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Faculty of Medicine
Cairo University
Chemical Pathology Department
Laboratory Service Manual

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1. About the laboratory:

The Chemical Pathology Department is the division of the Clinical and Chemical Pathology Department concerned with all laboratory clinical chemistry activities.

The department provides cutting-edge laboratory services to Kasr Al-Ainy patients, outpatient clinics and outside referring laboratories; in addition to postgraduate and research candidates, armed with many fully-automated analyzers, state-of-the-art research instruments and numerous ancillary tools and machine.

The lab is supervised by eminent faculty staff and highly trained chemists and technologists in addition to the existence of a leak-proof laboratory information system connecting the whole laboratory. This department proudly occupies the top of the laboratory service hierarchy in Egypt. Since 2016, the lab is accredited by EGAC in compliance with the requirements of ISO 15189:2012 in the fields of clinical chemistry, hormones, tumor markers and specific proteins. This scope is continuously updated and expanding.

2. Location of the laboratory:

Cairo University Hospitals - Kasr Al-Ainy School of Medicine

The Chemical Pathology Department is located in the west wing of the hospital, on the second and third floors. It houses 4 units:

1. Routine Chemistry unit (RC) (3rd floor)
2. Hormones and tumour markers unit (H&TM) (3rd floor)
3. Drugs and trace element unit (D&T) (2nd floor)
4. Molecular diagnostics and research unit (MDR) (3rd floor)

3. Opening hours of the laboratory:

Saturday to Thursday from 8:30 till 14:00 o'clock.

Report release continues up to 17:00 o'clock.

Emergency samples are sent to the emergency lab.

4. Time allowed for receiving samples:


Outpatient and lab to lab samples are received from 8:30 – 13:00 o'clock while inpatient samples are received from 8:30 – 10:30 o'clock.

All inpatient and outpatient samples should be delivered to the lab by a maximum of 2 h following collection. Lab to lab samples are the responsibility of the provider.

5. Turn-around time:

The turn-around time (time between submitting a sample to the lab and reporting result) is specified as follows:

- Same day for routine chemistry tests (max. 9 h from sample submission to the lab).
- 48 working hours for hormones and tumor markers.

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- 72 working hours for the specific proteins.
- For the rest of the tests, please refer to the LSM.

6. Complaint policy:

Lab's policy is to accept complaints that are relevant to lab processes/activities; if authenticated, received by phone, or filled in person.

The lab accepts the complaints from patients, physicians or other interested parties.

7. Laboratory's policy on protection of personal information:

- All laboratory staff is obliged to maintain the confidentiality of data and customer information.
- Lab staff is not authorized to inform any person with the lab data and test results except if previously agreed upon in the analysis request.
- It is not allowed for any of the lab staff to inform anyone with the results or data by telephone, except for critical value reporting.
- The test results are released only to:
 - Patients
 - Physicians
 - Nursing unit staff
 - For paid services, persons who have the payment receipt form.

8. Clinical advice:

The lab is ready to provide advice on ordering of examinations and on interpretation of examination results.

9. Retention time:


For routine chemistry tests: 24 hours

For hormones and tumor markers: 48 working hours

For specific proteins: 72 working hours

10. Types of clinical services offered:

- * Routine chemistry (RC)
- * Hormones and tumour markers assays (H&TM)
- * Trace elements and electrolytes (D&T)
- * Therapeutic drug monitoring and drug-of-abuse (D&T)
- * Proteins and Body fluid analyses; CSF, urine, serous fluid (MDR)

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11. Laboratory methods:

- AAS: Atomic Absorption Spectrophotometry
- CLEIA: ChemiLuminescenceEnzyme ImmunoAassay
- ECLIA: ElectroChemiLuminescenceImmunoAassay
- EIA : Enzyme ImmunoAssay
- ELISA: Enzyme-Linked ImmunoSorbent Assay
- EMIT: Enzyme Multiplied Immunoassay Technique.
- IEF: IsoElectricFocusing
- IN: ImmunoNephelometry
- ISE: Ion Selective Electrode
- RIA: Radio Immuno Assay
- SP: SpectroPhotometric
- TINIA:TurbidimetricInhibition ImmunoAassay


