# RAPID ASSESSMENT TOOL FOR MONITORING LABORATORY CAPACITY FOR ANTIMICROBIAL SURVEILLANCE

**Name of the institution** | **Country** | **Name of the lab manager** | **Date**

**--- Characteristics of the Institution ---**

Nº of beds | Nº of professional staff | Nº of technical staff | Nº of auxiliary staff

**Observations**

**--- Average Monthly Production ---**

| Sample | Total Nº | Total Nº of positives | Total Nº with sensitivity test | Turnaround time | |
|---|---|---|---|---|---|
| Urine: | | | | | Days |
| Respiratory secretions: | | | | | Days |
| Other secretions / exudates: | | | | | Days |
| Fluid: | | | | | Days |
| Blood: | | | | | Days |
| Stool: | | | | | Days |

**Observations**

**--- Pre-Analytical Phase ---**

Adequate infrastructure (physical space / lighting / separation of activities)

○ Yes ○ No

**Observations**

Sampling manual

○ Yes ○ No

Criteria for rejection of samples

○ Yes ○ No

***Procedure manual***

a. for identification
Yes No

b. for susceptibility test
Yes No

c. includes list of antibiotics/pathogen
Yes No

**--- Biosafety ---**

**Observations**

Biosafty standards
Yes No

Staff training
Yes No

Guidelines for sample transport
Yes No

Availability of personal protection supplies
Yes No

Fire contingency plan
Yes No

Fire extinguisher
Yes No

Control of biological spills
Yes No

Measures in case of injuries or other accidents
Yes No

**--- Analytical Phase ---**

***Salmonella spp.***
Yes No

**Identification methods**
- Manual (Biochemical tests)
- Automated method
- Miniaturized (API)
- Serology
- Genotypic method
- Chromogenic method
- Morphology
- Coagulase
- Microscopic characteristic
- ID kits
- Oxidase

**Antibiogram methods**
- Disk diffusion method
- Automated method
- Epsilometer method
- Microdilution
- Broth dilution
- Agar dilution

**Screening methods**
- ESBL
- Hodge test
- AMP-C test
- Immunological method
- Reduced susceptibility to FQ
- Differentiation of carbapenemases
- β-lactamase test
- Colorimetric method (Blue-Carba/ Carba NP)
- D-test
- Latex for PBP2a (MRSA)

**Molecular methods**
- PCR
- RT PCR
- Hybridization
- Sequencing
- Whole genome sequencing

**Observations**

***Shigella spp.***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***E. coli***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***H. influenzae***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***N. meningtidis***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***N. gonorrhoeae***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***β-hemolytic Streptococcus***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***S. pneumoniae***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***Campylobacter spp.***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***Staphylococcus spp.***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***Enterobacter cloacae***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***Klebsiella pneumoniae***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***Enterococcus spp.***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***P. aeruginosa***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase
- ☐ Pigment

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Observations**

***Acinetobacter baumannii***

○ Yes ○ No

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Observations**

***Others-1***

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Observations**

***Others-2***

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***Others-3***

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

***Others-4***

**Identification methods**

- ☐ Manual (Biochemical tests)
- ☐ Automated method
- ☐ Miniaturized (API)
- ☐ Serology
- ☐ Genotypic method
- ☐ Chromogenic method
- ☐ Morphology ☐ Coagulase
- ☐ Microscopic characteristic
- ☐ ID kits ☐ Oxidase

**Antibiogram methods**

- ☐ Disk diffusion method
- ☐ Automated method
- ☐ Epsilometer method
- ☐ Microdilution
- ☐ Broth dilution
- ☐ Agar dilution

**Screening methods**

- ☐ ESBL ☐ Hodge test
- ☐ AMP-C test
- ☐ Immunological method
- ☐ Reduced susceptibility to FQ
- ☐ Differentiation of carbapenemases
- ☐ β-lactamase test
- ☐ Colorimetric method (Blue-Carba/ Carba NP)
- ☐ D-test ☐ Latex for PBP2a (MRSA)

**Molecular methods**

- ☐ PCR
- ☐ RT PCR
- ☐ Hybridization
- ☐ Sequencing
- ☐ Whole genome sequencing

**Observations**

**--- Antibiogram ---**

**Disk diffusion method**

**Observations**

***Halo size registry***

Yes No

***Temperature control***

a. incubator

Yes No

b. refrigerator

Yes No

c. freezer

Yes No

***Mueller Hinton media control***

a. lot #

Yes No

b. date

Yes No

c. sterility control

Yes No

***Water***

a. distilled

Yes No

b. demineralized

Yes No

***pH of the media***

a. pH meter

Yes No

b. strip (range available)

