



## Listing and evaluation of the results

1: Dr. med.Max Mustermann  
Laboratory Mustermann

Survey of 18 September 2020

Adviser:

421

### Mycobacteriology 01 - Microscopy

Sam-ple	Method	Your specification(s)	Specifications for which points are issued	Points	TV-Type	Points scored
51	1 - Auramine stain	No acid fast bacilli -	No acid fast bacilli -	5	RLV	5 of 5
52	1 - Auramine stain	No acid fast bacilli -	No acid fast bacilli -	5	RLV	5 of 5
53	1 - Auramine stain	acid fast bacilli ++	acid fast bacilli ± acid fast bacilli + acid fast bacilli ++ acid fast bacilli +++	5 5 5 5	RLV	5 of 5
54	1 - Auramine stain	No acid fast bacilli -	No acid fast bacilli -	5	RLV	5 of 5
55	1 - Auramine stain	acid fast bacilli +	acid fast bacilli ± acid fast bacilli + acid fast bacilli ++ acid fast bacilli +++	5 5 5 5	RLV	5 of 5
56	1 - Auramine stain	No acid fast bacilli -	No acid fast bacilli -	5	RLV	5 of 5

Task part		Reached points	Maximum points	Meets criteria
Microscopic Detection of Mycobacteria	(in order to pass the task "Microscopic Detection of Mycobacteria" at least 80.0% of the maximum possible points must be achieved)	30	30	+



## Listing and evaluation of the results

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### Mycobacteriology 04 - NAT

Sample	Method	Your specification(s)	Specifications for which points are issued	Points	TV-Type	Points scored
51		M. tuberculosis complex negative (32)	M. tuberculosis complex negative (32)	5	RLV	5 of 5
52		M. tuberculosis complex positive (31)	M. tuberculosis complex positive (31)	5	RLV	5 of 5
53		M. tuberculosis complex positive (31)	M. tuberculosis complex positive (31)	5	RLV	5 of 5
54		M. tuberculosis complex negative (32)	M. tuberculosis complex negative (32)	5	RLV	5 of 5
55		M. tuberculosis complex negative (32)	M. tuberculosis complex negative (32)	5	RLV	5 of 5

Task part		Reached points	Maximum points	Meets criteria
Mycobacterium tuberculosis, genome detection	(in order to pass the task "Mycobacterium tuberculosis, genome detection" at least 80.0% of the maximum possible points must be achieved)	25	25	+



## Individual summary of results

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### Mycobacteriology 01 - Microscopy

Microscopic Detection of Mycobacteria (N = 265, Rate of success: 97,7%)

**Sample 51** (Correct specification(s): 97.4%)

#### Result

Collective	No acid fast bacilli - ( )	acid fast bacilli ± ( )	acid fast bacilli + ( )	acid fast bacilli ++ ( )	acid fast bacilli +++ ( )	total
projectmembers	24 ●	1	0	0	0	25
Auramine stain	71 ●	2	1	0	0	74
Acridine Orange stain	9 ●	0	0	0	0	9
Ziehl-Neelsen stain	66 ●	1	0	0	0	67
Ziehl-Armand stain	3 ●	0	0	0	0	3
Kinyoun stain	59 ●	1	0	0	0	60
other stainings	26 ●	0	0	1	0	27
total	258	5	1	1	0	265

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Sample 52** (Correct specification(s): 97.4%)

#### Result

Collective	No acid fast bacilli - ( )	acid fast bacilli ± ( )	acid fast bacilli + ( )	acid fast bacilli ++ ( )	acid fast bacilli +++ ( )	total
projectmembers	23 ●	1	0	1	0	25
Auramine stain	74 ●	0	0	0	0	74
Acridine Orange stain	9 ●	0	0	0	0	9
Ziehl-Neelsen stain	66 ●	1	0	0	0	67
Ziehl-Armand stain	3 ●	0	0	0	0	3
Kinyoun stain	58 ●	2	0	0	0	60
other stainings	25 ●	1	0	1	0	27
total	258	5	0	2	0	265

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Sample 53** (Correct specification(s): 99.6%)

#### Result

Collective	No acid fast bacilli - ( )	acid fast bacilli ± ( )	acid fast bacilli + ( )	acid fast bacilli ++ ( )	acid fast bacilli +++ ( )	total
projectmembers	0	1 ●	2 ●	12 ●	10 ●	25
Auramine stain	0	1 ●	12 ●	42 ●	18 ●	73
Acridine Orange stain	0	1 ●	5 ●	3 ●	0 ●	9
Ziehl-Neelsen stain	0	1 ●	9 ●	43 ●	14 ●	67
Ziehl-Armand stain	0	0 ●	0 ●	2 ●	1 ●	3
Kinyoun stain	0	0 ●	13 ●	42 ●	5 ●	60
other stainings	0	0 ●	2 ●	19 ●	6 ●	27
total	0	4	43	163	54	264

