## Microbiology

### Out-Of-Hours Services

* The medical scientist on-call must be contacted through the switch or through bleep 869. The following specimen requests are routinely processed:
* CSFs from all wards and from the Emergency Department.
* Urines for culture and sensitivity until 12 midnight from the Emergency Department.
* Pregnancy tests from the Emergency Department and day theatre.
* Peritoneal dialysis fluids from nephrology wards.
* Broncho-alveolar lavage fluids from ITU/RTU until 9pm.
* Loading of all blood cultures and processing of any blood cultures that flag positive.
* Flu swabs for Influenza A/B/RSV and COVID-19 PCR testing from emergency department and ICS, ICN/RTU at agreed times.
* Transplant COVID-19 from recipient and donor

The consultant microbiologist on-call must sanction all other requests.

* **Other tests which may be available on request include:**

1. Microscopy and culture of specimens from sterile sites e.g. surgically or radiologically collected ‘critical or theatre specimens’.
2. TB PCR.
3. Cryptococcal antigen.
4. Urines from wards other than the Emergency Department.

* Specimens should be sent by means of the pneumatic tube system (2647) **with the exception of Mycobacterium glass blood culture bottles, CSF** and **critical specimens.**

### Medical Out of Hours Services

A consultant microbiologist is available at **all** times for diagnostic, therapeutic and infection prevention and control advice.

The consultant microbiologist may be contacted through the switch.

If an interim report, clinical advice or result interpretation is required please contact the Clinical Microbiology Team.

### Requests for Additional Tests

Please note that if it is necessary to request further tests on samples which have already been received in the laboratory, this should be done within 48 hours. After this time, specimens may be unsuitable for further testing.

All additional requests must be ordered by the requesting doctor on Powerchart and the label sent to the laboratory via the pneumatic chute system. Verbal requests cannot be taken over the phone.

Additional tests for referral:

These can be requested by the patient’s clinical team or the clinical Microbiology team

When an aliquot is required for sending out, the following is adhered to:

-Sufficient sample available

-Appropriate container for aliquot

-Labelling criteria (same information as original sample) See section 2.1.6

-Stability and storage conditions correct

-Samples that are aliquoted for referral include:Respiratory samples, Theatre/tissue/pus/fluids samples, CSFs, Faeces, Serology tests (See table ‘All Serology referred tests’ below,

### Test Request Forms

Table 4 is a list of Microbiology test requests that can only be ordered in the Laboratory and therfore need to be requested via form which is available on Q-pulse as LF-MIC-CRIT or on the intranet at http://my.beaumont.ie/Documents/Request%20Form%20for%20Critical%20Specimens.pdf.

### Reporting

All specimens with test requests are received in laboratory. Specimen status is visible once received in laboratory from collected to verified. All results are viewable on Powerchart in Results Review. All report results are printable from Powerchart.

If an interim report, clinical advice or result interpretation is required please contact the Clinical Microbiology Team.

### Specimen Storage Criteria

Samples must be delivered to laboratory as soon as possible after the sample is taken. Where a delay in transport is envisaged, store specimens as follows:

|  |  |
| --- | --- |
| **Specimen** | **Storage** |
| Blood cultures | Room temperature |
| CSF | 2-8˚C |
| *Neisseria gonorrhoea* | Room temperature |
| Urines | 2-8˚C |
| All other microbiology specimens | 2-8˚C |

Repertoire of Test Services *See Table 4.* The table is a brief guide to the test name changes on Powerchart, MedLIS