Abbreviations

CSF: CerebroSpinal Fluid

F: Feces

S: Serum

U: Urine

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Test List

A

1-Acetaminophen(Tylenol/Paracetamol)

Sample requirements: 3 mL blood in a plain tube

Available at: D&T unit

Setup: daily

Results: same day

2-Adrenocorticotrophic Hormone (ACTH)

Sample requirements: 2 mL blood collected on EDTA tubes

Sample timing: 8:00 – 10:00 o'clock

Available at: H&TM unit

Set up: daily

Results ready: 48 working hours

Sample transport: note that the stability for this analysis is greatly reduced at room temperature. It is vital that immediately after collection, the EDTA blood sample be kept chilled and promptly delivered to the lab in an ice bath until centrifuged at 4°C

3-Alpha-Fetoprotein (AFP):

Sample requirements: 3mL blood in a plain tube

Available at: H&TM unit

Set up: daily

Results at: 48 working hours

4-A/G Ratio:

Sample requirements: 3mLblood in a plain tube

Available at: RC unit

Set up: daily

Results in: same day


5-Adenosine Deaminase (ADA):

Sample requirements: 2 samples are required (1) 2 mL of the pleural or ascetic fluid (2) 3 mL Blood on a plain tube drawn simultaneously with the fluid sample

Available in: D&T unit.

Setup: twice/week

Results in: 72 working hours

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6-Amikacin

Sample requirements: 3mL blood in a plain tube

Available at: D&T unit

Set up: daily

Results in: same day

7-Alanine transaminase (ALT):

Sample requirements: 3mL blood tube

Available at: RC unit

Set up: daily

Results in: same day

8-Albumin (CSF): See under CSF

9-Albumin (S):

Sample requirements: 3mL blood in a plain tube

Available at: RC unit

Set up: daily

Results in: same day

10-Albumin/creatinine ratio:

Sample requirements: urine from the second morning urine

Available at: MDR unit

Set up: twice per week (Sunday-Wednesday)

Results ready: 72 working hours

11-Alpha-1-Antitrypsin (F), quantitative:

Sample requirements: 5 g faeces

Available at: MDR unit

Set up: twice weekly (Sunday-Wednesday)

Results ready: 72 working hours


12- Alpha-1-Antitrypsin (S):

Sample requirements: 3 mL blood in a plain tube

Set up: twice weekly (Sunday-Wednesday)

Available at: MDR unit

Results ready: 72 working hours

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13-Alpha-1-Antitrypsin phenotype:

Sample requirements: 3 mL blood in a plain tube

Available at: MDR unit

Set up: contact the unit

Results ready: contact the unit

14-AlkalinePhosphatase:

Sample requirements: 3mL blood in a plain tube

Available at: RC unit

Setup: daily

Results in: same day

Patient preparation: preferably fasting (8 hours overnight)

15-Aminogram: qualitative

Sample requirements: 3 mL blood in heparinized tube, first morning urine sample, delivered very promptly to the lab.

Available at: D&T unit

Setup: once/week

Results in: 1 week

16-Amphetamine screen (U), qualitative

Sample requirements: 10 mL urine

Set up: daily

Available at: D&T unit

Results: same day

17-Amylase (S):

Sample requirements:3 mL blood in a plain tube

Available at: RC unit

Setup: daily

Results in: same day


18-Amylase (U):

Sample requirements:24 h urine collection

Available at: RC unit

Setup: daily

Results in: same day

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19-Aspartate Aminotransferase (AST):

