

LIST OF TEST IN PATHOLOGY DEPARTMENT									
	TEST	PERFORMING LAB	CONTAINER	SPECIMEN TYPE	VOLUME	SCHEDULE	LTAT (Min/Hr/Day)	LOCATION	REMARK
1	Acetaminophen	Core Lab	Plain tube without gel (Red cap)	Blood	3 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	PER-PAT form/ TDM form (In-house)
2	Activated Partial Thrombin Time (APTT)	Core Lab	Sodium citrate tube	Blood	1.8 ml (Paeds) 2.7ml (Adults)	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	To fill up the tube with blood until indicated line. Send to the laboratory as soon as possible (within 4 hours of sample collection).
3	Adenocorticotrophic Hormone (ACTH)	Special Chemical Pathology	EDTA tube	Plasma	3ml	2 times / week	5 working days	Kaunter Utama Jabatan Patologi	Put in ice once blood drawn and send to the lab immediately. Use cold centrifuge to separate the plasma. Keep in freezer -20°C and send to the referral lab in ice packs.
4	AFB Direct Smear	Microbiology	Sterile container	Sputum, Bronchoalveolar Lavage (BAL), Tracheal aspirate, Gastric Lavage, Bronchial Washing, Nasal Pharyngeal Aspirate	1 ml	Daily	1 days	Kaunter Utama Jabatan Patologi	TBIS 20C Form
5	Air sampling	Microbiology	Culture plate	Inoculated plate	Not applicable	By appointment	3 days	Microbiology lab	Done by Infection Control Staff
6	Alanine transaminase (ALT)	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
7	Albumin	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
8	Albumin Creatinine Ratio, Urine i) Urine albumin ii) Urine Creatinine	Core Lab SCACC Lab	Urine container	First morning urine (preferred). Random urine is acceptable if a first-morning urine is not available	5 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
9	Alkaline phosphatase (ALP)	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
10	Allergy Testing (Screening)	Microbiology	Plain tube	Blood	5 ml	Once a week	14 days	Kaunter Utama Jabatan Patologi	
11	Allergy Testing (Specific)	Microbiology	Plain tube	Blood	5 ml	Once a week	14 days	Kaunter Utama Jabatan Patologi	
12	Alpha Feto-Protein (AFP)	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	5 working days	Kaunter Utama Jabatan Patologi	
13	Alpha-1-Antitrypsin	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	
14	Amikacin	Core Lab	Plain tube without gel (Red cap)	Blood	4 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
15	Ammonia	Core Lab	EDTA tube	Blood	2 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	Sample should be sent immediately in ice bath. Sample need to be processed within 60 minutes of collection sample.
16	Amylase	Core Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	
17	Amylase, Urine	Core Lab	Urine container	Random Urine	5 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	
18	Anemia i) Ferritin ii) Iron iii) UIBC / TIBC	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi	
19	Antibiotic sensitivity testing	Microbiology	Culture plate	Organism isolate	Not applicable	Daily	3 days	Kaunter Utama Jabatan Patologi	
20	Antifungal Susceptibility Test -yeast only)	Microbiology	Culture plate	Organism isolate	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	Only for sample from sterile site
21	Anti HBs EIA	Microbiology	Plain tube	Serum	1 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
22	Anti-HBc IgM EIA	Microbiology	Plain tube	Serum	1 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
23	Anti-HBc Total EIA	Microbiology	Plain tube	Serum	1 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
24	Anti-HBe EIA	Microbiology	Plain tube	Serum	1 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
25	Anti Beta-2 Glycoprotein 1 Antibodies IgM & IgG	Microbiology	Plain tube	Blood	5 ml	Tue, Thur	14 days	Kaunter Utama Jabatan Patologi	
26	Anti-Cardiolipin (ACL) IgM & IgG	Microbiology	Plain tube	Blood	5 ml	Tue, Thur	14 days	Kaunter Utama Jabatan Patologi	
27	Anti-Cyclic Citrullinated Peptides IgG (Anti-CCP/ACPA)	Microbiology	Plain tube	Blood	5 ml	Tue, Thur	14 days	Kaunter Utama Jabatan Patologi	
28	Anti-neutrophil Cytoplasmic antibody (ANCA)	Microbiology	Plain tube	Blood	5 ml	Once a week	14 days	Kaunter Utama Jabatan Patologi	Initial screening with ANCA IF test followed by specific ELISA if positive
29	Anti double-stranded DNA	Microbiology	Plain tube	Blood	5 ml	Once a week	14 days	Kaunter Utama Jabatan Patologi	Indicated if SLE clinically suspected. A reflex test for positive ANA with homogenous pattern.
30	Antinuclear antibodies - Extractable Nuclear Antigen (ENA)	Microbiology	Plain Tube	Blood	5 ml	Once a week	14 days	Kaunter Utama Jabatan Patologi	
31	Antinuclear antibodies (screening)	Microbiology	Plain tube	Blood	5 ml	Mon, Wed, Fri	7 days	Kaunter Utama Jabatan Patologi	
32	Antinuclear antibodies (IF)	Microbiology	Plain tube	Blood	5 ml	Tue	14 days	Kaunter Utama Jabatan Patologi	
33	Anti-streptolysin 'O' Titre (ASOT)	Microbiology	Plain tube	Blood	5 ml	Mon, Wed, Fri	4 days	Kaunter Utama Jabatan Patologi	

	TEST	PERFORMING LAB	CONTAINER	SPECIMEN TYPE	VOLUME	SCHEDULE	LTAT (Min/Hr/Day)	LOCATION	REMARK
34	Anti-thyroglobulin	Special Chemical Pathology	Plain tube	Serum	3 ml	2 times / week	10 working days	Kaunter Utama Jabatan Patologi	
35	Anti-thyroid Specific Peroxidase	Special Chemical Pathology	Plain tube	Serum	3 ml	2 times / week	10 working days	Kaunter Utama Jabatan Patologi	
36	Anti-thyroid Stimulating Hormone Receptor	Special Chemical Pathology	Plain tube	Serum	3 ml	2 times / week	10 working days	Kaunter Utama Jabatan Patologi	
37	Aspartate Transaminase (AST)	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
38	Benzodiazepine	Special Chemical Pathology	Plain tube (Red cap)	Serum	3 ml	Weekdays Office hours	1 working day	Kaunter Utama Jabatan Patologi	TDM form
39	Beta Human Chorionic Gonadotrophin (β-hCG)(Quantitative)	Core Lab	Plain tube (yellow cap)	Blood	3 ml	Monday - Friday Sat, Sun & PH : Urgent request only	1 hour (Urgent) 5 working days (Routine)	Kaunter Utama Jabatan Patologi	
40	Bilirubin - Direct	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
41	Bilirubin - Total	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
42	BK virus (BKV) - DNA PCR (Quantitative)	Microbiology	EDTA tube	Plasma	3-5 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	Transport in ice.
43	Blood culture & sensitivity (aerobic)	Microbiology	Aerobic Blood Culture Bottle	Blood	5 -10 ml	Daily	7 days	Kaunter Utama Jabatan Patologi	Preliminary report available
44	Blood culture & sensitivity (anaerobic)	Microbiology	Anaerobic Blood Culture Bottle	Blood	5 -10 ml	Daily	7 days	Kaunter Utama Jabatan Patologi	Preliminary report available
45	Blood Film for Malarial parasites (BFMP)	Microbiology	Thick/Thin film	Thick & Thin blood smear	Not applicable	Daily	2 hours	Microbiology lab	Preliminary report available
46	Blood Fungal culture & sensitivity	Microbiology	Aerobic Blood Culture Bottle or Myco/F Lytic	Blood	5-10 ml	Daily	30 days	Kaunter Utama Jabatan Patologi	To request blood fungal culture bottle from Microbiology Lab. Lab. Preliminary report available
47	Blood Gases (ABG / VBG) i) Blood pH ii) CO2 pressure iii) O2 pressure iv) Bicarbonate v) Total CO2 vi) Base Excess	Core Lab SCACC Lab	Heparinised syringe	Blood	1 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi SCACC Lab	<p>Procedure of specimen collection:</p> <ol style="list-style-type: none"> 1. Indicate time of arterial or venous puncture in the request form. 2. Use a 1 ml disposable syringe 3. Remove the protective cover from the ABG needle and then flush through 1000 IU/ml heparin from the syringe. 4. If using alcohol to clean the venipuncture site, allow the alcohol to dry completely. 5. Draw 1 ml of blood 6. Invert the syringe upward and expel all air bubbles. 7. Mix well by rolling between palms for 5 seconds 8. Sample should be sent immediately in ice bath. Sample need to be processed within 30 minutes of collection sample. 9. If sample was received with needle, the test request will be rejected.
