

Mycobacteriology Proficiency Testing Program

Event 15-1 Results Summary, March 2015

Samples 15-1F , 15-1G, 15-1H and 15-1I contained *Mycobacterium tuberculosis*. Sample 15-1J contained *Mycobacterium gordonae*.

I. Microscopy

EXPECTED RESULTS:

	Acid Fast Bacilli
15-1A	Absent
15-1B	Absent
15-1C	Present
15-1D	Absent
15-1E	Absent

SCORES FOR MICROSCOPY (98 PARTICIPANTS):

	Labs
100%	94
80-89%	4
<80%	0

	15-1A	15-1B	15-1C	15-1D	15-1E
Correct answer	98	97	98	97	96
Incorrect answer	0	1	0	1	2

STAINING METHOD

Carbol Fuschin: 43 laboratories (43.9%)

Fluorochrome: 33 laboratories (33.7%)

Carbol Fuschin + Fluorochrome: 22 laboratories (22.4%)

II. Identification/Drug Susceptibility

SCORES FOR ID

	Comprehensive Labs	Restricted Labs
100%	16	45
90-99%		0
80-89%	1	0
< 80%		0

SCORES FOR SUSCEPTIBILITY

	Comprehensive Labs
100%	13
90-99%	2
80-89%	1

One laboratory was exempt

OVERALL SCORES (MICROSCOPY, ID AND SUSCEPTIBILITY)

	Comprehensive Labs	Restricted Labs
100%	13	44
90-99%	3	1
80-89%	1	0
< 80%	0	0

RESULTS FOR 15-1F (*Mycobacterium tuberculosis* pan-susceptible)

Identification

Result	Method	Restricted	Comprehensive
<i>M. tuberculosis</i> complex	GenProbe/Accuprobe	33	5
	HPLC		
	PCR Assay	2	
	Conventional Biochemicals	1	
<i>M. tuberculosis</i>	GenProbe/Accuprobe & Conventional Biochemicals	3	7
	GenProbe/Accuprobe & PCR Assay		1
	Conventional Biochemicals		2
	PCR Assay		2
	DNA Sequencing		
Acid Fast Bacilli	Microscopy	6	

Susceptibility

Antibiotic	Results	# Labs*
EMB1	Susceptible	16
INH1	Susceptible	16
PZA	Susceptible	16
RIF	Susceptible	16
SM1	Susceptible	12
	Resistant	1
	Not offered	3

Green: acceptable answer

Red: unacceptable answer

*: One comprehensive laboratory ceased drug susceptibility testing

RESULTS FOR 15-1G (*Mycobacterium tuberculosis* pan-susceptible)

Identification

Result	Method	Restricted	Comprehensive
<i>M. tuberculosis</i> complex	GenProbe/Accuprobe	33	5
	HPLC		
	PCR Assay	2	
	Conventional Biochemicals	1	
<i>M. tuberculosis</i>	GenProbe/Accuprobe & Conventional Biochemicals	3	7
	GenProbe/Accuprobe & PCR Assay		1
	Conventional Biochemicals		2
	PCR Assay		2
	DNA Sequencing		
Acid Fast Bacilli	Microscopy	6	

Susceptibility

Antibiotic	Results	# Labs
EMB1	Susceptible	16
INH1	Susceptible	15
	Resistant	1
INH2	Susceptible	10
	Resistant	1
	Not offered	5
PZA	Susceptible	16
RIF	Susceptible	16
SM1	Susceptible	12
	Resistant	1
	Not offered	3

Green: acceptable answer

Red: unacceptable answer

*: One comprehensive laboratory ceased drug susceptibility testing

RESULTS FOR 15-1H (*Mycobacterium tuberculosis* RIF^R at 1 µg/ml)

Identification

Result	Method	Restricted	Comprehensive
<i>M. tuberculosis</i> complex	GenProbe/Accuprobe	33	5
	HPLC		
	PCR Assay	2	
	Conventional Biochemicals	1	
<i>M. tuberculosis</i>	GenProbe/Accuprobe & Conventional Biochemicals	3	7
	GenProbe/Accuprobe & PCR Assay		1
	Conventional Biochemicals		2
	PCR Assay		2
	DNA Sequencing		
Acid Fast Bacilli	Microscopy	6	

Susceptibility

Antibiotic	Results	# Labs
EMB1	Susceptible	16
INH1	Susceptible	15
	Resistant	1
INH2	Susceptible	11
	Not offered	5
PZA	Susceptible	16
RIF	Resistant	15
	Susceptible	1
SM1	Susceptible	12
	Resistant	1
	Not offered	3

Green: acceptable answer

Red: unacceptable answer

*: One comprehensive laboratory ceased drug susceptibility testing

RESULTS FOR 15-1I (*Mycobacterium tuberculosis* pan-susceptible)

Identification

Result	Method	Restricted	Comprehensive
<i>M. tuberculosis</i> complex	GenProbe/Accuprobe	33	5
	HPLC		
	PCR Assay	2	
	Conventional Biochemicals	1	
<i>M. tuberculosis</i>	GenProbe/Accuprobe & Conventional Biochemicals	3	6
	GenProbe/Accuprobe & PCR Assay		1
	Conventional Biochemicals		2
	PCR Assay		2
	DNA Sequencing		
<i>M. bovis</i> BCG	GenProbe/Accuprobe & Conventional Biochemicals		1
Acid Fast Bacilli	Microscopy	6	

Susceptibility

Antibiotic	Results	# Labs*
EMB1	Susceptible	16
INH1	Susceptible	15
	Resistant	1
PZA	Susceptible	15
	Resistant	1
RIF	Susceptible	16
SM1	Susceptible	10
	Resistant	3
	Not offered	3

Green: acceptable answer

Red: unacceptable answer

*: One comprehensive laboratory ceased drug susceptibility testing

RESULTS FOR 15-1J (*Mycobacterium gordonae*)

Identification

Result	Method	Restricted	Comprehensive
<i>M. gordonae</i>	GenProbe/Accuprobe	29	12
	MALDI-TOF Mass Spectrometry		3
	HPLC		1
	DNA Sequencing		1
	Conventional Biochemicals	1	
Non-tuberculous Mycobacteria	GenProbe/Accuprobe	6	
	PCR	1	
	Conventional Biochemicals	2	
Acid Fast Bacilli	Microscopy	6	

Green: acceptable answer

Red: unacceptable answer