Sample requirements: 3mL blood in a plain tube

Available at: RC unit

Setup: daily

Results in: same day

20-Aquaporin-4

Sample requirements: 3 mL blood in a plain tube

Available at: MDR unit

Set up: contact the unit

Results ready: contact the unit

B

21-Beta-Human Chorionic Gonadotropin (β -HCG):

Sample requirements: 3mL blood in plain tube, please state week of pregnancy

Available at: H&TM unit

Setup: daily

Results in: 48 working hours

22-Barbiturates screen (U), qualitative:

Principle: EMIT

Sample requirements: 10 mL urine

Available at: D&T unit

Set up: daily

Results ready: same day

Reference interval: Negative

23-Benzodiazepine screen (U), qualitative:

Sample requirements: 10 mL urine

Available at: D&T unit

Set up: daily

Results ready: same day


24-Beta-2Microglobulins (S):

Sample requirements: 3mL blood in a plain tube

Available in: MDR unit

Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

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25-Beta-2 Microglobulins (U):

Sample requirements: 10 mL urine (random or timed).

Available at: MDR unit

Set up: twice weekly (Sunday-Wednesday)

Results ready: 72 working hours

26-Bilirubin, direct(S):

Sample requirements: 3 mL blood in a plain tube, protect from light

Available at: RC unit

Setup: daily

Results in: sameday

27-Bilirubin, total (S):

Sample requirements: 3mL blood in a plain tube, protect from light

Available in: RC unit

Setup: daily

Results in: same day

28-Blood gases:

Sample requirements: 3 mL blood in a heparinized syringe, small syringes are preferred e.g. 3 and 5 mL, transfer the sample within 5 minutes to the lab, if delay is expected in transport; keep the syringe on ice.

Avoid the presence of air or air bubbles in the syringe

Available at: D&T unit

Setup: daily

Results in: immediately upon sample receipt

C

29-C-Peptide:

Sample requirements: 3 mL blood in plain tube

Patient prep: Fasting

Set up: daily

Results ready: 48 working hours


30-CA125:

Sample requirements: 3mL blood in a plain tube

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

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31-CA15.3:

Sample requirements: 3mL blood in a plain tube

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

32-CA19.9:

Sample requirements: 3mL blood in a plain tube

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

33-Calcium, Ionized:

Sample requirements: 3mL blood in a heparinized syringe. Transfer the sample promptly to the lab, if delay is expected in transport; keep the syringe on ice.

Avoid the presence of air or air bubbles in the syringe.

Available in: D&T unit

Setup: daily

Results in: same day

34-Calcium, Total (S):

Sample requirements: 3mL blood in a plain tube. Avoid long standing tourniquet.

Available in: RC

Setup: daily

Results in: same day

35-Calcium in urine:

Sample requirements: 24 h urine collection, collected on 10mL, 6 Mol/L HCl

Available in: RC

Setup: daily

Results in: same day

36-Cannabinoids: (THC: Tetrahydrocannabinol), qualitative:

Sample requirements: 10 mL urine

Available in: D&T unit

Set up: daily


Results ready: same day

37-Carbamazepine (Tegretol):

Sample requirements: 3 mL blood on a plain tube

Available in: D&T unit

Setup: daily

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Results in: same day

38-Carcino embryonic antigen (CEA):

Sample requirements: 3 mL blood in a plain tube

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

39-Ceruloplasmin (S)

Sample requirements: 3 mL blood in a plain tube

Available in: MDR unit

Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

40-Chloride (CSF): See under CSF

41-Chloride (S):

Sample requirements: 3 mL blood in a plain tube

Available in: D&T unit

Setup: daily

Results in: same day

42-Chloride in urine:

Sample requirements: urine sample either random or 24 h urinary collection

Available in: D&T unit

Results in: same day

43-Cholesterol (total):

Sample requirements: 3 mL blood in a plain tube

Available in: RC

Setup: daily


Results in: same day

44-Cholesterol-HDL:

Sample requirements: 3 mL blood in a plain tube.

