TEST RELATED	**REQUEST RELATED**
Internal test transfers	Requirement for Clinical Details
PDL-1 testing	Bordetella pertussis outbreak
Illumiscreen Prenatal Testing	Repeat cards
IDENTIFICATION of PATIENTS	**SAMPLE COLLECTIONS**

TEST RELATED

Internal Test Transfers

The following tests, previously forwarded to CHL, are now being processed in our Wellington Laboratory (WSCL). Both laboratories are on the same LIS and resulting will be seamless.

Adrenal Ab		Ethylene glycol		Porphyrin, faeces
Amyloid A		F actin Ab		Porphyrin, urine
Anti-GBM Ab		Growth hormone		Protein C
C1 esterase inhibitor		HepB e Ab		Protein S
Catecholamine, urine		HepB Core IgM		Scleroderma Ab
Ceruloplasmin		HIAA (urine)		Soluble liver antigen
CK-MB		Hydatid serology		TSI
Cryptococcus antigen		Measles IgM		VMA (urine)
CSF oligoclonal bands		Mumps IgM		Porphyrin, faeces
DHEAS		Myoglobin, blood		
E histolytica serology		PBG		

5TGN and 6MMP performed in house in Dunedin from 8 Nov 2017

PD-L1 Testing

SCL Dunedin is the first of 3 centres of excellence in NZ to offer PD-L1 immunohistochemistry for the use of pembroluzimab (Keytruda) in metastatic non-small cell lung cancer. Future indications include metastatic bladder cancer, metastatic gastric cancer. Applications for testing are to be made through Merck , Sharp & Dohme who part fund the treatment, and then forward approved applications to Anatomical Pathology Department, SCL Dunedin

Ilumiscreen Pre-natal Testing - SCL has noticed increased demand from patients for the Ilumiscreen (pre-natal test for the most common chromosomal abnormalities). This is a patient paid test and not covered by DHB funding. https://www.illumiscreen.co.nz/

Urgent Requests in the Community - If requesting tests such as Troponin and d-Dimer please ensure that the request includes a phone number to ring the results to. There have been several instances lately of laboratory staff being unable to contact anyone with grossly abnormal results.

IDENTIFICATION of PATIENTS

It is a matter of grave concern to the laboratories that so many patients are mis-identified by our referrers. So far this year, across all our sites, 80 samples have been received that were not for the patient indicated. These have either been notified by the referrer concerned or picked up because the results were not compatible with previous results/could not to be found. The real numbers will be much higher than this as many incidents are either not reported or not detectable. Incidents have included:

- Five histology and one CSF sample which were authorised by the referrer and processed as precious
- Three faulty samples from the same patient
- Mixed up samples for twins / triplets / relatives

Mis-identification can - and does - result in the wrong antibiotic being given, the wrong drip being put up, treatment being delayed and in extreme cases patient death can result.

The rules for correct patient identification

- Always have the request form in your hand
- Positively ID the patient by asking them for their name and DOB. Do not ask the patient to confirm their name (elderly patients in particular may affirm when they have not actually heard the question)
- Check the wristband ID if they have one
- If the patient is unable to provide details these should be obtained from the caregiver or a relative, we advise our own staff to note down the details of the person who provided the identification
- Label the tubes at the patient's side. Never pass the tubes over to someone else to label

PLEASE DO NOT ABUSE OUR STAFF FOR DISCARDING MISLABELLED and UNLABELLED SAMPLES

REQUEST RELATED

The importance of clinical details on specimen request forms

Many (over 50%) of specimens submitted to the microbiology laboratory have no or inadequate clinical details on the request form. This applies to specimens from hospitals as well as the community.

Clinical information is a critical part of the *pre-analytical phase* of laboratory testing (ie the stages before the specimen is cultured and results released). Unlike many automated blood analytical procedures, clinical microbiology is very much a labour-intensive and interpretive specialty.

For microbiology, clinical details are important for the following reasons:

- To ensure that the appropriate tests are performed when the specimen is received in the laboratory. Clinical details influence the pathogens we look for in the laboratory: these often need specialised culture plates and incubation conditions, or even molecular testing.
- To allow the scientist to interpret the initial results, and to aid them in deciding on further testing, including antimicrobial susceptibility testing when appropriate.
- The clinical history will also help the laboratory suggest whether further testing is indicated. For instance, the specimen received may not be optimal for the diagnosis of that condition.

- Note: this applies to all laboratory specialties, but is particularly important for microbiology and serology.

The details which are important to specify on request forms include

- Clinical history: why are you sending the specimen and what you are looking for?
- Exposure history, including foreign travel, exposure to potential infection sources such as animals or sick contacts, recent antibiotic treatment, etc
- Underlying conditions which may influence which tests are performed, such as immunocompromised, pregnancy, COPD, indwelling urinary catheters
- The precise site of the specimen: "wound swab" alone is not sufficient!

If clinical details are not provided, there is a risk to the patient, in that the correct diagnosis may be missed. Therefore, we are considering introducing a policy of requiring relevant clinical details before laboratory testing is performed for all microbiology and serology requests. A consultation paper will be circulated early in 2018.

