

Table S3: Interactions between characteristics and sum of interactions per characteristic and per category.

Categories of characteristics	Characteristics (taken from column 1 of Supplemental Table S2)	Influencing Characteristics (taken from column 4 of Supplemental Table S2)	Categories of Influencing Characteristics	Presence of an interaction between two characteristics ('1' means 'yes')	Sum of interactions per characteristic	Sum of interactions per category
Intended Use	Target population	Does the patient have an infection?	Diagnostic Question	1	4	14
Intended Use	Target population	Are microorganisms present?	Diagnostic Question	1		
Intended Use	Target population	Are there AMR determinants present?	Diagnostic Question	1		
Intended Use	Target population	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Intended Use	Setting	Target population	Intended Use	1	2	
Intended Use	Setting	End user	Intended Use	1		
Intended Use	End user	Setting	Intended Use	1	8	
Intended Use	End user	Does the patient have an infection?	Diagnostic Question	1		
Intended Use	End user	Are microorganisms present?	Diagnostic Question	1		
Intended Use	End user	Are there AMR determinants present?	Diagnostic Question	1		
Intended Use	End user	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Intended Use	End user	Test principle	Test Description	1		
Intended Use	End user	Test system	Test Description	1		
Intended Use	End user	Regulatory	Commercial	1		
Diagnostic Question	Does the patient have an infection?	Setting	Intended Use	1	3	11
Diagnostic Question	Does the patient have an infection?	Are microorganisms present?	Diagnostic Question	1		
Diagnostic Question	Does the patient have an infection?	Are there AMR determinants present?	Diagnostic Question	1		
Diagnostic Question	Are microorganisms present?	Setting	Intended Use	1	2	
Diagnostic Question	Are microorganisms present?	Does the patient have an infection?	Diagnostic Question	1		

Diagnostic Question	Are there AMR determinants present?	Setting	Intended Use	1	3	
Diagnostic Question	Are there AMR determinants present?	Does the patient have an infection?	Diagnostic Question	1		
Diagnostic Question	Are there AMR determinants present?	Are microorganisms present?	Diagnostic Question	1		
Diagnostic Question	Which antimicrobial drug(s) can be used?	Setting	Intended Use	1	3	
Diagnostic Question	Which antimicrobial drug(s) can be used?	Does the patient have an infection?	Diagnostic Question	1		
Diagnostic Question	Which antimicrobial drug(s) can be used?	Are microorganisms present?	Diagnostic Question	1		
Test Description	Test principle	Setting	Intended Use	1	5	128
Test Description	Test principle	Target analyte(s)	Test Description	1		
Test Description	Test principle	Time-to-result	Assay Protocol	1		
Test Description	Test principle	Analytical sensitivity	Performance	1		
Test Description	Test principle	Analytical specificity	Performance	1		
Test Description	Test system	Setting	Intended Use	1	5	
Test Description	Test system	Test principle	Test Description	1		
Test Description	Test system	Target specimen	Assay Protocol	1		
Test Description	Test system	Sample quantity	Assay Protocol	1		
Test Description	Test system	Operating conditions	Assay Protocol	1		
Test Description	Additional third-party consumables	Regulatory	Commercial	1	1	
Test Description	Target analyte(s)	Does the patient have an infection?	Diagnostic Question	1	6	
Test Description	Target analyte(s)	Are microorganisms present?	Diagnostic Question	1		
Test Description	Target analyte(s)	Are there AMR determinants present?	Diagnostic Question	1		
Test Description	Target analyte(s)	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Test Description	Target analyte(s)	Clinical sensitivity	Performance	1		