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective



### Sample 54 (Correct specification(s): 97.7%)

#### Result

Collective	No acid fast bacilli - ( )	acid fast bacilli ± ( )	acid fast bacilli + ( )	acid fast bacilli ++ ( )	acid fast bacilli +++ ( )	total
projectmembers	23 ●	2	0	0	0	25
Auramine stain	73 ●	1	0	0	0	74
Acridine Orange stain	9 ●	0	0	0	0	9
Ziehl-Neelsen stain	66 ●	0	1	0	0	67
Ziehl-Armand stain	3 ●	0	0	0	0	3
Kinyoun stain	59 ●	1	0	0	0	60
other stainings	26 ●	0	0	1	0	27
total	259	4	1	1	0	265

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

### Sample 55 (Correct specification(s): 99.6%)

#### Result

Collective	No acid fast bacilli - ( )	acid fast bacilli ± ( )	acid fast bacilli + ( )	acid fast bacilli ++ ( )	acid fast bacilli +++ ( )	total
projectmembers	0	2 ●	8 ●	14 ●	1 ●	25
Auramine stain	0	5 ●	26 ●	41 ●	2 ●	74
Acridine Orange stain	0	2 ●	4 ●	3 ●	0 ●	9
Ziehl-Neelsen stain	1	6 ●	34 ●	26 ●	0 ●	67
Ziehl-Armand stain	0	0 ●	3 ●	0 ●	0 ●	3
Kinyoun stain	0	15 ●	37 ●	8 ●	0 ●	60
other stainings	0	1 ●	16 ●	9 ●	1 ●	27
total	1	31	128	101	4	265

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

### Sample 56 (Correct specification(s): 98.1%)

#### Result

Collective	No acid fast bacilli - ( )	acid fast bacilli ± ( )	acid fast bacilli + ( )	acid fast bacilli ++ ( )	acid fast bacilli +++ ( )	total
projectmembers	25 ●	0	0	0	0	25
Auramine stain	72 ●	2	0	0	0	74
Acridine Orange stain	9 ●	0	0	0	0	9
Ziehl-Neelsen stain	64 ●	1	1	1	0	67
Ziehl-Armand stain	3 ●	0	0	0	0	3
Kinyoun stain	60 ●	0	0	0	0	60
other stainings	27 ●	0	0	0	0	27
total	260	3	1	1	0	265

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective



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### Mycobacteriology 04 - NAT

**Mycobacterium tuberculosis**, (N = 233, Rate of success: 97%)

#### genome detection

**Sample 51** (Correct specification(s): 97.4%)

#### Result

Collective	M. tuberculosis complex positive (31)	M. tuberculosis complex negative (32)	Not interpretable due to inhibition (33)	total
projectmembers	1	25 ●	1	27
Abbott: RealTime MTB	0	3 ●	0	3
artus: PCR Kit	0	9 ●	0	9
BD: ProbeTec / BD: Max	1	15 ●	0	16
Cepheid: Xpert MTB / RIF	0	83 ●	1	84
FluoroType MTB	1	34 ●	0	35
GeneProof: MTB PCR Kit	0	3 ●	0	3
Hain Lifescience: GenoType	0	1 ●	0	1
COBAS TaqMan	0	12 ●	0	12
other testkit	0	42 ●	0	42
total	3	227	2	232

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Sample 52** (Correct specification(s): 99.6%)

#### Result

Collective	M. tuberculosis complex positive (31)	M. tuberculosis complex negative (32)	Not interpretable due to inhibition (33)	total
projectmembers	27 ●	0	0	27
Abbott: RealTime MTB	3 ●	0	0	3
artus: PCR Kit	9 ●	0	0	9
BD: ProbeTec / BD: Max	16 ●	0	0	16
Cepheid: Xpert MTB / RIF	84 ●	0	0	84
FluoroType MTB	35 ●	0	0	35
GeneProof: MTB PCR Kit	3 ●	0	0	3
Hain Lifescience: GenoType	1 ●	0	0	1
COBAS TaqMan	12 ●	0	0	12
other testkit	42 ●	0	0	42
total	232	0	0	232

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Sample 53** (Correct specification(s): 95.7%)

