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دائرة المختبرات الطبية و علم الأمراض
Department of Laboratory Medicine and Pathology

Lab Guide – 2019

Virology Section Lab Guide

Test Name: Indirect hemagglutination test for Entamoeba histolytica (Amoeba)

Cerner code - Entamoeba Histolytica Antibody)

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	Quantitative detection of specific antibodies to *Entamoeba histolytica* in human serum using indirect hemagglutination test (IHA).
Reference Value	Titer – range: 1:80 to ≥1:2560
Interpretation	• Titer < 1:80 Negative (Considered Negative) • 1:80 ≤ Titer ≤1:160 Doubtful reaction. • Titer ≥ 1:320 significant reaction in favour of visceral amoebiasis.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic • The specimen has leaked • The specimen is in a wrong containe
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).

Reference	Kit insert ELITech MICROBIO– Amoeba

Test name: Quantitative tube agglutination test for serological diagnosis of *Brucella abortus* and *Brucella melitensis* infections (Cerner code – Brucella Antibodies) <u>Test is only department order</u>

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	Quantitative tube agglutination test for Brucella antibodies
Reference Value	Titre – range: 1:20 to ≥1:1280
Interpretation	Titer ≥1:80 considered positive. Titer (1:20 - 1:80) is doubtful Titer < 1:20 considered negative
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipaemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical, City(ext#5125).

Reference	Kit insert: Remel Brucella Agglutination Test

Test name: Qualitative determination of IgG & IgM antibody against Brucella (Cerner code – Brucella IgM/IgG Abs)

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	Detection of Brucella IgG/IgM antibody by ELISA
Reference Value	Negative: < 90% of cut off Positive: > 110% of cut off Equivocal (gray zone): 90% - 110% of cut off
Interpretation	-Positive IgG result indicates current or past infection - Gray zone result should be repeated in a fresh sample 2-4 weeks later. If the result is still gray zone the sample has to be considered negative. -Positive IgM result indicates acute infection - Gray zone result should be repeated in a fresh sample 2-4 weeks later. If the result is still gray zone the sample has to be considered negative.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample.

	• An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Kit insert: NovaLisa Brucella IgG + IgM -ELISA

Test Name: Chikungunya **Virus IgG Antibody**

(Cerner code – Chikungunya Virus IgG) Test is only department order

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	As required
Turnaround time	7 days
Method	An enzyme linked immunosorbent assay (ELISA) for detection of IgG antibodies to Chikungunya virus.
Reference Value	Negative: Result by ratio **< 0.8** Positive: Result by ratio **≥ 1.1** Equivocal: **≥ 0.8- <1.1**
Interpretation	• Chikungunya IgG positive & IgM negative: Past exposure to Chikungunya virus or other Alphavirus (PCR test should be done) • Chikungunya IgG negative & IgM negative: No serological evidence of exposure to Chikungunya Virus.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container for non HGH facilities. • The request form contains no patient's name and Hospital or Qatar ID number for non HGH facilities. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked. • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Anti- Chikungunya Virus IgG Elisa Euroimmune package insert.

Test name: Chikungunya Virus IgM Antibody

(Cerner code – Chikungunya Virus IgM) Test is only department order

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	As required
Turnaround time	7 days
Method	An enzyme linked immunosorbent assay (ELISA) for detection of IgM antibodies to Chikungunya virus.
Reference Value	Negative: Result by ratio **< 0.8** Positive: Result by ratio **≥ 1.1** Equivocal: **≥ 0.8- <1.1**
Interpretation	• Chikungunya IgM Ab positive: Chikungunya probable case (PCR test should be done)
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container for non HGH facilities. • The request form contains no patient's name and Hospital or Qatar ID number for non HGH facilities. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked. • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).

Reference	Anti-Chikungunya Virus IgM Elisa Euroimmune package insert.