Test Description	Target analyte(s)	Clinical specificity	Performance	1		
Test Description	Throughput	Target population	Intended Use	1	9	
Test Description	Throughput	Setting	Intended Use	1		
Test Description	Throughput	Test principle	Test Description	1		
Test Description	Throughput	Test system	Test Description	1		
Test Description	Throughput	Instrument size	Test Description	1		
Test Description	Throughput	Hands-on steps	Assay Protocol	1		
Test Description	Throughput	Time-to-result	Assay Protocol	1		
Test Description	Throughput	Retail price	Commercial	1		
Test Description	Throughput	Bill of materials	Commercial	1		
Test Description	Random access	Target population	Intended Use	1	7	
Test Description	Random access	Setting	Intended Use	1		
Test Description	Random access	Test principle	Test Description	1		
Test Description	Random access	Test system	Test Description	1		
Test Description	Random access	Instrument size	Test Description	1		
Test Description	Random access	Time-to-result	Assay Protocol	1		
Test Description	Random access	Retail price	Commercial	1		
Test Description	Disposal	Setting	Intended Use	1	5	
Test Description	Disposal	End user	Intended Use	1		
Test Description	Disposal	Regulatory	Commercial	1		
Test Description	Disposal	Retail price	Commercial	1		
Test Description	Disposal	Bill of materials	Commercial	1		
Test Description	Instrument size	Setting	Intended Use	1	7	
Test Description	Instrument size	Test principle	Test Description	1		
Test Description	Instrument size	Throughput	Test Description	1		
Test Description	Instrument size	Instrument weight	Test Description	1		
Test Description	Instrument size	Sample preparation needs	Assay Protocol	1		
Test Description	Instrument size	Retail price	Commercial	1		
Test Description	Instrument size	Bill of materials	Commercial	1		
Test Description	Instrument weight	Setting	Intended Use	1	7	
Test Description	Instrument weight	Test principle	Test Description	1		
Test Description	Instrument weight	Throughput	Test Description	1		
Test Description	Instrument weight	Instrument size	Test Description	1		
Test Description	Instrument weight	Sample preparation needs	Assay Protocol	1		

Test Description	Instrument weight	Retail price	Commercial	1		
Test Description	Instrument weight	Bill of materials	Commercial	1		
Test Description	Power requirements	Setting	Intended Use	1	8	
Test Description	Power requirements	Test principle	Test Description	1		
Test Description	Power requirements	Test system	Test Description	1		
Test Description	Power requirements	Throughput	Test Description	1		
Test Description	Power requirements	Instrument connectivity	Test Description	1		
Test Description	Power requirements	Data display	Test Description	1		
Test Description	Power requirements	Sample preparation needs	Assay Protocol	1		
Test Description	Power requirements	Operating conditions	Assay Protocol	1		
Test Description	Instrument connectivity	Setting	Intended Use	1	8	
Test Description	Instrument connectivity	End user	Intended Use	1		
Test Description	Instrument connectivity	Power requirements	Test Description	1		
Test Description	Instrument connectivity	Data display	Test Description	1		
Test Description	Instrument connectivity	Data input	Test Description	1		
Test Description	Instrument connectivity	Data export	Test Description	1		
Test Description	Instrument connectivity	Regulatory	Commercial	1		
Test Description	Instrument connectivity	Retail price	Commercial	1		
Test Description	Result output	Target population	Intended Use	1	8	
Test Description	Result output	Setting	Intended Use	1		
Test Description	Result output	End user	Intended Use	1		
Test Description	Result output	Does the patient have an infection?	Diagnostic Question	1		
Test Description	Result output	Are microorganisms present?	Diagnostic Question	1		
Test Description	Result output	Are there AMR determinants present?	Diagnostic Question	1		

Test Description	Result output	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Test Description	Result output	Retail price	Commercial	1		
Test Description	Data display	Setting	Intended Use	1	7	
Test Description	Data display	End user	Intended Use	1		
Test Description	Data display	Throughput	Test Description	1		
Test Description	Data display	Power requirements	Test Description	1		
Test Description	Data display	Instrument connectivity	Test Description	1		
Test Description	Data display	Result output	Test Description	1		
Test Description	Data display	Retail price	Commercial	1		
Test Description	Data input	Setting	Intended Use	1	6	
Test Description	Data input	End user	Intended Use	1		
Test Description	Data input	Test system	Test Description	1		
Test Description	Data input	Throughput	Test Description	1		
Test Description	Data input	Instrument size	Test Description	1		
Test Description	Data input	Retail price	Commercial	1		
Test Description	Data export	Setting	Intended Use	1	7	
Test Description	Data export	End user	Intended Use	1		
Test Description	Data export	Does the patient have an infection?	Diagnostic Question	1		
Test Description	Data export	Are microorganisms present?	Diagnostic Question	1		
Test Description	Data export	Are there AMR determinants present?	Diagnostic Question	1		
Test Description	Data export	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Test Description	Data export	Throughput	Test Description	1		
Test Description	Calibration	Setting	Intended Use	1	6	
Test Description	Calibration	Test principle	Test Description	1		
Test Description	Calibration	Test system	Test Description	1		
Test Description	Calibration	Target analyte(s)	Test Description	1		
Test Description	Calibration	Throughput	Test Description	1		
Test Description	Calibration	Regulatory	Commercial	1		
Test Description	Maintenance	Setting	Intended Use	1	6	
Test Description	Maintenance	End user	Intended Use	1		