48	BM Aspirate	Haematology	Smear	Bone Marrow	Not applicable	Daily by appointment	10 days	Haematology Laboratory Counter	Please call ext 6549 for appointment.
49	BM Trepine Biopsy (routine)	Haematology	Sterile/Universal container (with 10% formalin)	Trepine biopsy	Not applicable	Daily by appointment	30 days	Kaunter Utama Jabatan Patologi	Please call ext 6549 for appointment.
50	BM Trepine Biopsy (complex)	Haematology	Sterile/Universal container (with 10% formalin)	Trepine biopsy	Not applicable	Daily by appointment	40 days	Kaunter Utama Jabatan Patologi	Please call ext 6549 for appointment.
51	Bone culture & sensitivity	Microbiology	Sterile container	Bone	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	
52	Ceruloplasmin	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	
53	Calcium	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
54	Calcium, Urine	Core Lab SCACC Lab	Urine container / 24 hr urine container	Random Urine / 24 hrs urine	5 ml / 24 hrs Urine Collection	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi SCACC Lab	<p>24-Hours Urine collection procedure:</p> <ol style="list-style-type: none"> i. 24-hour urine container containing preservatives for the required testing are available at the Stor Integrasi counter, Jabatan Patologi ii. On the day of collection, the first urine voided must be discarded. Time of first urine voided is start of the timing for the 24 hours' urine collection. iii. Collect the second and subsequent voided urine for 24 hours into the 24 hours' urine container. iv. At the end of 24 hours, the last urine voided is collected. For best result, refrigerate the urine if possible. v. Label the container as directed and send immediately to the laboratory.
55	Cancer Antigen 125 (CA 125)	Core Lab	Plain tube (yellow cap)	Blood	3 ml	Daily (Office hour)	5 working days	Kaunter Utama Jabatan Patologi	
56	Cancer Antigen 15-3 (CA 15-3)	Core Lab	Plain tube (yellow cap)	Blood	3 ml	Daily (Office hour)	5 working days	Kaunter Utama Jabatan Patologi	
57	Cancer Antigen 19-9 (CA 19-9)	Core Lab	Plain tube (yellow cap)	Blood	3 ml	Daily (Office hour)	5 working days	Kaunter Utama Jabatan Patologi	
58	Carbamazepine	Core Lab	Plain tube without gel (Red cap)	Blood	4 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
59	Carcinoembryonic Antigen (CEA)	Core Lab	Plain tube (yellow cap)	Blood	3 ml	Daily (Office hour)	5 working days	Kaunter Utama Jabatan Patologi	

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60	Cerebrospinal fluid culture & sensitivity	Microbiology	Sterile container	CSF	3 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	Preliminary report available pending validation
61	<i>Chlamydia Antibody IgM</i>	Microbiology	Plain tube	Blood	3 ml	Mon, Thurs	7 days	Kaunter Utama Jabatan Patologi	
62	Chloride	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
63	Chloride, Urine	Core Lab SCACC Lab	Urine container / 24 hr urine container	Random Urine / 24 hrs urine	5 ml / 24 hrs Urine Collection	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	24-Hours Urine collection procedure: i. 24-hour urine container containing preservatives for the required testing are available at the Stor Integrasi counter, Jabatan Patologi ii. On the day of collection, the first urine voided must be discarded. Time of first urine voided is start of the timing for the 24 hours' urine collection. iii. Collect the second and subsequent voided urine for 24 hours into the 24 hours' urine container. iv. At the end of 24 hours, the last urine voided is collected. For best result, refrigerate the urine if possible. v. Label the container as directed and send immediately to the laboratory.
64	Cholesterol	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
65	Cholinesterase	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi	
66	CMV - DNA PCR Viral Load (Quantitative)	Microbiology	EDTA tube	Plasma	3-5 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	Transport in ice.
67	CMV - DNA PCR Viral Load (Quantitative)	Microbiology	Sterile container	CSF	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	Transport in ice.
68	CMV - IgG ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
69	CMV - IgM ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
70	Coagulation Test i) Prothrombin Time (PT) ii) INR iii) Activated Partial Thrombin Time (APTT) iv) APTT Ratio	Core Lab	Sodium citrate tube	Blood	1.8 ml (Paeds) 2.7ml (Adults)	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	To fill up the tube with blood until indicated line. Send to the laboratory as soon as possible (within 4 hours of sample collection).
71	Complement C3	Core Lab	Plain tube (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	PER-PAT 301 form
72	Complement C4	Core Lab	Plain tube (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	PER-PAT 301 form
73	Coximetry Profile i) Methemoglobin (Methb) ii) Carboxyhemoglobin (COHb) iii) Oxyhemoglobin (O2Hb) iv) Deoxyhemoglobin (HHb)	Core Lab	Heparinised syringe	Blood	1 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	This test is only offered for HKL internal wards only. Procedure of specimen collection: 1. Indicate time of arterial or venous puncture in the request form. 2. Use a 1 ml disposable syringe 3. If using regular syringe, rinse it by sucking heparin 1000 IU/ml into the syringe and expel excess heparin solution from the syringe. 4. If using alcohol to clean the venipuncture site, allow the alcohol to dry completely. 5. Draw 1 ml of blood 6. Invert the syringe upward and expel all air bubbles. 7. Mix well by rolling between palms for 5 seconds 8. Sample should be sent immediately in ice bath. Sample need to be processed within 30 minutes of collection sample. 9. If sample was received with needle, the test request will be rejected.
74	Corneal scraping	Microbiology	Culture plate	Corneal scraping	BA,MAC,CHOC,SAB	Daily	14 days	Microbiology lab	To collect culture plates from Microbiology Unit before collection
75	Cortisol, serum	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi	Specimen collection: 1. Morning serum Cortisol: between 6 to 10 am 2. Evening serum Cortisol: between 4 to 8 pm.
76	C-Peptide	Special Chemical Pathology	Plain tube	Serum	3 ml	2 times / week	5 working days	Kaunter Utama Jabatan Patologi	For referring labs: centrifuge, aliquote and freeze sample before send to referral lab.
77	C-Reactive protein	Core Lab	Plain tube (yellow cap) / Lithium heparin tube	Blood	3.5 ml	Daily	1 day	Kaunter Utama Jabatan Patologi	
78	Creatine kinase	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
79	Creatinine	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
80	Creatinine 24hr Peritoneal Dialysate	SCACC Lab	Plain container	Fluid	2 ml	Daily (Office hour)	1 day (Routine)	SCACC Lab	
81	Creatinine clearance i) Serum/Plasma creatinine ii) Urine creatinine	Core Lab SCACC Lab	24 hrs urine container & Lithium heparin tube	Blood & Urine	4 ml (blood) & 24 hrs Urine collection	Daily (Office hour)	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	The test requires a 24-hour urine collection and a blood sample drawn within 24 hour of urine collection.
82	Creatinine Peritoneal Dialysate	SCACC Lab	Plain container	Fluid	2 ml	Daily (Office Hour)	1 day (Routine)		

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83	Creatinine, Urine	Core Lab SCACC Lab	Urine container / 24 hr urine container	Random Urine / 24 hrs urine	5 ml / 24 hrs Urine Collection	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi SCACC Lab	24-Hours Urine collection procedure: i. 24-hour urine container containing preservatives for the required testing are available at the Stor Integrasi counter, Jabatan Patologi ii. On the day of collection, the first urine voided must be discarded. Time of first urine voided is start of the timing for the 24 hours' urine collection. iii. Collect the second and subsequent voided urine for 24 hours into the 24 hours' urine container. iv. At the end of 24 hours, the last urine voided is collected. For best result, refrigerate the urine if possible. v. Label the container as directed and send immediately to the laboratory.
84	Cryoglobulin test	Haematology	2 EDTA tubes and 2 plain tubes	Blood	12 ml (2.0 ml for each EDTA tube AND 4.0 ml for each plain tube)	By appointment	7 days	Haematology Laboratory Counter	Please call ext 6549 for appointment. Avoid meal 4 hours before blood taking.
85	Cryptococcal antigen - CSF	Microbiology	Sterile container	CSF	3 ml	Daily	1 day	Microbiology lab	Preliminary report available pending validation
86	Cryptococcal antigen - Serum	Microbiology	Plain tube	Blood	3-5 ml	Daily	1 day	Microbiology lab	Preliminary report available pending validation
87	CSF Biochemistry i) Glucose ii) Total Protein iv) Appearance	Core Lab	Fluoride tube/Sterile Bijou bottle	CSF	1 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	Send to the laboratory as soon as possible.
