic Assay                                                              | 3 ml EDTA                                                                                                                                                                                                      | 7-14  |

| Code  | Test Description                                                      | Specimen Type                                                                                                                                                                                                                                                                                                                                                                             | TAT  |  |
|-------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|
| I     |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                           |      |  |
| IFE   | Immunofixation Electrophoresis (IFE), Serum                           | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 14   |  |
| IFEU  | Immunofixation Electrophoresis (IFE), Urine/CSF                       | 50 ml FMU or 24hr Urine/10 ml CSF                                                                                                                                                                                                                                                                                                                                                         | 14   |  |
| IGA   | Immunoglobulin A (IgA)                                                | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 5    |  |
| IGD   | Immunoglobulin D (IgD)                                                | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 8    |  |
| IGE   | Immunoglobulin E (IgE), Total                                         | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 5    |  |
| IGEC  | Immunoglobulin E (IgE), Low Range (for Newborn)                       | 3 ml EDTA Cord Blood (Plasma)                                                                                                                                                                                                                                                                                                                                                             | 5    |  |
|       | IgE & IgG for specific allergen (refer to Allergy Section in Profile) |                                                                                                                                                                                                                                                                                                                                                                                           |      |  |
| IGG   | Immunoglobulin G (IgG)                                                | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 5    |  |
| IGGS  | Immunoglobulin G Subclass 1 - 4                                       | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 10   |  |
| IGM   | Immunoglobulin M (IgM)                                                | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 5    |  |
| INAB  | Influenza Virus type A & B Antigen - Rapid                            | Nasopharyngeal Swab                                                                                                                                                                                                                                                                                                                                                                       | 1    |  |
| INHA  | Inhibin A                                                             | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 7    |  |
| INS   | Insulin                                                               | 5 ml Plain, Fasting sample. Separate serum & freeze.<br>For HOMA index calculation, confirm the fasting blood sugar level performed on the same day as the sample collection for insulin.<br>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin.<br>Essential to stop treatment 8 days before taking the sample. | 5    |  |
| IGF1  | Insulin-like Growth Factor-1 (IGF-1), Total (Somatomedin-C)           | 5 ml Plain (fasting), Separate serum & freeze.                                                                                                                                                                                                                                                                                                                                            | 7    |  |
| SI    | Iron, Serum                                                           | 5 ml Plain, Fasting sample.                                                                                                                                                                                                                                                                                                                                                               | 1    |  |
| IA2   | Islet Antigen-2 (IA2) Antibodies                                      | 5 ml Plain, Separate serum & freeze.                                                                                                                                                                                                                                                                                                                                                      | 30   |  |
| J     |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                           |      |  |
|       | Joint Fluid (refer to Synovial fluid)                                 |                                                                                                                                                                                                                                                                                                                                                                                           |      |  |
| K     |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                           |      |  |
| UKET  | Ketones (Acetons) (Semi-quantitative)                                 | 20 ml Urine                                                                                                                                                                                                                                                                                                                                                                               | 2    |  |
| L     |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                           |      |  |
| LCA   | Lactate (Lactic Acid), plasma                                         | 3 ml Fluoride, fasting, avoid tourniquet                                                                                                                                                                                                                                                                                                                                                  | 5    |  |
| LDH   | Lactate Dehydrogenase (LDH)                                           | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 1    |  |
| LDHE  | LDH Isoenzyme Electrophoresis                                         | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 5    |  |
| LDLOX | LDL, oxidized (ox-LDL)                                                | 3 ml EDTA                                                                                                                                                                                                                                                                                                                                                                                 | 14   |  |
| LDLSD | LDL, small-dense (ds-LDL)                                             | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 14   |  |
| LDL1  | LDL-Cholesterol                                                       | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 1    |  |
| LEG   | Legionella Antibodies                                                 | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 7-10 |  |
| LEGUG | Legionella Urinary Antigen                                            | 20 ml Urine                                                                                                                                                                                                                                                                                                                                                                               | 5    |  |
| LEPT  | Leptin                                                                | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 7    |  |
| LPSM  | Leptospira IgM                                                        | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 3    |  |
| LIPA  | Lipase                                                                | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 5    |  |
| LPA   | Lipoprotein (a), Lp(a)                                                | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                | 5    |  |

