DEPARTMENT OF MICROBIOLOGY
ESIC SUPERSPECIALITY HOSPITAL, HYDERABAD

S.No	Name of PT provider	Type of sample	Name of the test	Test method	Date of PT Report	Is result satisfactory
1	CMC Vellore	Serum	HIV 1&2 ANTIBODIES, P24 ANTIGEN	CLIA Vertical flow through (ICG) Lateral flow through(ICG)	OCTOBER 2023 JUNE 2023	Yes
2	CMC Vellore	Serum	HBV ANTIGEN HBsAg	CLIA (ICG)Lateral flow through	OCTOBER 2023 JUNE 2023	Yes
3	CMC Vellore	Serum	HCV ANTIBODIES	CLIA Vertical flow through (ICG) Lateral flow through(ICG)	OCTOBER 2023 JUNE 2023	Yes
4	CMC Vellore	Serum	ASO TITRES	Latex agglutination	OCTOBER 2023 JUNE 2023 FEBRUARY 2023	Yes
5	CMC Vellore	Serum	WIDAL TEST	Tube Agglutination	OCTOBER 2023 JUNE 2023 NOVEMBER 2022	Yes
6	CMC Vellore	Serum	SYPHILIS SEROLOGY	RPR Test	OCTOBER 2023 JUNE 2023 NOVEMBER 2022	Yes
7	CMC Vellore	Serum	RA FACTOR	Latex agglutination	OCTOBER 2023 JUNE 2023 JULY 2022	Yes

CLIA – Chemiluminiscent Immunoassay, ICG – Immunochromatography, ASO- Anti steptolysin O, RPR- Rapid plasma Reagin, RA- Rheumatoid arthritis

CMCVIROEQAS

(Under the aegis of Indian Association of Medical Microbiologists)

Department of Clinical Virology
Christian Medical College, Vellore

Certificate of Participation

This is to certify that, LAB ID V0131

Department of Microbiology, ESIC Superspeciality Hospital,

Hyderabad, Telangana

has participated in the Virology External Quality Assessment Scheme during the year 2022 for the following panels:

1. Blood Borne Virus Serology
2. Dengue Serology

Dr. Rajesh Kannangai
Coordinator

PC-1034

PC-1033

The Department of Clinical Microbiology
Christian Medical College
Vellore - 632 004

Certificate

This is to certify that

Department of Microbiology

ESIC Superspeciality Hospital, Hyderabad

LAB CODE NO : **M0171**

Participated in the Microbiology

External Quality Assessment Scheme

Basic Bacteriology and Serology: Tier 1 under the aegis of

Indian Association of Medical Microbiologist (IAMM) for the year 2022

V. Balaji

Balaji Veeraraghavan, MD., Ph.D., FRCP.,
Microbiology EQAS Coordinator

Email **Swathi Suravaram**

Re: Results for Distribution no S323 for V0131.

From : viroeqas@cmcvellore.ac.in Fri, Oct 20, 2023 12:54 PM
Subject : Re: Results for Distribution no S323 for V0131.
To : Swathi Suravaram <swathi.suravaram@esic.nic.in>

Dear Participant (V0131),

This is to acknowledge the receipt of your results for **BBVS, DENGUE Serology & HCV Molecular** Dist. No: S323.

Thanks, and Regards
CMCVIROEQAS Coordinator

All participants are requested to mention their Virology EQAS Code number, name of the laboratory and contact number in all communications. All communications and queries regarding Virology EQAS should be sent to viroeqas@cmcvellore.ac.in ONLY.

From: Swathi Suravaram <swathi.suravaram@esic.nic.in>
Sent: Wednesday, October 4, 2023 4:24 PM
To: viroeqas <viroeqas@cmcvellore.ac.in>
Subject: Results for Distribution no S323 for V0131.

Respected Sir/Madam
Please find attached results for Distribution no **S323 for V0131**. HCV PCR Reading from True nat Chip based PCR has also been attached. Hard copy is being sent in post.

Thank you,
Dr S Swathi
HoD and Senior Specialist grade 1
ESIC Superspeciality Hospital
Hyderabad
V0131

From : Swathi Suravaram <swathi.suravaram@esic.nic.in> Wed, Oct 04, 2023 04:24 PM
Subject : Results for Distribution no S323 for V0131. 2 attachments
To : viroeqas <viroeqas@cmcvellore.ac.in>

Respected Sir/Madam
Please find attached results for Distribution no **S323 for V0131**. HCV PCR Reading from True nat Chip based PCR has also been attached. Hard copy is being sent in post.

Thank you,
Dr S Swathi
HoD and Senior Specialist grade 1
ESIC Superspeciality Hospital
Hyderabad
V0131

Truenat Chip based PCR Reading.pdf
204 KB

viroeqas oct 2023 S323.pdf
3 MB

Email **Swathi Suravaram**

IAMM MICROBIOLOGY EQAS 2023

From : eqas@cmcvellore.ac.in Tue, Feb 07, 2023 03:52 PM
Subject : IAMM MICROBIOLOGY EQAS 2023
To : Swathi Suravaram <swathi.suravaram@esic.nic.in>

Dear Sir / Madam,

Thank you for participating the CMCMicroEQAS programme (M0171).

This is to acknowledgement receipt of IAMM MICROBIOLOGY EQAS 2023 registration and your payment.

With regards,

S.Suganthi
8778867546

For Dr. V.Balaji
Professor
Coordinator IAMM EQAS Microbiology
Department of Clinical Microbiology
Christian Medical College, Vellore 4

All participants are requested to mention their complete contact details : EQAS code number, name, address, phone number and alternate email ID on all communications and on the reverse of any draft/cheque sent to the IAMM EQAS.

Indian Association of Medical Microbiologists
Virology External Quality Assessment Scheme
CMCVIROEQAS, Proficiency Testing Unit, Department of Clinical Virology
Christian Medical College, Vellore-632004, Tamil Nadu
Email: viroeqas@cmcvellore.ac.in Phone: 08438172355

PC - 1034

21st SEROLOGY CMCVIROEQAS EVALUATION FINAL REPORT

PANEL: BBVS

CMCVIROEQAS ID. V0131

Distribution No: S323

Opening Date: 18-09-2023
Closing Date: 09-10-2023
Result receiving Date: 04.10.2023

Specimen #	Intended Result			Your Result		
	HIV	HBsAg	HCV	HIV	HBsAg	HCV
S01323009	NEGATIVE	**POSITIVE**	NEGATIVE	NEGATIVE	POSITIVE	NEGATIVE
S01323010	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE
S01323011	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE
S01323012	**POSITIVE**	NEGATIVE	**POSITIVE**	POSITIVE	NEGATIVE	POSITIVE
Your Score				**8/8 (100%)**	**8/8 (100%)**	**8/8 (100%)**
Performance grading				**E**	**E**	**E**

Scoring System

Qualitative Results	Score
Concordant Result	2
Indeterminate/Equivocal	1
Discordant Result	0

Indian Association of Medical Microbiologists
Virology External Quality Assessment Scheme
CMCVIROEQAS, Proficiency Testing Unit, Department of Clinical Virology
Christian Medical College, Vellore-632004, Tamil Nadu
Email: viroeqas@cmcvellore.ac.in Phone: 08438172355