88	CT/NG GeneXpert	Microbiology	Sterile container	Urine	2 mL	Mon-Fri	24 hours	Kaunter Utama Jabatan Patologi	PER-PAT form. Request accepted from STD Clinic HKL and verified by ID Team only
89	Cyclosporin	Core Lab	EDTA tube	Blood	2 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
90	Cytology : Non-gynaecology	Cytology	Universal container / sterile container	Body Fluid, Washing,Urine	Minimum of 20mL to 200mL or as collected depending on storage facility	Daily	Urgent: 3 working days Routine: 14 calendar days	Kaunter Penerimaan Sampel Unit Sitologi	
91	Cytology : Non-gynaecology	Cytology	Universal container / sterile container	Sputum	As collected	Daily	Urgent: 3 working days Routine: 14 calendar days	Kaunter Penerimaan Sampel Unit Sitologi	
92	Cytology: Fine Needle Aspiration	Cytology	Alcohol fixed and air-dried slides	Fine Needle Aspiration	As collected	By appointment: 1. Monday (non-breast cases/endocrine cases)- Appointment given by Cytology Lab 2. Thursday (Breast cases/endocrine cases) - Appointment given by Cytology Lab	Urgent: 3 working days Routine: 14 calendar days	Kaunter Penerimaan Sampel Unit Sitologi	
93	Cytology: Non-gynaecology	Cytology	Sterile bijou bottle / collecting tube	CSF	As collected	Daily	Urgent: 3 working days	Kaunter Penerimaan Sampel Unit Sitologi	
94	Cytology: Non-gynaecology	Cytology	Smear in coplin jar with 96% alcohol or place spray fixed slide in slide mailer/slide tray	Brushing	1-3 smears	Daily	Urgent: 3 working days Routine: 14 calendar days	Kaunter Penerimaan Sampel Unit Sitologi	Slide mailer
95	Cytology: Pap smear conventional	Cytology	Alcohol fixed Slide	Smear (on slide)	1 smear	Daily	Urgent: 14 working days Routine: 30 calendar days	Kaunter Utama Jabatan Patologi	Slide mailer
96	Cytology: Pap smear Liquid based	Cytology	Fluid-based (Thin Prep Kit)	Cervical broom rinsed in fluid based kit fixative	As collected	Daily	Urgent: 14 working days Routine: 30 calendar days	Kaunter Penerimaan Sampel Unit Sitologi	
97	D-Dimer	Core Lab	Sodium citrate tube	Blood	1.8 ml (Paeds) 2.7ml (Adults)	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	To fill up the tube with blood until indicated line. Send to the laboratory as soon as possible (within 4 hours of sample collection).
98	Dehydroepiandrosterone Sulfate (DHEA-S)	Special Chemical Pathology	Plain tube	Serum	3 ml	2 times / week	5 working days	Kaunter Utama Jabatan Patologi	For referring labs: centrifuge, aliquote and freeze sample before send to referral lab.
99	Dengue Serology - IgG ELISA	Microbiology	Plain tube	Serum	1 ml	Daily	2 days	Kaunter Utama Jabatan Patologi	Cut off receive sample 8.00am to proceed test on same day
100	Dengue Serology NS1 Antigen - ELISA	Microbiology	Plain tube	Serum	1 ml	Daily	2 days	Kaunter Utama Jabatan Patologi	Cut off receive sample 8.00am to proceed test on same day
101	Dengue Serology - IgM ELISA	Microbiology	Plain tube	Serum	1 ml	Daily	2 days	Kaunter Utama Jabatan Patologi	Cut off receive sample 8.00am to proceed test on same day
102	Digoxin	Core Lab	Plain tube without gel (Red cap)	Blood	4 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
103	DIVC Screening : i) Prothrombin Time (PT) ii) INR iii) Activated Partial Thrombin Time (APTT) iv) APTT Ratio v) Fibrinogen vi) D-Dimer vii) Haemoglobin viii) Platelet Count	Core Lab	Sodium citrate tube & EDTA tube	Blood	Citrate tube 1.8 ml (Paeds)/ 2.7ml (Adults) & EDTA tube 2 ml	Daily	90 minutes (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	To fill up the tube with blood until indicated line. Send to the laboratory as soon as possible (within 4 hours of sample collection).
104	DNA Analysis Alpha Thalassaemia and DNA Analysis Beta Thalassaemia	Haematology	EDTA tube	Blood	2.0-3.0 ml	Office hour	90 days	Kaunter Utama Jabatan Patologi	Please call ext 5746 or 5748 for information. Must include Hb Analysis report and recent Full Blood Count result. Detail history on Index Case must be provided for family screening.
105	Ear culture & sensitivity	Microbiology	Amies transport media / sterile container	Pus swab / tissue	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	
106	EBV VCA - IgG EIA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
107	EBV VCA - IgM EIA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
108	Efficiency testing on autoclaves	Microbiology	NA	Biological Indicator Cartridge	Not applicable	Daily	2 days	Microbiology lab	
109	EBV -DNA PCR Viral load (Quantitative)	Microbiology	EDTA tube	Plasma	3-5 ml	By batch	7 days	Kaunter Utama Jabatan Patologi	Transport in ice.
110	EBV -DNA PCR Viral load (Quantitative)	Microbiology	Sterile container	CSF	1 ml	By batch	7 days	Kaunter Utama Jabatan Patologi	Transport in ice.

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111	Erythrocyte Sedimentation Rate (ESR)	Core Lab	EDTA tube	Blood	2 ml	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	To fill up the tube with blood until indicated line. Send to the laboratory as soon as possible (within 4 hours of sample collection).
112	Estradiol (Oestradiol/E2)	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	Blood taking at Day 2 to Day 5 menses
113	Ethanol	Core Lab	Plain tube without gel (Red cap)	Blood	4 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
114	Everolimus	Special Chemical Pathology	EDTA tube	Whole blood	3 ml	Tuesday & Friday	Within 6 hours after sample analysis. (Sample analysis every Tuesday & Friday)	Kaunter Utama Jabatan Patologi	TDM form Sample stability: 3 days (2-8°C) 28 days (-20°C)
115	Eye culture & sensitivity	Microbiology	Amies transport media / sterile container	Swab / tissue	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	
116	Fasting Serum Lipid (FSL) i) Cholesterol ii) HDL Cholesterol iii) LDL Cholesterol iv) Triglycerides	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	Patient should fast 8-12 hours prior test conducted SCACC Lab for routine test only
117	Ferritin	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi	
118	Fertility Test i) Follicle Stimulating Hormone (FSH) ii) Luteinising Hormone (LH) iii) Estradiol (Oestradiol/E2) iv) Progesterone v) Prolactin vi) Testosterone	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	Specimen collection procedure: 1. Specimen for Progesterone should be collected at day 21 of menstrual cycle. 2. Specimen for Estradiol, FSH and LH should be collected at day 2 to 5 of menstrual cycle.
119	Fibrinogen	Core Lab	Sodium citrate tube	Blood	1.8 ml (Paeds) 2.7ml (Adults)	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	To fill up the tube with blood until indicated line. Send to the laboratory as soon as possible (within 4 hours of sample collection).
120	Fluids Biochemistry i) Glucose ii) Total Protein iii) Lactate Dehydrogenase iv) pH	Core Lab	Plain container / Fluoride tube	Body Fluid	2 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	Send to the laboratory as soon as possible.
121	Folate	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi	
122	Follicle Stimulating Hormone (FSH)	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour) Sat, Sun & PH : Urgent request only	2 working days	Kaunter Utama Jabatan Patologi	
123	Foreign bodies culture & sensitivity	Microbiology	Sterile container	Indwelling devices / contact lens / corneal button	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	
124	Free Thyroxine (FT4)	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour) Sat, Sun & PH : Urgent request only	1 working day	Kaunter Utama Jabatan Patologi	
125	Free Triiodothyronine (FT3)	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour) Sat, Sun & PH : Urgent request only	2 working days	Kaunter Utama Jabatan Patologi	
126	Full Blood Count (FBC)	Core Lab SCACC Lab	EDTA tube	Whole Blood	2 ml	Daily	45 minutes (Urgent) 3 hours (Routine) 4 hours (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	Send to the laboratory as soon as possible. SCACC Lab for routine test only
127	Full Blood Picture (routine)	Haematology	EDTA tube	Blood	2 ml	Office hour	14 days	Kaunter Utama Jabatan Patologi	Send to the laboratory as soon as possible (within 4 hours of sample collection).
128	Full Blood Picture (priority)	Haematology	EDTA tube	Blood	2 ml	Office hour	7 days	Kaunter Utama Jabatan Patologi	Send to the laboratory as soon as possible (within 4 hours of sample collection).