| Code   | Test Description                                                                         | Specimen Type                                                                                                                                                                             | TAT  |
|--------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| LEP    | Lipoprotein Electrophoresis                                                              | 5 ml Plain                                                                                                                                                                                | 5    |
|        | Liver-Kidney Microsomal 1 Ab (refer to Anti-LKM1)                                        |                                                                                                                                                                                           |      |
| LUPA   | Lupus Anticoagulant (by PTT-LA & dRVVT)                                                  | 2x 2* ml Citrate *as specified on tube, Stop heparin therapy one day before test. (freeze Plasma)                                                                                         | 5-7  |
| LH     | Luteinising Hormone (LH)                                                                 | 5 ml Plain                                                                                                                                                                                | 3    |
| M      |                                                                                          |                                                                                                                                                                                           |      |
| MGS    | Magnesium, Serum                                                                         | 5 ml Plain                                                                                                                                                                                | 2    |
| MGR    | Magnesium, RBC                                                                           | 3 ml EDTA                                                                                                                                                                                 | 5    |
| MALA   | Malaria Parasite                                                                         | 3 ml EDTA                                                                                                                                                                                 | 2    |
| MPAG   | Malaria Antigen                                                                          | 3 ml EDTA                                                                                                                                                                                 | 2    |
| MEAG   | Measles IgG                                                                              | 5 ml Plain                                                                                                                                                                                | 7    |
| MEAM   | Measles IgM                                                                              | 5 ml Plain                                                                                                                                                                                | 7    |
| MEVR   | Measles Virus RNA (by PCR)                                                               | Swab                                                                                                                                                                                      | 7-10 |
| MTHFR  | Methylenetetrahydrofolate reductase (MTHFR) Genetic Assay                                | 3 ml EDTA                                                                                                                                                                                 | 7-14 |
| UMAL   | Microalbumin, Creatinine & Ratio                                                         | 10 ml Urine (prefer FMU)                                                                                                                                                                  | 2    |
| MFP    | Microfilaria Parasite                                                                    | 3 ml EDTA                                                                                                                                                                                 | 2    |
| MON    | Monospot (Infectious Mononucleosis)<br>(may also consider EBV)                           | 5 ml Plain                                                                                                                                                                                | 1    |
| MRSAGX | MRSA Rapid Gene Xpert PCR                                                                | Specific collection kit                                                                                                                                                                   | 1-2  |
| MUMG   | Mumps IgG                                                                                | 5 ml Plain                                                                                                                                                                                | 8    |
| MUMM   | Mumps IgM                                                                                | 5 ml Plain                                                                                                                                                                                | 8    |
| TBGXP  | TB Rapid Gene Xpert PCR                                                                  | Sputum/ Bronchial Wash/ Fresh Tissue/ CSF                                                                                                                                                 | 1-2  |
| TBIGRA | TB- Interferon Gamma Release Assay (TB-IGRA) (QuantiFERON)                               | 5 ml Heparin blood without gel, no vigorous shaking, reach lab within 24hrs, keep in room temperature, <b>Call Lab</b>                                                                    | 7    |
| MGEND  | <i>Mycoplasma genitalium</i> DNA Detection                                               | Swab                                                                                                                                                                                      | 7    |
| MHOMD  | <i>Mycoplasma hominis</i> DNA Detection<br>(may consider profile STPC)                   | Swab                                                                                                                                                                                      | 7    |
| MPG    | <i>Mycoplasma pneumoniae</i> IgG                                                         | 5 ml Plain                                                                                                                                                                                | 5    |
| MPM    | <i>Mycoplasma pneumoniae</i> IgM                                                         | 5 ml Plain                                                                                                                                                                                | 7    |
| MYG    | Myoglobin, serum                                                                         | 5 ml Plain                                                                                                                                                                                | 5    |
| MYGU   | Myoglobin, urine                                                                         | Urine                                                                                                                                                                                     | 5    |
| N      |                                                                                          |                                                                                                                                                                                           |      |
|        | <i>Neisseria gonorrhoeae</i> DNA (by PCR) (refer to CTNG Chlamydia & N. gonorrhoeae DNA) |                                                                                                                                                                                           |      |
| NSE    | Neuron-Specific Enolase (NSE)<br>(small cell lung, neuroblastoma, kidney ca)             | 5 ml Plain - Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Stop treatment 8 days before taking the sample. | 5    |
| O      |                                                                                          |                                                                                                                                                                                           |      |
| OSS    | Osmolality, Serum                                                                        | 5 ml Plain                                                                                                                                                                                | 5    |
| OSU    | Osmolality, Urine                                                                        | 20 ml Urine                                                                                                                                                                               | 5    |

| Code     | Test Description                                        | Specimen Type                                                                                                                                                                                                                           | TAT   |  |
|----------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--|
| OTC      | Osteocalcin                                             | 3 ml EDTA (Plasma) fasting, morning                                                                                                                                                                                                     | 7     |  |
| <b>P</b> |                                                         |                                                                                                                                                                                                                                         |       |  |
| PAP      | PAP Smear                                               | Fixed smear                                                                                                                                                                                                                             | 4-6   |  |
| PALP     | PAP Test, Liquid based preparation                      | Cervical brush in Collection kit                                                                                                                                                                                                        | 4-6   |  |
| PTHI     | Parathyroid Hormone, Intact (PTH-I)                     | 3 ml EDTA, Fasting morning<br>Separate serum/plasma a.s.a.p. & refrigerated.                                                                                                                                                            | 5-7   |  |
| PEVR     | Parechovirus RNA (by PCR)                               | Swab / Feaces                                                                                                                                                                                                                           | 7-10  |  |
| PB19D    | Parvovirus B19 DNA (by PCR)                             | 5 ml Plain Blood / CSF                                                                                                                                                                                                                  | 7     |  |
|          | Pemphigoid Ab (refer to Anti-Basement Membrane Ab)      |                                                                                                                                                                                                                                         |       |  |
|          | Pemphigus Ab (refer to Anti-Intercellular Substance Ab) |                                                                                                                                                                                                                                         |       |  |
| PEG12    | Pepsinogen I, II & Ratio                                | 5 ml Plain, fasting                                                                                                                                                                                                                     | Call  |  |
| PHOS     | Phosphorus, Serum                                       | 5 ml Plain                                                                                                                                                                                                                              | 1     |  |
| UP       | Phosphorus, Urine                                       | 24 hr Urine, in Acid preservative and Refrigeration                                                                                                                                                                                     | 5     |  |
|          | Platelet Antibodies (refer to Anti-Platelets Ab)        |                                                                                                                                                                                                                                         |       |  |
|          | Platelet Count (refer to Full Blood Count)              |                                                                                                                                                                                                                                         |       |  |
|          | Porphyrin (refer to Coproporphyrin)                     |                                                                                                                                                                                                                                         |       |  |
|          | Potassium (K) (refer to Electrolytes)                   |                                                                                                                                                                                                                                         |       |  |
| PALB     | Prealbumin                                              | 5 ml Plain                                                                                                                                                                                                                              | 5     |  |
|          | Pre-Eclampsia Risk (refer to Profile Test)              |                                                                                                                                                                                                                                         |       |  |
| PCT      | Procalcitonin (PCT)                                     | 5 ml Plain                                                                                                                                                                                                                              | 7     |  |
| P1NP     | Procollagen 1 N-Propeptide (P1NP)                       | 5 ml EDTA (Plasma)                                                                                                                                                                                                                      | 7     |  |
| PGRP     | Pro-Gastrin-Releasing Peptide (ProGRP)                  | 5 ml Plain                                                                                                                                                                                                                              | 7-10  |  |
| PRG      | Progesterone (P4)                                       | 5 ml Plain                                                                                                                                                                                                                              | 5     |  |
| PRL      | Prolactin                                               | 5 ml Plain                                                                                                                                                                                                                              | 3     |  |
| PACND    | Propionibacterium acnes DNA (by PCR)                    | Swab                                                                                                                                                                                                                                    | 7-14  |  |
| PGE2     | Prostaglandin E2 (PGE2)                                 | 24hr Urine, in Refrigeration without acid preservative<br>Stop anti-inflammatory medication for 2 days                                                                                                                                  | 7-14  |  |
| PSA      | Prostatic Specific Antigen (PSA)                        | 5 ml Plain                                                                                                                                                                                                                              | 2     |  |
| PSAF     | Prostate Specific Ag, Free                              | 5 ml Plain                                                                                                                                                                                                                              | 5     |  |
| PHI      | Prostate Health Index (PSA, Fpsa, p2PSA)                | 5 ml Plain                                                                                                                                                                                                                              | 5     |  |
| PROC     | Protein C                                               | 2x 2 ml Citrate<br>PC is vitamin K dependant and testing must be performed well after any AVK treatment (1 month). Do not assay in the event of ongoing treatment with a direct-acting oral anticoagulant.<br>Separate plasma & freeze. | 15-20 |  |
| PROS     | Protein S                                               | 2x 2 ml Citrate<br>PS is vitamin K dependant and testing must be performed well after any AVK treatment (1 month). Do not assay in the event of ongoing treatment with a direct-acting oral anticoagulant.<br>Separate plasma & freeze. | 10-12 |  |
| PEP      | Protein Electrophoresis, Serum                          | 5 ml Plain                                                                                                                                                                                                                              | 5     |  |

