

# Supplementary:

## Data indicators report

**Hospital name:** WHO Test Hospital

**Country name:** World Health Organization

**Data from:**

**01 Jan 1995 to 31 Jan 1995**

This is a detailed report for records with data indicators. This report, together with the full list in Excel format, is for users to check and validate records with notifiable bacteria, notifiable antibiotic-pathogen combinations, infrequent phenotypes or potential errors in the AST results at the local level. The identifiers listed include hospital number and specimen collection date. Users should not share or transfer this Supplementary data indicators report (in PDF and Excel formats) to any party outside of the hospital without data security management and confidential agreement.

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## Summary result

The tables are counts of records of blood samples that violated the data validation indicators stratified by the level of priority as indicated in the list\_of\_indicators.xlsx.

In brief, the microbiology data is de-duplicated by including only the first isolate per unique specimen number per specimen type per organism identified per evaluation period.

The microbiology\_data file had:

Sample collection dates ranged from **01 Jan 1995 to 31 Jan 1995**

Number of records of all specimen types collected within the above date range:

**622 records**

Number of records of all specimen types with culture positive for a microorganism:

**622 records**

Number of records of blood specimens collected within the above date range:

**81 records**

Number of records of blood specimens with culture positive for a microorganism:

**81 records**

Number of records of blood specimens with no growth for a microorganism:

**0 records**

Organisms	Proportion of blood samples (n)
<i>Arcanobacterium</i> spp.	NA
<i>Arthrobacter</i> spp.	NA
<i>Bacillus</i> spp. except <i>Bacillus anthracis</i>	NA
<i>Brevibacillus</i> spp.	NA
<i>Brevibacterium</i> spp.	NA
<i>Cellulomonas</i> spp.	NA
<i>Cellulosimicrobium</i> spp.	NA
<i>Corynebacterium</i> spp. except <i>Corynebacterium diphtheriae</i> , <i>Corynebacterium jeikeium</i> , <i>Corynebacterium pseudotuberculosis</i> , <i>Corynebacterium striatum</i> , <i>Corynebacterium ulcerans</i> , and <i>Corynebacterium urealyticum</i>	NA
<i>Cutibacterium</i> spp.	NA
<i>Dermabacter</i> spp.	NA
<i>Dermacoccus</i> spp.	NA
<i>Diphtheroids</i> spp.	NA
<i>Exiguobacterium</i> spp.	NA
<i>Geobacillus</i> spp.	NA
<i>Helcobacillus</i> spp.	NA
<i>Janibacter</i> spp.	NA
<i>Knoellia</i> spp.	NA
<i>Kocuria</i> spp.	NA
<i>Kytococcus</i> spp.	NA
<i>Leifsonia</i> spp.	NA
<i>Microbacterium</i> spp.	NA
<i>Micrococcus</i> spp.	NA
<i>Nesterenkonia</i> spp.	NA
<i>Paenibacillus</i> spp.	NA
<i>Propionibacterium</i> spp.	NA
<i>Pseudoclavibacter</i> spp.	NA
<i>Staphylococcus</i> spp. except <i>Staphylococcus aureus</i> , and <i>Staphylococcus lugdunensis</i>	NA
<i>Trueperella</i> spp.	NA
<i>Virgibacillus</i> spp.	NA
Viridans group streptococci include <i>Streptococcus anginosus</i> , <i>Streptococcus bovis</i> , <i>Streptococcus constellatus</i> , <i>Streptococcus gallolyticus</i> , <i>Streptococcus gordonii</i> , <i>Streptococcus intermedius</i> , <i>Streptococcus mitis</i> , <i>Streptococcus mutans</i> , <i>Streptococcus oralis</i> , <i>Streptococcus salivarius</i> , <i>Streptococcus sanguinis</i> , and <i>Streptococcus vestibularis</i>	NA

Blood culture contamination rate is defined as the number of raw contaminated cultures per number of blood cultures received by the laboratory per reporting period. Blood culture contamination rate will not be estimated in case that the data of negative culture (specified as 'no growth' in the dictionary\_for\_microbiology\_data file) is not available. Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration".

**Table 1 (continue): Summary of potential contaminants**

Organisms	Proportion of blood samples (n)
Other contaminants	NA

Blood culture contamination rate is defined as the number of raw contaminated cultures per number of blood cultures received by the laboratory per reporting period. Blood culture contamination rate will not be estimated in case that the data of negative culture (specified as 'no growth' in the dictionary\_for\_microbiology\_data file) is not available. Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration".