Yes No

c. biological

Yes No

***Thickness of the agar (4mm)***

**Observations**

a. Is it determined

Yes No

b. evaluate random thickness (2-3 plates)

Yes No

c. records

Yes No

d. perfectly leveled table

Yes No

***Use of blood***

a. sheep

Yes No

b. human

Yes No

***Control of thymine/thymidine***
***E. faecalis ATCC 29212 against SXT (check registry)***

Yes No

***Control of Ca, Mg, and Zn***
***P. aeruginosa ATCC 27853 against gentamicin (check registry)***

Yes No

***Quality of the disks / ATCC strains***

a. expiration record

Yes No

b. disks maintenance

Yes No

c. ATCC strains

Yes No

Specify which

d. correct storage of ATCC strains (check registry)

Yes No

e. frequency of the control (check registry)

f. corrective actions (check registry)

Yes No

***McFarland standards***

a. available

Yes No

b. Is it expired

Yes No

expiration year

c. correct storage

Yes No

***Inoculum adjustment and control***

a. manual

Yes No

b. nephelometer

Yes No

c. other

Yes No

***Correct number of disks per plate***

Yes No

***CLSI document***

Yes No

Document year

**Automated**

**Observations**

***Expert system is on (See activated rules)***

Yes No

***Preventive maintenance***

Yes No

***Corrective maintenance***

Yes No

***Quality control of identification tests***

a. gram

Yes No

b. catalase

Yes No

c. coagulase

Yes No

d. oxidase

Yes No

e. hemolysis

Yes No

***Quality control of panels/cards/ATCC strains***

**Observations**

a. expiration registry

Yes No

b. correct storage of cards or panels

Yes No

c. ATCC strains

Yes No

Specify which

d. correct storage of ATCC strains (check registry)

Yes No

e. frequency of control (check registry)

f. corrective actions (check registry)

Yes No

**--- Post-Analytical Phase ---**

| ***Availability of clinical/epidemiological data*** | **Observations** |
|---|---|
| a. patient identification<br>◯ Yes ◯ No | |
| b. age<br>◯ Yes ◯ No | |
| c. sex<br>◯ Yes ◯ No | |
| d. ward of the sample origin<br>◯ Yes ◯ No | |
| e. type of sample<br>◯ Yes ◯ No | |
| f. date of hospitalization<br>◯ Yes ◯ No | |
| g. date of sampling<br>◯ Yes ◯ No | |
| h. purpose of sampling<br>◯ Yes ◯ No | |
| i. diagnosis<br>◯ Yes ◯ No | |
| j. underlying disease(s)<br>◯ Yes ◯ No | |
| k. risk factor<br>◯ Yes ◯ No | |
| l. can differentiate infection / colonization / contamination<br>◯ Yes ◯ No | |
| ***Can separate sample results from community acquired infections to those associated with health-care***<br>◯ Yes ◯ No | |
| ***Evaluation of results before delivery***<br>◯ Yes ◯ No | |

***Record of results delivery***

Yes No

**Observations**

***Periodic surveillance reports are sent to various services of the institution***

**Observations**

a. ICU

Yes No

b. surgery

Yes No

c. obstetrics

Yes No

d. traumatology

Yes No

e. others

Yes No

***Computer***

Yes No

***Internet connection***

Yes No

***Results of external quality assurance***

Yes No

***Dissemination of results: hospital, community, prevalent species and resistance profiles***

Yes No

***Send samples to the reference center***

Yes No

***Reference center answered***

Yes No

***Timing***

***Data are sent nationally***

Yes No

***Frequency***

***Data are sent regionally***

Yes No

***Frenquency***

***Surveillance software***

***If yes, specify which***

--- Other Methodologies ---

***Perform dilution tests***

Yes No

**Method**

**Microorganisms**

**Observations**

***Conduct molecular epidemiology (confirmation of outbreaks, dissemination of microorganisms, etc.)***

Yes No

**Method**

**Microorganisms**

**Observations**

--- Persons that carried out the evaluation ---

1.

2.

3.

4.

**General comments**

-End-