129	Full Blood Picture (urgent)	Haematology	EDTA tube	Blood	2 ml	Office hour	3 days	Kaunter Utama Jabatan Patologi	Send to the laboratory as soon as possible (within 4 hours of sample collection). Please call ext 6374 or 6549 (normal working hours) or Medical Officer on-call (after office hours) to request for urgent FBP.
130	Full Blood Count (FBC) in citrate	Core Lab SCACC Lab	Sodium citrate tube	Whole Blood	1.8 ml (Paeds) 2.7ml (Adults)	Daily	45 minutes (Urgent) 3 hours (Routine) 4 hours (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	To fill up the tube with blood until indicated line. Send to the laboratory as soon as possible. SCACC Lab for routine test only
131	Full Examination Microscopy Examination (FEME)	Microbiology	Sterile container	Sterile body fluid, CSF,PD fluid	3 ml	Daily	1 day	Microbiology lab	
132	Fungal culture	Microbiology	Sterile container	Tissue / Hair / Nail / Skin / Sterile body fluid / Bronchial washing / BAL	Not applicable	Daily	30 days	Kaunter Utama Jabatan Patologi	
133	Gamma-glutamyltransferase (GGT)	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi	
134	Genital culture & sensitivity	Microbiology	Amies transport media	Swab	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	
135	Genexpert SARS-CoV-2 RT-PCR	Microbiology	Swab in Viral Transport Media	Nasopharyngeal swab / NPA	2 ml	Daily	4 hours	Makmal Virologi / Makmal Bakteriologi 1	Triple packaging and transport in ice. Preliminary result available
136	Gentamicin	Core Lab	Plain tube without gel (Red cap)	Blood	4 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
137	Glucose (FBS, 2HPP, RBS)	Core Lab SCACC Lab	Fluoride tube	Blood	2 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	For Fasting Blood Sugar - Blood sample for this test is taken after an 8-12 hours or overnight fasting. Water intake is allowed during this fasting period SCACC Lab for routine test only
138	Glucose Peritoneal Dialysate	SCACC Lab	Fluoride tube	Fluid	2 ml	Daily (Office hour)	1 day (Routine)	SCACC Lab	
139	Glucose, CSF	Core Lab	Fluoride tube/Sterile Bijou bottle	CSF	1 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	Send to the laboratory as soon as possible.
140	Gonococcal culture & sensitivity	Microbiology	Amies transport media / culture plate	Swab / culture plate	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	

	TEST	PERFORMING LAB	CONTAINER	SPECIMEN TYPE	VOLUME	SCHEDULE	LTAT (Min/Hr/Day)	LOCATION	REMARK
141	Growth Hormone	Special Chemical Pathology	Plain tube	Serum	3 ml	2 times / week	5 working days	Kaunter Utama Jabatan Patologi	For referring labs: centrifuge, aliquote and freeze sample before send to referral lab.
142	H Inclusion	Haematology	EDTA tube	Blood	2 ml	Office hour	5 days	Kaunter Utama Jabatan Patologi	Send to the laboratory as soon as possible (within 4 hours of sample collection).
143	Haemoglobin A1c (HbA1c)	Special Chemical Pathology	EDTA tube	Whole blood	3 ml	Daily	3 working days	Kaunter Utama Jabatan Patologi	Rejection criteria : Request less than 3 months(12 weeks) from previous result.
144	Haemoglobin Analysis	Haematology	EDTA tube	Blood	2 ml	Office hour	6 weeks	Kaunter Utama Jabatan Patologi	Detail history on Index Case must be provided for family screening.
145	Haptoglobin	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	
146	Hb F/Hb S quantitation	Haematology	EDTA tube	Blood	2 ml	Office hour	7 days	Kaunter Utama Jabatan Patologi	Please write appropriate indication on request form.
147	HBe Ag EIA	Microbiology	Plain tube	Serum	1 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
148	HBsAg - (Screening by EIA)	Microbiology	Plain tube	Serum	1 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
149	HBsAg - (Confirmatory by EIA)	Microbiology	Plain tube	Serum	1 ml	By batch	5 days	Kaunter Utama Jabatan Patologi	
150	Hepatitis B Virus - DNA PCR Viral Load (Quantitative)	Microbiology	EDTA tube	Plasma	3-5 ml	By batch	14 days	Kaunter Utama Jabatan Patologi	Transport in ice.
151	Hepatitis C Virus (HCV) - RNA PCR Genotyping (Qualitative)	Microbiology	EDTA tube	Plasma	3-5 ml	By batch	30 days	Kaunter Utama Jabatan Patologi	Transport in ice.
152	HCV - RNA PCR Viral Load (Quantitative)	Microbiology	EDTA tube	Plasma	3-5 ml	By batch	14 days	Kaunter Utama Jabatan Patologi	Transport in ice.
153	HDL Cholesterol	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
154	Heinz bodies	Haematology	EDTA tube	Blood	2 ml	By appointment	5 days	Kaunter Utama Jabatan Patologi	Please call ext 6549 for appointment.
155	Hepatitis A Virus (HAV) - IgG EIA	Microbiology	Plain tube	Serum	1 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
156	Hepatitis A Virus (HAV) - IgM EIA	Microbiology	Plain tube	Serum	1 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
157	Hepatitis C Virus (HCV) - Ab (Screening by EIA)	Microbiology	Plain tube	Serum	1 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
158	Histopathology: HPE/Surgical Specimen-Urgent Biopsy	Histopathology	Tissue in 10% neutral buffered formalin (NBF)	Tissue	Not applicable	Daily (Office hour)	3 Working Days (not more than 3 containers, and/or not require further levels or ancillary tests)	Kaunter Unit Histopatologi	Request form : PER-PAT 301
159	Histopathology: HPE/Surgical Specimen-Other than Urgent Biopsy	Histopathology	Tissue in 10% neutral buffered formalin (NBF)	Tissue	Not applicable	Daily (Office hour)	14 Days (70% of cases)	Kaunter Unit Histopatologi	Request form : PER-PAT 301
160	Histopathology: HPE/Second Opinion	Histopathology	HPE/Second Opinion	Paraffin block (FFPE) and stained slides	Not applicable	Daily (Office hour)	Within 30 Days	Kaunter Unit Histopatologi	Request form : PER-PAT 301
161	Histopathology : Enzyme Histochemistry for Acetylcholinesterase (Rectal biopsy)	Histopathology	Universal container	Fresh tissue	Not applicable	Daily (Office hour)	14 Days	Kaunter Unit Histopatologi	Request form : PER-PAT 301. Place fresh tissue in an universal container and send immediately to the laboratory
162	Histopathology : Enzyme Histochemistry (Muscle biopsy /Sural nerve biopsy) *For list of test, refer to eHandbook Pathology (Histopathology Unit)	Histopathology	Universal container	Fresh tissue (biceps/quadriceps muscle or sural nerve)	10 mm diameter & 5 mm depth	Daily (Office hour) / by appointment	Within 30 Days	Kaunter Unit Histopatologi	Request form : PER-PAT 301. Wrap fresh tissue in aluminium foil and place in an universal container. If ETA is > 4 hours, place the specimen container into a larger container containing ice or gel ice
163	Histopathology: Frozen Section	Histopathology	Universal container	Fresh tissue	Not applicable	Daily / by appointment	30 minutes per specimen	Kaunter Unit Histopatologi	Request form : PER-PAT 301. Place fresh tissue in an empty universal container and send immediately to the laboratory. Fill up Frozen section request form (HKL/JP/HI/AK05-02 form) Appointment is required 1 day earlier (Please call ext 5603/6851)
164	Histopathology: Histochemistry Stain *For list of test, refer to eHandbook Pathology (Histopathology Unit)	Histopathology	Not applicable	Paraffin block (FFPE) or 2 unstained slides per test	Not applicable	Daily (Office hour)	7 Days	Kaunter Unit Histopatologi	Requirement: Request Form for Immunohistochemistry (IHC) and Histochemistry test and according to service agreement
165	Histopathology: Immunofluorescence (IF) Stain *For list of test, refer to eHandbook Pathology (Histopathology Unit)	Histopathology	Universal container	Fresh tissue	Minimum 5mm in length	Daily (Office hour)	14 Days	Kaunter Unit Histopatologi	Fresh tissue soak in Phosphate Buffer Solution (PBS) in universal container. If delayed, place the universal container into larger container containing ice or dry ice
166	Histopathology: Immunohistochemistry (IHC) Stain *For list of test, refer to eHandbook Pathology (Histopathology Unit)	Histopathology	Not applicable	Paraffin block (FFPE) or 2 unstained slides per test	Not applicable	Daily (Office hour)	7 Days	Kaunter Unit Histopatologi	Requirement: Request Form for Immunohistochemistry (IHC) and Histochemistry test and according to service agreement
167	Histopathology: Molecular 1) Chromogenic In Situ Hybridization (CISH)	Histopathology	Not applicable	Paraffin block (FFPE)/ unstained slides	Not applicable	(Office hour) / prior consultation	14 Days	Kaunter Unit Histopatologi	Request form : PER-PAT 301 and special request form for FISH/CISH/PCR For all molecular tests (except DDISH) prior discussion and approval by Molecular Pathologist is required.

