SEROLOGY (INFECTIOUS DISEASES)

- Even though a tube of clotted blood is indicated with most tests, a battery of tests can be done on one clotted sample and not a separate sample/test.

Anti-streptolycin O antibodies
Anti-DNAse-B antibodies
Brucella antibodies
Schistosoma antibodies (Bilharzia)
*Coxiella burnetii* antibodies
Cysticercosis antibodies
Echinococcus antibodies
Entamoeba antibodies
Histoplasma antibodies
Legionella antibodies
Leptospira antibodies
*Mycoplasma pneumoniae* antibodies
Rickettsia antibodies
Toxocara antibodies
Toxoplasma antibodies (TBH: TORCH screen - Only Toxoplasma test is done at Serology; Rubella, CMV and Herpes tests are done at the Virology laboratory in the Medical School)
Widal test
Yersinia antibodies

- All abovementioned serology tests:
  - Serum: 10 ml clotted blood in sterile tube A battery of tests can be done on one clotted sample.

Syphilis serology (RPR; FTA; VDRL)

RPR
- Serum: 10ml clotted blood in sterile tube

FTA
- Serum: 10ml clotted blood in sterile tube
  - Cerebrospinal fluid: 2ml in sterile tube

VDRL
- Cerebrospinal fluid: 2ml in sterile tube

Chlamydia antigen detection

- Cervical or urethral swabs must be sent in transport media (TBH: swabs and transport media obtainable from the laboratory)

*Pneumocystis jiroveci* antigen detection

- Broncho-alveolar lavage specimen or tracheal aspirate
  - Sputum is only recommended if above mentioned specimens cannot be obtained. Send an early-morning specimen in a sterile container (saliva is not acceptable). At TBH only respiratory specimens <6 hours old and received on weekdays before 13h00 will be processed. A similar sample should be sent to cytology for staining.

- Do not request Bacteriological culture and Pneumocystis serological
detection on the same specimen.

**IMMUNOLOGY**

Even though a tube of clotted blood is indicated with most tests, a battery of tests can be done on one clotted sample and not a separate sample/test.

**AUTO-ANTIBODY TESTS:**

Collagen screen (stomach, liver and kidney tissue substrate): Anti-mitochondrial; Anti-smooth muscle; Anti-parietal cell and Anti-nuclear antigen

Anti-nuclear antigen (ANA)
Anti-DNA
Anti-extractable nuclear antigen
Anti-Glomerular basement membrane
Anti-Ro
Anti-La
Anti-SCL-70 (Scleroderma)
Anti-Jo1
Thyroid antibodies (Anti-microsomal; Anti-thyroglobulin)
Anti-cardiolipin
ANCA (Anti-cytoplasmic antibodies)
LKM-antibodies (Liver Kidney Microsomes)
Rheumatoid factor
Anti-Coeliac disease/Anti-Gliadin antibodies
Anti-Gad/IA2 antibodies.

Auto-antibody tests:
Serum: 5 ml clotted blood in sterile tube. A battery of tests can be done on one clotted sample.

<table>
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<th>TISSUE</th>
<th>DISEASE</th>
<th>AUTO-ANTIBODY</th>
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<tr>
<td>Thyroid</td>
<td>Hypothyroidism</td>
<td>Anti-microsomal</td>
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<td>Anti-thyroglobulin</td>
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<td>Gastric</td>
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<td>Anti-parietal cell</td>
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<td>Liver</td>
<td>Autoimmune hepatitis</td>
<td>Anti-smooth muscle</td>
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<td>Primary biliary cirrhosis</td>
<td>Anti-mitochondrial</td>
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<td>Neuromuscular</td>
<td>Myastenia gravis</td>
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<td>Kidney</td>
<td>Goodpasture’s syndrome</td>
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<tr>
<td>Haematological</td>
<td>Antiphospholipid</td>
<td>Anti-cardiolipin</td>
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</tbody>
</table>
### Connective tissue diseases
- Rheumatoid arthritis
- SLE
- Polydermatomyositis
- Scleroderma
- Mixed Connective tissue disease
- Sjogren’s syndrome

### Vasculitis
- Anti-neutrophil cytoplasmic membrane (ANCA)

### Circulating immune complexes
- Serum: 5 ml clotted blood in sterile tube

### COMPLEMENT STUDIES:
#### C3; C4
- Serum: 5 ml clotted blood in sterile tube

#### Total complement
- Serum: 5 ml clotted blood in sterile tube **on ice**

#### C3 nephritic factor
- Serum: 5 ml clotted blood in sterile tube
  - At TBH: Test is only performed when C3 is reduced

#### C1-esterase inhibitor (C1 inactivator)
- Serum: 5 ml clotted blood in sterile tube
  - At TBH: test is only performed when C4 is reduced

#### Other complement fractions
- Serum: 5 ml clotted blood in sterile tube **on ice**
  - At TBH: Test is only performed when total complement is absent or markedly reduced

#### CRP (C reactive protein)
- Serum: clotted blood in sterile tube
  - Adults: 5ml
  - Children: 1.5ml

#### Fungal antibodies
- Serum: 5 ml clotted blood

#### Avian antibodies
- Serum: 5 ml clotted blood

#### IgG subclasses
- Serum: 5 ml clotted blood

#### Quantitative CD4 and CD8 counts and ratio
- 5ml EDTA blood. Keep blood at all times at room temperature.
Lymphocyte subsets on bronchial lavages - only by prior arrangement with laboratory, at TBH: extension 5564 or 5278
Test only done on weekdays Monday to Friday.
Result also available in absolute count:-No need to request FBC and DIFF first.

HLA B27 marker

- 5ml EDTA blood
  Keep blood at all times at room temperature.

Lymphocyte function tests (T- and B-cell activity)

- Arrange with laboratory, At TBH: extension 5564 or 5278
- 20ml EDTA blood
  Ensure that patient is not on antibiotic treatment as this will affect the result of this test.
  Allow for a seven day delay before result becomes available.

Neutrophil function tests

- Arrange with laboratory, At TBH: extension 5564 or 5278
- 20ml EDTA blood + 5ml clotted blood

LAD(Leucocyte adhesion receptors)
Burst test(Oxidative burst test)
Fast Immune assays(Lymphocyte transformation flowcytometric assays)