#### Result

Collective	M. tuberculosis complex positive (31)	M. tuberculosis complex negative (32)	Not interpretable due to inhibition (33)	total
projectmembers	24 ●	2	1	27
Abbott: RealTime MTB	3 ●	0	0	3
artus: PCR Kit	9 ●	0	0	9
BD: ProbeTec / BD: Max	15 ●	1	0	16
Cepheid: Xpert MTB / RIF	81 ●	2	1	84
FluoroType MTB	34 ●	1	0	35
GeneProof: MTB PCR Kit	3 ●	0	0	3
Hain Lifescience: GenoType	1 ●	0	0	1
COBAS TaqMan	12 ●	0	0	12
other testkit	41 ●	1	0	42
total	223	7	2	232

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective



## Sample 54 (Correct specification(s): 96.1%)

### Result

Collective	M. tuberculosis complex positive (31)	M. tuberculosis complex negative (32)	Not interpretable due to inhibition (33)	total
projectmembers	1	25 ●	1	27
Abbott: RealTime MTB	0	3 ●	0	3
artus: PCR Kit	0	9 ●	0	9
BD: ProbeTec / BD: Max	1	15 ●	0	16
Cepheid: Xpert MTB / RIF	1	82 ●	0	83
FluoroType MTB	1	34 ●	0	35
GeneProof: MTB PCR Kit	0	3 ●	0	3
Hain Lifescience: GenoType	0	1 ●	0	1
COBAS TaqMan	0	12 ●	0	12
other testkit	2	40 ●	0	42
total	6	224	1	231

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

## Sample 55 (Correct specification(s): 97.4%)

### Result

Collective	M. tuberculosis complex positive (31)	M. tuberculosis complex negative (32)	Not interpretable due to inhibition (33)	total
projectmembers	2	24 ●	1	27
Abbott: RealTime MTB	0	3 ●	0	3
artus: PCR Kit	0	9 ●	0	9
BD: ProbeTec / BD: Max	1	15 ●	0	16
Cepheid: Xpert MTB / RIF	0	84 ●	0	84
FluoroType MTB	0	35 ●	0	35
GeneProof: MTB PCR Kit	0	3 ●	0	3
Hain Lifescience: GenoType	0	1 ●	0	1
COBAS TaqMan	0	12 ●	0	12
other testkit	1	41 ●	0	42
total	4	227	1	232

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective



## Listing and evaluation of the results

1: Dr. med.Max Mustermann  
Laboratory Mustermann

Survey of 13 November 2020

Adviser:

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### Mycobacteriology 02 - Culture

Sample	Analyte / Method	Your specification(s)	Specifications for which points are issued	Points	TV-Type	Points scored
51	Cultivation of Mycobacteria	Growth of mycobacteria (43)	Growth of mycobacteria (43)	5	RLV	5 of 5
51	Differentiation of tuberculosis bacteria	Growth of nontuberculous mycobacteria (44)	Growth of nontuberculous mycobacteria (44)	5	RLV	5 of 5
52	Cultivation of Mycobacteria	Growth of mycobacteria (43)	Growth of mycobacteria (43)	5	RLV	5 of 5
52	Differentiation of tuberculosis bacteria	Growth of Mycobacterium tuberculosis complex (45)	Growth of Mycobacterium tuberculosis complex (45)	5	RLV	5 of 5
53	Cultivation of Mycobacteria	No growth of mycobacteria (35)	No growth of mycobacteria (35)	5	RLV	5 of 5
53	Differentiation of tuberculosis bacteria	No growth of mycobacteria (35)	No growth of mycobacteria (35)	5	RLV	5 of 5
54	Cultivation of Mycobacteria	No growth of mycobacteria (35)	No growth of mycobacteria (35)	5	RLV	5 of 5
54	Differentiation of tuberculosis bacteria	No growth of mycobacteria (35)	No growth of mycobacteria (35)	5	RLV	5 of 5
55	Cultivation of Mycobacteria	Growth of mycobacteria (43)	Growth of mycobacteria (43)	5	RLV	5 of 5
55	Differentiation of tuberculosis bacteria	Growth of Mycobacterium tuberculosis complex (45)	Growth of Mycobacterium tuberculosis complex (45)	5	RLV	5 of 5

Task part		Reached points	Maximum points	Meets criteria
Cultivation of Mycobacteria	(in order to pass the task "Cultivation of Mycobacteria" at least 80.0% of the maximum possible points must be achieved)	25	25	+
Differentiation of tuberculosis bacteria	(in order to pass the task "Differentiation of tuberculosis bacteria" at least 80.0% of the maximum possible points must be achieved)	25	25	+

## Individual summary of results

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### Mycobacteriology 02 - Culture