	TEST	PERFORMING LAB	CONTAINER	SPECIMEN TYPE	VOLUME	SCHEDULE	LTAT (Min/Hr/Day)	LOCATION	REMARK
168	Histopathology: Molecular 2) Fluorescence In Situ Hybridization (FISH)	Histopathology	Not applicable	Paraffin block (FFPE)/ unstained slides	Not applicable	(Office hour) / prior consultation	Within 30 Days	Kaunter Unit Histopatologi	Request form : PER-PAT 301 and special request form for FISH/CISH/PCR For all molecular tests (except DDISH) prior discussion and approval by Molecular Pathologist is required.
169	Histopathology: Molecular 3) Polymerase Chain Reaction (PCR)	Histopathology	Not applicable	Paraffin block (FFPE)/ unstained slides	Not applicable	(Office hour) / prior consultation	14 Days	Kaunter Unit Histopatologi	
170	Histopathology: Clinical Autopsy	Histopathology	Not applicable	Not applicable	Not applicable	Daily	3 Months	Kaunter Unit Histopatologi	Requirement : Borang Keizinan Bedah Siasat Mayat Klinikal (Autopsi Klinikal HKLJ/P/HI-BP-02) -Written consent from the next of kin During office hour, the Histopathology Medical Officer and Pathologist on-call can be contacted at extension 6851 or 5603. After office hour, their contact no. can be obtained at the mortuary counter of IPFN, HKL (ext. 6695) or through hospital operator.
171	HIV-1 RNA PCR Viral Load (Quantitative)	Microbiology	EDTA tube	Plasma	3-5 ml	By batch	14 days	Kaunter Utama Jabatan Patologi	Transport in ice.
172	HSV I & II - DNA PCR (Qualitative)	Microbiology	Sterile container	CSF	1 ml	By batch	7 days	Kaunter Utama Jabatan Patologi	Transport in ice.
173	HSV I & II - DNA PCR (Qualitative)	Microbiology	EDTA tube	Plasma	3-5 ml	By batch	7 days	Kaunter Utama Jabatan Patologi	Transport in ice.
174	HSV I & II - IgG ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
175	HSV I & II - IgM ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
176	HTLV I & II - Ab (Screening by ELISA)	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
177	Immunoglobulin A (IgA)	Special Chemical Pathology	Plain tube	Blood	3 ml	3 times / week	5 working days	Kaunter Utama Jabatan Patologi	
178	Immunoglobulin G (IgG)	Special Chemical Pathology	Plain tube	Blood	3 ml	3 times / week	5 working days	Kaunter Utama Jabatan Patologi	
179	Immunoglobulin M (IgM)	Special Chemical Pathology	Plain tube	Blood	3 ml	3 times / week	5 working days	Kaunter Utama Jabatan Patologi	
180	Influenza PCR: Flu A, B & Flu A H1N1 (Qualitative)	Microbiology	Swab in Viral Transport Media	Upper Respiratory tract specimen	2 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	For selected severe cases only.
181	Influenza PCR: Flu A, B & Flu A H1N1 (Qualitative)	Microbiology	Sterile container	TA / NPA / Sputum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
182	Insulin	Special Chemical Pathology	Plain tube	Serum	3 ml	2 times / week	5 working days	Kaunter Utama Jabatan Patologi	For referring labs: centrifuge, aliquote and freeze sample before send to referral lab.
183	Parathyroid Hormone (PTH 1-84)	Special Chemical Pathology	Plain tube/EDTA (Preference should be given to EDTA plasma, as it is stable longer than serum.	Serum/Plasma	3 ml	2 times / week	5 working days	Kaunter Utama Jabatan Patologi	Please send sample immediately to lab. For referring labs: centrifuge, aliquote and freeze sample before send to referral lab.
184	Iron (Fe)	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi	
185	Lactate	Core Lab	Fluoride tube	Blood	2 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	Sample should be sent immediately in ice bath. Sample need to be processed within 15 minutes of collection sample.
186	Lactate Dehydrogenase (LDH)	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
187	LAP/NAP Score	Haematology	EDTA tube	Blood	2 ml	By appointment	5 days	Kaunter Utama Jabatan Patologi	Please call ext 6549 for appointment. Send the sample to laboratory as soon as possible. EDTA sample need to be processed within 30 minutes of blood collection.
188	Legionella pneumophila Antigen	Microbiology	Sterile container	Urine	5 ml	Mon, Wed, Fri	4 days	Kaunter Utama Jabatan Patologi	
189	Leptospira Antibody IgM	Microbiology	Plain tube	Blood	5 ml	Mon, Wed, Fri	4 days	Kaunter Utama Jabatan Patologi	
190	Lithium	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	PER-PAT form/ TDM form
191	Liver Function Test (LFT) i) Total Protein ii) Albumin iii) Total Bilirubin iv) Alkaline Phosphatase v) Alanine Transaminase vi) Globulin vii) Albumin / Globulin Ratio	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
192	Luteinising Hormone (LH)	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	Blood taking at Day 2 to Day 5 menses
193	Magnesium	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only

	TEST	PERFORMING LAB	CONTAINER	SPECIMEN TYPE	VOLUME	SCHEDULE	LTAT (Min/Hr/Day)	LOCATION	REMARK
194	Magnesium, Urine	Core Lab SCACC Lab	Urine container / 24 hr urine container	Random Urine / 24 hrs urine	5 ml / 24 hrs Urine Collection	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi SCACC Lab	24-Hours Urine collection procedure: i. 24-hour urine container containing preservatives for the required testing are available at the Stor Integrasi counter, Jabatan Patologi ii. On the day of collection, the first urine voided must be discarded. Time of first urine voided is start of the timing for the 24 hours' urine collection. iii. Collect the second and subsequent voided urine for 24 hours into the 24 hours' urine container. iv. At the end of 24 hours, the last urine voided is collected. For best result, refrigerate the urine if possible. v. Label the container as directed and send immediately to the laboratory.
195	MERS-CoV PCR (Qualitative)	Microbiology	Swab in Viral Transport Media	Upper Respiratory tract specimen	2 ml	Daily	2 days	Kaunter Utama Jabatan Patologi	Triple packaging and transport in ice. Received cut off at 11 am to proceed test on same day.
196	MERS-CoV PCR (Qualitative)	Microbiology	Sterile container	TA / NPA / Sputum	1 ml	Daily	2 days	Kaunter Utama Jabatan Patologi	Triple packaging and transport in ice. Received cut off at 11 am to proceed test on same day.
197	Microalbumin, urine	Core Lab SCACC Lab	Urine container	First morning urine (preferred). Random urine is acceptable if a first- morning urine is not available	5 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
198	Microfilaria (Blood film)	Microbiology	Thick film	Blood	Not applicable	Daily	1 day	Kaunter Utama Jabatan Patologi	
199	Mixing Test	Core Lab	Sodium citrate tube	Blood	1.8 ml (Paeds) 2.7ml (Adults)	Daily after consultation with Pathologist (Hematology) (Office Hour : 5239/6853 ; After Office Hour : Pathologist Oncall)	1 day	Kaunter Utama Jabatan Patologi	To fill up the tube with blood until indicated line. Send to the laboratory as soon as possible (within 4 hours of sample collection).
200	Modified Ziehl-Neelsen for <i>Cryptosporidium/Microsporidium</i>	Microbiology	Sterile container	Stool	5 ml	Daily	2 days	Kaunter Utama Jabatan Patologi	
201	MTB/Rif GeneXpert	Microbiology	Sterile container	Respiratory sample: Sputum, Tracheal aspirate, Bronchial washing, Bronchialveolar lavage (BAL), Nasopharyngeal Aspirate (NPA)	2 mL	Mon - Fri	24 hours	Kaunter Utama Jabatan Patologi	TBIS 20C Form. Request verified by ID Team/ Clinical Microbiologist. Please send MTB C&S together with TB GeneXpert request For non respiratory sample, send to IPR (Referred Test)
202	Mycobacterium culture & sensitivity (Blood)	Microbiology	M-F Lytic Blood Culture Bottle	Blood	5-10 ml	Daily	42 days	Kaunter Utama Jabatan Patologi	M-F Lytic Blood Culture Bottle- request from Microbiology lab before collection. Indicated for disseminated tuberculous infection
203	Mycophenolic Acid	Special Chemical Pathology	EDTA tube	Plasma	3ml	Every Friday	Within 6 hours after sample analysis. (Sample analysis every Friday)	Kaunter Utama Jabatan Patologi	TDM form. For referring labs: centrifuge, aliquote and freeze plasma sample before send to referral lab.
