

CHEMICAL PATHOLOGY TESTING IN THE ERA OF COVID-19

PRESENTER



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CHEMICAL PATHOLOGIST

INTRODUCTION

- THE CHEMICAL PATHOLOGY UNIT IS AN ACCREDITED CLINICAL LABORATORY THAT PROVIDES COMPREHENSIVE CLINICAL BIOCHEMISTRY AND ADVISORY SERVICES INCLUDING INTERPRETATION OF RESULTS, ADVICE ON APPROPRIATE SELECTION OF THE LABORATORY TESTS, INVESTIGATION AND MONITORING STRATEGIES FOR INDIVIDUAL PATIENTS AND SPECIFIC DISEASES.

SERVICES

The Chemical Pathology Unit provides laboratory and consultative services in the areas of diagnostic and research as follows:

- a) Urgent tests
- b) 24-hour (on-call) tests
- c) Routine tests
- d) Specialised tests

URGENT TESTS

- URGENT TESTS WHICH REQUIRE STAT ANALYSIS
- TURNAROUND TIME: 45 MINUTES (ARTERIAL AND VENOUS BLOOD GASES)
: 1 HOUR (OTHER URGENT BIOCHEMISTRY TESTS)

24-HOUR (ON-CALL) TESTS

- Tests which are offered over a 24-hour period

- RENAL PROFILE
- BLOOD GASES
- LIVER FUNCTION TEST
- BONE PROFILE
- AMYLASE
- ASPARTATE AMINOTRANSFERASE (AST)
- CALCIUM
- CORRECTED CALCIUM
- CREATINE KINASE
- C-REACTIVE PROTEIN
- GLUCOSE
- MAGNESIUM
- PHOSPHATE
- HS TROPONIN T
- BODY FLUIDS BIOCHEMISTRY
- BILIRUBIN (TOTAL/DIRECT)
- URINE FEME (DIPSTICK ONLY)
- URINE PREGNANCY TEST

ROUTINE TESTS

- TESTS THAT ARE OFFERED DURING OFFICE HOURS.
- TURNAROUND TIME – 4 HOURS (INPATIENT) TO 5 WORKING DAYS (OUTPATIENT)

SPECIALISED TESTS

- TESTS THAT ARE RUN IN **BATCHES** (E.G., ENDOCRINE TESTS, DYNAMIC FUNCTION TESTS AND ANAEMIA PROFILE).
- TURNAROUND TIME – 5 WORKING DAYS.

**COVID-19: SPECIMEN
COLLECTION & SAFE HANDLING
OF SPECIMENS FOR
LABORATORY TESTINGS:
CHEMICAL PATHOLOGY UNIT**

SAFE HANDLING OF SPECIMENS FOR LABORATORY TESTING

- **NOTIFY AND INFORM LABORATORY 1 HOUR PRIOR TO SENDING SAMPLE AT 5209 / 5215 (PATHOLOGY).**

To	All Clinicians and Staff Nurses of: - Wards, Critical Care Units and Clinics, HUiTM - UiTM Private Specialist Centre (UPSC)
From	Dr Aletza Mohd Ismail
Date	27 th May 2021
Title	Outsourced Test Requests for Positive and Potential COVID-19 Samples

Please be informed that Department of Clinical Diagnostic Laboratories will only accept positive and potential Covid-19 samples for **outsourced test requests** during **office hours only**.

This is due to the scarcity of referral laboratories that are willing to accept positive and potential Covid-19 samples and the services offered are only limited to office hours. In addition, the safety protocols practiced by our department dictate that all positive and potential Covid-19 samples shall not be stored in the laboratory and discarded immediately after analysis. Therefore, outsourced test requests involving positive and potential Covid-19 samples received after office hours will be rejected.

Your cooperation in this matter is greatly appreciated.

Collect
sample in
appropriate
test tube

Place the collected
sample into **2** layers of
biohazard plastic bags.

Place the biohazard
plastic bags containing
collected sample into the
polystyrene box.

Do **NOT** seal the polystyrene box with tape.

Provide **ONE EXTRA** label for each tube, place those with
request form in the biohazard plastic bag & paste it to the
box.

Ready to be sent to the lab

COVID 19: IN-HOUSE/ OUTSOURCED TESTS

REFERENCES



- ***COVID-19 2020: SAFETY 01***
***Document: COVID-19:
SPECIMEN COLLECTION &
SAFE HANDLING OF
SPECIMENS FOR
LABORATORY TESTINGS***

QUIZ TIME

1) THYROID FUNCTION TEST FOR COVID-19 CASE CAN BE SENT AT 8 PM:

TRUE

FALSE

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TRUE

FALSE

THYROID FUNCTION TEST IS NON ONCALL TEST. LABORATORY CANNOT HOLD OR KEEP THE COVID SAMPLE TO RUN DURING OFFICE HOUR.

SO SEND THE TEST DURING OFFICE HOUR

QUIZ TIME

A STAFFNURSE FROM EMERGENCY DEPARTMENT WOULD LIKE TO SEND SAMPLE OF COVID -19 PATIENT FOR FULL BLOOD COUNT, RENAL PROFILE AND SPUTUM FOR CULTURE AND SENSITIVITY.

HOW MANY POLYSTYRENE BOX(ES) IS/ ARE REQUIRED TO TRANSPORT THE SAMPLES

- A. 1**
- B. 2**
- C. 3**

QUIZ TIME : ANSWER

A STAFFNURSE FROM EMERGENCY DEPARTMENT WOULD LIKE TO SEND SAMPLE OF COVID -19 PATIENT FOR FULL BLOOD COUNT, RENAL PROFILE AND SPUTUM FOR CULTURE AND SENSITIVITY.

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Full blood count is run by hematology unit, Renal profile is run by chemical pathology unit. Samples for hematology and chemical pathology can be combined in 1 polystyrene, the samples are handled by same covid-laboratory staff
Sputum for CnS are handled by microbiology staff, thus it needs separate container.

QUIZ TIME

DR ADHAM ALREADY ORDERED URGENT RENAL PROFILE FOR HIS COVID-19 PATIENT AT 9 AM. HE ALREADY RECEIVED THE RESULT AT 950 AM. SUDDENLY DURING WARD ROUND AT 1030 AM, HIS CONSULTANT ASKED HIM THE MAGNESIUM RESULT, WHICH HE FORGOT TO ORDER EARLIER. HE CALLED LABORATORY TO ADD ON THE TEST.

WHAT WOULD BE THE LIKELY RESPOND FROM THE LABORATORY STAFF

- a) YES , U CAN ADD ON, THE SAMPLE IS STILL AVAILABLE AND STABLE**
- b) THE SAMPLE HAS BEEN DISCARDED**

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THANK YOU!