### Repertoire of Testing

| **Test** | **Target Pathogens** | **Specimen** | **Minimum**  **Volume** | **Biological reference range** | **TAT** | **Comment** | **MedLIS order on Powerchart** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Urine | | | | | | | |
| Microscopy | N/A | The Sarstedt NFT (Needle Free Transfer) system. 100ml NFT primary container Reference 75.562.900) and a10mL Monovette tube reference 10.252) | 15 mls  2mls | WBC, RBC <1 to >100  per µL | Within 24 hours from receipt | Culture is only performed on urines which meet the appropriated laboratory and clinical criteria. ‘WBC ≥50/uL **OR** sediMAX bacterial count of >+.  The following urines are always cultured: Urology/ Transplant,Nephrology, Haematology, Oncology and RAD/ONC, pregnant women, children <16 years old, Nephrostomy & intra-operative urine (I.O.U) urines | URINE |
| Routine culture and susceptibility | N/A | The Sarstedt NFT (Needle Free Transfer) system | 15 mls  2mls | N/A | 2-6 Days |  | URINE |
| Pregnancy test | N/A | The Sarstedt NFT (Needle Free Transfer) system | 15 mls | HCG Preg Positive 25mIU/mL  HCG Preg Negative  HCG Weak Positive | 1 Day | Samples received from Emergency Department for HCG are processed within 30 mins of receipt if requested as urgent.  Samples received from Day Theatre for HCG are processed within 30 mins of receipt if requested as urgent.  Repeat specimen requested within 48 hrs for weak pos results | PREG |
| Legionella antigen | Legionella | The Sarstedt NFT (Needle Free Transfer) system | 15 mls | Leg U Ag Detected  Leg U Ag not detected | 2 Days |  | Leg UR Ag |
| Streptococcus pneumoniae antigen | *Streptococcus pneumoniae* | The Sarstedt NFT (Needle Free Transfer) system | 15 mls | S Pneum U Ag Detected  S pneum U Ag not detected | 2 Days | Not suitable for testing of urines from children or for testing of urines that have been concentrated or boiled prior to testing | S pneum Ag |
| TB culture | *Mycobacterium* spp. | Sterile 60ml container\* | 15 mls | N/A | 70 Days | 3 consecutive EMUs needed | TB |
| Faeces | | | | | | | |
| Enteric pathogens | Enteric pathogens including *Cryptosporidium,parvum hominis and Giardia lamblia* | Sterile 60ml container\* | 1-2g | N/A | 3-6 Days | A negative disclaimer is added to ‘Not Detected’ results | FAECES |
| *C difficile* toxin | *C difficile* toxin | Sterile 60ml container\* | 1-2mls | C diff tox Detected/not detected | 2 Days | Performed on semi-formed and liquid samples onlys | C diff toxin PCR |
| Rota/adeno virus | Rota/adeno virus | Sterile 60ml container\* | 1-2g | Adeno/Rota virus Positive  Adeno/Rota virus Neg | 3 Days | Performed on infants <2 years old | ROT/ADV |
| Ova/parasites | Ova/parasites | Sterile 60ml container\* | 1-2g | N/A | 4-8 days | Travel details essential | Ova and Parasites |
| Helicobacter pylori antigen | Helicobacter *pylori* | Sterile 60ml container\* | 1-2g | H.pylori Ag Not detected/detected | 4 days | A negative disclaimer is added to ‘Not Detected’ results | H pylori Ag |
| Respiratory Specimens | | | | | | | |
| Broncheolar Lavage(BAL)/ EBUS Sputum/Tracheal Aspirate Routine Culture  CF culture | Respiratory pathogens | Sterile 60ml container\* | 15mls | N/A | 2-14 Days  18 Days | Salivary samples are unsuitable (except in the following: ITU/RTU, Haematology,Oncology,  Radiology,  CF patients,specimens for TB or Legionella | Resp  CF Resp |
| Broncheolar Lavage (BAL)/ Sputum/Tracheal Aspirate TB Microscopy | Acid Fast Bacilli (AFB) | Sterile 60ml container\* | 15mls | N/A | 5 Days |  | TB |
| Broncheolar Lavage (BAL)/ Sputum/Tracheal Aspirate TB Culture | *Mycobacterium* spp. | Sterile 60ml container\* | 15mls | N/A | 70 Days | 3 consecutive morning samples | TB |
| Broncheolar Lavage (BAL)/ Sputum/Tracheal | Legionella Culture | Sterile 60ml container | 15 mLs | N/A | 12 Days |  | LEG |
| TB PCR | MTB/Rif Resistance | Specimen | At least 1 mL | Detected/ Not Detected | 1 Day |  | In lab order |
| Galactomannan | *Aspergillus* | Sterile Container | 1ml | (BAL)  Galacto Ag (BAL) positive/Negative | 7 Days | An index value of ≥1.0 is considered pos result for BALs.  Negative disclaimer on ‘Not Detected’  Can also be performed on serum | Galactomannan BAL |