**Cultivation of Mycobacteria** (N = 201, Rate of success: 99,5%)

**Differentiation of tuberculosis bacteria** (N = 170, Rate of success: 100%)

**Sample 51** (Correct specification(s): 98.7%)

#### Cultivation of Mycobacteria

##### Result

Collective	No growth of mycobacteria (35)	Growth of mycobacteria (43)	Culture contaminated, no result available (36)	total
projectmembers	0	25 ●	0	25
all procedures	1	176 ●	0	177
total	1	201	0	202

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

#### Differentiation of tuberculosis bacteria

##### Result

Collective	No growth of mycobacteria (35)	Growth of nontuberculous mycobacteria (44)	Growth of Mycobacterium tuberculosis complex (45)	Mixed culture of more than one mycobacterial isolate (42)	Culture contaminated, no result available (36)	total
projectmembers	0	25 ●	0	0	0	25
all procedures	0	142 ●	3	1	0	146
total	0	167	3	1	0	171

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Sample 52** (Correct specification(s): 99.2%)

#### Cultivation of Mycobacteria

##### Result

Collective	No growth of mycobacteria (35)	Growth of mycobacteria (43)	Culture contaminated, no result available (36)	total
projectmembers	0	25 ●	0	25
all procedures	2	175 ●	0	177
total	2	200	0	202

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

#### Differentiation of tuberculosis bacteria

##### Result

Collective	No growth of mycobacteria (35)	Growth of nontuberculous mycobacteria (44)	Growth of Mycobacterium tuberculosis complex (45)	Mixed culture of more than one mycobacterial isolate (42)	Culture contaminated, no result available (36)	total
projectmembers	0	0	25 ●	0	0	25
all procedures	1	0	145 ●	0	0	146
total	1	0	170	0	0	171

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective



**Sample 53** (Correct specification(s): 99.7%)

**Cultivation of Mycobacteria**

**Result**

Collective	No growth of mycobacteria (35)	Growth of mycobacteria (43)	Culture contaminated, no result available (36)	total
projectmembers	25 ●	0	0	25
all procedures	176 ●	1	0	177
total	201	1	0	202

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Differentiation of tuberculosis bacteria**

**Result**

Collective	No growth of mycobacteria (35)	Growth of nontuberculous mycobacteria (44)	Growth of Mycobacterium tuberculosis complex (45)	Mixed culture of more than one mycobacterial isolate (42)	Culture contaminated, no result available (36)	total
projectmembers	25 ●	0	0	0	0	25
all procedures	146 ●	0	0	0	0	146
total	171	0	0	0	0	171

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Sample 54** (Correct specification(s): 100%)

**Cultivation of Mycobacteria**

**Result**

Collective	No growth of mycobacteria (35)	Growth of mycobacteria (43)	Culture contaminated, no result available (36)	total
projectmembers	25 ●	0	0	25
all procedures	177 ●	0	0	177
total	202	0	0	202

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Differentiation of tuberculosis bacteria**

**Result**

Collective	No growth of mycobacteria (35)	Growth of nontuberculous mycobacteria (44)	Growth of Mycobacterium tuberculosis complex (45)	Mixed culture of more than one mycobacterial isolate (42)	Culture contaminated, no result available (36)	total
projectmembers	25 ●	0	0	0	0	25
all procedures	146 ●	0	0	0	0	146
total	171	0	0	0	0	171

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective



**Sample 55** (Correct specification(s): 99.5%)

## Cultivation of Mycobacteria

### Result

Collective	No growth of mycobacteria (35)	Growth of mycobacteria (43)	Culture contaminated, no result available (36)	total
projectmembers	0	25 ●	0	25
all procedures	2	175 ●	0	177
total	2	200	0	202

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

## Differentiation of tuberculosis bacteria

### Result

Collective	No growth of mycobacteria (35)	Growth of nontuberculous mycobacteria (44)	Growth of Mycobacterium tuberculosis complex (45)	Mixed culture of more than one mycobacterial isolate (42)	Culture contaminated, no result available (36)	total
projectmembers	0	0	25 ●	0	0	25
all procedures	0	0	146 ●	0	0	146
total	0	0	171	0	0	171

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective



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### Mycobacteriology 03 - Identification

Sam-ple	Method	Your specification(s)	Specifications for which points are issued	Points	TV-Type	Points scored
51	49 - Hybridisation with GenoType blot	M. avium (79a)	M. avium (79a)	5	RLV	5 of 5
			M. avium Komplex (79b)	4		
52	49 - Hybridisation with GenoType blot	M. tuberculosis (121)	M. tuberculosis (121)	5	RLV	5 of 5
53	49 - Hybridisation with GenoType blot	M. chelonae (85)	M. chelonae (85)	5	RLV	5 of 5
54	49 - Hybridisation with GenoType blot	M. bovis ssp. bovis (82)	M. africanum (76a)	2	RLV	5 of 5
			M. bovis BCG (81)	2		
			M. bovis ssp. bovis (82)	5		
			M. tuberculosis (121)	2		
55	49 - Hybridisation with GenoType blot	M. malmoense (102)	M. intracellulare (99)	5	RLV	0 of 5
			M. chimaera (99a)	5		