Test name: Qualitative determination of lipid antibodies in CSF to VDRL antigen (Cerner code – VDRL Screen CSF)

ITEM	PROCESS
Specimen	• Collect CSF, minimum 2ml, in plain sterile screw capped container tube. • Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Daily
Turnaround time	2 days
Method	A macroscopic non-treponemal flocculation test that is used to detect lipid antibodies in CSF to modified VDRL cardiolipin antigen
Reference Value	• Negative: No flocculation • Positive: Flocculation titer of ≥ 1:1
Interpretation	Positive results in association with positive syphilis specific tests indicate current untreated infection.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • Blood stained CSF • An inadequate volume of specimen for testing is received. • The specimen has leaked. • The specimen is in a wrong container
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21 (ext# 5125), Hamad Medical City.
Reference	BD VDRL Antigen package insert.

Test name: Demgue IgG

(Cerner code - Dengue Virus IgG)

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	Detection of IgG antibody by ELISA
Reference Value	Negative: Result by ratio **< 0.8** Positive: Result by ratio **≥ 1.1** Equivocal: **≥ 0.8- <1.1**
Interpretation	• -Positive IgG result indicates current or past infection (PCR test should be done, if clinically indicated) • - Gray zone result should be repeated in a fresh sample 2-4 weeks later. If the result is still gray zone the sample has to be considered negative.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Kit insert: Anti-Dengue Virus Elisa IgG, Euroimmune.

Test name: Demgue IgM

(Cerner code - Dengue Virus IgM)

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	Detection of IgM antibody by ELISA
Reference Value	Negative: Result by ratio **< 0.8** Positive: Result by ratio **≥ 1.1** Equivocal: **≥ 0.8- <1.1**
Interpretation	• - Positive IgM result indicates current acute infection(PCR test should be done) • - Gray zone result should be repeated in a fresh sample 2-4 weeks later. If the result is still gray zone the sample has to be considered negative.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Kit insert: Anti-Dengue Virus Elisa IgM, Euroimmune

Test name: Indirect hemagglutination test for *Echinoccocus* granulosus
(Cerner code – Echinococcus Antibody)

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	Quantitative detection of specific antibodies to *Echinococcus granulosus* in human serum using indirect hemagglutination test (IHA).
Reference Value	Titer – range: 1:80 to ≥1:2560
Interpretation	• Titer < 1:80 Negative (Considered Negative) • Titer < 1:160 Non significant reaction (Repeat after 2-3 weeks) • Titer = 1:160 Doubtful reaction (Repeat the test 2 to 3 weeks later) • Titer ≥ 1:320 Significant reaction in favour of progressive hydatidosis (Considered Positive)
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic

	• The specimen has leaked. • The specimen is in a wrong container
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Kit insert ELITech MICROBIO– Echinococcosis

Test Name: Hepatitis Delta Virus Total Antibody

(Cerner code – Hepatitis D Total Antibody)

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Once a week
Turnaround time	2 weeks
Method	An enzyme linked immunosorbent assay for detection of total antibodies to Hepatitis D virus.
Reference Value	• Specimens with absorbance values greater than the cut-off value are considered non-reactive. • Specimens with absorbance values less than or equal to the cut-off value are considered initially reactive and are retested in duplicate before interpretation. • Specimens with absorbance values within ± 10% of the cut-off value are retested in order to confirm the initial result. • Specimens found reactive on retesting are interpreted as repeatedly reactive for total antibodies to HDV.
Interpretation	• HDV total Ab positive: Indicate possible exposure to Hepatitis D virus.

	• HDV total Ab negative: No evidence of exposure to HDV.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Kit insert: DiaSorin – ETI-DELTAK-2

Test Name: Hepatitis E Virus IgG Antibody

(Cerner code – Hepatitis E Virus IgG)

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Once a week
Turnaround time	2 weeks
Method	An enzyme linked immunosorbent assay for detection of IgG antibodies to Hepatitis E virus.
Reference Value	Negative: Result by ratio **< 0.8** Positive: Result by ratio **≥ 1.1** Equivocal: **≥ 0.8- <1.1**
Interpretation	• HEV IgG positive: In absence of HEV IgM, indicates past exposure to HEV.

