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1. Blood Cultures	Microbiology tests
2. Sodium Citrate Plasma 	Haematology Tests
3. Plain Serum (no gel)  Paediatric option	<p><u>Specialist Drugs:</u></p>  Methotrexate  Thiopentone, Lamotrigine, Levetiracetam <p><u>Specialist Endocrine:</u></p>  Androstenedione  17-Hydroxyprogesterone
4. Serum Separator (SST)  Paediatric options	<p><u>Proteins:</u> Alpha-1-Antitrypsin (AAT), Immunoglobulins (IgG, IgA, IgM), IgG subclasses (inc IgG4), Beta-2-Microglobulin (B2M), Ceruloplasmin, C3, C4, Haptoglobin, Rheumatoid factor (RF), Serum Protein Electrophoresis (SPE) [inc. Alb & TP], Serum free light chains (FLC)</p>  Oligoclonal bands (with paired CSF)  ALP Isoenzymes, CK Isoenzymes <p><u>General Biochemistry:</u></p>  Lithium <p><u>Bone Markers:</u></p>  Crosslaps (CTX), Ostase, Total P1NP <p><u>Vitamins:</u></p>  Vit D (Total)  Vit A, Vit E (Protect from light) <p><u>Specialist Endocrine:</u></p>  Anti-Mullerian Hormone (AMH) [For RFC Only]  Thyroglobulin & Thyroglobulin Antibody  P3NP
5. Lithium Heparin Plasma (with gel)  Paediatric options	<p><u>General Chemistry:</u></p> <p><u>Profiles:</u></p> <p><u>ELEC:</u> Na, K, Cl, Bicarbonate (CO₂), Urea, Creatinine (CKD-EPI)</p> <p><u>LFT:</u> TBil, ALP, Alb, AST, ALT, GGT (Adjusted Ca)</p> <p><u>BONE:</u> Ca, PO₄, Alb, ALP (Adjusted Ca)</p> <p><u>LIPID:</u> Total Cholesterol, HDL, Triglycerides (LDL, TChol/HDL ratio, non-HDL Chol)</p> <p><u>IRON:</u> Iron, Ferritin, Transferrin (Transferrin sat %)</p> <p><u>THYROID:</u> TSH, FT4, (+ FT3 when required)</p> <p><u>B12 & FOLATE:</u> Folate, Vit B12</p> <p><u>Other:</u> ACE, Amylase, CK, Beta-hCG, DBIL, CRP, Ethanol, LDH, Lipase, Magnesium, Paracetamol, Pro-BNP, Phosphate, Salicylate, Troponin-T, Total Protein, Urate, Osmolality.</p> <p>[Note: Serum SST Gold Top required for TP and Alb as part of SPE profile, and for ALP and CK Isoenzymes].</p> <p><u>TDM:</u> Carbamazepine, Digoxin, Phenobarbitone, Phenytoin, Theophylline, Valproate.</p> <p>[NOTE: Use Gold Top for Lithium]</p> 

	<p><u>Antibiotics:</u> Amikacin, Gentamicin, Tobramycin, Vancomycin, Teicoplanin</p> <p><u>Tumour Markers:</u> AFP, CA19-9, CA-125, CEA, PSA</p> <p><u>Endocrine:</u> Anti-TPO, Cortisol, DHEAS, FSH, LH, Oestradiol, Progesterone, Prolactin, SHBG, Testosterone.</p> <p>NOTE: All tests listed above can be requested on the same Li-Hep bottle. The tests noted below require separate Li-Hep samples.</p> <ul style="list-style-type: none">  CarboxyHb and MetHb (heparinised blood gas syringe ideally)  Vit C (On ice & protect from light)  Bile Acids (Analysed at UH Lab, SET)  Amino Acids <u>Endocrine:</u>  Calcitonin [On ice & received in local lab within 4hr]  Growth Hormone (GH), IGF-1  Insulin [inc. Hypopak], C-peptide [Received in local lab within 4hr]
<p>6. K-EDTA Plasma</p>  <p>K3 EDTA</p> <p>Paediatric Options</p> 	<div style="display: flex; justify-content: space-between;"> <div>  Ammonia (on ice)</div> <div>  HbA1c </div> </div> <p> Homocysteine (on ice)</p> <p><u>Immunosuppressants:</u>  Cyclosporine, Everolimus, Sirolimus, Tacrolimus</p> <p><u>Specialist Endocrine:</u></p> <ul style="list-style-type: none">  ACTH [On ice & must be received in lab within 30 min]  Aldosterone, Renin [Must be received in lab within 3 hr]  PTH [Must be received in lab within 12 hr]  Porphyrins (Protect from light) <p> Gut Hormones (inc. CgA, Neurokinin A, Gastrin, Glucagon, Pancreatic Polypeptide, Vasoactive Intestinal Peptide, Somatostatin) [4 adult bottles needed for full profile. On ice & received in local lab within 2hr]</p> <p>NOTE: A separate EDTA tube is required for Haematology tests eg FBC</p>
<p>7. Pink Cross-Match</p>  <p>Cross match</p>	<p>Blood Bank</p>
<p>8. Dark Blue – Trace Elements</p>  <p>Trace Elements</p>	<p><u>Trace Elements and Metals</u></p> <p>NOTE: A Separate sample is required for Plasma metals and Blood metals.</p> <ul style="list-style-type: none">  Plasma Metals: Aluminium, Copper, Selenium, Zinc.  Blood Metals: Lead, Manganese, Chromium, Cobalt, Mercury, Cadmium, Arsenic.

**9. Fluoride Oxalate
Plasma**



Fluoride
Oxalate



Glucose, Lactate, 3-Hydroxybutyrate

Specialist Toxicology:



Methanol, Ethylene Glycol

NOTE – Sample consolidation information depicted in the table above. Some specialist requests will require a separate sample bottle for ease of processing and to avoid long delays or tests being missed.

NOTE – For referral tests (tests that are referred to other laboratories in the UK for testing), please consult local laboratory handbook or local lab contacts for information on sample requirements.

NOTE – Lithium Heparin tubes without gel are **NOT** suitable for routine Biochemistry testing.