Task part	Reached points	Maximum points	Meets criteria
Identification of Mycobacteria (in order to pass the task "Identification of Mycobacteria" at least 80.0% of the maximum possible points must be achieved)	20	25	+

## Individual summary of results

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### Mycobacteriology 03 - Identification

Identification of Mycobacteria (N = 115, Rate of success: 97,4%)

**Sample 51** (Correct specification(s): 99.1%)

#### Result

Collective	M. avium (79a)	M. avium Komplex (79b)	total
projectmembers	28 ●	0 ●	28
all processes	83 ●	3 ●	86
total	111	3	114

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Sample 52** (Correct specification(s): 98.3%)

#### Result

Collective	M. tuberculosis (121)	total
projectmembers	27 ●	27
all processes	86 ●	86
total	113	113

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Sample 53** (Correct specification(s): 94.8%)

#### Result

Collective	M. chelonae (85)	M. avium (79a)	total
projectmembers	26 ●	1	27
all processes	83 ●	0	83
total	109	1	110

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

**Sample 54** (Correct specification(s): 97.4%)

#### Result

Collective	M. africanum (76a)	M. bovis BCG (81)	M. bovis ssp. bovis (82)	M. tuberculosis (121)	total
projectmembers	0 ●	0 ●	25 ●	1 ●	26
all processes	1 ●	1 ●	76 ●	8 ●	86
total	1	1	101	9	112

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective



## Sample 55 (Correct specification(s): 94.8%)

### Result

Collective	M. intracellulare (99)	M. chimaera (99a)	M. malmoense (102)	total
projectmembers	4 ●	24 ●	0	28
all processes	24 ●	57 ●	1	82
total	28	81	1	110

The point corresponds to the correct specification (for which points are issued), the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective



## Listing and evaluation of the results

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### Mycobacteriology 05 - Drug Susceptibility Testing

Sam- ple	Method	Antibiotic	Your specification(s)	Specifications for which points are issued	Points	TV- Type	Points scored
51							10 of 10
		Isoniazid (INH)	susceptible (S)	susceptible (S)	5	RLV	
		Rifampicin (RMP)	resistant (R)	resistant (R)	5	RLV	
				intermediate (I)	5		
		Ethambutol (EMB)		susceptible (S)	5	RLV	
		Pyrazinamide (PZA)		susceptible (S)	5	RLV	
		Levofloxacin (LFX)		susceptible (S)	5	RLV	
		Moxifloxacin: cc (critical concentration) (MFX1)		susceptible (S)	5	RLV	
		Moxifloxacin: cb (critical breakpoint) (MFX2)			0	RLV	
		Amikacin (AMK)		susceptible (S)	5	RLV	
		Capreomycin (CAP)		susceptible (S)	5	RLV	
		Kanamycin (KAN)		susceptible (S)	5	RLV	
		Streptomycin (SM)		susceptible (S)	5	RLV	
		Prothionamide (PTO)		susceptible (S)	5	RLV	
		Linezolid (LZD)		susceptible (S)	5	RLV	
		Clofazimine (CFZ)		susceptible (S)	5	RLV	
		Bedaquiline (BDQ)		susceptible (S)	5	RLV	
		Delamanid (DLM)		susceptible (S)	5	RLV	
52							10 of 10
		Isoniazid (INH)	susceptible (S)	susceptible (S)	5	RLV	
		Rifampicin (RMP)	susceptible (S)	susceptible (S)	5	RLV	
		Ethambutol (EMB)		susceptible (S)	5	RLV	
		Pyrazinamide (PZA)		susceptible (S)	5	RLV	
		Levofloxacin (LFX)		resistant (R)	5	RLV	
				intermediate (I)	5		
		Moxifloxacin: cc (critical concentration) (MFX1)		resistant (R)	5	RLV	
				intermediate (I)	5		
		Moxifloxacin: cb (critical breakpoint) (MFX2)			0	RLV	
		Amikacin (AMK)		susceptible (S)	5	RLV	
		Capreomycin (CAP)		susceptible (S)	5	RLV	
		Kanamycin (KAN)		susceptible (S)	5	RLV	
		Streptomycin (SM)		susceptible (S)	5	RLV	
		Prothionamide (PTO)		susceptible (S)	5	RLV	
		Linezolid (LZD)		susceptible (S)	5	RLV	
		Clofazimine (CFZ)		susceptible (S)	5	RLV	
		Bedaquiline (BDQ)		susceptible (S)	5	RLV	
		Delamanid (DLM)		susceptible (S)	5	RLV	