204	Mycoplasma pneumoniae serology	Microbiology	Plain Tube	Blood	5 ml	Mon, Wed, Fri	4 days	Kaunter Utama Jabatan Patologi	
205	Nasal swab for MRSA Screening	Microbiology	Amies transport media	Swab	Not applicable	daily	5 days	Kaunter Utama Jabatan Patologi	
206	Occult Blood	Core Lab	Stool container	Stool	1 g	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	
207	Osmolality, Serum	Core Lab	Plain tube with gel (yellow cap)	Blood	3.5 ml	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	
208	Osmolality, Urine	Core Lab	Urine container	Random Urine	2 ml	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	
209	Osmotic Fragility Test (OFT)	Haematology	Lithium heparin tube	Blood (Patient AND Control)	2 tubes (4.0 ml for each tube) for patient AND control	By appointment	5 days	Kaunter Utama Jabatan Patologi	Please call ext 6549 for appointment. Send to the laboratory before 9.00 am. Test must be performed within 2 hours after blood collection if samples are kept at room temperature; or within 6 hours if samples are kept at 2-6°C.
210	Paraquat, Urine	Core Lab	Urine container	Urine	10 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	Available 24 hrs, PER-PAT form
211	Parvovirus B19 - IgG ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
212	Parvovirus B19 - IgM ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
213	Peritoneal Fluid culture & sensitivity	Microbiology	Sterile container	Peritoneal fluid	5 - 10 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
214	pH, Urine	Core Lab SCACC Lab	Urine container	Random Urine	2 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
215	Phenobarbital	Core Lab	Plain tube without gel (Red cap)	Blood	4 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
216	Phenytoin	Core Lab	Plain tube without gel (Red cap)	Blood	4 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
217	Phosphate	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only

	TEST	PERFORMING LAB	CONTAINER	SPECIMEN TYPE	VOLUME	SCHEDULE	LTAT (Min/Hr/Day)	LOCATION	REMARK
218	Phosphate , Urine	Core Lab SCACC Lab	Urine container / 24 hr urine container	Random Urine / 24 hrs urine	5 ml / 24 hrs Urine Collection	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi SCACC Lab	24-Hours Urine collection procedure: i. 24-hour urine container containing preservatives for the required testing are available at the Stor Integrasi counter, Jabatan Patologi ii. On the day of collection, the first urine voided must be discarded. Time of first urine voided is start of the timing for the 24 hours' urine collection. iii. Collect the second and subsequent voided urine for 24 hours into the 24 hours' urine container. iv. At the end of 24 hours, the last urine voided is collected. For best result, refrigerate the urine if possible. v. Label the container as directed and send immediately to the laboratory.
219	Potassium	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
220	Potassium, Urine	Core Lab SCACC Lab	Urine container / 24 hr urine container	Random Urine / 24 hrs urine	5 ml / 24 hrs Urine Collection	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	24-Hours Urine collection procedure: i. 24-hour urine container containing preservatives for the required testing are available at the Stor Integrasi counter, Jabatan Patologi ii. On the day of collection, the first urine voided must be discarded. Time of first urine voided is start of the timing for the 24 hours' urine collection. iii. Collect the second and subsequent voided urine for 24 hours into the 24 hours' urine container. iv. At the end of 24 hours, the last urine voided is collected. For best result, refrigerate the urine if possible. v. Label the container as directed and send immediately to the laboratory.
221	Progesterone	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	Blood taking at Day 21 of menses
222	Procalcitonin	Core Lab	Plain tube with gel (yellow cap)	Blood	3.5 ml	Daily	1 day	Kaunter Utama Jabatan Patologi	Ujian baru untuk wad ICU dan kawalan penyakit berjangkit HKL (Covid-19) sahaja. Request form must be signed by the Specialist.
223	Prolactin	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	
224	Prostate-Specific Antigen (free)	Core Lab	Plain tube (yellow cap)	Blood	3 ml	Daily (Office hour)	5 working days	Kaunter Utama Jabatan Patologi	Free PSA is offered if Total PSA = 4 - 10 ng/mL
225	Prostate-Specific Antigen (total)	Core Lab	Plain tube (yellow cap)	Blood	3 ml	Daily (Office hour)	5 working days	Kaunter Utama Jabatan Patologi	
226	Protein Electrophoresis and Immunofixation, Serum	Special Chemical Pathology	Plain tube	Serum	3 ml	2 times / week	15 working days-(except for sample require further tests eg: extended immunofixation or BME treatment)	Kaunter Utama Jabatan Patologi	Rejection criteria: Request less than 1 month from previous result.
227	Protein Electrophoresis and Immunofixation, Urine	Special Chemical Pathology	Urine Container	Random Urine / 24 hrs urine	5 ml/ 24 hrs urine collection	2 times / week	15 working days-(except for sample require further tests eg: extended immunofixation or BME treatment)	Kaunter Utama Jabatan Patologi	Urine protein electrophoresis request must be accompanied by serum sample.
228	Protein, Total	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
229	Protein, Urine	Core Lab SCACC Lab	Urine container / 24 hr urine container	Random Urine / 24 hrs urine	5 ml / 24 hrs Urine Collection	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi SCACC Lab	24-Hours Urine collection procedure: i. 24-hour urine container containing preservatives for the required testing are available at the Stor Integrasi counter, Jabatan Patologi ii. On the day of collection, the first urine voided must be discarded. Time of first urine voided is start of the timing for the 24 hours' urine collection. iii. Collect the second and subsequent voided urine for 24 hours into the 24 hours' urine container. iv. At the end of 24 hours, the last urine voided is collected. For best result, refrigerate the urine if possible. v. Label the container as directed and send immediately to the laboratory.
230	Protein Creatinine Ratio, Urine i) Protein, Urine ii) Creatinine, Urine	Core Lab SCACC Lab	Urine container	Random Urine	5 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
231	Protein, CSF	Core Lab	Fluoride tube/Sterile Bijou bottle	CSF	1 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	Send to the laboratory as soon as possible.
232	Prothrombin Time (PT) & INR	Core Lab	Sodium citrate tube	Blood	1.8 ml (Paeds) 2.7ml (Adults)	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	To fill up the tube with blood until indicated line. Send to the laboratory as soon as possible (within 4 hours of sample collection).
233	Pus culture & sensitivity	Microbiology	Amies transport media / sterile container	Swab / pus aspirate	3 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
234	QIAstat-Dx Respiratory SARS-CoV-2 Panel	Microbiology	Universal Transport Media (UTM)	Nasopharyngeal swab	Not applicable	Mon-Fri (8.00 am- 5.00pm) Saturday,Sunday & PH (8.00am-2.00pm)	1 day	Makmal Virologi / Makmal Bakteriologi 1	Please collect UTM from Virology Lab.Triple packaging and transport in ice. Preliminary result available. Request verified by ID Team/ Clinical Microbiologist
235	QIAstat-Dx Meningitis Panel	Microbiology	Sterile container	CSF	0.5 ml	Mon-Fri (8.00 am- 5.00pm) Saturday,Sunday & PH (8.00am-2.00pm)	1 day	Makmal Virologi / Makmal Bakteriologi 1	1. By appointment and request verified by Clinical Microbiologist
236	Rapid Plasma Reagin (Syphilis)	Microbiology	Plain tube	Blood	5 ml	Daily	4 days	Kaunter Utama Jabatan Patologi	Syphilis screening test and treatment monitoring for confirmed cases
237	Rapid Respiratori Antigen - (RTK) Influenza type A, Influenza type B, Respiratory Syncytial Virus (RSV), Adenovirus	Microbiology	FLOQ swab or Sterile container	Nasopharyngeal swab (FLOQ Swab) or Nasopharyngeal aspirate	Not applicable	Mon-Friday (6am-3pm)	1 day	Kaunter Utama Jabatan Patologi	Transport in ice
238	Rectal Swab for MRO	Microbiology	Amies transport media	Swab	Not Applicable	Screening Staff/Outbreak Cases	5 days	Kaunter Utama Jabatan Patologi	

	TEST	PERFORMING LAB	CONTAINER	SPECIMEN TYPE	VOLUME	SCHEDULE	LTAT (Min/Hr/Day)	LOCATION	REMARK
239	Renal Profile i) Urea ii) Creatinine iii) Chloride iv) Potassium v) Sodium vi) eGFR	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
240	Respiratory culture & sensitivity	Microbiology	Sterile container	Tracheal aspirate, Sputum, Bronchial washing (BW), Bronchoalveolar lavage (BAL)	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	
241	Reticulocyte count	Core Lab	EDTA tube	Blood	2 ml	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	Send to the laboratory as soon as possible.