**Table 2: Summary of notifiable antibiotic-pathogen combinations**

Organisms	Antimicrobial-susceptible profile	Proportion of blood samples (n)
<i>Acinetobacter baumannii</i>	Carbapenems-NS	NA
<i>Pseudomonas aeruginosa</i>	Carbapenems-NS	NA
Enterobacteriaceae	Carbapenems-NS	NA
Enterobacteriaceae	3GC-NS	NA
Enterobacteriaceae	Carbapenem-S and 3GC-NS	NA
<i>Enterococcus faecium</i>	Vancomycin-NS	NA
<i>Staphylococcus aureus</i>	Vancomycin-NS	NA
<i>Staphylococcus aureus</i>	Methicillin-NS	NA
<i>Helicobacter pylori</i>	Clarithromycin-NS	NA
<i>Campylobacter</i> spp.	Fluoroquinolones-NS	NA
<i>Salmonella</i> spp.	Fluoroquinolones-NS	NA
<i>Neisseria gonorrhoeae</i>	3GC-NS	NA
<i>Neisseria gonorrhoeae</i>	Fluoroquinolones-NS	NA
<i>Neisseria gonorrhoeae</i>	Fluoroquinolones-NS and 3GC-S	NA

Notifiable antibiotic-pathogen combinations and their classifications are defined as WHO list of AMR priority pathogen published in 2017 [1]. The proportion represents the number of patients with blood culture positive for non-susceptible isolates (numerator) over the total number of patient with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". NS=Non-susceptible; 3GC-NS=3rd-generation cephalosporin; Carbapenems-NS: imipenem, meropenem, ertapenem or doripenem; Fluoroquinolones-NS: ciprofloxacin or levofloxacin; Methicillin: methicillin, oxacillin, or ceftiofur

[1] World Health Organization. Global priority list of antibiotic-resistant bacteria to guide research discover, and development of new antibiotics. 2017.  
[https://www.who.int/medicines/publications/WHO-PPL-Short\\_Summary\\_25Feb-ET\\_NM\\_WHO.pdf](https://www.who.int/medicines/publications/WHO-PPL-Short_Summary_25Feb-ET_NM_WHO.pdf). accessed 7th December 2021.

**Table 3: Summary of infrequent phenotypes or potential errors in AST results based on the indicators that the organisms are intrinsically resistant to an antibiotic but are reported as susceptible**

Organisms	Antibiotic that intrinsically resistant but reported as susceptible	Proportion of blood samples (n)
<i>Achromobacter xylosoxidans</i>	Amoxicillin	NA
<i>Achromobacter xylosoxidans</i>	Ampicillin	NA
<i>Achromobacter xylosoxidans</i>	Aztreonam	NA
<i>Achromobacter xylosoxidans</i>	Ceftriaxone	NA
<i>Achromobacter xylosoxidans</i>	Doxycycline	NA
<i>Achromobacter xylosoxidans</i>	Ertapenem	NA
<i>Achromobacter xylosoxidans</i>	Fosfomycin	NA
<i>Achromobacter xylosoxidans</i>	Tetracycline	NA
<i>Achromobacter xylosoxidans</i>	Trimethoprim	NA
<i>Acinetobacter baumannii</i>	Amoxicillin and clavulanic acid	NA
<i>Acinetobacter baumannii</i>	Amoxicillin	NA
<i>Acinetobacter baumannii</i>	Ampicillin	NA
<i>Acinetobacter baumannii</i>	Aztreonam	NA
<i>Acinetobacter baumannii</i>	Ceftriaxone	NA
<i>Acinetobacter baumannii</i>	Doxycycline	NA
<i>Acinetobacter baumannii</i>	Ertapenem	NA
<i>Acinetobacter baumannii</i>	Fosfomycin	NA
<i>Acinetobacter baumannii</i>	Tetracycline	NA
<i>Acinetobacter baumannii</i>	Trimethoprim	NA
<i>Acinetobacter nosocomialis</i>	Ceftriaxone	NA
<i>Acinetobacter nosocomialis</i>	Amoxicillin	NA
<i>Acinetobacter nosocomialis</i>	Amoxicillin and clavulanic acid	NA
<i>Acinetobacter nosocomialis</i>	Ampicillin	NA
<i>Acinetobacter nosocomialis</i>	Aztreonam	NA
<i>Acinetobacter nosocomialis</i>	Doxycycline	NA
<i>Acinetobacter nosocomialis</i>	Ertapenem	NA
<i>Acinetobacter nosocomialis</i>	Fosfomycin	NA
<i>Acinetobacter nosocomialis</i>	Tetracycline	NA
<i>Acinetobacter nosocomialis</i>	Trimethoprim	NA
<i>Acinetobacter pittii</i>	Ceftriaxone	NA