| Code | Test Description               | Specimen Type                                                                                                                                                                                                                                                                                                                                                                                                  | TAT  |  |
|------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|
| UPEP | Protein Electrophoresis, Urine | 20 ml FMU                                                                                                                                                                                                                                                                                                                                                                                                      | 8-10 |  |
| PRO  | Protein, Serum                 | 5 ml Plain                                                                                                                                                                                                                                                                                                                                                                                                     | 1    |  |
| UPRO | Protein, Urine                 | 24 hr Urine, in Refrigeration without acid preservative                                                                                                                                                                                                                                                                                                                                                        | 7    |  |
| PT   | Prothrombin Time (PT/INR)      | 2 ml Citrate<br><i>Do not draw blood from a heparinized line. Avoid contaminating the sample with tissue thromboplastin or heparin. Venipuncture must be performed with no trauma. If blood is drawn from an indwelling catheter, flush with 5 mL of saline and discard the first 5 mL of blood collected. If blood is drawn with a butterfly device, draw a discard tube first to remove air from tubing.</i> | 2    |  |

## R

|      |                                                            |                                                                                                                                                                                                                                                                        |      |  |
|------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|
| RENC | Renin Concentration, Total                                 | 3 ml EDTA (Plasma), Separate plasma and refrigerate a.s.a.p. Specify patient's posture, upright or recumbent. Normal sodium intake & stop medication for 2 days                                                                                                        | 7    |  |
|      | Resistin                                                   | 5 ml Plain                                                                                                                                                                                                                                                             |      |  |
| RC   | Reticulocyte Count                                         | 3 ml EDTA                                                                                                                                                                                                                                                              | 2    |  |
| RF   | Rheumatoid Factor (Quantitative)                           | 5 ml Plain                                                                                                                                                                                                                                                             | 2    |  |
| ROMA | Risk of Ovarian Malignancy Algorithm (ROMA) (HE4 + CA-125) | 5 ml Plain<br><i>HE4 and CA125 must be assayed with the same technology. Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 7-10 |  |
| ROTA | Rotavirus Antigen                                          | Fresh Stool                                                                                                                                                                                                                                                            | 2    |  |
| RG   | Rubella IgG                                                | 5 ml Plain                                                                                                                                                                                                                                                             | 2    |  |
| RM   | Rubella IgM                                                | 5 ml Plain                                                                                                                                                                                                                                                             | 5    |  |

## S

|         |                                                           |                                                                                                                                                                                                                |      |  |
|---------|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|
| SARS2R  | SARS Coronavirus Type 2 (SARS-CoV-2) Viral RNA (by rtPCR) | Nasopharyngeal & Oropharyngeal Swab in VTM / Sputum/ Brounchial Wash/ Saliva in preservative                                                                                                                   | call |  |
| SARS2AB | SARS-CoV-2 Antibodies IgM & IgG (by Rapid Test)           | 5 ml Plain                                                                                                                                                                                                     | call |  |
| SARS2AG | SARS-CoV-2 Antigen (by Rapid Test)                        | Nasopharyngeal Swab in Plain tube                                                                                                                                                                              | call |  |
| SEMA    | Seminal Analysis                                          | <b>Call lab</b> / patient to lab<br><i>Pre-appointment, specimen must reach lab within 1 hr (State time of collection).</i>                                                                                    | 1    |  |
| SRT     | Serotonin                                                 | 5 ml Plain                                                                                                                                                                                                     |      |  |
| SHBG    | Sex Hormone Binding Globulin (SHBG)                       | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 7    |  |
|         | Sodium (refer to Electrolytes)                            |                                                                                                                                                                                                                |      |  |