Test Description	Maintenance	Test system	Test Description	1		
Test Description	Maintenance	Throughput	Test Description	1		
Test Description	Maintenance	Sample preparation needs	Assay Protocol	1		
Test Description	Maintenance	Operating conditions	Assay Protocol	1		
Test Description	Shipping/storage conditions	Setting	Intended Use	1	4	
Test Description	Shipping/storage conditions	Test principle	Test Description	1		
Test Description	Shipping/storage conditions	Test system	Test Description	1		
Test Description	Shipping/storage conditions	Shelf life	Test Description	1		
Test Description	Shelf life	Setting	Intended Use	1	4	
Test Description	Shelf life	Test system	Test Description	1		
Test Description	Shelf life	Shipping/storage conditions	Test Description	1		
Test Description	Shelf life	Regulatory	Commercial	1		
Test Description	Training requirements	Setting	Intended Use	1	12	
Test Description	Training requirements	End user	Intended Use	1		
Test Description	Training requirements	Test system	Test Description	1		
Test Description	Training requirements	Result output	Test Description	1		
Test Description	Training requirements	Data display	Test Description	1		
Test Description	Training requirements	Data input	Test Description	1		
Test Description	Training requirements	Data export	Test Description	1		
Test Description	Training requirements	Calibration	Test Description	1		
Test Description	Training requirements	Specimen/sample collection	Assay Protocol	1		

Test Description	Training requirements	Hands-on steps	Assay Protocol	1		
Test Description	Training requirements	Controls	Assay Protocol	1		
Test Description	Training requirements	Regulatory	Commercial	1		
Assay Protocol	Target specimen	Setting	Intended Use	1	5	53
Assay Protocol	Target specimen	Does the patient have an infection?	Diagnostic Question	1		
Assay Protocol	Target specimen	Are microorganisms present?	Diagnostic Question	1		
Assay Protocol	Target specimen	Are there AMR determinants present?	Diagnostic Question	1		
Assay Protocol	Target specimen	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Assay Protocol	Specimen/sample collection	Setting	Intended Use	1	6	
Assay Protocol	Specimen/sample collection	End user	Intended Use	1		
Assay Protocol	Specimen/sample collection	Test system	Test Description	1		
Assay Protocol	Specimen/sample collection	Target analyte(s)	Test Description	1		
Assay Protocol	Specimen/sample collection	Target specimen	Assay Protocol	1		
Assay Protocol	Specimen/sample collection	Sample quantity	Assay Protocol	1		
Assay Protocol	Sample quantity	Test principle	Test Description	1	4	
Assay Protocol	Sample quantity	Test system	Test Description	1		
Assay Protocol	Sample quantity	Target analyte(s)	Test Description	1		
Assay Protocol	Sample quantity	Analytical sensitivity	Performance	1		
Assay Protocol	Sample preparation needs	Setting	Intended Use	1	8	
Assay Protocol	Sample preparation needs	End user	Intended Use	1		