	• HEV IgG negative: No evidence of exposure to HEV.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	HEV IgG Euroimmune package insert

Test name: Hepatitis E Virus IgM Antibody

(Cerner code – Hepatitis E Virus IgM)

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Once a week
Turnaround time	2 weeks
Method	An enzyme linked immunosorbent assay for detection of IgM antibodies to Hepatitis E virus.
Reference Value	Negative: Result by ratio **< 0.8** Positive: Result by ratio **≥ 1.1** Equivocal: **≥ 0.8- <1.1**
Interpretation	Anti-HEV IgM positive: current or recent infection with the virus.

Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	HEV IgM Euroimmune package insert

Test name: HIV-1 and HIV-2 Antibody Confirmatory Assay
(Cerner code – HIV Blot Panel) Test is only department order

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	The Geenius™ HIV 1/2 Supplemental Assay is a single-use immunochromatographic assay to confirm the presence & and differentiation of antibodies against HIV-1 and HIV-2.
Reference Value	• A sample is NEGATIVE if there no bands (lines) on the strip. • A sample is POSITIVE if it meets kit manufacturer's criteria for positivity. • A sample is INDETERMINATE if it does not meet criteria for positivity or negativity
Interpretation	• Although a sample which is confirmed positive for HIV-1 or HIV-2

	antibodies indicates infection, clinical findings, exposure history and other laboratory data must be taken into consideration before a final diagnosis is reached. • If an indeterminate result is obtained, it is recommended to test an additional patient sample after a few weeks. • A negative result does not preclude the possibility of exposure to HIV or infection with the virus.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	BioRad Geenius HIVI/II Supplemental Assay kit insert.

Test name: HTLV I/II Antibody Confirmatory Assay

(Cerner code – HTLV Blot Panel) <u>Test is only department order</u>

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days

Method	A Line Immuno Assay (LIA) to confirm the presence of antibodies against HTLV-1 and HTLV-2
Reference Value	• A sample is NEGATIVE if: 1. If all HTLV antigen lines have a negative reactivity rating 2. If **one** HTLV antigen band (p19 I/II or p24 I/II or gp46 I/II) has a reactivity of ≥±. • A sample is POSITIVE if : 1. If two bands has a reactivity of ≥± and gp21 reactive. 2. If three or more bands reactive. • A sample is INDETERMINATE if: 1. If single HTLV antigen line gp21 has a reactivity of ≥±. 2. If two bands has a reactivity of ≥± and gp21 **NON** reactive
Interpretation	• Although a sample which is confirmed positive for HTLV-1 or HTLV-2 antibodies indicates infection, clinical findings, exposure history and other laboratory data must be taken into consideration before a final diagnosis is reached. • If an indeterminate result is obtained, it is recommended to test an additional patient sample after a few weeks. • A negative result does not preclude the possibility of exposure to HTLV or infection with the virus.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	FUJIREBIO INNO-LIA HTLVI/II Score kit insert.

Test name: Human T-cell Lymphotropic Virus types I & II (HTLV-I & HTLV-II) Antibodies (Cerner code – Human T Lymphotropic Virus Antibody)

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Daily
Turnaround time	7 days
Method	A Chemiluminescent Microparticle Immunoassay (CMIA) for the qualitative detection of antibodies to Human T-cell Lymphotropic Virus types I and II
Reference Value	• Nonreactive (i.e. negative): S/CO <1.00 • Reactive (i.e positive): S/CO ≥ 1.00
Interpretation	Presence of antibodies indicates exposure to HTLV-I or HTLV-II. However, reactive samples need to be confirmed with a Western blot.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Abbott, Architect package insert Human T Lymphotropic Virus I/II Antibody.