| Skin Scrapings/Nail Clippings/Hair | | | | | | | |
| Microscopy | Fungal Elements  Dermatophytes, moulds &  Yeasts | Dermapak /Sterile 60ml container\* | As much as  possible | N/A | 7 Days | Swabs are not an appropriate specimen for fungal culture.  Hair must contain root | Fungal |
| Culture | Fungal Elements  Dermatophytes, moulds &  Yeasts | Dermapak /Sterile 60ml container\* | As much as  Possible | N/A | 40 Days | Swabs are not an appropriate specimen for fungal culture.  Hair must contain root | Fungal |
| Swabs | | | | | | | |
| MRSA Screen | MRSA | Charcoal Transswab | N/A | N/A | 3-10 Days | Nasal, Groin & Wound site | SCREEN |
| VRE Screen | VRE | Charcoal Transswab | N/A | N/A | 3-10 Days | Only from rectal swabs | SCREEN |
| CRE Screen | CPE | Charcoal Transswab | N/A | N/A | 4 Days | Only from rectal swabs | SCREEN |
| CRE Molecular screen | CPE | Copan Eswab | N/A | DNA Detected/ Not Detected | 4 Days | Only from rectal swabs | SCREEN Molecular screen |
| Non uro-genital (e.g. wound, eye, ear, nasal, throat) | Pathogens appropriate to site | Charcoal Transswab | N/A | N/A | 3-6 Days | Relevant clinical details essential e.g. surgery, post-partum | Swab |
| Penile/vulval | Non -STI pathogens | Charcoal Transswab | N/A | N/A | 3-6 Days |  | Swab |
| HVS – culture | Candida & non-STI pathogens | Charcoal Transswab | N/A | N/A | 3-4 Days |  | HVS |
| Fluids – Ascites/CAPD/Pleural/Synovial/Peritoneal/Pericardial | | | | | | | |
| Microscopy | All significant isolates | Sterile/ Universal Container | As much as possible | N/A | 12-24 hours | EDTA tube needed if cell count required | FLUID |
| Routine Culture | All significant isolates | Sterile/ Universal Container | As much as possible | N/A | 3-6 Days |  | FLUID |
| TB Microscopy | Acid Fast Bacilli (AFB) | Sterile/ Universal Container | As much as possible | N/A | 5 Days |  | TB |
| TB Culture | All significant isolates | Sterile/ Universal Container | As much as possible | N/A | 70 days |  | TB |
| Perfusion | All significant isolates | Sterile/ Universal Container | As much as possible | N/A | 3-5 Days |  | FLUID |
| Theatre Specimens | | | | | | | |
| Microscopy | All significant isolates | Sterile/ Universal Container | As much as possible | N/A | 12-24 hours | Do not place specimens in formalin and do not use histology containers.  Specimens must be hand-delivered to laboratory.  Request form must contain type and site of specimen | THEATRE |
| Gram Stain | All significant isolates | Sterile/ Universal Container | As much as possible | N/A | 1 Day | Do not place specimens in formalin and do not use histology containers.  Specimens must be hand-delivered to laboratory.  Request form must contain type and site of specimen | THEATRE |
| Culture | All significant isolates | Sterile/ Universal Container | As much as possible | N/A | 3-8 Days | Do not place specimens in formalin and do not use histology containers.  Specimens must be hand-delivered to laboratory. | THEATRE |
| TB Microscopy | Acid Fast Bacilli (AFB) | Sterile/ Universal Container | As much as possible | N/A | 5 Days |  | TB |
| TB Culture | All significant isolates | Sterile/ Universal Container | As much as possible | N/A | 70 Days | Do not place specimens in formalin and do not use histology containers.  Specimens must be hand-delivered to laboratory.  Request form must contain type and site of specimen | TB |
| **ON-SITE COVID-19/ INFLUENZA TESTING** | | | | | | | |
| COVID-19/ Flu A/B | COVID-19 & Influenza A/ Influenza B | VTM/UTM viral swab containing one swab or PrimeStore® Lysis MTM swabs | N/A | Flu A/B/ SARS-CoV-2 Detected  FluA/B/ SARS-CoV-2 RNA Not Detected | 2 Days \* | \*Flu A/B only available during FLU PCR Influenza season as decided by the outbreak influenza committee  A negative disclaimer is added to a negative result | COVID |
| COVID-19 ONLY | COVID-19 | VTM/UTM viral swab containing one swab or PrimeStore® Lysis MTM swabs | N/A | SARS-CoV-2 Detected  SARS-CoV-2 RNA Not Detected | 2 Days | A negative disclaimer is added to a negative result | COVID |