Available in: RC

Results in: same day

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45-Cholesterol-LDL:

Sample requirements: 12h offasting, 3 mL blood in a plain tube

Available in: RC unit

Setup: daily

Results in: same day

46-Cocaine screen (U), qualitative:

Sample requirements: 10 mL URINE

Available in: D&T unit

Setup: daily

Results in: same day

47-Complement 3 (C3):

Sample requirements: 3 mL blood in a plain tube

Available in: MDR unit

Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

48-Complement 4 (C4):

Sample requirements: 3 mL blood in a plain tube

Available in: MDR unit

Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

49-Copper (S):

Sample requirements: 5 mL blood in a plain tube (special tubes are available at the lab)

Available in: D&T unit

Setup: once/week

Results in: 1 week

50-Copper (U):

Sample requirements: 24 h collection on a special container, containers are available at the lab.

Available in: D&T

Setup: once/week


Results in: 1 week

51-Cortisol:

Sample requirements: 3 mL blood in a plain tube

Samples are drawn at 8-10 am for morning cortisol and at 8-10 pm (or midnight) for evening cortisol. Please specify in the request whether its am or pm sample

Available in: H&TM unit

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Setup: daily

Results in: 48 working hours

52-Creatine Kinase(CK):

Sample requirements: 3 mL blood in a plain tube

Available in: RC unit

Setup: daily

Results in: same day

53- Creatine Kinase-MB (CK-MB) activity:

Replaced by (CK-MB) mass

54-Creatine Kinase-MB (CK-MB) mass:

Sample requirements: 3mL blood in a plain tube

Available in: RC unit

Setup: daily

Results in: same day

55-Creatinine (serum):

Sample requirements: 3mL blood in a plain tube

Available in: RC unit

Set up: daily

Results ready: same day

56-Creatinine clearance:

Sample requirements: 3 mL blood in a plain tube, 24h urinary collection, weight and height of the patient must be included in the request form

Available in: RC unit

Setup: daily

Results in: same day

57-CSF Chemistry (Glucose, Chloride, Proteins):

Sample requirements: 3mL of CSF in a plain tube or a syringe

Available in: MDR unit


Setup: daily

Results in: same day

58-CSF IgG index:

Sample requirements: 3mL blood in a plain tube and 3 mL CSF in a syringe

Available in: MDR unit

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Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

59-Cyclosporine:

Sample requirements: 3 mL blood on EDTA tube

Available in: D&T unit

Setup: daily

Results in: same day

60-Cystatin C

Sample requirements: 3 mL blood in a plain tube or heparinized tube

Available in: MDR unit

Set up: twice weekly (Sunday-Wednesday)

Results ready: 72 working hours

D

61-Dehydroepiandrosterone sulfate(DHEA-S):

Sample requirements: 3 mL blood in a plain tube

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

62-Depakine (Valproic acid):

Sample requirements: 3 mL blood on a plain tube

Setup: daily

Results in: same day

63-Digoxin (Lanoxin):

Sample requirements: 3 mL blood on a plain tube

Available in: D&T unit

Setup: daily

Results in: same day


E

64-Epanutin (Phenytoin):

Sample requirements: 3 mL blood on a plain tube

Available in: D&T unit

Setup: daily

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Results in: same day

65-Estradiol (E2):

Sample requirements: 3 mL blood in a plain tube

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

F

66-Folliclestimulatinghormone(FSH):

Sample requirements: 3 mL blood in a plain tube

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

G

67- Gamma glutamyltransferase (GGT):

Sample requirements: 3 mL blood in a plain tube

Available in: RC unit

Setup: daily

Results in: same day

68-Glucose:

Sample requirements: 3 mL blood in sodium fluoride tube

Patient can be fasting for at least 8 h or 2 h after meal /75gram glucose.