| Code    | Test Description                                                                                                                                        | Specimen Type                                                                                                                                                                                                  | TAT   |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
|         | <b>Somatomedin C</b> (refer to IGF-I)                                                                                                                   |                                                                                                                                                                                                                |       |
| SPV     | <b>Spermatozoa for Post-vasectomy</b>                                                                                                                   | <b>Call lab/</b> patient to lab<br><i>Specimen must reach lab in 2 hours.</i>                                                                                                                                  | 1     |
| SMAG    | <b>Spinal Muscular Atrophy (SMA) Genetic Assay</b>                                                                                                      | 3 ml EDTA                                                                                                                                                                                                      | 7-10  |
|         | <b>Sputum Culture &amp; Sensitivity</b> (refer to Culture)                                                                                              |                                                                                                                                                                                                                |       |
| SCC     | <b>Squamous Cell Carcinoma Ag (SCC Ag/ TA-4)</b>                                                                                                        | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 5     |
| STOA    | <b>Stone (Calculi) Analysis</b>                                                                                                                         | Kidney/Biliary Stone                                                                                                                                                                                           | 14-21 |
| STBD    | <b>Streptococcus Group B DNA Detection</b>                                                                                                              | Swab/ 3ml Blood                                                                                                                                                                                                | 5-7   |
|         | <b>Swab Culture &amp; Sensitivity</b> (refer to Culture)                                                                                                |                                                                                                                                                                                                                |       |
| SOD     | <b>Superoxide Dismutase (SOD) Activity</b>                                                                                                              | 5 ml Plain / 3ml Heparin                                                                                                                                                                                       | 3-5   |
| SYFEM   | <b>Synovial Fluid FEME</b> - Cell count, Gram's stain, protein & crystals                                                                               | Synovial Aspirate                                                                                                                                                                                              | 2     |
|         | <b>Syphilis</b> (refer to <i>Treponema</i> )                                                                                                            |                                                                                                                                                                                                                |       |
| T       | <b>Turbocluosis (TB) Tests</b> (AFB stain refer to page C-1, C&S refer to Culture page C-6, PCR & TB-IGRA test refer to <i>Mycobacterium</i> page C-12) |                                                                                                                                                                                                                |       |
| TELOM   | <b>Telomere Length</b>                                                                                                                                  | 3 ml EDTA                                                                                                                                                                                                      | 14    |
| FTES1   | <b>Testosterone, Free</b> (cal Total Testosterone & SHBG)                                                                                               | 5 ml Plain                                                                                                                                                                                                     | 5     |
| TES     | <b>Testosterone, Total</b>                                                                                                                              | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 5     |
| THLDA7  | <b>Thalassaemia Alpha DNA Analysis (7 mutations)</b>                                                                                                    | 2x 3 ml Whole/ Cord Blood in EDTA or 10 ml Amniotic Fluid,<br><i>Avoid contamination from mother's blood.</i>                                                                                                  | 14    |
| THLDA15 | <b>Thalassaemia Alpha DNA Analysis (15 mutations)</b>                                                                                                   | 2x 3 ml Whole/ Cord Blood in EDTA or 10 ml Amniotic Fluid,<br><i>Avoid contamination from mother's blood.</i>                                                                                                  | 14    |
| THLDB22 | <b>Thalassaemia Beta DNA Analysis (22 mutations)</b>                                                                                                    | 2x 3 ml Whole/ Cord Blood in EDTA or 10 ml Amniotic Fluid,<br><i>Avoid contamination from mother's blood</i>                                                                                                   | 14    |
| THLDBW  | <b>Thalassaemia Beta DNA Analysis (whole genome sequencing detect ~ 370 mutations)</b>                                                                  | 2x 3 ml Whole/ Cord Blood in EDTA or 10 ml Amniotic Fluid,<br><i>Avoid contamination from mother's blood</i>                                                                                                   | 14    |
| THLDD   | <b>Thalassaemia Delta DNA Analysis</b>                                                                                                                  | 2x 3 ml Whole/ Cord Blood in EDTA or 10 ml Amniotic Fluid,<br><i>Avoid contamination from mother's blood</i>                                                                                                   | 14    |
| THG     | <b>Thyroglobulin</b>                                                                                                                                    | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 10    |
|         | <b>Thyroglobulin Antibody</b> (refer to Anti-Thyroglobulin)                                                                                             |                                                                                                                                                                                                                |       |
|         | <b>Thyroid Anti-Microsomal Ab</b> (refer to Anti-TPO)                                                                                                   |                                                                                                                                                                                                                |       |
| TBG     | <b>Thyroid Binding Globulin (TBG)</b>                                                                                                                   | 5 ml Plain                                                                                                                                                                                                     |       |
|         | <b>Thyroid Peroxidase Ab</b> (refer to Anti-TPO)                                                                                                        |                                                                                                                                                                                                                |       |
| TSH     | <b>Thyroid Stimulating Hormone (TSH)</b>                                                                                                                | 5 ml Plain                                                                                                                                                                                                     | 1     |
| TSHR    | <b>TSH Receptor Antibody</b>                                                                                                                            | 5 ml Plain                                                                                                                                                                                                     | 7     |

| Code                                                                                              | Test Description                                                                                                   | Specimen Type                                                                                                                                                                                                  | TAT   |
|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| TSI                                                                                               | Thyroid Stimulating Immunoglobulin (TSI)                                                                           | 5 ml Plain                                                                                                                                                                                                     | 10    |
| TNFA                                                                                              | TNF- alpha                                                                                                         | 5 ml Plain                                                                                                                                                                                                     | 10    |
| FT4                                                                                               | Thyroxine, Free (FT4)                                                                                              | 5 ml Plain<br><i>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample.</i> | 1     |
| TPA                                                                                               | Tissue Polypeptide Ag (TPA)<br>(non-specific tumour marker)                                                        | 5 ml Plain                                                                                                                                                                                                     | 7-10  |
| <b>Total Iron Binding Capacity (TIBC)</b> (refer to Transferrin / Iron Status Evaluation Profile) |                                                                                                                    |                                                                                                                                                                                                                |       |
| TOXG                                                                                              | Toxoplasma IgG                                                                                                     | 5 ml Plain                                                                                                                                                                                                     | 5     |
| TOXM                                                                                              | Toxoplasma IgM                                                                                                     | 5 ml Plain                                                                                                                                                                                                     | 5     |
| TOXD                                                                                              | <i>Toxoplasma gondii</i> DNA                                                                                       | 5 ml Plain/ CSF/ Amniotic Fluid                                                                                                                                                                                | 5-7   |
| TPHA (refer to Treponema Pallidum-Ab test)                                                        |                                                                                                                    |                                                                                                                                                                                                                |       |
| TRA                                                                                               | Transferrin (suggest Iron Status Evaluation profil)                                                                | 5 ml Plain, <i>Fasting sample.</i>                                                                                                                                                                             | 3     |
| <b>Transforming Growth Factor Beta-1 (TGF β-1)</b>                                                |                                                                                                                    |                                                                                                                                                                                                                |       |
| TPD                                                                                               | <i>Treponema pallidum</i> DNA (by PCR)                                                                             | Swab / CSF                                                                                                                                                                                                     | 7     |
| TPAB                                                                                              | <i>Treponema pallidum</i> Ab (TP-Ab)                                                                               | 5 ml Plain                                                                                                                                                                                                     | 3     |
| TPHA                                                                                              | <i>Treponema pallidum</i> Hemagglutination Assay (TPHA)                                                            | 5 ml Plain                                                                                                                                                                                                     | 3     |
| FTAM                                                                                              | <i>Treponema</i> , FTA-Abs IgM                                                                                     | 5 ml Plain                                                                                                                                                                                                     | 10    |
| FTAG                                                                                              | <i>Treponema</i> , FTA-Abs total (IgG)                                                                             | 5 ml Plain                                                                                                                                                                                                     | 10    |
| RPR                                                                                               | Syphilis Screen (RPR method)                                                                                       | 5 ml Plain                                                                                                                                                                                                     | 1     |
| TVD                                                                                               | <i>Trichomonas vaginalis</i> DNA (by PCR)                                                                          | Genital Swab / FVU                                                                                                                                                                                             | 7     |
| TG                                                                                                | Triglycerides                                                                                                      | 5 ml Plain, <i>Fasting sample.</i>                                                                                                                                                                             | 1     |
| FT3                                                                                               | Triiodothyronine, Free (FT3)                                                                                       | 5 ml Plain                                                                                                                                                                                                     | 2     |
| RT3                                                                                               | T3, Reverse                                                                                                        | 5 ml Plain                                                                                                                                                                                                     | 10    |
| TNIH                                                                                              | Troponin I, High-Sensitive, Quantitative (CMIA)<br>– For risk stratification non urgent case only                  | 5 ml Plain                                                                                                                                                                                                     | 1-3   |
| TNIHF                                                                                             | Tropinin I, High-Sensitive, Quantitative (FIA)<br>– Ipoh only                                                      | 5 ml Plain                                                                                                                                                                                                     | 1-3   |
| TRI                                                                                               | Troponin I (cTnI), Rapid Qualitative                                                                               | 5 ml Plain                                                                                                                                                                                                     | 1     |
| TNFA                                                                                              | Tumour Necrosis Factor-Alpha (TNF-α)                                                                               | 5 ml Plain                                                                                                                                                                                                     | 10-14 |
| TYPGM                                                                                             | Typhoid Rapid IgG & IgM (Typhi-Dot)                                                                                | 5 ml Plain                                                                                                                                                                                                     |       |
| Typhoid Ab (refer to Widal Test)                                                                  |                                                                                                                    |                                                                                                                                                                                                                |       |
| Typhus Ab (refer to Weil-Felix Test)                                                              |                                                                                                                    |                                                                                                                                                                                                                |       |
| <b>U</b>                                                                                          |                                                                                                                    |                                                                                                                                                                                                                |       |
| UREA                                                                                              | Urea                                                                                                               | 5 ml Plain                                                                                                                                                                                                     | 1     |
| Urea Breath Test (refer to <i>H Pylori</i> )                                                      |                                                                                                                    |                                                                                                                                                                                                                |       |
| UUREA                                                                                             | Urea, Urine                                                                                                        | 24 hr Urine, <i>in Refrigeration without acid preservative</i>                                                                                                                                                 | 3     |
| UPLAS                                                                                             | <i>Ureaplasma urealyticum</i> DNA Detection<br>(May consider profile 3-in-1 Mycoplasma Test – TMT Test, Page B-24) | Swab                                                                                                                                                                                                           | 5-7   |