Performance Grading

Your score	Score	Grade
100%	Excellent	E
75 – 99%	Good	G
50 – 74%	Average	A
0 – 49%	Poor	P

Cumulative Report of this cycle:

Total Number of specimens you received : 4

Number of markers reported as not examined : 0

Number of kits used for HIV : 3

Specimen # not used for analysis : 0

Reported After Closing Date : NO

Your cumulative score for the specimens you reported : 24 out of the possible total of 24

Total Number of participants for BBVS : 702

Total Number of Participants who turned in their results : 689

Indian Association of Medical Microbiologists
Virology External Quality Assessment Scheme
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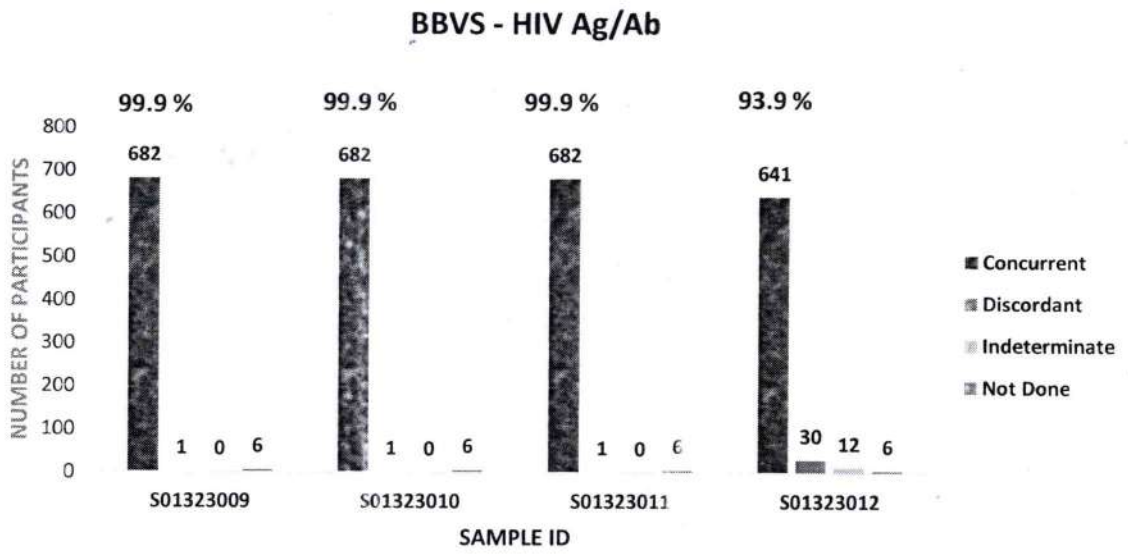
Christian Medical College, Vellore-632004, Tamil Nadu
Email: viroeqas@cmcvellore.ac.in Phone: 08438172355

PC - 1034

Participants who reported all analyzed specimens accurately

Marker	Number of Participants with all four specimen's results	Percentage of Participants with concordant result from all four specimens
HIV	683	93.9
HBsAg	689	91.6
HCV-Ab	687	94.6

Performance Graph



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Christian Medical College, Vellore-632004, Tamil Nadu
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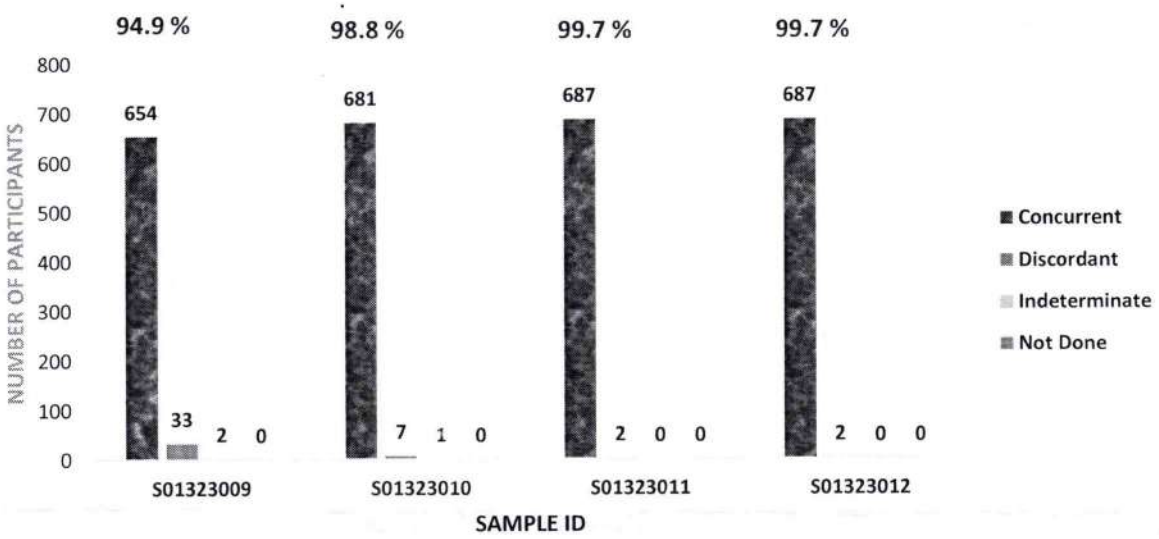
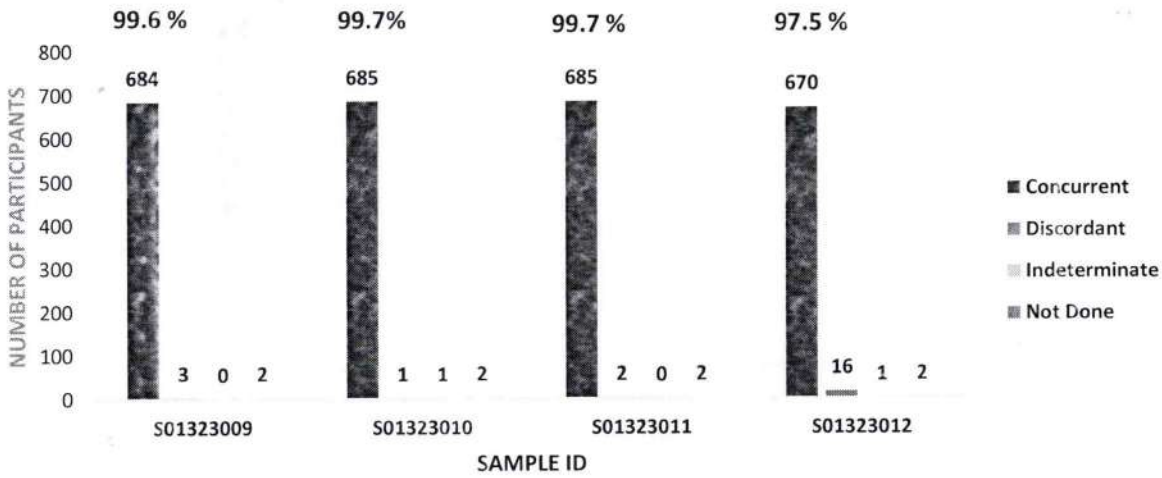
BBVS - HBsAg



BBVS - HCV Ab



	HIV Ag/Ab		HBsAg		HCV-Ab	
	n	Discordant	n	Discordant	n	Discordant
Chemiluminescence	256	5 (2.0 %)	293	7 (2.4 %)	298	2 (0.7 %)
ELFA	21	0	18	0	21	1 (4.8 %)
ELISA	91	1 (1.1 %)	106	0	112	0
Rapid Assay	315	36 (11.4 %)	272	33 (12.1 %)	256	15 (5.9 %)
Not Done	6	-	0	-	2	-
No Info		0		0		0

Comments:

This PT program is a simultaneous and continuous scheme.