| COVID-19 for Transplant patients | COVID-19 | VTM/UTM viral swab containing one swab or PrimeStore® Lysis MTM swabs  BAL | N/A  1ml | SARS-CoV-2 Detected  SARS-CoV-2 RNA Not Detected | 4 hours  6 hours | Sample should be transported to the laboratory as soon as possible after taking | COVID |
| Tips | | | | | | | |
| Tips | All significant isolates | Sterile/ Universal Container for culture | N/A | N/A | 4 days |  | CATHETER |
| CSF | | | | | | | |
| Microscopy | All significant isolates | Clear Sterile/ Universal Container | As much as possible | N/A | 4 Hours | Do not send CSF samples in chute system – must be hand delivered to laboratory within 2 hours of being taken.  Contact Bleep 158 if sending between 8pm and 8am.  Label all CSFs numerically (sequentially) | CSF |
| Routine Culture | All significant isolates | Clear Sterile/ Universal Container | As much as possible | N/A | 4 Days | Do not send CSF samples in chute system – must be hand delivered to laboratory within 2 hours of being taken  Contact Bleep 158 if sending between 8pm and 8am.  Label all CSFs numerically (sequentially) | CSF |
| TB Microscopy | Acid Fast Bacilli (AFB) | Sterile/ Universal Container | As much as possible | N/A | 5 Days |  | TB |
| TB Culture | All significant isolates | Clear Sterile/ Universal Container | As much as possible | N/A | 70 Days | Do not send CSF samples in chute system – must be hand delivered to laboratory as soon as possible after taking.  Contact Bleep 158 if sending between 8pm and 8am. | TB |
| Blood Cultures | | | | | | | |
| Routine Blood Cultures  Direct Gram stain of positive blood culture bottle | All isolates | Blood Culture Bottles | See IPCT “Taking a blood culture” guidelines | N/A | 5 hours |  | Blood Culture |
| Routine Blood Cultures | All significant isolates | Blood Culture Bottles | See IPCT “Taking a blood culture” guidelines | N/A | 6 days for routine negative result | All blood cultures should be transported to the laboratory as soon as possible after taking. | Blood Culture |
| Routine Blood Cultures | All significant isolates | Identification/ Susceptibility testing | N/A | N/A | 24-48 hours |  | Blood Culture |
| Mycobacterium Blood Cultures | All significant isolates | Blood Culture Bottles | See IPCT “Taking a blood culture” guidelines | N/A | 7 weeks | Myobacterium blood culture bottles can NOT be sent in the chute system, must be hand-delivered to laboratory. | TB |
| Serology –referred tests (If the test requested is not available to order on Powerchart, please send paper request form LF-MIC-VIR or http://my.beaumont.ie/Documents/Request%20Form%20for%20Virology%20Serology.pdf | | | | | | | |
| Acanthamoeba PCR | N/A | Eye scrapings | As much as possible | N/A | 2/3 days | Tested in the NVRL |  |
| Adenovirus PCR | N/A | Potassium EDTA | 2.6mls | N/A | 2/3 days | Tested in the NVRL |  |
| Adenovirus Serology / Culture | N/A | Stool, Throat or Eye Swab, Nasal Aspirate | As much as possible | N/A | 2/3 days | Tested in the NVRL |  |
| Alcoban Levels | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead Bristol |  |
| Amikacin Levels | N/A | White Topped Serum Tube | 7.5ml | N/A | Same day | Tested in Biochem Dept. Mater Hospital |  |
| Anti HB’s (Hep B) | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Antiretrovirus (see HIV) Serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Arbovirus | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Aspergillus Abs | N/A | White Topped Serum Tube | 7.5ml | N/A | ~ 3 weeks | Tested in Immunology Beaumont |  |
| Aspergillus Antigenemia | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Eurofins Biomnis |  |
| Atypical Pneumonia Serology <20 years old | N/A | White Topped Serum Tube | 7.5ml | N/A |  | **Requires convalescent sample**  Tested in the NVRL |  |
| Atypical Pneumonia Serology >20 years old | N/A | White Topped Serum Tube | 7.5ml | N/A |  | **Requires convalescent sample**  Tested in PHL Bristol |  |
| Avian Antibodies | N/A | White Topped Serum Tube | 7.5ml | N/A | ~ 3 weeks | Tested in Immunology Beaumont |  |
| Bartonella serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 weeks | Tested in Eurofins Biomnis |  |
| Beta-D-glucan or  Beta-1-3-glucan | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead Bristol |  |