| Code                                                                           | Test Description                                                           | Specimen Type                                                                                                                                                                                           | TAT   |
|--------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| UA                                                                             | Uric Acid                                                                  | 5 ml Plain                                                                                                                                                                                              | 1     |
| UUA                                                                            | Uric Acid, Urine                                                           | 24 hr Urine, in Refrigeration without acid preservative                                                                                                                                                 | 3     |
| <b>Urine Culture &amp; Sensitivity</b> (refer to Culture)                      |                                                                            |                                                                                                                                                                                                         |       |
| UFEM                                                                           | Urine FEME / Urinalysis - 10 chemical parameters & microscopic examination | 20 ml MSU                                                                                                                                                                                               | 1     |
| UPT                                                                            | Urine Pregnancy Test (Urine $\beta$ -hCG), rapid                           | 20 ml Urine                                                                                                                                                                                             | 1     |
| <b>V</b>                                                                       |                                                                            |                                                                                                                                                                                                         |       |
| VMA                                                                            | Vanillylmandelic Acid (VMA)                                                | 24 hr Urine, in Acid preservative and Refrigeration                                                                                                                                                     | 10    |
| VMCR                                                                           | Vanillylmandelic Acid (VMA)/Creatinine Ratio                               | 20 ml Urine (random)                                                                                                                                                                                    | 7     |
| VZG                                                                            | Varicella-zoster IgG (Chicken Pox)                                         | 5 ml Plain                                                                                                                                                                                              | 8     |
| VZM                                                                            | Varicella-zoster IgM (Chicken Pox)                                         | 5 ml Plain                                                                                                                                                                                              | 12    |
| VZD                                                                            | Varicella-zoster Virus (VZV) DNA (by PCR)                                  | Swab / Urine / CSF / Serum                                                                                                                                                                              | 7     |
| <b>Vascular Endothelial Growth Factor (VEGF)</b>                               |                                                                            |                                                                                                                                                                                                         |       |
| <b>VDRL</b> (refer to <i>Treponema</i> )                                       |                                                                            |                                                                                                                                                                                                         |       |
| VA                                                                             | Vitamin A (Retinol)                                                        | 5 ml Plain, fasting, wrap, avoid light. Separate serum & freeze.                                                                                                                                        | 14-21 |
| VB12                                                                           | Vitamin B12 (Cobalamin)                                                    | 5 ml Plain<br>Interference possible in patients treated with biotin (vitamin B7, B8 or H) or taking any food supplement containing biotin. Essential to stop treatment 8 days before taking the sample. | 7-10  |
| VDT                                                                            | Vitamin D, Total (25-OH D2 & D3)                                           | 5 ml Plain, Separate serum & refrigerate a.s.a.p.                                                                                                                                                       | 5-7   |
| <b>W</b>                                                                       |                                                                            |                                                                                                                                                                                                         |       |
| WEIL                                                                           | Weil-Felix Tests ( <i>Rickettsia</i> Ab /Typhus)                           | 5 ml Plain                                                                                                                                                                                              | 1     |
| WET                                                                            | Wet Mount Examination (refer to <i>Trichomonas</i> )                       | Vaginal Swab in medium                                                                                                                                                                                  | 1     |
| <b>Total White Cell Differential Count, (TWDC)</b> (refer to Full Blood Count) |                                                                            |                                                                                                                                                                                                         |       |
| WWF                                                                            | Widal & Weil-Felix Tests (WWF)                                             | 5 ml Plain                                                                                                                                                                                              | 1     |
| WT                                                                             | Widal Tests ( <i>Salmonella</i> Ab/Typhoid)                                | 5 ml Plain                                                                                                                                                                                              | 1     |
| <b>Z</b>                                                                       |                                                                            |                                                                                                                                                                                                         |       |
| ZIKAR                                                                          | Zika Virus RNA                                                             | 5 ml Plain/ Urine/ CSF                                                                                                                                                                                  | 7-10  |