Testing Material (Specimen):

The proficiency testing material is a pooled lyophilized plasma sample prepared by following institutional proficiency testing standard operating protocol (PT-SOP) by trained staff. None of the work related to testing, preparation and packaging of sample is subcontracted. The homogeneity of the PT material is determined using multiple testing. The stability of the testing material is determined by assessing the reactivity of the specimen till the closing date. The homogeneity and stability of the materials were found satisfactory as per ISO13528:2015.

Indian Association of Medical Microbiologists
Virology External Quality Assessment Scheme
CMCVIROEQAS, Proficiency Testing Unit, Department of Clinical Virology
Christian Medical College, Vellore-632004, Tamil Nadu
Email: viroeqas@cmcvellore.ac.in Phone: 08438172355

Assigned Value:

Assigned value is pre-determined using multiple assays/multiple testing of the same analyte. Assigned value was not derived using reference material or calibrators.

Scoring:

Participants are scored based on qualitative result. If more than 30% of the laboratory report discrepant result that sample will not be considered for analysis.

Confidentiality of the results:

The results are kept confidential between the participant and the provider. The results can be revealed to a regulatory body with written consent from the participant. However, in exceptional circumstances, results from a particular participant will be provided to the regulatory body and the participant will be notified of this action in writing.

Appeal:

For appeals, regarding result analysis and evaluation process, please contact CMCVIROEQAS coordinator by phone 08438172355 or email **viroeqas@cmcvellore.ac.in within a week of receiving this report.**

Enquiries:

For all communications, please use your **CMCVIROEQAS LAB ID** and **Distribution Number**.

END OF REPORT

Name of CMCVIROEQAS Coordinator **Signature**

Dr. Rajesh Kannangai

Department of Clinical Virology

Report Dispatch Date: 15-11-2023

Report authorized by: CMCVIROEQAS Coordinator

PC - 1034

Indian Association of Medical Microbiologists
Virology External Quality Assessment Scheme
CMCVIROEQAS, Proficiency Testing Unit, Department of Clinical Virology
Christian Medical College, Vellore-632004, Tamil Nadu
Email: viroeqas@cmcvellore.ac.in Phone: 08438172355

20th SEROLOGY CMCVIROEQAS EVALUATION FINAL REPORT

PANEL: BBVS

CMCVIROEQAS ID. V0131

Distribution No: S223

Opening Date: 12.06.2023
Closing Date: 28.06.2023
Result receiving Date: 28.06.2023

Specimen #	Intended Result			Your Result		
	HIV	HBsAg	HCV	HIV	HBsAg	HCV
S01223005	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE
S01223006	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE
S01223007	NEGATIVE	**POSITIVE**	NEGATIVE	NEGATIVE	POSITIVE	NEGATIVE
S01223008	NEGATIVE	NEGATIVE	**POSITIVE**	NEGATIVE	NEGATIVE	POSITIVE
Your Score				**8/8 (100%)**	**8/8 (100%)**	**8/8 (100%)**
Performance grading				**E**	**E**	**E**

Scoring System

Qualitative Results	Score
Concordant Result	2
Indeterminate/Equivocal	1
Discordant Result	0

Indian Association of Medical Microbiologists
Virology External Quality Assessment Scheme
CMCVIROEQAS, Proficiency Testing Unit, Department of Clinical Virology
Christian Medical College, Vellore-632004, Tamil Nadu
Email: viroeqas@cmcvellore.ac.in Phone: 08438172355

Performance Grading

Your score	Score	Grade
100%	Excellent	E
75 – 99%	Good	G
50 – 74%	Average	A
0 – 49%	Poor	P

Cumulative Report of this cycle:

Total Number of specimens you received : 4

Number of assays reported as not examined : 0

Specimen # not used for analysis : 0

Reported After Closing Date : NO

Your cumulative score for the specimens you reported : 24 out of the possible total of 24

Total Number of participants for BBVS : 386

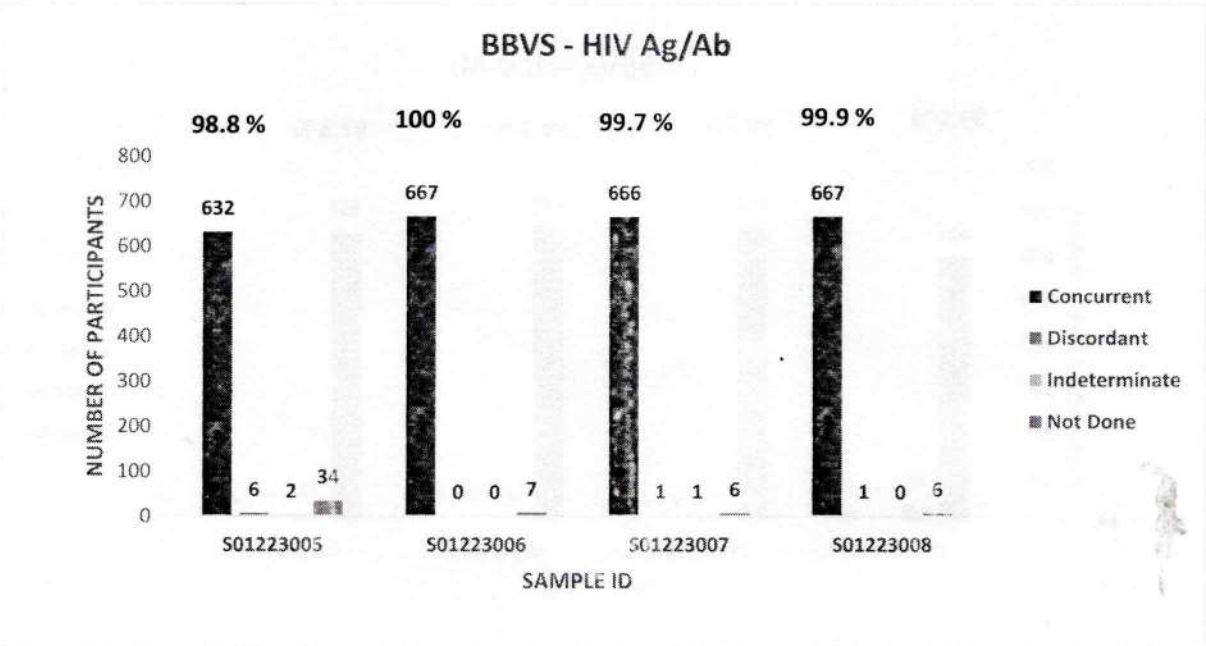
Total Number of Participants who turned in their results : 374