Test Name: ***Leishmania donovani*** **antibodies**

(Cerner code – Leishmania Antibody)

ITEM	PROCESS
Specimen	• Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. • Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	Qualitative detection of Leishmania Ab in human serum or plasma.
Reference Value	• **Positive (prensence of control band C & test band T)** • **Negative (prensence of control bamd C only)**
Interpretation	• Positive sample should be confirmed by a supplemental assay (ELISA)
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic • The specimen has leaked • The specimen is in a wrong container
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21 (ext # 5125), Hamad Medical City.
Reference	Kit insert: The SD Bioline Leishmania Ab, Standard Diagnostic.

Test name: Rapid Plasma Reagin card test for serodiagnosis of Syphilis
(Cerner code : RPR Test) Test is only department order

ITEM	PROCESS
Specimen	• Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. • Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Daily
Turnaround time	7 days
Method	Non- treponemal agglutination test for the qualitative and semi-quantitative determination of regain antibodies in human serum or plasma.
Reference Value	**Negative:** No agglutination **Positive:** Agglutination titer ≥ 1:1
Interpretation	• RPR test is performed to monitor treatment. • In conjunction with confirmatory assay, RPR is used to determine current or past infection. • This is a non-treponemal test and is associated with false positive reactions when the patient has infections other than syphilis. Also it can be positive due to pregnancy, drug addiction, collagen vascular disease and Gaucher's disease. • If positive RPR result is found a specific treponemal confirmatory test will be performed.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic • The specimen has leaked • The specimen is in a wrong container
Performing Lab	Virology Laboratory, Dept. of Lab Medicine & Pathology,

Location	located on 4th floor of building #21 (ext # 5125), Hamad Medical City.
Reference	BD Macro-Vue RPR Card Tests

Test Name: Indirect hemagglutination test for ***Schistosoma mansoni*, *Schistosoma haematobium*, and *Schistosoma intercalatum***

(Cerner code – Schistosoma Antibody)

ITEM	PROCESS
Specimen	• Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. • Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	Quantitative detection of specific antibodies to *Schistosoma mansoni, Schistosoma haematobium*, and *Schistosoma intercalatum* in human serum using indirect hemagglutination test (IHA).
Reference Value	Titre – range: 1:80 to ≥1:2560
Interpretation	• Titre < 1:80 Negative • Titer < 1:160 Non significant reaction (Repeat after 2-3 weeks) • Titer ≥1:160 significant reaction Presumption of an active infection. Considered positive
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is

	received. • A blood specimen is lipemic • The specimen has leaked • The specimen is in a wrong container
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21 (ext # 5125), Hamad Medical City.
Reference	Kit insert: ELITech MICROBIO– Schistosoma

Test Name: Zika Virus IgG Antibody

(Cerner code – Zika Virus IgG) Test is only department order)

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	As required
Turnaround time	7 days
Method	An enzyme linked immunosorbent assay (ELISA) for detection of IgG antibodies to Zika virus.
Reference Value	Negative: Result by ratio **< 0.8** Positive: Result by ratio **≥ 1.1** Equivocal: **≥ 0.8- <1.1**
Interpretation	• Zika IgG positive & IgM negative: Past exposure to Zika virus or other flavivirus (PCR test should be done) • Zika IgG negative & IgM negative: No serological evidence of exposure to Zika Virus.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container for non HGH facilities. • The request form contains no patient's name and Hospital or Qatar ID number for non HGH facilities.

	• There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked. • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Anti-Zika Virus IgG Elisa Euroimmune package insert.

Test name: Zika Virus IgM Antibody

(Cerner code – Zika Virus IgM) <u>Test is only department order</u>

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	As required
Turnaround time	7 days
Method	An enzyme linked immunosorbent assay (ELISA) for detection of IgM antibodies to Zika virus.
Reference Value	Negative: Result by ratio **< 0.8** Positive: Result by ratio **≥ 1.1** Equivocal: **≥ 0.8- <1.1**
Interpretation	• Zika IgM Ab positive: Zika probable case (PCR test should be done)
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container for non HGH facilities.