Bordetella pertussis outbreak (whooping cough)

Pertussis testing

We are currently experiencing increased numbers of pertussis (whooping cough) cases. As a result we are receiving high volumes of test requests for PCR (+/- culture).

Pertussis is a notifiable disease which requires notification to Public Health *on suspicion***.** Do not wait for test results before notifying.

Who to test

Testing to confirm infection is currently recommended if the following criteria are met:

1. Clinical suspicion of pertussis in a patient with a clinically compatible illness. Cases typically present in the paroxysmal stage which starts after 1-2 weeks of infection:
   a. Paroxysmal cough with inspiratory "whoop"
   b. Post cough vomiting
   c. Periods of cough with apnoea and/or cyanosis in young infants
2. High risk individual
   a. Pregnant
   b. Child <5 years
   c. High risk occupation e.g. health care worker, early childhood (pre-school) worker, long term care facility worker
   d. Immunocompromised
   e. Household contact of an infant

Testing of known contacts of a *laboratory confirmed* case with a clinically compatible illness is not required. Please remember to notify these cases

All requests for testing MUST be discussed with the Medical Officer of Health (MOH) or a public health Communicable Disease nurse and that discussion must be clearly indicated on the request form.

Samples required

The recommended sample is an ORANGE top ***nasopharyngeal swab for pertussis PCR*** (do NOT place in liquid UTM). Serology and culture are no longer routinely recommended.

Swabs should be taken during the patient consultation. Please do not send patients to SCL collection rooms as pertussis is a highly infectious communicable disease.

Please note that the sensitivity of the PCR test declines rapidly after 3 weeks from onset of paroxysmal cough. Samples taken > 3 weeks from onset of paroxysmal cough are therefore rarely diagnostic.

Ensure that the laboratory request form gives a clear indication that the request has been discussed with the MOH.

Bordetella pertussis serology

Pertussis serology is of limited utility. Its only use is to retrospectively diagnose a case of pertussis when the patient presents outside the diagnostic window for PCR (first 3 weeks of illness). It should *never* be used for immunity testing as it does not correlate with protection; pertussis serology will be negative 6-12 months post-vaccination. We have noted a number of requests for pertussis serology pre-employment or pre-admission to training. These requests are inappropriate and will be rejected.

For further information on either of the above items please contact:

Dr Antje van der Linden (Microbiologist Ph 470 2920, email: antje.vanderlinden@sclabs.co.nz).
Dr James Ussher (Microbiologist Ph 4702924, email: james.ussher@sclabs.co.nz)

Repeat Cards

Up to 10% of the patients we test daily are using a 'repeat request form'. An audit of repeat requests forms has found that some patients have multiple forms with the same or similar tests on them, from different referrers eg: a hospital clinic and their GP. In the past we have 'merged' these multiple requests however with the advent of HCS signing off this has been found unacceptable so now we process as separate requests.

Prior to giving your patient a repeat request form, ask them if they have laboratory forms from anyone else, and rationalise where possible. Include on the request form:

1. Accurate patient details including NHI
2. Date of form
3. Frequency required for all requested tests
4. Expiry/review date for all requested tests
5. Relevant clinical details

Do not write out the repeat card (or any other request) in someone else's name. This is a particular problem for the Rheumatology Department, who do not write out any repeat cards but frequently find themselves in receipt of results assigned to them by a GP.

Faxing of Requests - if faxing a request form to the laboratory, ***please*** include a note stating why. We regularly receive faxed forms and have no idea what we are expected to do with them (Is it a request for a home visit? A patient calling in later? A problem to resolve? A test-add request?). To action your request we need clear instructions.

Services to Midwives - Email reporting to Midwives in OS has been put in place; given the poor service now offered by NZ Post it has been greeted with great relief and enthusiasm.

Getting it Right – clearly identify the test you require, common issues we encounter

- PCR = protein creatinine ratio, but can also be interpreted as polymerase chain reaction for chlamydia and gonorrhoea on a urine sample
- RFT conveys Rheumatoid factor to us not renal function tests
- MSU is not a test but a sample type. Please specify if you want microscopy and culture or another test, such as protein creatinine ratio.

Occasionally the laboratory receives aspirate specimens, in lavender top specimen pots, that resemble urine and the request form also has the "urine" box ticked. Please ensure that aspirates are clearly indicated as such on the request form and the site is included.

SAMPLE COLLECTIONS

18 Filleul Street Collection Centre

The Hanover Street Collection Centre in Dunedin has relocated to 18 Filleul Street (together with the Urgent Pharmacy and Urgent Doctors). The services and hours remain the same.

Foreign patients

Please remind foreign patients that they need to bring their work visas with them if they are to have a blood test. Patients come in saying they have a valid work visa and for more than the required two years and are therefore entitled to free testing, however we need to be able to actually sight the document.

Christmas Arrangements

Collection Centres in Dunedin will be closed on the Saturday, Monday and Tuesday at both Christmas and New Year. Filleul Street will close at 4pm Friday 22nd and Friday 29th

Ward rounds at Dunedin Hospital will be provided as usual with the exception of Christmas Day and New Year's Day

Season's Greetings from the Team at SCL and best wishes for the New Year

Jan Parker, COO SCL/MLS 0274 442 117 jan.parker@sclabs.co.nz