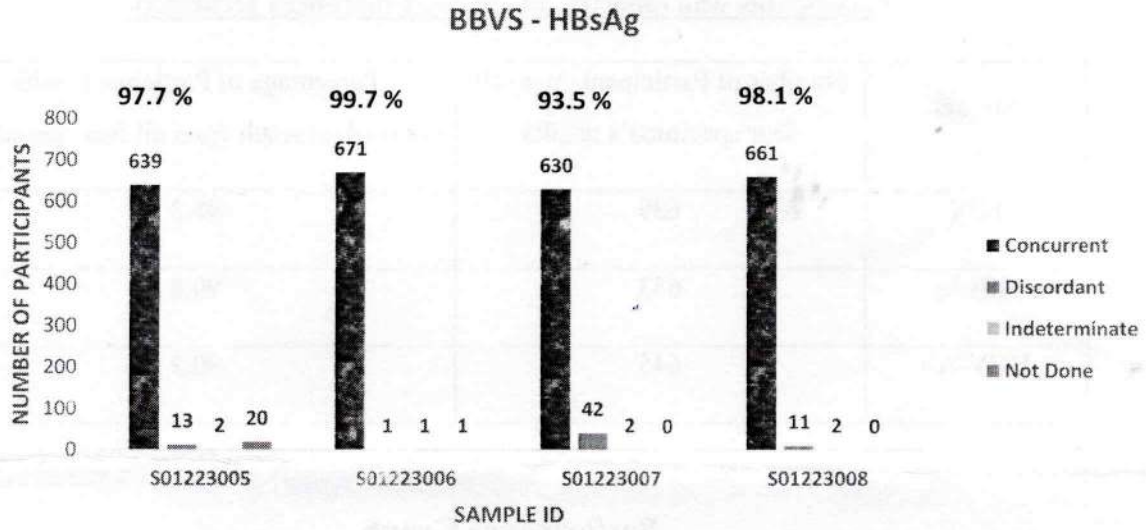
Indian Association of Medical Microbiologists
Virology External Quality Assessment Scheme
CMCVIROEQAS, Proficiency Testing Unit, Department of Clinical Virology
Christian Medical College, Vellore-632004, Tamil Nadu
Email: viroeqas@cmcvellore.ac.in Phone: 08438172355

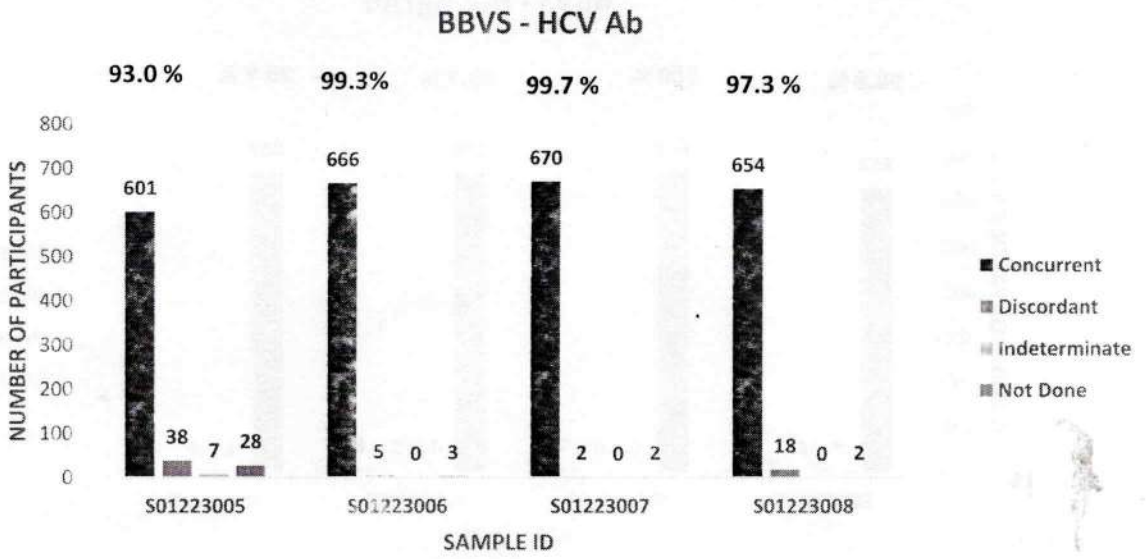
Participants who reported all analyzed specimens accurately

Marker	Number of Participants with all four specimen's results	Percentage of Participants with concordant result from all four specimens
HIV	639	98.3
HBsAg	653	90.8
HCV-Ab	645	90.2

Performance Graph




BBVS - HBsAg
97.7 %
99.7 %
93.5 %
98.1 %
NUMBER OF PARTICIPANTS
800
700
600
500
400
300
200
100
0
639
13
2
20
671
1
1
1
630
42
2
0
661
11
2
0
S01223005
S01223006
S01223007
S01223008
SAMPLE ID
Concurrent
Discordant
Indeterminate
Not Done


BBVS - HCV Ab
93.0 %
99.3%
99.7 %
97.3 %
NUMBER OF PARTICIPANTS
800
700
600
500
400
300
200
100
0
601
38
7
28
666
5
0
3
670
2
0
2
654
18
0
2
S01223005
S01223006
S01223007
S01223008
SAMPLE ID
Concurrent
Discordant
Indeterminate
Not Done

	HIV Ag/Ab		HBsAg		HCV-Ab	
	n	Discordant	n	Discordant	n	Discordant
Chemiluminescence	266	3 (1.1 %)	280	16 (5.7 %)	287	29 (10.1 %)
ELFA	18	0	18	0	21	6 (28.6 %)
ELISA	89	0	106	6 (5.7 %)	100	7 (7.0 %)
Rapid Assay	294	8 (2.7 %)	270	50 (18.5 %)	264	26 (9.8 %)
Not Done	6	-	0	-	2	-
No Info	1	0	-	0	0	0

Comments:

This PT program is a simultaneous and continuous scheme.

Testing Material (Specimen):

The proficiency testing material is a pooled lyophilized plasma sample prepared by following institutional proficiency testing standard operating protocol (PT-SOP) by trained staff. None of the work related to testing, preparation and packaging of sample is subcontracted. The homogeneity of the PT material is determined using multiple testing. The stability of the testing material is determined by assessing the reactivity of the specimen till the closing date. The homogeneity and stability of the materials were found satisfactory as per ISO13528:2015.

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Christian Medical College, Vellore-632004, Tamil Nadu
Email: viroeqas@cmcvellore.ac.in Phone: 08438172355

Assigned Value:

Assigned value is pre-determined using multiple assays/multiple testing of the same analyte. Assigned value was not derived using reference material or calibrators.

Scoring:

Participants are scored based on qualitative result. If more than 30% of the laboratory report discrepant result that sample will not be considered for analysis.

Confidentiality of the results:

The results are kept confidential between the participant and the provider. The results can be revealed to a regulatory body with written consent from the participant. However, in exceptional circumstances, results from a particular participant will be provided to the regulatory body and the participant will be notified of this action in writing.

Appeal:

For appeals, regarding result analysis and evaluation process, please contact CMCVIROEQAS coordinator by phone 08438172355 or email **viroeqas@cmcvellore.ac.in.**

Enquiries:

For all communications, please use your **CMCVIROEQAS LAB ID** and **Distribution Number**.