Assay Protocol	Sample preparation needs	Test principle	Test Description	1		
Assay Protocol	Sample preparation needs	Test system	Test Description	1		
Assay Protocol	Sample preparation needs	Throughput	Test Description	1		
Assay Protocol	Sample preparation needs	Power requirements	Test Description	1		
Assay Protocol	Sample preparation needs	Target specimen	Assay Protocol	1		
Assay Protocol	Sample preparation needs	Retail price	Commercial	1		
Assay Protocol	Hands-on steps	Setting	Intended Use	1	9	
Assay Protocol	Hands-on steps	End user	Intended Use	1		
Assay Protocol	Hands-on steps	Test principle	Test Description	1		
Assay Protocol	Hands-on steps	Test system	Test Description	1		
Assay Protocol	Hands-on steps	Throughput	Test Description	1		
Assay Protocol	Hands-on steps	Calibration	Test Description	1		
Assay Protocol	Hands-on steps	Sample preparation needs	Assay Protocol	1		
Assay Protocol	Hands-on steps	Controls	Assay Protocol	1		
Assay Protocol	Hands-on steps	Retail price	Commercial	1		
Assay Protocol	Hands-on-time	Setting	Intended Use	1	6	
Assay Protocol	Hands-on-time	End user	Intended Use	1		
Assay Protocol	Hands-on-time	Test system	Test Description	1		
Assay Protocol	Hands-on-time	Throughput	Test Description	1		
Assay Protocol	Hands-on-time	Sample preparation needs	Assay Protocol	1		
Assay Protocol	Hands-on-time	Retail price	Commercial	1		
Assay Protocol	Time-to-result	Target population	Intended Use	1	9	
Assay Protocol	Time-to-result	Setting	Intended Use	1		
Assay Protocol	Time-to-result	Does the patient have an infection?	Diagnostic Question	1		
Assay Protocol	Time-to-result	Are microorganisms present?	Diagnostic Question	1		
Assay Protocol	Time-to-result	Are there AMR determinants present?	Diagnostic Question	1		

Assay Protocol	Time-to-result	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Assay Protocol	Time-to-result	Test principle	Test Description	1		
Assay Protocol	Time-to-result	Throughput	Test Description	1		
Assay Protocol	Time-to-result	Hands-on-time	Assay Protocol	1		
Assay Protocol	Controls	Test principle	Test Description	1	3	
Assay Protocol	Controls	Test system	Test Description	1		
Assay Protocol	Controls	Regulatory	Commercial	1		
Assay Protocol	Operating conditions	Setting	Intended Use	1	3	
Assay Protocol	Operating conditions	Test principle	Test Description	1		
Assay Protocol	Operating conditions	Test system	Test Description	1		
Performance	Analytical sensitivity	Setting	Intended Use	1	10	51
Performance	Analytical sensitivity	Does the patient have an infection?	Diagnostic Question	1		
Performance	Analytical sensitivity	Are microorganisms present?	Diagnostic Question	1		
Performance	Analytical sensitivity	Are there AMR determinants present?	Diagnostic Question	1		
Performance	Analytical sensitivity	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Performance	Analytical sensitivity	Target analyte(s)	Test Description	1		
Performance	Analytical sensitivity	Target specimen	Assay Protocol	1		
Performance	Analytical sensitivity	Clinical sensitivity	Performance	1		
Performance	Analytical sensitivity	Regulatory	Commercial	1		
Performance	Analytical sensitivity	Retail price	Commercial	1		
Performance	Analytical specificity	Setting	Intended Use	1	10	
Performance	Analytical specificity	Does the patient have an infection?	Diagnostic Question	1		
Performance	Analytical specificity	Are microorganisms present?	Diagnostic Question	1		
Performance	Analytical specificity	Are there AMR determinants present?	Diagnostic Question	1		

Performance	Analytical specificity	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Performance	Analytical specificity	Target analyte(s)	Test Description	1		
Performance	Analytical specificity	Target specimen	Assay Protocol	1		
Performance	Analytical specificity	Clinical specificity	Performance	1		
Performance	Analytical specificity	Regulatory	Commercial	1		
Performance	Analytical specificity	Retail price	Commercial	1		
Performance	Clinical sensitivity	Setting	Intended Use	1	6	
Performance	Clinical sensitivity	Does the patient have an infection?	Diagnostic Question	1		
Performance	Clinical sensitivity	Are microorganisms present?	Diagnostic Question	1		
Performance	Clinical sensitivity	Are there AMR determinants present?	Diagnostic Question	1		
Performance	Clinical sensitivity	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Performance	Clinical sensitivity	Regulatory	Commercial	1		
Performance	Clinical specificity	Setting	Intended Use	1	6	
Performance	Clinical specificity	Does the patient have an infection?	Diagnostic Question	1		
Performance	Clinical specificity	Are microorganisms present?	Diagnostic Question	1		
Performance	Clinical specificity	Are there AMR determinants present?	Diagnostic Question	1		
Performance	Clinical specificity	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Performance	Clinical specificity	Regulatory	Commercial	1		
Performance	Positive predictive value	Setting	Intended Use	1	6	
Performance	Positive predictive value	Does the patient have an infection?	Diagnostic Question	1		
Performance	Positive predictive value	Are microorganisms present?	Diagnostic Question	1		
Performance	Positive predictive value	Are there AMR determinants present?	Diagnostic Question	1		