## Toxicology

| Code                                                 | Test Description                                                                                                                                                                                                                                | Specimen Type | TAT  |  |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------|--|
|                                                      | <b>Abused Drug Tests</b>                                                                                                                                                                                                                        |               |      |  |
| <b>SCREENING ASSAYS (Qualitative / Quantitative)</b> |                                                                                                                                                                                                                                                 |               |      |  |
| AMPH                                                 | Amphetamines, by EIA                                                                                                                                                                                                                            | 10 ml Urine   | 2    |  |
| AMPHR                                                | Amphetamines, Rapid Screen                                                                                                                                                                                                                      | 10 ml Urine   | 1    |  |
| BARU                                                 | Barbiturates                                                                                                                                                                                                                                    | 10 ml Urine   | 6    |  |
| BENU                                                 | Benzodiazepine                                                                                                                                                                                                                                  | 10 ml Urine   | 6    |  |
| CANN                                                 | Cannabinoids (THC), by EIA                                                                                                                                                                                                                      | 10 ml Urine   | 2    |  |
| CANR                                                 | Cannabinoids (THC), Rapid Screen                                                                                                                                                                                                                | 10 ml Urine   | 1    |  |
| COCU                                                 | Cocaine                                                                                                                                                                                                                                         | 10 ml Urine   | 6    |  |
| NICOT                                                | Cotinin (Nicotine metabolite)                                                                                                                                                                                                                   | 10 ml Urine   | 7    |  |
| ETH                                                  | Ethanol (Ethyl Alcohol)                                                                                                                                                                                                                         | 5 ml Plain    | 5    |  |
| UHER                                                 | Heroin                                                                                                                                                                                                                                          | 20 ml Urine   | 5    |  |
| KETA                                                 | Ketamine                                                                                                                                                                                                                                        | 20 ml Urine   | 5    |  |
| KETU                                                 | Ketum /Kratom (Mitragyna) (Rapid Screen)                                                                                                                                                                                                        | 10 ml Urine   | 2    |  |
| MTET                                                 | Methanol & Ethanol (by LC-MS)                                                                                                                                                                                                                   | 5 ml Plain    | 7-12 |  |
| METHR                                                | Methamphetamines, Rapid Screen                                                                                                                                                                                                                  | 10 ml Urine   | 1    |  |
| MORP                                                 | Morphine/Opiates, by EIA                                                                                                                                                                                                                        | 10 ml Urine   | 2    |  |
| MORR                                                 | Morphine/Opiates, Rapid Screen                                                                                                                                                                                                                  | 10 ml Urine   | 1    |  |
| METD                                                 | Methadone, Quantitative                                                                                                                                                                                                                         | 10 ml Urine   | 6    |  |
| PCP                                                  | Pencyclidine, Quantitative                                                                                                                                                                                                                      | 10 ml Urine   | 6    |  |
| PPX                                                  | Propoxyphene, Quantitative                                                                                                                                                                                                                      | 10 ml Urine   | 6    |  |
| MOCA                                                 | Morphine & Cannabinoids, by EIA                                                                                                                                                                                                                 | 10 ml Urine   | 2    |  |
| MOCAR                                                | Morphine & Cannabinoids, Rapid Screen                                                                                                                                                                                                           | 10 ml Urine   | 1    |  |
| MCA                                                  | Morphine, Cannabinoids & Amphetamines, by EIA                                                                                                                                                                                                   | 10 ml Urine   | 2    |  |
| MCAR                                                 | Morphine, Cannabinoids & Amphetamines, Rapid Screen                                                                                                                                                                                             | 10 ml Urine   | 1    |  |
| DX9                                                  | 9 Multiple Abused Drugs Screen                                                                                                                                                                                                                  | 20 ml Urine   | 6    |  |
|                                                      | <ul style="list-style-type: none"> <li>• Amphetamines    - Cannabinoids    • Methamphetamines</li> <li>• Barbiturates    - Cocaine        • Morphine (Opiates)</li> <li>• Benzodiazepines - Methadone    • Tricyclic Antidepressants</li> </ul> |               |      |  |

| Code  | Test Description                                                                          | Specimen Type                                  | TAT   |
|-------|-------------------------------------------------------------------------------------------|------------------------------------------------|-------|
|       | <b>CONFIRMATION ASSAY (by GC-MS / LC-MS method)</b>                                       | 20 ml Urine for all the tests in sealed bottle | 14-21 |
| ADCT1 | <b>Cannabinoids (Carboxy-THC)</b>                                                         |                                                |       |
| ADCT2 | <b>Barbiturates</b>                                                                       |                                                |       |
| ADCT4 | <b>Opiates (including Morphine &amp; Codeine)</b>                                         |                                                |       |
| ADCTB | <b>Benzodiazepines</b>                                                                    |                                                |       |
| ADCT5 | <b>Amphetamines (including Amphetamine &amp; , Methamphetamine, MDMA, MDA, MDEA, etc)</b> |                                                |       |
| ADCT6 | <b>Ecstasy (MDMA &amp; MDA)</b>                                                           |                                                |       |
| ADCT7 | <b>Ketamine</b>                                                                           |                                                |       |

|       |                                     |                  |   |
|-------|-------------------------------------|------------------|---|
|       | <b>Therapeutic Drug Assays</b>      |                  |   |
| ACET  | <b>Acetaminophen / Paracetamol</b>  | 5 ml Plain       | 5 |
| AMIK  | <b>Amikacin</b>                     | 5 ml Plain       | 5 |
| CARB  | <b>Carbamazepine (Tegretol)</b>     | 5 ml Plain       | 5 |
| CCSA  | <b>Cyclosporin A</b>                | 3 ml EDTA Plasma | 5 |
| DIG   | <b>Digoxin (Lanoxin)</b>            | 5 ml Plain       | 5 |
| FK506 | <b>FK506 (Tacrolimus)</b>           | 3 ml EDTA        | 5 |
| GENT  | <b>Gentamycin</b>                   | 5 ml Plain       | 5 |
| LIT   | <b>Lithium</b>                      | 5 ml Plain       | 7 |
| MTT   | <b>Methotrexate (MTX)</b>           | 5 ml Plain       | 5 |
| PNB   | <b>Phenobarbital (Luminal)</b>      | 5 ml Plain       | 5 |
| PNT   | <b>Phenytoin (Dilantin)</b>         | 5 ml Plain       | 5 |
| SIRO  | <b>Sirolimus (Rapamycin)</b>        | 3 ml EDTA        | 7 |
| TPL   | <b>Theophylline (Aminophylline)</b> | 5 ml Plain       | 5 |
| VALA  | <b>Valproic Acid (Depakine)</b>     | 5 ml Plain       | 5 |
| VANC  | <b>Vancomycin</b>                   | 5 ml Plain       | 5 |