Available in: RC lab

Setup: daily


Results in: same day

69-Glucose, CSF: See under CSF

70-Glucose, pericardial: See in pericardial fluid chemistry

71-Glucose, peritoneal: See in peritoneal fluid chemistry

72- Glucose, pleural: See in pericardial fluid chemistry

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73-Growth Hormone (GH):

Sample requirements: 3 mL blood in a plain tube

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

H

74-HDL-cholesterol: See under Cholesterol-HDL

75-Hemoglobin A1c (glycated hemoglobin)

Sample requirements: 3mL on EDTA tube

Available in: RC unit

Setup: daily

Results in: 48 working hours

76- Homocysteine

Sample requirement: 3 mL of blood on plain/Heparin/EDTA tube on ice immediately following venipuncture and delivered to the lab immediately so that centrifugation done within one hour

Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

I

77- IgA:

Sample requirements: 3 mL blood in a plain tube

Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

78- IgG (CSF):

Sample requirement: 2 mL CSF (not to be frozen)

If paired serum and CSF samples are to be analyzed, they should be drawn simultaneously

Available in: MDR unit


Set up: twice weekly

Results ready: 72 working hours

79- IgG (S):

Sample requirements: 3 mL blood in a plain tube

Available in: MDR unit

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Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

80-IgG (U):

Sample requirements: second morning sample (not to be frozen)

Available in: MDR unit

Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

81-IgM (S):

Sample requirements: 3 mL blood in a plain tube

Available in: MDR unit

Setup: twice weekly

Results in: 72 working hours

82- Immunoglobulin light-chain (lambda) (S):

Sample requirements: 3 mL blood in a plain tube

Available in: MDR unit

Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

83-Immunoglobulin light chain (kappa) (S):

Sample requirements: 3 mL blood in a plain tube

Available in: MDR unit

Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

84-Insulin:

Sample requirements: 3 mL blood in a plain tube

Patient preparation: 12 h fasting

Available in: H&TM unit

Setup: daily

Results in: 48 working hours


85-Insulin like growth factor:

Sample requirements: 3 mL blood in a plain tube,

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

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86-Iron:

Sample requirements: 3 mL blood in a plain tube

Available in: RC unit

Setup: daily

Results in: same day

87-Iron binding capacity, total (TIBC):

Sample requirements: 3 mL blood in a plain tube

Available in: RC unit

Setup: daily

Results in: same day

L

88-LactateDehydrogenase (LDH), CSF: See under CSF chemistry

89-LactateDehydrogenase (LDH), S:

Sample requirements: 3 mL blood in a plain tube

Available in: RC unit

Setup: daily

Results in: same day

90- LDL-Cholesterol: See Cholesterol-LDL

91-Lead:

Sample requirements: 3 mL whole blood on EDTA polypropylene tube

Available in: D&T unit

Setup: once/week

Results: one week

92-Luteinizing Hormone(LH)

Sample requirements: 3 mL blood in a plain tube

Available in: H&TM unit

Setup: Daily

Results in: 48working hours


M

93-Magnesium:

Sample requirements: 3 mL blood in a plain tube

Available in: RC unit

Setup: daily

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Results in: same day

94-Methotrexate:

Sample requirements: 3 mL blood on EDTA tube or serum

Available in: D&T unit

Setup: daily

Results in: same day

95-Microalbuminurine: (see albumin/creatinine)

O

96-Oligoclonal band:

Sample requirements: 3 mL blood in a plain tube, 3 mL CSF

Available in: MDR unit

Setup: once/week

Results in: 2 weeks

97- Opiates(U)(screening), qualitative:

Sample requirement: 10 mL urine

Set up: daily

Results ready: same day

P

98-Parathyroid hormone(PTH):

Sample requirements: 3mL whole blood on EDTA anticoagulant, transfer promptly to the lab in a cup of ice.