END OF REPORT

Name of CMCVIROEQAS Coordinator **Signature**

Dr. Rajesh Kannangai

Department of Clinical Virology

Report Dispatch Date: 10-08-2023

Report authorized by: CMCVIROEQAS Coordinator

PC-1033

113th IAMM EQAS Microbiology: Bacteriology/ Serology

CMC MICRO EQAS
Department of Clinical Microbiology, Christian Medical College, Vellore-632004, Tamil Nadu
Email: eqas@cmcvellore.ac.in, Twitter: @microeqas, Phone: +91-416-2282588

FEBRUARY 2023

113th EQAS EVALUATION REPORT

MEMBER ID: M 0 1 7 1

Marks Obtained: 64/66 (97%)

FEBRUARY 2023 / BACTERIOLOGY SMEARS

Question: Carry out the appropriate staining procedure and document the relevant observation.
Provide the Impression or probable organism seen (AS ASKED)
Please refer the attached evaluation format/answer template for details on the criteria for evaluation.

PLEASE NOTE: The inaccuracies in the participant report resulting in deduction of marks has been underlined in the expected smear report.

Exercise Number	Question	Expected Report	Evaluation		
SM1	**Please carry out a Gram stain on the given fixed smear prepared from a BLOOD culture specimen obtained from a 68-year-old gentleman presenting with high grade fever with fatigue, night sweats and joint pains for 10 days.**	**Description of Organism/s (2marks):** Gram-positive (1) spherical cocci arranged in groups (1), (pairs, scattered forms are also seen) **Probable organism (1 mark):** *Staphylococcus* spp (1) (*Staphylococcus aureus*)	0	0.5	1
			1.5	2	2.5
			3		

SM2	**Please carry out a Gram stain on the given fixed smear prepared from an ENDOTRACHEAL ASPIRATE obtained from a 55-year-old gentleman admitted with pneumonia. He has a history of regular alcohol consumption for 20 years.**	**Presence and grading of Host cells (1 mark):** Many pus cells (1) **Description of Organism/s (2marks):** Many (0.5) (short & long) Gram-negative (1) thick bacilli (0.5) **Probable organism (1 mark):** Gram negative bacilli - Probably *Klebsiella* spp (1) Acinetobacter spp/ Hemophilus spp (0.5 marks)	**0** **1.5** **3**	**0.5** **2** **3.5**	**1** **2.5** **4**
SM3	**Please carry out a Gram stain on the given fixed smear prepared from an CSF specimen obtained from a 6 day old neonate presenting with fever, irritability, poor feeding and vomiting and had one episode of seizures.**	**Presence and grading of Host cells (1 mark):** Many pus cells (1) **Description of Organism/s (2marks):** Many (0.5) spherical Gram-positive cocci (1) arranged in pairs, chains (0.5) (Few oval cocci resembling *Enterococcus* spp seen) **Probable organism (1 mark):** Group B Streptococcus (1) Streptococcus spp/Enterococcus spp (0.5 marks)	**0** **1.5** **3**	**0.5** **2** **3.5**	**1** **2.5** **4**

FEBRUARY 2023 / BACTERIOLOGY CULTURE:

Question: A freeze-dried (lyophilized) culture of an organism isolated from a clinical specimen is given. Carry out the appropriate techniques for each exercise and identify the pathogen. Carry out the antimicrobial susceptibility testing according to the panel given below.

Please refer the attached evaluation format for details on the criteria for evaluation.

A 'partially correct' or 'incorrect' component of the participant report which has resulted in a deduction of marks has been in indicated in the evaluation report below.

"REMOVED FROM EVALUATION" refers to a test that has not been evaluated for ALL participants. The explanation can be found in the EQAS statistics and the EQAS explained documents.

CU 1: Isolated from an ENDOTRACHEAL ASPITATE received from a 60-year-old gentleman admitted in the ICU on mechanical ventilation

FINAL INDENTIFICATION: *Pseudomonas aeruginosa*

Identification details	Reported	Not reported	Evaluation (7 marks)
Microscopy (Gram stain)	✓		0 0.5 (1)
Salient culture and biochemical findings enabling final identification (Minimum 3 key characteristics)	✓		1 2 3 (4)
Final identification : *Pseudomonas aeruginosa*	✓		0.5 1 1.5 (2)

Susceptibility report Confirmed Manual, Vitek, BD, Etest, BMD	EXPECTED REPORT			PARTICIPANT REPORT		MARK	TYPE OF ERROR
	Zone size (mm)	MIC (µg/ml)	Interpretation CLSI	Correct	Incorrect	8 marks	Error
Ceftazidime 30µg	</=14	>/=32	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Levofloxacin 5µg	</= 14	>/= 4	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Piperacillin-tazobactam 100/10 µg	</= 17	>/= 64/4	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Aztreonam 30µg	</= 15	>/= 32	Resistant	REMOVED FROM EVALUATION *			
Meropenem 10µg	</= 15	>/= 8	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME

*Aztreonam susceptibility test: This been removed from the evaluation, however, you were among the 64% of participants that obtained the (correct) expected answer.

CU 2: Isolated from a FECES specimen of a 6-year-old boy presenting in OPD with a history abdominal pain and loose scanty stools with blood and mucus.

FINAL IDENTIFICATION: *Shigella sonnei*

Identification details	Reported	Not reported	Evaluation (7 marks)
Microscopy (Gram stain + Motility)	✓		0 0.5 (1)
Salient culture and biochemical findings enabling final identification (Minimum 3 key characteristics)	✓		1 2 3 (4)
Final identification: *Shigella sonnei*	✓		0.5 1 1.5 (2)

Susceptibility Report Confirmed Manual, Vitek, BD, Etest, BMD	EXPECTED REPORT			PARTICIPANT REPORT		MARK	TYPE OF ERROR
	Zone size (mm)	MIC (µg/ml)	Interpretation CLSI	Correct	Incorrect	8 marks	Error
Ampicillin 10µg	</= 13	>/= 32	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Co-trimoxazole 1.25/23.75 µg	</= 10	>/= 4	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Ciprofloxacin 5µg	</= 21	>/= 1	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Cefixime 5µg	</= 15	>/= 4	Resistant	REMOVED FROM EVALUATION *			
Azithromycin 15µg	</= 12	>/= 32	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME

*Cefixime susceptibility test: This been removed from the evaluation, however, you were among the 67% of participants that obtained the (correct) expected answer.

CU 3: Isolated from a BLOOD culture of a 19-year-old boy presenting in OPD with high grade fever, chills, headache and diarrhoea.