| BK- Polyoma Virus | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Blastomycosis Ab | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead Bristol |  |
| Bordetella | N/A | N/A | N/A | N/A | N/A | See Pertussis IgG |  |
| Borrelia Burgdorferi (Lyme’s) | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Botulism | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in RVPBRU- Colindale |  |
| Brucella (Melitensis Sero) | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Liverpool UK |  |
| C.J.D. | N/A | White Topped Serum Tube | 7.5ml | N/A |  | **On request directly to Clinical Micro Team**  Tested in Neuropathology, Beaumont |  |
| Campylobacter serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 weeks | Tested in Southmead, Bristol |  |
| Candida I.D. (Pan Fungal) | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead Bristol |  |
| Cellcept/ mycophenolic Acid | N/A | CSF |  | N/A |  | Tested in Royal Brompton Hospital |  |
| Chagas disease | N/A |  |  | N/A |  | (See Trypanosomiasis) |  |
| Chicken Pox (VorcellaZoster) | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in NVRL |  |
| Chickungunya Virus | N/A | CSF |  | N/A | 2/3 days | Tested in NVRL |  |
| Chlamydia (GC) Trachomatis | N/A | Eye/ Urethral/ Cervical Swab, Urine (Genprobe) | N/A | N/A | 2/3 days | Tested in NVRL |  |
| Chlamydia Serology | N/A | White Topped Serum Tube | 7.5ml |  |  | Tested in Southmead Bristol |  |
| Chloramphenicol levels | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in Southmead, Bristol |  |
| Ciprofloxacin Levels | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Antimicrobial Reference Lab.  Southmead, Bristol |  |
| CMV (Cytomegalovirus) Serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in NVRL |  |
| CMV PCR/ Quantitative/ Viral Load | N/A | Potassium EDTA | 2.6mls | N/A | 2/3 days | Tested in NVRL |  |
| Coccidiodes Levels | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Infectious & Tropical Diseases,  Southmead, Bristol |  |
| Colistin Levels/ Colomycin | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Antimicrobial Reference Lab  Southmead, Bristol |  |
| Co-Trimoxazole Level | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Coxiella (Barbrella Borrelia) | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Eurofins Biomnis |  |
| Coxsackie Antibodies (Serology) | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Eurofins Biomnis |  |
| Coxsackie Virus + Enterovirus | N/A | Faeces | 1-2g | N/A | 2/3 days | Tested in NVRL |  |
| Cryptococcal PCR | N/A | Potassium EDTA | 2.6mls | N/A |  | Tested in Southmead, Bristol |  |
| Cryptococcus Antibodies | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| CSF VIROLOGY PANEL | N/A | CSF | As much as possible (Min 0.5ml) | N/A | 2/3 days | **Ordered in Microbiology**  Tested in the NVRL |  |
| Cycloserine Level | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Cyclosporin Levels | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Bio Dept, Beaumont |  |
| Dengue Fever Serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Diptheria Specific IgG | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in RVPBRU- Colindale |  |
| E. coli 0157 Enteric Pathogen | N/A | Faeces |  | N/A |  | Tested in Cherry Orchard, PHL, Dublin |  |
| Echovirus | N/A | Faeces |  | N/A | 2/3 days | Tested in the NVRL |  |
| Ecoli 0157 serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 Weeks | Tested in Cherry Orchard |  |
| Ehrlichia | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Wiltshire UK |  |
| Endemic fungal testing. | N/A | Serum, BAL, Urine, CSF and Plasma | As much as possible | N/A |  | Tested in MiraVista Veterinary Diagnostics 4705 Decatur Blvd.  Indianapolis, IN 46241 |  |
| Enterovirus antibodies | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Surrey UK |  |
| Enterovirus Culture PCR | N/A | Faeces |  | N/A | 2/3 days | Tested in the NVRL |  |
| Enterovirus Molecular Qualitative (PCR) | N/A | CSF |  | N/A | 2/3 days | Tested in the NVRL |  |
| Epstein Barr Virus (EBV) Serology | N/A | Potassium EDTA  CSF | 2.6mls  As much as possible | N/A | 2/3 days | Tested in the NVRL |  |
| Flavivirus | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Flucytosene Levels | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Galactomannan | *Aspergillus* | Serum/BAL | 1 ml | ≥0.5 GMI | 1 week | Tested In-house |  |