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Laboratory Mustermann

Survey of 23 October 2020

Sample	Method	Antibiotic	Your specification(s)	Specifications for which points are issued	Points	TV-Type	Points scored
53		Isoniazid (INH)	susceptible (S)	susceptible (S)	5	RLV	10 of 10
		Rifampicin (RMP)	susceptible (S)	susceptible (S)	5	RLV	
		Ethambutol (EMB)		susceptible (S)	5	RLV	
		Pyrazinamide (PZA)		susceptible (S)	5	RLV	
		Levofloxacin (LFX)		susceptible (S)	5	RLV	
		Moxifloxacin: cc (critical concentration) (MFX1)		susceptible (S)	5	RLV	
		Moxifloxacin: cb (critical breakpoint) (MFX2)			0	RLV	
		Amikacin (AMK)		susceptible (S)	5	RLV	
		Capreomycin (CAP)		susceptible (S)	5	RLV	
		Kanamycin (KAN)		susceptible (S)	5	RLV	
		Streptomycin (SM)		susceptible (S)	5	RLV	
		Prothionamide (PTO)		resistant (R)	5	RLV	
				intermediate (I)	5		
		Linezolid (LZD)		susceptible (S)	5	RLV	
		Clofazimine (CFZ)		susceptible (S)	5	RLV	
		Bedaquiline (BDQ)		susceptible (S)	5	RLV	
		Delamanid (DLM)		resistant (R)	5	RLV	
			intermediate (I)	5			
54		Isoniazid (INH)	susceptible (S)	susceptible (S)	5	RLV	10 of 10
		Rifampicin (RMP)	susceptible (S)	susceptible (S)	5	RLV	
		Ethambutol (EMB)		susceptible (S)	5	RLV	
		Pyrazinamide (PZA)		susceptible (S)	5	RLV	
		Levofloxacin (LFX)		susceptible (S)	5	RLV	
		Moxifloxacin: cc (critical concentration) (MFX1)		susceptible (S)	5	RLV	
		Moxifloxacin: cb (critical breakpoint) (MFX2)			0	RLV	
		Amikacin (AMK)		susceptible (S)	5	RLV	
		Capreomycin (CAP)		susceptible (S)	5	RLV	
		Kanamycin (KAN)		susceptible (S)	5	RLV	
		Streptomycin (SM)		susceptible (S)	5	RLV	
		Prothionamide (PTO)		susceptible (S)	5	RLV	
		Linezolid (LZD)		susceptible (S)	5	RLV	
		Clofazimine (CFZ)		susceptible (S)	5	RLV	
		Bedaquiline (BDQ)		susceptible (S)	5	RLV	
		Delamanid (DLM)		susceptible (S)	5	RLV	
	55		Isoniazid (INH)	resistant (R)	resistant (R)	5	
				intermediate (I)	5		
		Rifampicin (RMP)	susceptible (S)	susceptible (S)	5	RLV	
		Ethambutol (EMB)		susceptible (S)	5	RLV	
		Pyrazinamide (PZA)		susceptible (S)	5	RLV	
		Levofloxacin (LFX)		susceptible (S)	5	RLV	
		Moxifloxacin: cc (critical concentration) (MFX1)		susceptible (S)	5	RLV	
		Moxifloxacin: cb (critical breakpoint) (MFX2)			0	RLV	
		Amikacin (AMK)		susceptible (S)	5	RLV	
		Capreomycin (CAP)		susceptible (S)	5	RLV	
		Kanamycin (KAN)		susceptible (S)	5	RLV	
		Streptomycin (SM)		resistant (R)	5	RLV	
				susceptible (S)	5		
				intermediate (I)	5		



## Listing and evaluation of the results

1: Dr. med.Max Mustermann  
Laboratory Mustermann

Survey of 23 October 2020

Sam- ple	Method	Antibiotic	Your specification(s)	Specifications for which points are issued	Points	TV- Type	Points scored
55							10 of 10
		Prothionamide (PTO)		resistant (R)	5	RLV	
				intermediate (I)	5		
		Linezolid (LZD)		susceptible (S)	5	RLV	
		Clofazimine (CFZ)		susceptible (S)	5	RLV	
		Bedaquiline (BDQ)		susceptible (S)	5	RLV	
		Delamanid (DLM)		susceptible (S)	5	RLV	
Task part					Reached points	Maximum points	Meets criteria
Susceptibility Testing of Tuberculosis Bacteria		(in order to pass the task "Susceptibility Testing of Tuberculosis Bacteria" at least 80.0% of the maximum possible points must be achieved)			50	50	+



