EQuAfrica Pilot programme scoring guide

Criteria and terminology used in evaluation of results

All graded areas require 80% referee consensus before being evaluated

Assessment criteria:

- Acceptable scores – Score of 4 or 3.
- Unacceptable scores – Score of 1 or 0.
- Not evaluated (NE) – Participant provides a valid reason for not submitting a response for a specific graded area. Valid reasons:
    - Reagents or consumables not available,
    - Instrument out of service or
    - Referred for testing
- Sample grading total – Score obtained for a sample. Shows participant sample score out of the highest possible score for the sample
- Sample percentage – Performance percentage calculated using the sample grading total.
- Sample assessment – Classified as "Acceptable" and "Not acceptable". Acceptable performance ≥80%.
- Overall comment – Overall performance for the cycle. Determined by "Average for all samples". Acceptable performance ≥80%.

Evaluation criteria for microscopy

Score	Gram stain response
4	Reporting correct expected Gram stain reaction and correct morphology. E.g. Correctly reporting an expected result of Gram-negative bacilli
3	No criteria for evaluation
2	Separator - Never assigned
1	Reporting correct expected Gram stain reaction and incorrect morphology. E.g. Reporting Gram-negative cocci for expected response of Gram-negative bacilli
0	Reporting incorrect Gram stain reaction with correct or incorrect morphology. E.g. Reporting Gram-positive bacilli for expected response of Gram-negative bacilli
	No response without providing a reason for not reporting.
NE	A valid reason for not responding is provided.

Evaluation criteria for Serotyping/Serogrouping

Score	Serotyping/Serogrouping response
4	Reporting correct expected Serotyping/Serogrouping response. E.g. Correctly reporting an expected result of *Salmonella* Enteritidis
3	Reporting correct, but incomplete or non-specific serotyping result. E.g. Reporting *Salmonella* polyvalent positive for expected response of *Salmonella* Enteritidis
2	Separator - Never assigned
1	Reporting incorrect serotype for expected organism. E.g. Reporting *Salmonella* Typhimurium for expected response of *Salmonella* Enteritidis.
0	Completely incorrect result. E.g. Reporting *Shigella flexneri* for expected response of *Salmonella* Enteritidis.
	No response without providing a reason for not reporting.
	No growth - Possible indication of incorrect culture methods and or conditions
NE	A valid reason for not responding is provided.

Evaluation criteria for Final identification

Score	Final identification responses
4	Correct Genus and species result reported. E.g. Correctly reporting an expected result of *Klebsiella pneumoniae*
3	Correct Genus, no species specified E.g. Reporting *Klebsiella* species for an expected response of *Klebsiella pneumoniae*
2	Separator - Never assigned
1	Reporting correct Genus with incorrect species reported. E.g. Reporting *Klebsiella oxytoca* for an expected response of *Klebsiella pneumoniae*
1	Reporting an unnamed or unspecified microorganism. E.g. Reporting Gram-negative bacilli or Gram-negative fermenter for an expected response of *Klebsiella pneumoniae*
0	Incorrect identification. E.g. Reporting *Acinetobacter baumannii* for an expected response of *Klebsiella pneumoniae*
0	No growth - Possible indication of incorrect culture methods and or conditions
0	No response without providing a reason for not reporting.
NE	A valid reason for not responding is provided.

Evaluation criteria for individual antibiotics reported for Antimicrobial susceptibility testing.

Each requested antibiotic is individually scored using the evaluation criteria below. The average is then calculated and a score out of 4 is assigned for the "AST result" graded area.
Participants are not penalised if they do not give results for all requested antibiotics, unless it is vital for a specific drug-bug combination (see e.g. below).
Participants are not penalised for reporting results for antibiotics that were not requested

Score	Response for individual requested antibiotic
4	Reporting correct expected response.
3	An expected response of "Intermediate" reported as "Susceptible" (mE)
3	An expected response of "Intermediate" reported as "Resistant" (mE)
3	An expected response of "Susceptible" reported as "Intermediate" (mE)
3	An expected response of "Resistant" reported as "Intermediate" (mE)
2	Separator - Never assigned
1	An expected response of "Susceptible" reported as "Resistant" (ME)
1	Not reporting a vital antibiotic that has been requested. E.g. Not reporting oxacillin/cefoxitin for *Staphylococcus aureus*
1	Reporting an antibiotic result where there is no guideline (CLSI/EUCAST etc.) for interpretation available. E.g. Reporting a vancomycin disk susceptibility result for *Staphylococcus aureus* (there are no disk interpretation guidelines available)
0	An expected response of "Resistant" reported as "Susceptible" (VME)
0	If "Final identification" score=0 AST is not be assessed, will automatically be scored "0"

Abbreviations:
mE-Minor error, ME-major error, VME-very major error