| Hep A,B,C,E, E-HepB S Ag- S Ab- Core | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Hep B Viral Load/ PCR/ DNA | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Hep C PCR/ Genotype/ DNA/ Viral Load | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Herpes Simplex Virus | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| HHV 6 | N/A | CSF | As much as possible | N/A | 2/3 days | Tested in the NVRL |  |
| HHV 6&7 | N/A | Potassium EDTA  CSF | 2.6mls  As much as possible | N/A | 2/3 days | **On request directly to Clinical Micro Team**  Tested in the NVRL |  |
| HHV 8 | N/A | Potassium EDTA | 2.6mls | N/A |  | Tested in Virus Ref Lab Colindale |  |
| Histoplasma Abs Double diffusion | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Histoplasma Abs & Antigen | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Histoplasma Abs CFtYeast Phase | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Histoplasma Abs Urinary Antigen | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Histoplasmosis Abs Double Defusion | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| HIV Abs and Antigen 1&2 | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| HIV V-Load/ PCR/ Resistance | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| HSV PCR | N/A | Potassium EDTA  CSF  Dry viral swab | 2.6mls  As much as possible | N/A | 2/3 days | Tested in the NVRL |  |
| HSV specific | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Virus Ref Lab Colindale |  |
| HTLV Human T- Lymphotrophic Virus | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Influenza Virus A&B H1N1 PCR | N/A | BAL |  | N/A | 2/3 days | Tested in the NVRL |  |
| Influenza Virus Serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Isavuconazole Level | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Itraconazole Level | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| JC (Polyoma or BK) Virus | N/A | White Topped Serum Tube  CSF/Urine | 7.5ml  As much as possible | N/A | 2/3 days | Tested in the NVRL |  |
| Legionella Antibodies | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Eurofins Biomnis |  |
| Leptospirosis Serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Linezolid Level (Pre or Post) | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Listeria Serology | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Eurofins Biomnis |  |
| Lyme Abs | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Lyme PCR | N/A | CSF | As much as possible | N/A |  | Tested in Eurofins Biomnis |  |
| Measles Antibodies | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Melitensis Serology | N/A | N/A | N/A | N/A | N/A | (See Brucella) |  |
| Meningococcal/ Pneumococcal Serology (Post vaccine response) | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the Immunology Dept, Beaumont |  |
| Molluscum contagiosum | N/A | Fluids/Tissue biopsy specimens | As much as possible | N/A |  | Tested in the NVRL |  |
| Moxifloxacin levels |  | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Monkeypox ( M pox) | N/A | White Topped Serum Tube | 7.5ml | N/A | 1/3 days | Tested in the NVRL |  |
| Mumps antibodies | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Mycoplasma IgM <20 Yrs old | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| NEEDLE STICK INJURY | HIV- HBSAG-HCV | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Norovirus | N/A | Faeces | 1-2g | N/A | 2/3 days | Tested in the NVRL |  |
| Paracoccidiodes Serology | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Paramyxovirus (Mumps) | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in the NVRL |  |
| Parasites :  Amoebiasis Serology  Angio Strongyloides Serology  Cysticerosis Antibodies  Echinococcus Serology  Entamoeba Serology  Filiarisis Serology,  Hydatid Serology  Leishmania Serology & K39 Abs –Direct Ag Test  Malaria Serology,  Neurocysticercosis (Taenia solium)  Schistosomiasis Serology  Strongyloides Abs  Taenia Serology  Toxocara Abs  Trichinella Abs  Trypanosomiasis | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 Weeks | Tested in HTD London |  |