## Individual summary of results

1: Dr. med. Max Mustermann  
Laboratory Mustermann

Survey of 23 October 2020

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### Mycobacteriology 05 - Drug Susceptibility Testing

Susceptibility Testing of Tuberculosis Bacteria (N = 119, Rate of success: 98,3%)

#### Sample 51

	resistant (R)	susceptible (S)	intermediate (I)	total	Correct specification(s)
Isoniazid (INH)	0 (0)	119 (5) ●	0 (0)	119	100%
Rifampicin (RMP)	115 (5) ●	4 (0)	0 (5) ●	119	97%
Ethambutol (EMB)	2 (0)	113 (5) ●	0 (0)	115	98%
Pyrazinamide (PZA)	1 (0)	106 (5) ●	0 (0)	107	99%
Levofloxacin (LFX)	0 (0)	25 (5) ●	0 (0)	25	100%
Moxifloxacin: cc (critical concentration) (MFX1)	0 (0)	45 (5) ●	0 (0)	45	100%
Moxifloxacin: cb (critical breakpoint) (MFX2)	0 (0)	31 (0)	0 (0)	31	-
Amikacin (AMK)	0 (0)	45 (5) ●	0 (0)	45	100%
Capreomycin (CAP)	0 (0)	35 (5) ●	0 (0)	35	100%
Kanamycin (KAN)	0 (0)	32 (5) ●	0 (0)	32	100%
Streptomycin (SM)	0 (0)	96 (5) ●	0 (0)	96	100%
Prothionamide (PTO)	0 (0)	21 (5) ●	0 (0)	21	100%
Linezolid (LZD)	0 (0)	32 (5) ●	0 (0)	32	100%
Clofazimine (CFZ)	0 (0)	16 (5) ●	0 (0)	16	100%
Bedaquiline (BDQ)	0 (0)	19 (5) ●	0 (0)	19	100%
Delamanid (DLM)	0 (0)	12 (5) ●	1 (0)	13	92%

The point corresponds to the correct specification (for which points are issued)

#### Sample 52

	resistant (R)	susceptible (S)	intermediate (I)	total	Correct specification(s)
Isoniazid (INH)	0 (0)	120 (5) ●	0 (0)	120	100%
Rifampicin (RMP)	0 (0)	120 (5) ●	0 (0)	120	100%
Ethambutol (EMB)	0 (0)	116 (5) ●	0 (0)	116	100%
Pyrazinamide (PZA)	0 (0)	106 (5) ●	0 (0)	106	100%
Levofloxacin (LFX)	24 (5) ●	1 (0)	0 (5) ●	25	96%
Moxifloxacin: cc (critical concentration) (MFX1)	40 (5) ●	6 (0)	0 (5) ●	46	87%
Moxifloxacin: cb (critical breakpoint) (MFX2)	4 (0)	28 (0)	1 (0)	33	-
Amikacin (AMK)	0 (0)	46 (5) ●	0 (0)	46	100%
Capreomycin (CAP)	0 (0)	35 (5) ●	0 (0)	35	100%
Kanamycin (KAN)	0 (0)	33 (5) ●	0 (0)	33	100%
Streptomycin (SM)	1 (0)	96 (5) ●	0 (0)	97	99%
Prothionamide (PTO)	0 (0)	21 (5) ●	0 (0)	21	100%
Linezolid (LZD)	0 (0)	33 (5) ●	0 (0)	33	100%
Clofazimine (CFZ)	0 (0)	16 (5) ●	0 (0)	16	100%
Bedaquiline (BDQ)	0 (0)	19 (5) ●	0 (0)	19	100%
Delamanid (DLM)	1 (0)	12 (5) ●	0 (0)	13	92%

The point corresponds to the correct specification (for which points are issued)