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

99-Pericardial effusion-fluid analysis(Protein, LDH, Glucose):

Sample requirements: aspirate 5 mL in a plain clean tube for chemistry analysis

Available in: RC unit


Setup: daily

Results in: same day

100-Peritoneal effusion-fluid analysis(Protein, LDH, Glucose, Amylase):

Sample requirements: aspirate 5 mL in a plain clean tube for chemistry analysis

Available in: RC unit

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Setup: daily

Results in: same day

101-Phenobarbital: See barbiturates

102-Phenytoin: See Epanutin

103-Phosphorus (S):

Sample requirements: 3 mL blood in a plain tube

Available in: RC unit

Setup: daily

Results in: same day

104-Phosphorus (U):

Sample requirements: 24 h urinary collection (see preface for instructions)

Available in: RC unit

Results in: same day

105-Pleural effusion-fluid analysis (Protein, LDH, Glucose):

Sample requirements: aspirate 5 mL in a plain clean tube for chemistry analysis

Available in: RC unit

Setup: daily

Results in: same day

106-Potassium (S):

Sample requirements: 3 mL blood on a plain tube, whole blood on lithium heparin is also acceptable; sample should be free of haemolysis.

Available in: RC unit

Setup: daily

Results in: same day

107-Potassium (U):

Sample requirements: 24 h urine.

Available in: RC unit

Setup: daily


Results in: same day

108-Progesterone:

Sample requirements: 3 mL blood in a plain tube

Available in: H&TM unit

Setup: daily

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Results in: 48working hours

109-Prolactin:

Sample requirements: 3 mL blood in a plain tube

Available in: H& TM unit

Setup: daily

Results in: 24 working hours

110-Prostatespecific antigen, Free (PSA-F):

Sample requirements: 3 mL blood in a plain tube

Before PSA analysis the patient should not be subjected to (Prostatic examination or massage, sonography or catheterization for 10 days)

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

111-Prostate specific antigen, Total (PSA):

Sample requirements: 3 mL blood in a plain tube

Before PSA analysis the patient should not be subjected to (Prostatic examination or massage, sonography or catheterization for 10 days)

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

112- Protein Electrophoresis (S):

Sample requirements: 3 mL blood in a plain tube

Available in:MDR unit

Setup: once/week

Results in: 72working hours

113-Protein Electrophoresis (U):

Sample requirements: Random urine sample

Available in: MDR unit

Setup: once/week


Results in: 72working hours

114-Proteins, CSF:See under CSF

115-Proteins, Total (S):

Sample requirements: 3 mL blood in a plain tube

Available in: RC unit

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Setup: daily

Results in: same day

116-Proteins,Total (U):

Sample requirements:24 h urine collection or random urine sample for protein/creatinine ratio

Available in: MDR unit

Setup: daily

Results in: same day

117-Proteins,Pericardialfluid:See under pericardial fluid

118-Proteins,Peritonealfuid: See under peritoneal fluid

S

119-Soduim (Na): (S)

Sample requirements: 3 mL blood on a plain tube,
whole blood on lithium heparin is also acceptable;

Available in: RC unit

Setup: daily

Result: same day

120-Soduim (Na): (U)

Sample requirements: 24 h urine collection

Available in: RC unit

Setup: daily

Result: same day

121-Stone (Calculus):

Sample requirements: stone or fragments of stone

Available in: D&T unit

Setup : twice/week

Results in: 72 working hours


122-Synovial fluid analysis (Uric acid, Protein, Glucose):

Sample requirements: 3mLsynovial fluid in a plain tube or syringe

Available in: RC unit

Setup: daily

Results in: same day

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T

123-Tacrolimus (Prograf or FK 506):

Sample requirements: 3 mL blood on EDTA tube
Available in: D&T unit
Setup :daily
Results in: same day

124-Testosterone,Free:

Sample requirements:3 mL blood in a plain tube
Available in: H&TM unit
Setup: once/week
Results in: 1 week

125-Testosterone,Total:

Sample requirements: 3 mL blood in a plain tube
Available in: H&TM unit
Setup: daily
Results in: 48 working hours

126-Theophylline:


Sample requirements: 3 mL blood on a plain tube
Available in: D&T unit
Setup: daily
Results in: same day