| Parinfluenza Virus | N/A | Nasal Aspirate | As much as possible | N/A | 2/3 days | Tested in the NVRL |  |
| Parvovirus B19 | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Parvovirus PCR | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Pertussis C+S | N/A | Perinasal swab (charcoal) | N/A | N/A |  | Tested in Temple street |  |
| Pertussis IgG and PCR | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Crumlin Hospital |  |
| Phlebotemina Screen | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in RIPL, London |  |
| Pneumocystis Pneumonia (PCP) PCR | N/A | Respiraotry samples/Nose & throat swabs | N/A | N/A |  | Tested in Belfast (routine) /NVRL (urgent) |  |
| Polyoma PCR | N/A | White Topped Serum Tube  CSF | 7.5ml  As much as possible | N/A | 2/3 days | Tested in the NVRL |  |
| Pseudo-cholinesterase | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Psittacosis | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Q-Fever (Coxiella burnetti) serology | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Eurofins Biomnis |  |
| QuantiFERON®–TB Gold assay | N/A | QuantiFERON®–TB Gold blood collection tubes | 1 ml x4 tubes (To the black fill line) | N/A | 1 week | Must be returned to Microbiology within 16 hours of sampling |  |
| Respiratory Syncitial Virus (RSV) | N/A | Nasal aspirate/Sputum | As much as possible | N/A | 2/3 days | Tested in the NVRL |  |
| Rhinovirus | N/A | Viral throat swab | N/A | N/A | 2/3 days | Tested in the NVRL |  |
| Rickettsia Abs (Spotted Fever) | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Wiltshire UK |  |
| Rifampicin Levels | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Rubella Serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Septrin Levels | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Shigella | N/A | Faeces | 1-2g | N/A |  | Tested in IMSSRL, UHG, Galway |  |
| Shigella Serology | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in GBRU, Colindale |  |
| Sirolimus | N/A | Potassium EDTA | 2.6ml | N/A |  | Tested in Royal Brompton Hospital, UK |  |
| Spotted Fever | N/A | N/A | N/A | N/A | N/A | (See Rickettsia) |  |
| Streptomycin Level | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Southmead, Bristol |  |
| Syphilis Serology/ (Treponema pallidum) / VDRL/TPHA/RPR | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Teicoplanin levels  (TEIC T) | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Eurofins Biomnis |  |
| Tobramycin Levels | N/A | White Topped Serum Tube | 7.5ml | N/A | Same day | Tested in Biochemistry, St. Vincents, Dublin |  |
| TORCH | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Toxoplasmosis PCR  Abs Dye Test | N/A | White Topped Serum Tube  Potassium EDTA  Tissue/Pus/CSF | 7.5ml  2.6ml  As much as possible | N/A |  | Tested in Swansea UK |  |
| Toxoplasmosis Serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in NVRL |  |
| Tularemia | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Porton Down, Salisbury |  |
| Typhus Serology | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Porton Down,  Salisbury |  |
| Urinary Histoplasmosis antigen | N/A | White Topped Serum Tube  Urine | 7.5ml  As much as possible | N/A |  | Tested in MiraVista Veterinary Diagnostics4705 Decatur Blvd.  Indianapolis, IN 46241 |  |
| Varicella Zoster (VZV) | N/A | White Topped Serum Tube  Potassium EDTA  Slides | 7.5ml  2.6ml | N/A | 2/3 days | Tested in the NVRL |  |
| Viral Pneumonia Screen | N/A | Sputum | As much as possible | N/A | 2/3 days | By request  Tested in the NVRL |  |
| Voriconazole levels | N/A | White Topped Serum Tube | 7.5ml | N/A | Same day | Tested in the Mater Hospital |  |
| Weils disease | N/A | N/A | N/A | N/A | N/A | (See Leptospirosis) |  |
| West Nile Virus Serology | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |
| Whipples PCR | N/A | Potassium EDTA  CSF | 2.6ml  As much as possible | N/A |  | Tested in St. James’s Leeds |  |
| Yellow Fever | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in Wiltshire, UK |  |
| Yersinia Abs | N/A | White Topped Serum Tube | 7.5ml | N/A |  | Tested in GBRU Colindale |  |
| Zika Virus | N/A | White Topped Serum Tube | 7.5ml | N/A | 2/3 days | Tested in the NVRL |  |