### Sample 53

	resistant (R)	susceptible (S)	intermediate (I)	total	Correct specification(s)
Isoniazid (INH)	0 (0)	119 (5) ●	0 (0)	119	100%
Rifampicin (RMP)	0 (0)	118 (5) ●	0 (0)	118	100%
Ethambutol (EMB)	1 (0)	114 (5) ●	0 (0)	115	99%
Pyrazinamide (PZA)	0 (0)	104 (5) ●	0 (0)	104	100%
Levofloxacin (LFX)	0 (0)	25 (5) ●	0 (0)	25	100%
Moxifloxacin: cc (critical concentration) (MFX1)	0 (0)	45 (5) ●	0 (0)	45	100%
Moxifloxacin: cb (critical breakpoint) (MFX2)	0 (0)	32 (0)	0 (0)	32	-
Amikacin (AMK)	0 (0)	45 (5) ●	0 (0)	45	100%
Capreomycin (CAP)	0 (0)	34 (5) ●	0 (0)	34	100%
Kanamycin (KAN)	1 (0)	31 (5) ●	0 (0)	32	97%
Streptomycin (SM)	1 (0)	95 (5) ●	0 (0)	96	99%
Prothionamide (PTO)	19 (5) ●	2 (0)	0 (5) ●	21	90%
Linezolid (LZD)	0 (0)	33 (5) ●	0 (0)	33	100%
Clofazimine (CFZ)	0 (0)	16 (5) ●	0 (0)	16	100%
Bedaquiline (BDQ)	0 (0)	19 (5) ●	0 (0)	19	100%
Delamanid (DLM)	12 (5) ●	1 (0)	0 (5) ●	13	92%

The point corresponds to the correct specification (for which points are issued)

### Sample 54

	resistant (R)	susceptible (S)	intermediate (I)	total	Correct specification(s)
Isoniazid (INH)	1 (0)	119 (5) ●	0 (0)	120	99%
Rifampicin (RMP)	0 (0)	120 (5) ●	0 (0)	120	100%
Ethambutol (EMB)	0 (0)	116 (5) ●	0 (0)	116	100%
Pyrazinamide (PZA)	0 (0)	107 (5) ●	0 (0)	107	100%
Levofloxacin (LFX)	0 (0)	25 (5) ●	0 (0)	25	100%
Moxifloxacin: cc (critical concentration) (MFX1)	0 (0)	45 (5) ●	1 (0)	46	98%
Moxifloxacin: cb (critical breakpoint) (MFX2)	0 (0)	32 (0)	0 (0)	32	-
Amikacin (AMK)	0 (0)	46 (5) ●	0 (0)	46	100%
Capreomycin (CAP)	0 (0)	35 (5) ●	0 (0)	35	100%
Kanamycin (KAN)	1 (0)	32 (5) ●	0 (0)	33	97%
Streptomycin (SM)	0 (0)	97 (5) ●	0 (0)	97	100%
Prothionamide (PTO)	0 (0)	21 (5) ●	0 (0)	21	100%
Linezolid (LZD)	0 (0)	32 (5) ●	0 (0)	32	100%
Clofazimine (CFZ)	0 (0)	16 (5) ●	0 (0)	16	100%
Bedaquiline (BDQ)	0 (0)	19 (5) ●	0 (0)	19	100%
Delamanid (DLM)	1 (0)	12 (5) ●	0 (0)	13	92%

The point corresponds to the correct specification (for which points are issued)



## Sample 55

	resistant (R)	susceptible (S)	intermediate (I)	total	Correct specification(s)
Isoniazid (INH)	109 (5) ●	3 (0)	6 (5) ●	118	97%
Rifampicin (RMP)	1 (0)	117 (5) ●	0 (0)	118	99%
Ethambutol (EMB)	0 (0)	114 (5) ●	0 (0)	114	100%
Pyrazinamide (PZA)	7 (0)	98 (5) ●	0 (0)	105	93%
Levofloxacin (LFX)	0 (0)	25 (5) ●	0 (0)	25	100%
Moxifloxacin: cc (critical concentration) (MFX1)	1 (0)	44 (5) ●	0 (0)	45	98%
Moxifloxacin: cb (critical breakpoint) (MFX2)	0 (0)	32 (0)	0 (0)	32	-
Amikacin (AMK)	0 (0)	45 (5) ●	0 (0)	45	100%
Capreomycin (CAP)	0 (0)	34 (5) ●	0 (0)	34	100%
Kanamycin (KAN)	2 (0)	30 (5) ●	0 (0)	32	94%
Streptomycin (SM)	57 (5) ●	36 (5) ●	2 (5) ●	95	100%
Prothionamide (PTO)	18 (5) ●	4 (0)	0 (5) ●	22	82%
Linezolid (LZD)	0 (0)	32 (5) ●	0 (0)	32	100%
Clofazimine (CFZ)	0 (0)	16 (5) ●	0 (0)	16	100%
Bedaquiline (BDQ)	0 (0)	19 (5) ●	0 (0)	19	100%
Delamanid (DLM)	0 (0)	13 (5) ●	0 (0)	13	100%

The point corresponds to the correct specification (for which points are issued)