	• The request form contains no patient's name and Hospital • or Qatar ID number for non HGH facilities. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked. • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Anti-Zika Virus IgM Elisa Euroimmune package insert.

Test name: Cytomegalovirus IgG Avidity Antibody

(Cerner code - Cytomegalovirus IgG Avidity) Department order only

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2- Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	A Chemiluminescent Microparticle Immunoassay (CMIA) for the determination of the avidity of IgG antibodies to Cytomegalovirus in human serum and plasma.
Reference Value	Low Avidity < 50.0 %Avi Grayzone 50.0 – 59.9 %Avi High Avidity ≥ 60.0 %Avi
Interpretation	• If the CMV IgG Avidity results are inconsistent with clinical evidence, additional testing is suggested to confirm the result. • For diagnostic purposes, results should be used in

	conjunction with other data; e.g., results of other tests (CMV IgG, CMV IgM), clinical impressions, etc.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Kit insert: Architect CMV IgG Avidity

Test name: Toxoplasma IgG Avidity Antibody

(Cerner code - Toxoplasma IgG Avidity) Department order only

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2- Deliver promptly to Central Processing (CP) in QRI, 3rd floor, HBKMC.
Transport Temperature	Room temperature
Days test is performed	Twice a week
Turnaround time	7 days
Method	A Chemiluminescent Microparticle Immunoassay (CMIA) for the determination of the avidity of IgG antibodies to *Toxoplasma gondii* in human serum and plasma.

Reference Value	Low Avidity < 50.0 %Avi Grayzone 50.0 – 59.9 %Avi High Avidity ≥ 60.0 %Avi
Interpretation	• If the Toxo IgG Avidity results are inconsistent with clinical evidence, additional testing is suggested to confirm the result. • For diagnostic purposes, results should be used in conjunction with other data; e.g., results of other tests (Toxo IgG, Toxo IgM), clinical impressions, etc.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Kit insert: Architect Toxo IgG Avidity

Test name: Hepatitis B Surface Antigen Confirmatory (HBsAg Conf)
(Cerner code – Hepatitis B Surface Antigen Conf) <u>Test is only department order</u>

ITEM	PROCESS
Specimen	1-Collect blood, minimum 5ml, in yellow capped tube with clot activator or in plain yellow or red capped tube. 2-Deliver promptly to Central Processing (CP) in Hamad General Hospital
Transport Temperature	Room temperature
Days test is performed	Daily

Turnaround time	7 days
Method	A Chemiluminescent Microparticle Immunoassay (CMIA) for confirmation of the presence of Hepatitis B Surface Antigen (HBsAg) using Architect.
Reference Value	• Samples with HBsAgQ2 C2 <0.70 S/CO Not-confirmed • Samples with HBsAgQ2 C2 <10 S/CO + Neutralization% <50% Not-confirmed • Samples with HBsAgQ2 C2 ≥0.70 S/CO + Neutralization% ≥50% Confirmed Positive
Interpretation	HBsAg Confirmatory is used to confirm gray zone, weak or low positive Hepatitis B surface Ag.
Rejection Criteria	• Patient information on request form does not match with information on the sample tube/container. • There is no doctor's stamp. • The request form contains no patient's name and Hospital or Qatar ID number. • There is gross haemolysis in serum or plasma sample. • An inadequate volume of specimen for testing is received. • A blood specimen is lipemic. • The specimen has leaked • The specimen is in a wrong container.
Performing Lab Location	Virology Laboratory, Dept. of Lab Medicine & Pathology, located on 4th floor of building #21, Hamad Medical City, (ext#5125).
Reference	Architect Hepatitis B Surface Antigen Qualitative II Confirmatory package insert