FINAL IDENTIFICATION: Salmonella enterica sub species enterica Serovar Paratyphi A

Identification details	Reported	Not reported	Evaluation (7 marks)
Microscopy (Gram stain + Motility)	✓		0 0.5 (1)
Salient culture and biochemical findings enabling final identification (Minimum 3 key characteristics)	✓		1 2 3 (4)
Final identification: Salmonella enterica sub species enterica Serovar Paratyphi A	✓		0.5 1 1.5 (2)

Susceptibility report Confirmed Manual, Vitek, BD, Etest, BMD	EXPECTED REPORT			PARTICIPANT REPORT		MARK	TYPE OF ERROR
	Zone size (mm)	MIC (µg/ml)	Interpretation CLSI	Correct	Incorrect	12 marks	Error
Ampicillin 10µg	>/= 17	</= 8	Susceptible		✓	-1 (0) 1 2	mE/ (ME)/ VME
Chloramphenicol 30µg	>/= 18	</= 8	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Co-trimoxazole 1.25/23.75 µg	>/= 16	</= 2/38	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Ceftriaxone 30µg	>/= 23	</= 1	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Ciprofloxacin 5µg	21-30	0.12–0.5	Resistant / Intermediate*	✓		-1 0 1 (2)	mE/ ME/ VME
Pefloxacin 5µg	<23	Not available	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME

* Ciprofloxacin susceptibility test: Disk Diffusion method for ciprofloxacin/ levofloxacin/ofloxacin: Report is based on Pefloxacin reports.
For Ciprofloxacin MIC reports falling in the Intermediate category, without a concomitant pefloxacin report – The report may be issued with a comment - " Drug may develop resistance on therapy even with a higher dose therefore fluoroquinolones is to be avoided"

FEBRUARY 2023 / SEROLOGY

Please refer the attached evaluation format/answer template for details on the criteria for evaluation.

SE1: Test method employed for detection C-reactive protein (CRP) at your lab: Turbidimetry

Peer group (n) = 506

	Parameter	Your Result	Your Value (mg/L)	Intended Result	Robust Mean	Robust SD	Range (mg/L)	Uncertainty of Assigned value	Z & Z' score	Max Marks	Your Score
SE1	CRP	Negative	3.3	Negative	3.4488	1.0177	0 to 66	0.0566	-0.1	2	2

SE2: Test method employed for detection Antistreptolysin O (ASO) at your lab: Latex Agglutination

Peer group (n) = 507

	Parameter	Your Result	Your Value (IU/mL)	Intended Result	Robust Mean	Robust SD	Range (IU/mL)	Uncertainty of Assigned value	Z & Z' score	Max Marks	Your Score
SE2	ASO	Negative	Not reported	Negative	NOT APPLICABLE					2	2

SE3: Test method employed for detection C-reactive protein (CRP) at your lab: Turbidimetry

Peer group (n) = 510

	Parameter	Your Result	Your Value (mg/L)	Intended Result	Robust Mean	Robust SD	Range (mg/L)	Uncertainty of Assigned value	Z & Z' score	Max Marks	Your Score
SE3	CRP	Positive	61	Positive	50.6637	8.4384	2.3 to 1129	0.4680	1.2	2	2

Disclaimer:

This is a confidential document and subject to the rules of confidentiality as described by the ISO 17043:2010 standard.

MEMBER ID: M 0 1 7 1

SM1	SM2	SM3	CU1	CU2	CU3	SE1	SE2	SE3	Marks obtained	
3	4	4	15	15	17	2	2	2	64	97%
3	4	4	15	15	19	2	2	2	Maximum marks = 66	

Dr. Rani Diana Sahni
Scientific Co-ordinator

Dr. John A Jude Prakash
Quality Manager

Dr. V. Balaji
PT Co-ordinator

Report Dispatch Date: 15.6.23

********** End of Report **********

PC-1033

112th IAMM EQAS Microbiology: Bacteriology/ Serology

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NOVEMBER 2022

112th EQAS EVALUATION REPORT

MEMBER ID: M 0 1 7 1

Marks Obtained: 71.5/75 (95.3%)

NOVEMBER 2022 / BACTERIOLOGY SMEARS

Question: Carry out the appropriate staining procedure and document the relevant observation.
Provide the Impression or probable organism seen (AS ASKED)
Please refer the attached evaluation format/answer template for details on the criteria for evaluation.

PLEASE NOTE: The inaccuracies in the participant report resulting in deduction of marks has been underlined in the expected smear report.

Exercise Number	Question	Expected Report	Evaluation		
SM1	**Please carry out a Gram stain on the given fixed smear prepared from a SPUTUM culture specimen obtained from a 74-year-old gentleman presenting with high-grade fever, cough with rusty sputum for 2 days.**	**Presence and grading of Host cells (1 mark):** Occasional pus cells (0.5), Many epithelial cells (0.5) **Description of Organism/s (2marks):** **ANY 4 MENTIONED (0.5 marks each)** Many GNB, GPC pairs, chains, groups, oval budding yeast like organisms with pseudo hyphae, slender non-palisading GPB, moderate GNC groups **Interpretation and advice (1 mark):** Bartlett criteria or any other accepted criteria applied- (0.5) Improperly collected specimen. (0.25) Suggest repeat appropriately collected specimen for culture (0.25)	0 1.5 3	0.5 2 3.5	1 (2.5) 4

SM2	**Please carry out a Gram stain on the given fixed smear prepared from a URINE specimen received from a 65-year-old diabetic lady with recurrent UTI, presenting with suprapubic pain and urgency of micturition.**	**Presence and grading of Host cells (1 mark):** Many pus cells **Description of Organism/s (2marks):** Many (0.5) Gram positive (0.5) oval budding yeast like organisms (1) **Probable organism (1 mark):** *Candida* species	0	0.5	1
			1.5	2	2.5
			3	3.5	(4)
SM3	**Please carry out a Gram stain on the given fixed smear prepared from an EXUDATE specimen obtained from a 68-year-old diabetic lady with a chronic non-healing foot ulcer with purulent secretions.**	**Presence and grading of Host cells (1 mark):** Many pus cells **Description of Organism/s (2marks):** Many(0.5) (slender) Gram negative bacilli (1.5) **Probable organism (1 mark):** Gram negative bacilli (probably *Pseudomonas* species- **no mark allotted**)	0	0.5	1
			1.5	2	2.5
			3	3.5	(4)

NOVEMBER 2022 / BACTERIOLOGY CULTURE:

Question: A freeze-dried (lyophilized) culture of an organism isolated from a clinical specimen is given. Carry out the appropriate techniques for each exercise and identify the pathogen. Carry out the antimicrobial susceptibility testing according to the panel given below.

Please refer the attached evaluation format for details on the criteria for evaluation.

A 'partially correct' or 'incorrect' component of the participant report which has resulted in a deduction of marks has been in indicated in the evaluation report below.

"REMOVED FROM EVALUATION" refers to a test that has not been evaluated for ALL participants. The explanation can be found in the EQAS statistics and the EQAS explained documents.