Performance	Positive predictive value	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Performance	Positive predictive value	Regulatory	Commercial	1		
Performance	Negative predictive value	Setting	Intended Use	1	6	
Performance	Negative predictive value	Does the patient have an infection?	Diagnostic Question	1		
Performance	Negative predictive value	Are microorganisms present?	Diagnostic Question	1		
Performance	Negative predictive value	Are there AMR determinants present?	Diagnostic Question	1		
Performance	Negative predictive value	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Performance	Negative predictive value	Regulatory	Commercial	1		
Performance	Reproducibility	Setting	Intended Use	1	7	
Performance	Reproducibility	End user	Intended Use	1		
Performance	Reproducibility	Does the patient have an infection?	Diagnostic Question	1		
Performance	Reproducibility	Are microorganisms present?	Diagnostic Question	1		
Performance	Reproducibility	Are there AMR determinants present?	Diagnostic Question	1		
Performance	Reproducibility	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		
Performance	Reproducibility	Regulatory	Commercial	1		
Commercial	Regulatory	Setting	Intended Use	1	10	37
Commercial	Regulatory	End user	Intended Use	1		
Commercial	Regulatory	Does the patient have an infection?	Diagnostic Question	1		
Commercial	Regulatory	Are microorganisms present?	Diagnostic Question	1		
Commercial	Regulatory	Are there AMR determinants present?	Diagnostic Question	1		
Commercial	Regulatory	Which antimicrobial drug(s) can be used?	Diagnostic Question	1		

Commercial	Regulatory	Test principle	Test Description	1		
Commercial	Regulatory	Test system	Test Description	1		
Commercial	Regulatory	Target analyte(s)	Test Description	1		
Commercial	Regulatory	Target specimen	Assay Protocol	1		
Commercial	Retail price	Target population	Intended Use	1	15	
Commercial	Retail price	Setting	Intended Use	1		
Commercial	Retail price	End user	Intended Use	1		
Commercial	Retail price	Test principle	Test Description	1		
Commercial	Retail price	Test system	Test Description	1		
Commercial	Retail price	Additional third-party consumables	Test Description	1		
Commercial	Retail price	Throughput	Test Description	1		
Commercial	Retail price	Random access	Test Description	1		
Commercial	Retail price	Instrument size	Test Description	1		
Commercial	Retail price	Power requirements	Test Description	1		
Commercial	Retail price	Instrument connectivity	Test Description	1		
Commercial	Retail price	Result output	Test Description	1		
Commercial	Retail price	Data display	Test Description	1		
Commercial	Retail price	Shelf life	Test Description	1		
Commercial	Retail price	Bill of materials	Commercial	1		
Commercial	Bill of materials	Test principle	Test Description	1	12	
Commercial	Bill of materials	Test system	Test Description	1		
Commercial	Bill of materials	Additional third-party consumables	Test Description	1		
Commercial	Bill of materials	Throughput	Test Description	1		
Commercial	Bill of materials	Instrument size	Test Description	1		
Commercial	Bill of materials	Power requirements	Test Description	1		
Commercial	Bill of materials	Instrument connectivity	Test Description	1		
Commercial	Bill of materials	Result output	Test Description	1		
Commercial	Bill of materials	Data display	Test Description	1		
Commercial	Bill of materials	Shelf life	Test Description	1		
Commercial	Bill of materials	Analytical sensitivity	Performance	1		
Commercial	Bill of materials	Analytical specificity	Performance	1		