1. Specimens received in Aptima Collection Devices will be sent to the NVRL for processing. The GenProbe (Aptima) collection devices (urine containers and swabs) are supplied by the NVRL.
2. In cases where *Neisseria gonorrhoeae* (GC) is suspected, clinical details of ?STI or ‘DISCHARGE’ must be provided on the request form. If not, samples will not be cultured for GC.
3. When an aliquot is required for sending out, the following is adhered to:

-Sufficient sample available

-Appropriate container for aliquot

-Labelling criteria (same information as original sample) See section 2.1.6

-Stability and storage conditions correct

Table 4.

Ordering mnemonics for ordering of tests on Powerchart.

While the actual tests remain the same the test names may be different.

The following table is a brief guide to the test name changes.

|  |  |  |
| --- | --- | --- |
|  | **MedLIS Order** | **Previous Order (PIPE)** |
| **FLUID** | Abdominal Fluid Culture | FLDCULT |
| Ascitic Fluid Culture |
| Bile Fluid Culture |
| Drainage Fluid Culture |
| Fluid/Aspirate Culture |
| Joint Fluid Culture |
| Pancreatic Fluid Culture |
| Perfusion Fluid Culture |
| Pericardial Fluid Culture |
| Peritoneal Dialysis Fluid Culture |
| Peritoneal Fluid Culture |
| Pleural Fluid Culture |
| Fluid Microscopy (Cell Count) |
| **SWAB** | Swab Culture | SWABCULT |
| Wound Swab Culture |
| Eye Culture |
| Ear Culture |
| Mouth Culture |
| Nasal Culture |
| Pus Culture |
| **SCREEN** | MRSA Screen | MRSA |
| VRE Screen | VRE |
| CPE Molecular Screen | CRE |
| **HVS** | High Vaginal Swab Culture | HVS |
| **CSF** | CSF Culture Microscopy | CSFCULT |
| **URINE** | Urine Culture with Microscopy | URCULT |
| **FAECES** | (Enteric Pathogens/Faeces Culture,  C difficile Toxin PCR) | FAECULT / CDTOX |
| **BLOOD CULTURE** | Blood Culture | BLDCULT |
| **TB** | TB Culture | TBCULT |

### General Notes

Contact details must be clearly supplied in order to enable our CMT to contact you for further queries surrounding any samples that may need to be referred to another centre for testing.

### Key Factors Affecting Turn Around Times:

The main reason for extended turn-around-times in Microbiology is in the follow up of positive specimens. Microbial isolation and identification can be extensive in some instances, occasionally requiring referral of an isolate to a Reference Laboratory for typing or confirmation. The quoted turnaround times take this into account, but in many cases negative reports are available sooner.

### Samples Sent to NVRL for Analysis

Please refer to the NVRL user manual for information on range of tests available in the NVRL, the type of specimen required and turn around time information on these tests. Information available on www.nvrl.ie

#### Notes on Samples Sent to the NVRL

• For tests where clotted blood is required, one 10ml vial is the specimen of choice.

• Results from the NVRL can be viewed on Powerchart. For results or enquiries, the NVRL can be contacted on 01 716 1354. Address: UCD National Virus Reference Laboratory, University College Dublin, Belfield, Dublin 4.

• Request forms can be printed on-line via the NVRL web site (www.nvrl.ie) – at ‘How do you send samples?’ prompt

### Abbreviations Used on Microbiology Reports

CPE: Carbapenem resistant Enterobacterales

ESBL: Extended spectrum Beta-lactamase producers

MRSA: Methicillin resistant Staphylococcus aureus

VRE: Vancomycin resistant enterococci

MSSA: Methicillin sensitive Staphylococci

CPO: Carbapenem Produccing Organism