CU 1: Isolated from an ASCITIC FLUID specimen received from a 54-year-old woman with a recent diagnosis of adenocarcinoma.
FINAL INDENTIFICATION: *Enterococcus faecium*

Identification details	Reported	Not reported	Evaluation (7 marks)
Microscopy (Gram stain)	✓		0 0.5 (1)
Salient culture and biochemical findings enabling final identification (Minimum 3 key characteristics)	✓		1 2 3 (4)
Final identification : *Enterococcus faecium*	✓		0.5 1 1.5 (2)

Susceptibility report Confirmed Manual, Vitek, BD, Etest, BMD	EXPECTED REPORT			PARTICIPANT REPORT		MARK	TYPE OF ERROR
	Zone size (mm)	MIC (µg/ml)	Interpretation CLSI	Correct	Incorrect	10 marks	Error
Ampicillin 10µg	≤ 16	≥ 16	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
High level gentamicin 120µg	6mm Vitek 2: synergy +	500µg > 1 colony	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Vancomycin 30µg	≥ 17	≤ 4	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Teicoplanin 30µg	≥ 14	≤ 8	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Linezolid 30µg	≤ 20	≥8	RESISTANT	✓		-1 0 1 (2)	mE/ ME/ VME

CU 2: Isolated from a SPUTUM specimen of a 60-year-old gentleman presenting in OPD with a history of beedi smoking and alcohol consumption for 30 years and currently presenting with a high-grade fever with chills, productive high coloured sputum and increasing shortness of breath for 3days.
FINAL IDENTIFICATION: *Klebsiella pneumoniae* subspp pneumoniae

Identification details	Reported	Not reported	Evaluation (7 marks)
Microscopy (Gram stain + Motility)	✓		0 0.5 (1)
Salient culture and biochemical findings enabling final identification (Minimum 3 key characteristics)	✓		1 2 3 (4)
Final identification: *Klebsiella pneumoniae* subspp pneumoniae	✓		0.5 1 1.5 (2)

Susceptibility Report Confirmed Manual, Vitek, BD, Etest, BMD	EXPECTED REPORT			PARTICIPANT REPORT		MARK	TYPE OF ERROR
	Zone size (mm)	MIC (µg/ml)	Interpretation CLSI	Correct	Incorrect	12 marks	Error
Cefotaxime 30µg	≤ 22	≥ 4	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Ceftriaxone 30µg	≤ 19	≥ 4	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Ciprofloxacin 5µg	≥ 21	≥ 1	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Piperacillin-tazobactam 100/10 µg	21-24	16/4	SUSCEPTIBLE DOSE DEPENDENT	✓		-1 0 1 (2)	mE/ ME/ VME
Ertapenem 10µg	≥ 22	≤ 0.5	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Meropenem 10µg	≥ 23	≤ 1	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME

CU 3: Isolated from a URINE specimen of a 48-year-old catheterized gentleman admitted for rehabilitation with traumatic paraplegia.
FINAL IDENTIFICATION: *Escherichia coli*

Identification details	Reported	Not reported	Evaluation (7 marks)
Microscopy (Gram stain + Motility)	✓		0 0.5 (1)
Salient culture and biochemical findings enabling final identification (Minimum 3 key characteristics)	✓		1 2 3 (4)
Final identification: *Escherichia coli*	✓		0.5 1 1.5 (2)

Susceptibility report Confirmed Manual, Vitek, BD, Etest, BMD	EXPECTED REPORT			PARTICIPANT REPORT		MARK	TYPE OF ERROR
	Zone size (mm)	MIC (µg/ml)	Interpretation CLSI	Correct	Incorrect	12 marks	Error
Cefotaxime 30µg	≤ 22	≥ 4	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Ceftriaxone 30µg	≤ 19	≥ 4	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Piperacillin-tazobactam 100/10 µg	≤ 20	≥ 32/4	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Meropenem 10µg	≤ 19	≥ 4	Resistant		✓	-1 0 (1) 2	(mE/ ME/ VME)
Ertapenem 10µg	≤ 18	≥ 2	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Ceftazidime-Avibactam 30/20 µg	≥ 21	≤ 8/4	SUSCEPTIBLE	✓		-1 0 1 (2)	mE/ ME/ VME

NOVEMBER 2022 / SEROLOGY

Please refer the attached evaluation format/answer template for details on the criteria for evaluation.

Parameter		Your Interpretation		Intended Result			Max Marks		Your Score
		Correct	Incorrect	STO	STH	Interpretation	STO	STH	
SE1	Widal*	✓		Negative	Negative	Not Suggestive of Enteric Fever / Typhoid Fever	2	2	4

*Negative at 1:20 dilution

	Parameter	Your Result	Intended result	Correct	Incorrect	Max Marks	Your Score
SE2	RPR/VDRL	Non-Reactive	Non-Reactive	✓		2	2
	TPHA	NOT DONE					
	Syphilis ELISA						

SE3: Test method employed for detection C-reactive protein (CRP) at your lab: Turbidimetry

Peer group (n) = 444

	Parameter	Your Result	Your Value (mg/L)	Intended Result	Robust Mean	Robust SD	Range (mg/L)	Uncertainty of Assigned value	Z & Z' score	Max Marks	Your Score
SE3	CRP	Positive	7.8	Positive	67.8083	11.2497	0.63 to 691.0	0.6674	-5.3	2	1

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MEMBER ID: M 0 1 7 1

SM1	SM2	SM3	CU1	CU2	CU3	SE1	SE2	SE3	Marks obtained	
2.5	4	4	17	19	18	4	2	1	71.5	95.3%
4	4	4	17	19	19	4	2	2	Maximum marks = 75	

Dr. Rani Diana Sahni
Scientific Co-ordinator

Dr. John A Jude Prakash
Quality Manager

Dr. V. Balaji
PT Co-ordinator

Report Dispatch Date: 15.02.23

********** End of Report **********

PC-1033

111th IAMM EQAS Microbiology: Bacteriology/ Serology

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JULY 2022

111th EQAS EVALUATION REPORT

MEMBER ID: | M | 0 | 1 | 7 | 1 |

Marks Obtained: 72.5/73 (99.3%)

JULY 2022 / BACTERIOLOGY SMEARS

Question: Carry out the appropriate staining procedure and document the relevant observation.
Provide the Impression or probable organism seen (AS ASKED)
Please refer the attached evaluation format/answer template for details on the criteria for evaluation.

PLEASE NOTE: The inaccuracies in the participant report resulting in deduction of marks has been underlined in the expected smear report.

Exercise Number	Question	Expected Report	Evaluation		
SM1	**Please carry out a Gram stain on the given fixed smear prepared from a BLOOD culture specimen obtained from a 2-year-old boy presenting with high-grade fever, loose stools and non-projectile vomiting for 7 days.**	Description of Organism/s (2marks): **(Long and short), slender Gram negative bacilli**	**0**	**0.5**	**1**
		Probable organism (1 mark): **Gram negative bacteraemia (1) – probably Salmonella species**	**1.5**	**2**	**2.5**
			3		

SM2	**Please carry out a Gram stain on the given fixed smear prepared from a EXUDATE specimen received from a 65-year-old lady with a 24-hour history of High-grade fever and diffuse erythema and oedema of the lower limb associated with severe pain and crepitus on examination.**	Presence and grading of Host cells (1 mark): **Many Pus cells (1)**	**0**	**0.5**	**1**
		Description of Organism/s (2marks): **Many (0.5) spherical (0.5), Gram positive cocci in pairs and short chains(1)**	**1.5**	**2**	**2.5**
		Probable organism (1 mark): ***Streptococcus* spp – probably *Streptococcus pyogenes***	**3**	**3.5**	**4**
SM3	**Please carry out a Gram stain on the given fixed smear prepared from an Endotracheal aspirate (ETA) specimen obtained from a 56-year-old lady, Post-RTA in ICU with fever, purulent secretions and reduced breath sounds with crackles on examination.**	Presence and grading of Host cells (1 mark): **Many Pus cells (1)**	**0**	**0.5**	**1**
		Description of Organism/s (2marks): **Many (0.5) Gram negative (0.5) cocco-bacilli (1)**	**1.5**	**2**	**2.5**
		Probable organism (1 mark): ***Acinetobacter* species**	**3**	**3.5**	**4**

JULY 2022 / BACTERIOLOGY CULTURE:

Question: A freeze-dried (lyophilized) culture of an organism isolated from a clinical specimen is given. Carry out the appropriate techniques for each exercise and identify the pathogen. Carry out the antimicrobial susceptibility testing according to the panel given below.
Please refer the attached evaluation format for details on the criteria for evaluation.
A 'partially correct' or 'incorrect' component of the participant report which has resulted in a deduction of marks has been in indicated in the evaluation report below.

