

**Mycobacteriology Proficiency Testing Program  
Event 13-2 Results Summary, October 2013**

Samples 13-12F, 13-2G, 13-2H and 13-1J contained *Mycobacterium tuberculosis*. Sample 13-2I contained *Mycobacterium abscessus*

**I. Microscopy**

**EXPECTED RESULTS:**

	Acid Fast Bacilli
13-2A	Absent
13-2B	Absent
13-2C	Absent
13-2D	Absent
13-2E	Present

**SCORES FOR MICROSCOPY (101 PARTICIPANTS):**

	Comprehensive Labs	Restricted Labs	Smears Only Labs	Total
100%	16	46	29	91
80-89%	2	1	6	9
<80%	0	0	1	1

	13-2A	13-2B	13-2C	13-2D	13-2E
Correct answer	100	97	98	97	101
Incorrect answer	1	4	3	4	0

**STAINING METHOD**

**Carbol Fuschin:** 44 laboratories (43.6%)

**Fluorochrome:** 34 laboratories (33.7%)

**Carbol Fuschin + Fluorochrome:** 23 laboratories (22.7%)

## II. Identification/Drug Susceptibility

### SCORES FOR ID

	Comprehensive Labs	Restricted Labs
100%	16	44
90-99%	0	0
80-89%	1	3
< 80%	1	0

### SCORES FOR SUSCEPTIBILITY

	Comprehensive Labs
100%	16
90-99%	2

One laboratory was exempt

### OVERALL SCORES (MICROSCOPY, ID AND SUSCEPTIBILITY)

	Comprehensive Labs	Restricted Labs
100%	13	44
90-99%	4	2
80-89%	1	1
< 80%	0	0

## RESULTS FOR 13-2F (*Mycobacterium tuberculosis* pan-susceptible)

### *Identification*

Result*	Method	Restricted	Comprehensive
<i>M. tuberculosis</i> complex	GenProbe/Accuprobe	35	5
	HPLC		1
	PCR Assay	1	
	Conventional Biochemicals		
<i>M. tuberculosis</i>	GenProbe/Accuprobe	4	6
	Conventional Biochemicals	1	3
	PCR Assay		2
	DNA Sequencing		1
Acid Fast Bacilli	Microscopy	6	

### *Susceptibility*

Antibiotic	Results	# Labs
EMB1	Susceptible	17
	Resistant	1
INH1	Susceptible	18
PZA	Susceptible	17
	Not offered	1
RIF	Susceptible	18
SM1	Susceptible	15
	Not offered	3

\*: Green: acceptable answer  
Red: unacceptable answer

## RESULTS FOR 13-2G (*Mycobacterium tuberculosis* pan-susceptible)

### *Identification*

Result*	Method	Restricted	Comprehensive
<i>M. tuberculosis</i> complex	GenProbe/Accuprobe	35	5
	HPLC		1
	PCR Assay	1	
	Conventional Biochemicals		
<i>M. tuberculosis</i>	GenProbe/Accuprobe	4	5
	Conventional Biochemicals	1	3
	PCR Assay		2
	DNA Sequencing		1
<i>M. africanum</i>	GenProbe/Accuprobe		1
Acid Fast Bacilli	Microscopy	6	

### *Susceptibility*

Antibiotic	Results	# Labs
EMB1	Susceptible	18
INH1	Susceptible	18
PZA	Susceptible	17
	Not offered	1
RIF	Susceptible	18
SM1	Susceptible	15
	Not offered	3

\*: Green: acceptable answer

Red: unacceptable answer

## RESULTS FOR 13-2H (*Mycobacterium tuberculosis* pan-susceptible)

### *Identification*

Result*	Method	Restricted	Comprehensive
<i>M. tuberculosis</i> complex	GenProbe/Accuprobe	33	5
	HPLC		1
	PCR Assay	1	
	Conventional Biochemicals		
<i>M. tuberculosis</i> complex, not <i>M. tuberculosis</i>	GenProbe/Accuprobe	2	6
<i>M. tuberculosis</i>	GenProbe/Accuprobe	4	6
	Conventional Biochemicals	1	3
	PCR Assay		2
	DNA Sequencing		1
Acid Fast Bacilli	Microscopy	6	

### *Susceptibility*

Antibiotic	Results	# Labs
EMB1	Susceptible	18
INH1	Susceptible	18
PZA	Susceptible	17
	Not offered	1
RIF	Susceptible	18
SM1	Susceptible	15
	Not offered	3

\*: Green: acceptable answer  
Red: unacceptable answer

## RESULTS FOR 13-2I (*Mycobacterium abscessus*)

### *Identification*

Result*	Method	Restricted	Comprehensive
<b>M. abscessus</b>	DNA Sequencing		<b>3</b>
	MALDI-TOF Mass Spectrometry		<b>1</b>
	HPLC	<b>1</b>	<b>1</b>
	Conventional Biochemicals	<b>4</b>	<b>5</b>
<b>M. bollettii</b>	DNA Sequencing		<b>1</b>
<b>M. abscessus/chelonae group</b>	HPLC		<b>1</b>
	DNA Sequencing	<b>1</b>	<b>3</b>
	Conventional Biochemicals	<b>2</b>	
<b>M. chelonae</b>	HPLC		<b>1</b>
<b>M. fortuitum group</b>	Conventional Biochemicals		<b>1</b>
<b>Non-tuberculous Mycobacteria</b>	GenProbe/Accuprobe	<b>30</b>	<b>1</b>
	PCR Assay	<b>1</b>	
	Conventional Biochemicals	<b>1</b>	
<b>Acid Fast Bacilli</b>	Microscopy	<b>6</b>	

**1 laboratory could not generate growth**

\*: Green: acceptable answer

Red: unacceptable answer

## RESULTS FOR 13-2J (*Mycobacterium tuberculosis* pan-susceptible)

### *Identification*

Result*	Method	Restricted	Comprehensive
<i>M. tuberculosis</i> complex	GenProbe/Accuprobe	35	5
	HPLC		1
	PCR Assay	1	
	Conventional Biochemicals		
<i>M. tuberculosis</i>	GenProbe/Accuprobe	4	6
	Conventional Biochemicals	1	3
	PCR Assay		2
	DNA Sequencing		1
Acid Fast Bacilli	Microscopy	6	

### *Susceptibility*

Antibiotic	Results	# Labs
EMB1	Susceptible	18
INH1	Susceptible	18
PZA	Susceptible	17
	Not offered	1
RIF	Susceptible	18
SM1	Susceptible	15
	Not offered	3

\*: Green: acceptable answer

Red: unacceptable answer