| Code  | Test Description                                                 | Specimen Type     | TAT   |
|-------|------------------------------------------------------------------|-------------------|-------|
|       | <b>Chemical Hazards</b>                                          |                   |       |
| ACETU | <b>Acetone, Urine</b>                                            | 20 ml Urine       | 7-14  |
| CHL1  | <b>Cholinesterase, RBC</b><br>(long term exposure to Pesticides) | 3 ml EDTA/Heparin | 7-14  |
| CHL   | <b>Cholinesterase, Serum</b><br>(acute exposure to Pesticides)   | 5 ml Plain        | 3     |
| CYANU | <b>Cyanide, Urine</b><br>(may consider plasma Lactate)           | 20 ml Urine       | 7-14  |
| SPMA  | <b>Benzene (as S-Phenylmercapturic Acid SPMA in Urine)</b>       | 20 ml Urine       | 7-14  |
| BENZ  | <b>Benzene (as Phenol in Urine)</b>                              | 20 ml Urine       | 7-14  |
| BEMA  | <b>Benzene (as t,t-Muconic Acid in Urine)</b>                    | 20 ml Urine       | 7-14  |
| FLUU  | <b>Fluoride, Urine</b>                                           | 20 ml Urine       | 7-14  |
| FORMU | <b>Formaldehyde, Urine</b>                                       | 20 ml Urine       | 7-14  |
| MEKU  | <b>Methyl Ethyl Ketone (MEK) in Urine</b>                        | 20 ml Urine       | 7-14  |
| HEX   | <b>n-Hexane (as 2,5-Hexanedione in Urine)</b>                    | 20 ml Urine       | 7-14  |
| PRQ   | <b>Paraquat, Serum</b>                                           | 5 ml Plain        | 7-10  |
| PRQU  | <b>Paraquat, Urine</b>                                           | 20 ml Urine       | 7-10  |
| STYRU | <b>Styrene (as Mandelic Acid in Urine)</b>                       | 20 ml Urine       | 7-14  |
| TOLU  | <b>Toluene (as Hippuric Acid in Urine)</b>                       | 20 ml Urine       | 7-14  |
| TCA   | <b>Trichloroethylene (as Trichloroacetic Acid in Urine)</b>      | 20 ml Urine       | 7-14  |
| XYL   | <b>Xylene (as Methylhippuric Acid), Urine</b>                    | 20 ml Urine       | 7-14  |
|       | <b>Trace &amp; Toxic Elements</b>                                |                   |       |
| ALU   | <b>Aluminium (Al), Blood</b>                                     | 5 ml TET Heparin  | 7-10  |
| ALUU  | <b>Aluminium (Al), Urine</b>                                     | 10 ml Urine       | 7-14  |
| ARS   | <b>Arsenic (As), Blood</b>                                       | 5 ml EDTA         | 14-20 |
| ARSU  | <b>Arsenic (As), Urine</b>                                       | 10 ml Urine       | 14-20 |
| ARSU2 | <b>Arsenic (AS), Inorganic in Urine</b>                          | 10 ml Urine       | 7-14  |
| CADM  | <b>Cadmium (Cd), Blood</b>                                       | 5 ml EDTA         | 7-14  |
| CADMU | <b>Cadmium (Cd), Urine</b>                                       | 10 ml Urine       | 7-14  |
| CHRB  | <b>Chromium (Cr), Blood</b>                                      | 5 ml EDTA         | 7-14  |
| CHRU  | <b>Chromium (Cr), Urine</b>                                      | 10 ml Urine       | 7-14  |
| COBB  | <b>Cobalt (Co), Blood</b>                                        | 5 ml in EDTA      | 7-14  |
| COBU  | <b>Cobalt (Co), Urine</b>                                        | 10 ml Urine       | 7-14  |
| COP   | <b>Copper (Cu), Serum</b>                                        | 5 ml TET Heparin  | 7-14  |
| COPU  | <b>Copper (Cu), Urine</b>                                        | 10 ml Urine       | 7-14  |
| PB    | <b>Lead (Pb), Blood</b>                                          | 5 ml EDTA         | 7-10  |
| UPB   | <b>Lead (Pb), Urine</b>                                          | 10 ml Urine       | 7-10  |

| Code | Test Description             | Specimen Type            | TAT  |
|------|------------------------------|--------------------------|------|
| MNBL | <b>Manganese (Mn), Blood</b> | 5 ml EDTA                | 7-14 |
| MNU  | <b>Manganese (Mn), Urine</b> | 10 ml Urine              | 7-14 |
| HG   | <b>Mercury (Hg), Blood</b>   | 3 ml EDTA                | 7-14 |
| UHG  | <b>Mercury (Hg), Urine</b>   | 10 ml Urine              | 7-14 |
| NIBL | <b>Nickel (Ni), Blood</b>    | 5 ml EDTA                | 7-14 |
| NIU  | <b>Nickel (Ni), Urine</b>    | 10 ml Urine in TET Plain | 7-14 |
| ZN   | <b>Zinc (Zn), Serum</b>      | 5 ml TET Heparin         | 7-14 |
| ZNU  | <b>Zinc (Zn), Urine</b>      | 10 ml Urine              | 7-14 |

\* TET = Trace Element Tube (Royal Blue Cap), Plain (Red label), EDTA (Lavender label), Heparin (Royal Blue Label)

If urine collection (24hrs/Random) via other bottle other than TET, the bottle must be acid washed.