127-Thyroid stimulating hormone (TSH), (Ultrasensitive):

Sample requirements: 3 mL blood in a plain tube
Available in: H&TM unit
Setup: daily
Results in: 48 working hours

128-Thyroxin, free T4 (FT4):

Sample requirements: 3 mL blood in a plain tube
Available in: H&TM unit
Setup: daily
Results in: 48 working hours

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129-Tri-iodothyronine, freeT3(FT3):

Sample requirements: 3 mL blood in a plain tube

Available in: H&TM unit

Setup: daily

Results in: 48 working hours

130-Tramadol screen (U), qualitative:

Sample requirements: 10 mL urine

Set up: daily

Results ready: same day

131-Transferrin:

Sample requirements: 3 mL blood in a plain tube

Available in: MDR unit

Setup: twice weekly (Sunday-Wednesday)

Results in: 72 working hours

132-Transferrin isoforms assay:

Sample requirements: 3 mL blood in a plain tube

Available in: MDR unit

Setup: contact the unit

Results in: contact the unit

133-Triglycerides:

Sample requirements: 3 mL blood in a plain tube. 12 h of fasting, water intake is not prohibited.

Available in: RC unit

Setup: daily

Results in: same day

U

134-Urea:

Sample requirements: 3 mL blood in a plain tube

Available in: RC Unit


Setup: daily

Results in: same day

135-Uric Acid (S):

Sample requirements: 3 mL blood in a plain tube

Available in: RC Unit

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Setup: daily
Results in: same day

136-Uric Acid, synovial: see under synovial fluid

137-Urinalysis (automated and manual):

Sample requirements: 50 mL random urine
Available in: MDR unit
Setup: daily
Results in: same day

V

138-Valproic Acid: See depakine

139-Vancomycin:

Sample: 3 mL blood in plain tube
Setup: daily
Results in: same day


140-Vanillylmandelic acid (VMA):

Sample requirements: 24 h urine collected on 20 mL of 6mole/L HCl, refrigerate sample between voids.
Diet: It is recommended that the patient has no intake for 2 days prior to urine sampling of the following: nuts, citrus fruits, cocoa, coffee or vanilla-containing products.
Medication: If clinical condition allows it is also recommended that the patient stops taking catecholamines (epinephrine, norepinephrine, dopamine), MAO-inhibitors or catecholamine-reuptake inhibitors at least 2 days prior to sampling.
Setup: once weekly

Z

141-Zinc (S):

Sample requirements: 5 mL blood in a plain tube (special tubes are available at the lab)
Available in: D&T unit
Setup: once/week
Results in: 1 week

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احتياطات خاصة بالتحاليل الطبية

دهنيات الدم : يشترط الصيام من 12-14 ساعة

سكر الصائم : يشترط الصيام لمدة لا تقل عن 8 ساعات

سكر بعد الاكل : يشترط احتساب الساعتين من بداية الاكل وبعد أخذ العلاج و لا يسمح الا بشرب الماء اثناء الساعتين كما يرجي الحضور للمعمل قبل الميعاد بربع ساعة علي الاقل

تجميع بول 24 ساعة : فور القيام من النوم صباحا تبول في دورة المياه و سجل الوقت ثم اجمع كل نقطة بول بعد ذلك حتي اليوم التالي في نفس الميعاد (24 ساعة) و احفظ البول في الثلجة

PSA : يتمتع المريض لمدة 10 أيام قبل اجراء التحليل عن أي فحص أو تدليك للبروستاتا أو ادخال منظار أو قسطرة

Vanillylmandelic acid (VMA)

تجميع بول 24 ساعة في زجاجة خاصة يتسلمها المريض من المعمل و يشترط الامتناع لمدة 24 ساعة عن الشاي و القهوة و البسكويت و المكسرات و الشيكولاته و الفانيليا و البرقوق و الاناناس و الطماطم و الموز