242	Rheumatoid Factor	Special Chemical Pathology	Plain tube	Blood	5 ml	Mon, Wed, Fri	5 days	Kaunter Utama Jabatan Patologi	
243	Rubella - IgG ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
244	Rubella - IgM ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
245	Salicylate	Core Lab	Plain tube without gel (Red cap)	Blood	3 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	PER-PAT form/ TDM form (In-house)
246	SARS-CoV-2 Antigen RTK	Microbiology	Dacron swab	Nasopharyngeal swab	-	Mon-Fri (8.00 am- 4.00pm) Saturday, Sunday & PH (8.00am- 2.00pm)	4 hours	Makmal Virologi / Makmal Bakteriologi 1	Triple packaging and transport in ice.
247	SARS-CoV-2 RT-PCR (Qualitative)	Microbiology	Sterile container	TA / NPA / Sputum	1 ml	Daily Receive cut-off at 11am	2 days	Kaunter Utama Jabatan Patologi	Triple packaging and transport in ice.
248	SARS-CoV-2 RT-PCR	Microbiology	Swab in Viral Transport Media	Upper / Lower respiratory sample	2 ml	Mon-Fri (8.00 am- 5.00pm) Saturday, Sunday & PH (8.00am- 2.00pm)	24- 48 hours	Makmal Virologi / Makmal Bakteriologi 1	Triple packaging and transport in ice.
249	Serum-Ascitic Albumin Gradient (SAAG) i) Serum/Plasma Creatinine ii) Fluid Creatinine	Core Lab	Plain tube with gel (yellow cap) / Lithium heparin tube	Serum & Fluid	3.5 ml Blood & 2 ml fluid	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	Send both serum and fluid specimen that are taken on the same day for the SAAG determination.
250	Serum Bilirubin (SB) i) Total Bilirubin ii) Direct Bilirubin iii) Indirect Bilirubin	Core Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	SCACC Lab for routine test only
251	Sickling test	Haematology	EDTA tube	Blood	2 ml	By appointment	5 days	Kaunter Utama Jabatan Patologi	Please call ext 6549 for appointment.
252	Sodium	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
253	Sodium, Urine	Core Lab SCACC Lab	Urine container / 24 hr urine container	Random Urine / 24 hrs urine	5 ml / 24 hrs Urine Collection	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	24-Hours Urine collection procedure: i. 24-hour urine container containing preservatives for the required testing are available at the Stor Integrasi counter, Jabatan Patologi ii. On the day of collection, the first urine voided must be discarded. Time of first urine voided is start of the timing for the 24 hours' urine collection. iii. Collect the second and subsequent voided urine for 24 hours into the 24 hours' urine container. iv. At the end of 24 hours, the last urine voided is collected. For best result, refrigerate the urine if possible. v. Label the container as directed and send immediately to the laboratory.
254	Sterile body fluid culture and sensitivity	Microbiology	Sterile container	Aspirated fluid	5 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	(excluding CSF, urine and blood) . Preliminary report available pending validation
255	Sterility testing	Microbiology	Sterile container	Milk, TPN fluid, Disinfectant	5 ml	Daily	9 days	Kaunter Utama Jabatan Patologi	
256	Stool culture & sensitivity	Microbiology	Sterile container	Stool	3 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
257	Stool for <i>Clostridium difficile</i> culture	Microbiology	Sterile container	Stool	3 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	
258	Stool for <i>Clostridium difficile</i> toxin	Microbiology	Sterile container	Stool	3 ml	Daily	2 days	Kaunter Utama Jabatan Patologi	
259	Stool for Isospora	Microbiology	Sterile container	Stool	Not applicable	Daily	2 days	Kaunter Utama Jabatan Patologi	
260	Stool ova and cyst	Microbiology	Sterile container	Stool	3 ml	Daily	2 days	Kaunter Utama Jabatan Patologi	
261	Stool <i>Vibrio cholera</i>	Microbiology	Alkaline Peptone Water	Stool	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	
262	Tacrolimus	Core Lab	EDTA tube	Blood	2 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
263	Testosterone	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	
264	Theophylline	Core Lab	Plain tube without gel (Red cap)	Blood	4 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
265	Throat swab culture & sensitivity	Microbiology	Amies transport media	Swab	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	
266	Thyroid Stimulating Hormone (TSH)	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour) Sat, Sun & PH : Urgent request only	1 working day	Kaunter Utama Jabatan Patologi	
267	Thyroid Function Test i) Thyroid Stimulating Hormone (TSH) ii) Free Thyroxine (FT4)	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour) Sat, Sun & PH : Urgent request only	1 working day	Kaunter Utama Jabatan Patologi	

	TEST	PERFORMING LAB	CONTAINER	SPECIMEN TYPE	VOLUME	SCHEDULE	LTAT (Min/Hr/Day)	LOCATION	REMARK
268	Thyroglobulin	Special Chemical Pathology	Plain Tube	Serum	3ml	2 times / week	10 working days	Kaunter Utama Jabatan Patologi	
269	Tissue culture & sensitivity	Microbiology	Sterile container	Tissue, biopsy	Not applicable	Daily	5 days	Kaunter Utama Jabatan Patologi	
270	Helicobacter pylori culture & sensitivity	Microbiology	Sterile container	Tissue	Not applicable	Daily	7 days	Kaunter Utama Jabatan Patologi	Gastric biopsy to send immediately to Microbiology Lab
271	Toxoplasma - IgG ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
272	Toxoplasma - IgM ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
273	Transferrin	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	2 working days	Kaunter Utama Jabatan Patologi	
274	Treponema Pallidum Particle Agglutination (TPPA)	Microbiology	Plain tube	Blood	5 ml	Daily	4 days	Kaunter Utama Jabatan Patologi	Syphilis confirmatory test
275	Triglycerides	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
276	Troponin T high sensitive	Core Lab	Lithium heparin tube / Plain tube (either one only)	Blood	2 ml	Daily	1 hour (Urgent)	Kaunter Utama Jabatan Patologi	Send to the laboratory as soon as possible.
277	Unsaturated Iron Binding Capacity (UIBC)	Core Lab	Plain tube with gel (yellow cap) / Lithium heparin tube	Blood	3 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi	
278	Urea	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
279	Urea, Urine	Core Lab SCACC Lab	Urine container / 24 hr urine container	Random Urine / 24 hrs urine	5 ml / 24 hrs Urine Collection	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi SCACC Lab	24-Hours Urine collection procedure: i. 24-hour urine container containing preservatives for the required testing are available at the Stor Integrasi counter, Jabatan Patologi ii. On the day of collection, the first urine voided must be discarded. Time of first urine voided is start of the timing for the 24 hours' urine collection. iii. Collect the second and subsequent voided urine for 24 hours into the 24 hours' urine container. iv. At the end of 24 hours, the last urine voided is collected. For best result, refrigerate the urine if possible. v. Label the container as directed and send immediately to the laboratory.
280	Urea 24hrs Peritoneal Dialysate	SCACC Lab	Plain container	Fluid	2 ml	Daily (Office hour)	1 day (Routine)	SCACC Lab	
281	Urea Peritoneal Dialysate	SCACC Lab	Plain container	Fluid	2 ml	Daily (Office hour)	1 day (Routine)	SCACC Lab	
282	Uric Acid	Core Lab SCACC Lab	Lithium heparin tube	Blood	4 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
283	Uric Acid, Urine	Core Lab SCACC Lab	Urine container / 24 hr urine container	Random Urine / 24 hrs urine	5 ml / 24 hrs Urine Collection	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi SCACC Lab	24-Hours Urine collection procedure: i. 24-hour urine container containing preservatives for the required testing are available at the Stor Integrasi counter, Jabatan Patologi ii. On the day of collection, the first urine voided must be discarded. Time of first urine voided is start of the timing for the 24 hours' urine collection. iii. Collect the second and subsequent voided urine for 24 hours into the 24 hours' urine container. iv. At the end of 24 hours, the last urine voided is collected. For best result, refrigerate the urine if possible. v. Label the container as directed and send immediately to the laboratory.
284	Urine Biochemistry & Microscopic examination	Core Lab	Urine container	Urine	4 ml	Daily	1 hour (Urgent) 3 hours (Routine)	Kaunter Utama Jabatan Patologi	
285	Urine culture and sensitivity	Microbiology	Urine Sterile container	Urine	5 ml	Daily	5 days	Kaunter Utama Jabatan Patologi	Send immediately to Microbiology Lab
286	Urine Hemosiderin	Haematology	Universal container	Urine	5 ml	By appointment	5 days	Kaunter Utama Jabatan Patologi	Send sample immediately after collection.