#### **Nutrient & Toxic Element Assay by ICP-MS Method**

|       |                                                                             |                    |       |
|-------|-----------------------------------------------------------------------------|--------------------|-------|
| FNTU6 | <b>6 Items Toxic Elements Analysis, Urine</b><br>~ Al, As, Cd, Pb, Hg, Ni   | Urine, refer below | 10-20 |
| FNTCU | <b>Toxic Elements Clearance Profile, Urine</b><br>~ Al, As, Cd, Pb, Hg & Ni | Urine, refer below | 10-20 |
| FNTEB | <b>Toxic Elements Analysis, RBC</b>                                         | Blood, refer below | 10-20 |
| FNNEB | <b>Nutrient Elements Analysis, RBC</b>                                      | Blood, refer below | 10-20 |
| FNNTB | <b>Nutrient &amp; Toxic Elements Analysis, RBC</b>                          | Blood, refer below | 10-20 |
| FNNTH | <b>Nutrient &amp; Toxic Elements Analysis, Hair</b>                         | Hair, refer below  | 10-20 |

Available for specimen, **H**: Hair, **R**: RBC, **U**: Urine

| Toxic Elements            | H | R | U |                  | H | R | U |                 | H | R | U |
|---------------------------|---|---|---|------------------|---|---|---|-----------------|---|---|---|
| Aluminium (Al)            |   |   |   | Germanium (Ge)*  |   |   |   | Tellurium (Te)* |   |   |   |
| Antimony (Sb)             |   |   |   | Lead (Pb)        |   |   |   | Thallium (Tl)*  |   |   |   |
| Arsenic (As)              |   |   |   | Mercury (Hg)     |   |   |   | Thorium (Th)*   |   |   |   |
| Barium (Ba)               |   |   |   | Nickel (Ni)      |   |   |   | Tin (Sn)        |   |   |   |
| Beryllium (Be)            |   |   |   | Palladium (Pd)   |   |   |   | Titanium (Ti)   |   |   |   |
| Bismuth (Bi)              |   |   |   | Platinum (Pt)    |   |   |   | Tungsten (W)*   |   |   |   |
| Cadmium (Cd)              |   |   |   | Rhodium (Rh)*    |   |   |   | Uranium (U)*    |   |   |   |
| Gadolinium (Gd)*          |   |   |   | Rubidium (Rb)*   |   |   |   |                 |   |   |   |
| Gallium (Ga)*             |   |   |   | Silver (Ag)      |   |   |   |                 |   |   |   |
| Nutrient / Trace Elements |   |   |   |                  |   |   |   |                 |   |   |   |
| Boron (B)*                |   |   |   | Lithium (Li)*    |   |   |   | Selenium (Se)   |   |   |   |
| Calcium (Ca)              |   |   |   | Magnesium (Mg)   |   |   |   | Sodium (Na)*    |   |   |   |
| Chromium (Cr)             |   |   |   | Manganese (Mn)   |   |   |   | Strontium (Sr)* |   |   |   |
| Cobalt (Co)               |   |   |   | Molybdenum (Mo)  |   |   |   | Sulphur (S)*    |   |   |   |
| Copper (Cu)               |   |   |   | Phosphorous (P)* |   |   |   | Vanadium (V)*   |   |   |   |
| Iron (Fe)                 |   |   |   | Potassium (K)    |   |   |   | Zinc (Zn)       |   |   |   |

#### **Specimen type:**

**Blood-** in 5ml Trace Element (K<sub>2</sub>EDTA) Tube (Royal Blue cap and Lavender label)

**Urine-** First morning urine directly fills in 2 x 5ml Trace Element (Plain) Tube, or urinate in acid washed bottles then transfer to 2x 5ml Trace Element (Plain) Tube (Royal Blue and Red label)

(all blood & urine sample preferably fasting, refrigerated, do not freeze)

**Hair-** Hair in special collection kit.

### Cytopathology

| Code | Test Description                                             | Specimen Type                    | TAT |  |
|------|--------------------------------------------------------------|----------------------------------|-----|--|
| PAP  | <b>PAP Smear</b>                                             | Fixed smear                      | 4-6 |  |
| PALP | <b>PAP Test, Liquid-based preparation</b>                    | Cervical brush in collection kit | 4-6 |  |
| CY04 | <b>Smear</b><br>- sputum, brushing etc.                      | Fixed smear                      | 5-7 |  |
| CY05 | <b>Fluid</b><br>- urine, washing, secretion, body fluid etc. | In Sterile Container             | 5-7 |  |
| CY06 | <b>Fine Needle Aspirate Cytology</b>                         | Relevant fixed smears            | 5-7 |  |

### Histopathology

| Code | Test Description                                                                                                                                                                                                                                                                | Specimen Type                                                                                                                                                                                                                         | TAT  |  |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|
| HP01 | <b>Small Specimen/Biopsy (&lt;3 cm)</b><br>- Endometrial curetings, Appendix, Fallopian tubes, Gall bladder, Vas deferens, Lymph nodes, Skin biopsies, Prostatic biopsies, single Ovary, single Tonsil, Cervical punch/ Colposcopic biopsies, Gastro-intestinal tract biopsies. | 10% buffered formalin fixed tissue<br><br><i>Specimen must be accompanied with appropriate and relevant clinical data.<br/>The specimen container must be labelled with patient's identification and anatomic site of the sample.</i> | 5-7  |  |
| HP02 | <b>Medium Specimen (&lt;6 cm)</b><br>- Prostatic chips (TURP), Cervical Cone biopsies, Simple Mastectomy, Uterus (without ovaries), Brest Lump, Lumps etc                                                                                                                       | 10% buffered formalin fixed tissue<br><br><i>Specimen must be accompanied with appropriate and relevant clinical data.<br/>The specimen container must be labelled with patient's identification and anatomic site of the sample.</i> | 5-7  |  |
| HP03 | <b>Large Specimen (&gt;6 cm)</b><br>- Bladder, Breast Mastectomy, Caecum, Cervical Cone Biopsy, Colectomy, Gastrectomy, Intestine, Kidney, Liver, Uterus with tubes & ovaries, etc                                                                                              | 10% buffered formalin fixed tissue<br><br><i>Specimen must be accompanied with appropriate and relevant clinical data.<br/>The specimen container must be labelled with patient's identification and anatomic site of the sample.</i> | 7-10 |  |
| HP04 | <b>Large Complex/Radical Specimen</b><br>Contact the lab for specific charges<br>- Wertheim's hysterectomy, TAHBSO with entire cervix, etc.                                                                                                                                     | 10% buffered formalin fixed tissue<br><br><i>Specimen must be accompanied with appropriate and relevant clinical data.<br/>The specimen container must be labelled with patient's identification and anatomic site of the sample.</i> | Call |  |
|      | <b>Immunohistochemistry (IHC) &amp; Special Stains</b>                                                                                                                                                                                                                          | Contact us for more information on stains available and charges.                                                                                                                                                                      | Call |  |