"REMOVED FROM EVALUATION" refers to a test that has not been evaluated for ALL participants. The explanation can be found in the EQAS statistics and the EQAS explained documents.

CU 1: Isolated from a BLOOD culture from the central venous line of a 64-year-old farmer admitted in ICU.

FINAL INDENTIFICATION: *Staphylococcus haemolyticus*

Identification details	Reported	Not reported	Evaluation (7 marks)
Microscopy (Gram stain)	✓		0 0.5 (1)
Salient culture and biochemical findings enabling final identification (Minimum 3 key characteristics)	✓	Culture descriptions partially incorrect	1 2 3 (3.5) 4
Final identification	✓		0.5 1 1.5 (2)

Susceptibility report	EXPECTED REPORT			PARTICIPANT REPORT		MARK	TYPE OF ERROR
	Zone size (mm)	MIC (µg/ml)	Interpretation CLSI	Correct	Incorrect	12 marks	Error
Cefoxitin 30µg	</= 24 (cefoxitin)	>/= 1 *(oxacillin)	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Tetracycline 30µg	>/= 19	</= 4	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Erythromycin 15µg	</= 13	>/= 8	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Clindamycin 2µg	</= 14	>/= 4	Resistant **	✓		-1 0 1 (2)	mE/ ME/ VME
Linezolid 30µg	>/= 21	</= 4	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Vancomycin	NO INTERPRETATION	</= 4***	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME

* Only oxacillin MIC recommended for *S.haemolyticus*
** No D-zone test required for clindamycin interpretation
*** Only vancomycin MIC recommended for testing

CU 2: Isolated from a FAECES specimen received from a 44-year-old gentleman presenting with a 3-day history of fever, abdominal pain and loose stools after attending a community function.

FINAL IDENTIFICATION: *Salmonella enterica* subspp *enterica* serovar Kentucky (Group C2)

Identification details	Reported	Not reported	Evaluation (6 marks)
Microscopy (Gram stain + Motility)	✓		0 0.5 (1)
Salient culture and biochemical findings enabling final identification (Minimum 3 key characteristics)	✓		1 2 3 (4)
Final identification	✓	SPECIES / SEROVAR REMOVED FROM EVALUATION	0.5 (1)

Susceptibility report	EXPECTED REPORT			PARTICIPANT REPORT		MARK	TYPE OF ERROR
	Zone size (mm)	MIC (µg/ml)	Interpretation CLSI	Correct	Incorrect	10 marks	Error
Ampicillin 10µg	</= 13	>/= 32	RESISTANT	✓		-1 0 1 (2)	mE/ ME/ VME
Ciprofloxacin 5µg	</= 20	>/= 1	RESISTANT	✓		-1 0 1 (2)	mE/ ME/ VME
Co-trimoxazole 1.25/23.75µg	>/= 16	</= 2/38	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Chloramphenicol 30µg	>/= 18	</= 8	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Ceftriaxone 30µg	</= 19	>/= 4	RESISTANT	✓		-1 0 1 (2)	mE/ ME/ VME

CU 3: Isolated from a SPUTUM specimen of a 49-year-old gentleman admitted in ICU with a history of alcohol-induced liver disease with ascites, high-grade fever, productive cough and breathlessness.

FINAL IDENTIFICATION: *Klebsiella pneumoniae*

Identification details	Reported	Not reported	Evaluation (7 marks)
Microscopy (Gram stain + Motility)	✓		0 0.5 (1)
Salient culture and biochemical findings enabling final identification (Minimum 3 key characteristics)	✓		1 2 3 (4)
Final identification	✓		0.5 1 1.5 (2)

Susceptibility report	EXPECTED REPORT			PARTICIPANT REPORT		MARK	TYPE OF ERROR
	Zone size (mm)	MIC (µg/ml)	Interpretation CLSI	Correct	Incorrect	10 marks	Error
Cefotaxime 30µg	</= 22	>/= 4	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Ceftazidime 30µg	</= 17	>/= 16	Resistant	✓		-1 0 1 (2)	mE/ ME/ VME
Amikacin 30µg	>/= 17	</= 16	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME
Piperacillin-tazobactam 100/10 µg	21-24	16/4	SUSCEPTIBLE DOSE DEPENDENT	✓		-1 0 1 (2)	mE/ ME/ VME
Meropenem 10µg	>/= 23	</= 1	Susceptible	✓		-1 0 1 (2)	mE/ ME/ VME

JULY 2022 / SEROLOGY

Test method employed for detection C-reactive protein (CRP) at your lab: Latex Agglutination

Peer group (n) = 229

Please refer the attached evaluation format for details on the criteria for evaluation

	Parameter	Your Result	Your Value (mg/L)	Intended Result	Robust Mean	Robust SD	Range (mg/L)	Uncertainty of Assigned value	Z & Z' score	Max Marks	Your Score
SE1	CRP	Negative	<6	Negative	Not Applicable					2	2
SE2	CRP	Positive	48	Positive	31.0011	19.1529	6 to 192	1.6328	0.9	2	2
SE3	CRP	Positive	32	Positive	20.3592	12.0561	6 to 192	1.0525	1.0	2	2

JULY 2022 / SEROLOGY

Test method employed for detection Rheumatoid Factor (RF) at your lab: Latex Agglutination

Peer group (n) = 406

Please refer the attached evaluation format for details on the criteria for evaluation

	Parameter	Your Result	Your Value (IU/mL)	Intended Result	Robust Mean	Robust SD	Range (IU/mL)	Uncertainty of Assigned value	Z & Z' score	Max Marks	Your Score
SE1	RF	Negative	<10	Negative	Not Applicable					2	2
SE2	RF	Negative	<10	Negative						2	2
SE3	RF	Negative	<10	Negative	NOT EVALUATED*						

*As >30% participants scored <70% on this exercise, it has been excluded from the final evaluation.

Disclaimer:

This is a confidential document and subject to the rules of confidentiality as described by the ISO 17043:2010 standard.

MEMBER ID: M 0 1 7 1

SM1	SM2	SM3	CU1	CU2	CU3	SE1	SE2	SE3	Marks obtained	
3	4	4	18.5	16	17	4	4	2	72.5	99.3%
3	4	4	19	16	17	4	4	2	Maximum marks =73	

Dr. Rani Diana Sahni
Scientific Co-ordinator

Dr. John A Jude Prakash
Quality Manager

Dr. V. Balaji
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Report Dispatch Date: 15.11.2022

********** End of Report **********