287	Urine Pregnancy Test	Core Lab SCACC Lab	Urine container	Fresh morning urine (preferred)	2 ml	Daily	1 hour (Urgent) 3 hours (Routine) 1 day (SCACC-Routine)	Kaunter Utama Jabatan Patologi SCACC Lab	SCACC Lab for routine test only
288	Valproic acid	Core Lab	Plain tube without gel (Red cap)	Blood	4 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
289	Vancomycin	Core Lab	Plain tube without gel (Red cap)	Blood	4 ml	Weekdays Office hours Weekend : 8:30 am - 12:30 pm	6 hours	Kaunter Utama Jabatan Patologi	TDM form
290	Varicella Zoster Virus (VZV) - IgG ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
291	Varicella Zoster Virus (VZV) - IgM ELISA	Microbiology	Plain tube	Serum	1 ml	Once a week	7 days	Kaunter Utama Jabatan Patologi	
292	Varicella Zoster Virus (VZV) DNA PCR (Qualitative)	Microbiology	Sterile container	CSF	1 ml	By batch	7 days	Kaunter Utama Jabatan Patologi	
293	Varicella Zoster Virus (VZV) DNA PCR (Qualitative)	Microbiology	EDTA tube	Plasma	2 ml	By batch	7 days	Kaunter Utama Jabatan Patologi	
294	Veneral Disease Research Lab cerebrospinal fluid (VDRL)	Microbiology	Sterile container	CSF	3 ml	Mon, Wed, Fri	4 days	Kaunter Utama Jabatan Patologi	
295	Vitamin B12	Core Lab	Plain tube with gel (yellow cap)	Blood	3 ml	Daily (Office hour)	1 working day	Kaunter Utama Jabatan Patologi	
296	25-hydroxyvitamin D	Special Chemical Pathology	Plain tube	Serum	3 ml	Once a week	10 working days	Kaunter Utama Jabatan Patologi	

	TEST	PERFORMING LAB	CONTAINER	SPECIMEN TYPE	VOLUME	SCHEDULE	LTAT (Min/Hr/Day)	LOCATION	REMARK
297	24 hr Urine Metanephrines: Normetanephrine / Metanephrine / 3-Methoxytyramine	Special Chemical Pathology	24 hrs urine container with 10mL of 32% HCL	Urine	24 hrs urine collection	2 times / week	20 working days	Kaunter Utama Jabatan Patologi	Rejection criteria : i) Inadequate urine collection (Adult > 1L ii) Urine pH > 2 iii) Must be requested by endocrinologist
298	Amphetamine Type Stimulants	Drug & Toxicology Lab	Urine Container	Urine	30 mL	Daily (Screening) Three times a week (Confirmation)	Medical Check-up (5 days) Medicolegal cases (60 days) Urgent Medicolegal Cases (14 days) Clinical Cases (6 weeks)	Drug & Toxicology Lab (Medicolegal cases) Kaunter Utama Jabatan Patologi (Clinical cases)	UPD-1 (Pindaan 2020) form (Medico-legal cases & Medical checkup) PER-PAT 301 form (Clinical) Medical checkup is ONLY offered to HKL staff via OSH Clinic
299	Amphetamine								
300	Methamphetamine								
301	Methylenedioxyamphetamine (MDA)								
302	3,4 Methylenedioxy methamphetamine (MDMA)								
303	Ephedrine								
304	Phentermine								
305	3,4 Methylenedioxyethyl amphetamine (MDEA)**	Drug & Toxicology Lab	Urine Container	Urine	30 mL	Twice a week	Medicolegal cases (60 days) Urgent Medicolegal Cases (14 days) Clinical Cases (6 weeks)	Drug & Toxicology Lab (Medicolegal cases) Kaunter Utama Jabatan Patologi (Clinical cases)	UPD-1 (Pindaan 2020) form (Medico-legal cases) PER-PAT 301 form (Clinical)
306	Benzodiazepines								
307	Alprazolam*								
308	Alpha-Hydroxyalprazolam								
309	Alpha-Hydroxytriazolam								
310	7- Aminoclonazepam								
311	7- Aminoflunitrazepam								
312	7- Aminonitrazepam								
313	7- Aminonimetazepam								
314	Clonazepam								
315	Diazepam*								
316	Flurazepam								
317	Flunitrazepam								
318	Midazolam*								
319	Lorazepam*								
320	Nitrazepam*								
321	Nimetazepam*								
322	Nordiazepam*								
323	Oxazepam*								
324	Temazepam*								
325	Cannabinoids (THC)	Drug & Toxicology Lab	Urine Container	Urine	30 mL	Daily (Screening) Three times a week (Confirmation)	Medical Check-up (5 days) Medicolegal cases (10 days) Clinical Cases (6 weeks)	Drug & Toxicology Lab (Medicolegal cases) Kaunter Utama Jabatan Patologi (Clinical cases)	UPD-1 (Pindaan 2020) form (Medico-legal cases & Medical checkup) PER-PAT 301 form (Clinical) Medical checkup is ONLY offered to HKL staff via OSH Clinic
326	Delta-9-THC-COOH								
327	Ketamine								
328	Dehydronorketamine								
329	Ketamine	Drug & Toxicology Lab	Urine Container	Urine	30 mL	Daily (Screening) Twice a week (confirmation)	Medicolegal cases (60 days) Urgent Medicolegal Cases (14 days) Clinical Cases (6 weeks)	Drug & Toxicology Lab (Medicolegal cases) Kaunter Utama Jabatan Patologi (Clinical cases)	UPD-1 (Pindaan 2020) form (Medico-legal cases) PER-PAT 301 form (Clinical)
330	Norketamine								
331	Cathinones (Khat)	Drug & Toxicology Lab	Urine Container	Urine	30 mL	Twice a week	Medicolegal cases (60 days) Clinical Cases (6 weeks)	Drug & Toxicology Lab (Medicolegal cases) Kaunter Utama Jabatan Patologi (Clinical cases)	UPD-1 (Pindaan 2020) form (Medico-legal cases) PER-PAT 301 form (Clinical)
332	Cathinones (Khat)								
333	Opioids	Drug & Toxicology Lab	Urine Container	Urine	30 mL	Daily (Screening) Three times a week (Confirmation)	Medical Check-up (5 days) Medicolegal cases (10 days) Clinical Cases (6 weeks)	Drug & Toxicology Lab (Medicolegal cases) Kaunter Utama Jabatan Patologi (Clinical cases)	UPD-1 (Pindaan 2020) form (Medico-legal cases & Medical checkup) PER-PAT 301 form (Clinical) Medical checkup is ONLY offered to HKL staff via OSH Clinic
334	Morphine								
335	Codeine	Drug & Toxicology Lab	Urine Container	Urine	30 mL	Twice a week	Medicolegal cases (60 days) Clinical Cases (6 weeks)	Drug & Toxicology Lab (Medicolegal cases) Kaunter Utama Jabatan Patologi (Clinical cases)	UPD-1 (Pindaan 2020) form (Medico-legal cases) PER-PAT 301 form (Clinical)
336	Methadone								
337	EDDP	Drug & Toxicology Lab	Urine Container	Urine	30 mL	Twice a week	Medicolegal cases (60 days) Clinical Cases (6 weeks)	Drug & Toxicology Lab (Medicolegal cases) Kaunter Utama Jabatan Patologi (Clinical cases)	UPD-1 (Pindaan 2020) form (Medico-legal cases) PER-PAT 301 form (Clinical)
338	6-Acetylmorphine (6-AM)								
339	Buprenorphine								
340	Dextromethorphan								
341	Fentanyl								
342	Hydrocodone								
343	Hydromorphone								
344	Oxycodone								
345	Oxymorphone								
346	Tramadol								
347	Synthetic Cathinones	Drug & Toxicology Lab	Urine Container	Urine	30 mL	Twice a week	Medicolegal cases (60 days) Clinical Cases (6 weeks)	Drug & Toxicology Lab (Medicolegal cases) Kaunter Utama Jabatan Patologi (Clinical cases)	UPD-1 (Pindaan 2020) form (Medico-legal cases) PER-PAT 301 form (Clinical)
348	Mephedrone								
349	Mitragynine (Ketum)	Drug & Toxicology Lab	Urine Container	Urine	30 mL	Twice a week	Medicolegal cases (60 days) Clinical Cases (6 weeks)	Drug & Toxicology Lab (Medicolegal cases)	UPD-1 (Pindaan 2020) form (Medico-legal cases) PER-PAT 301 form (Clinical)
350	Mitragynine								
351	7-Hydroxymitragynine								