A summary on isolates with infrequent phenotypes that is rarely seen and may potentially be errors in antimicrobial resistant testing results. The proportion represents the number of patients with discordant AST results (numerator) over the total number of patients with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". AST: antimicrobial-susceptibility test

**Table 3 (continue): Summary of infrequent phenotypes or potential errors in AST results based on the indicators that the organisms are intrinsically resistant to an antibiotic but are reported as susceptible**

Organisms	Antibiotic that intrinsically resistant but reported as susceptible	Proportion of blood samples (n)
<i>Acinetobacter pittii</i>	Amoxicillin	NA
<i>Acinetobacter pittii</i>	Amoxicillin and clavulanic acid	NA
<i>Acinetobacter pittii</i>	Ampicillin	NA
<i>Acinetobacter pittii</i>	Aztreonam	NA
<i>Acinetobacter pittii</i>	Doxycycline	NA
<i>Acinetobacter pittii</i>	Ertapenem	NA
<i>Acinetobacter pittii</i>	Fosfomycin	NA
<i>Acinetobacter pittii</i>	Tetracycline	NA
<i>Acinetobacter pittii</i>	Trimethoprim	NA
<i>Aeromonas caviae</i>	Amoxicillin	NA
<i>Aeromonas caviae</i>	Ampicillin	NA
<i>Aeromonas caviae</i>	Ampicillin and sulbactam	NA
<i>Aeromonas dhakensis</i>	Amoxicillin	NA
<i>Aeromonas dhakensis</i>	Ampicillin	NA
<i>Aeromonas dhakensis</i>	Ampicillin and sulbactam	NA
<i>Aeromonas dhakensis</i>	Cefoxitin	NA
<i>Aeromonas hydrophila</i>	Amoxicillin	NA
<i>Aeromonas hydrophila</i>	Ampicillin	NA
<i>Aeromonas hydrophila</i>	Ampicillin and sulbactam	NA
<i>Aeromonas veronii</i>	Amoxicillin	NA
<i>Aeromonas veronii</i>	Ampicillin	NA
<i>Aeromonas veronii</i>	Ampicillin and sulbactam	NA
<i>Aeromonas veronii</i>	Ticarcillin	NA
<i>Burkholderia cepacia</i> complex	Ampicillin	NA
<i>Burkholderia cepacia</i> complex	Aminoglycosides	NA
<i>Burkholderia cepacia</i> complex	Amoxicillin	NA
<i>Burkholderia cepacia</i> complex	Amoxicillin and clavulanic acid	NA
<i>Burkholderia cepacia</i> complex	Ampicillin and sulbactam	NA
<i>Burkholderia cepacia</i> complex	Aztreonam	NA
<i>Burkholderia cepacia</i> complex	Ceftriaxone	NA

A summary on isolates with infrequent phenotypes that is rarely seen and may potentially be errors in antimicrobial resistant testing results. The proportion represents the number of patients with discordant AST results (numerator) over the total number of patients with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". AST: antimicrobial-susceptibility test



**Table 3 (continue): Summary of infrequent phenotypes or potential errors in AST results based on the indicators that the organisms are intrinsically resistant to an antibiotic but are reported as susceptible**

Organisms	Antibiotic that intrinsically resistant but reported as susceptible	Proportion of blood samples (n)
<i>Burkholderia cepacia</i> complex	Chloramphenicol	NA
<i>Burkholderia cepacia</i> complex	Ciprofloxacin	NA
<i>Burkholderia cepacia</i> complex	Colistin	NA
<i>Burkholderia cepacia</i> complex	Ertapenem	NA
<i>Burkholderia cepacia</i> complex	Fosfomycin	NA
<i>Burkholderia cepacia</i> complex	Piperacillin	NA
<i>Burkholderia cepacia</i> complex	Piperacillin and tazobactam	NA
<i>Burkholderia cepacia</i> complex	Ticarcillin	NA
<i>Burkholderia cepacia</i> complex	Ticarcillin and clavulanic acid	NA
<i>Burkholderia cepacia</i> complex	Trimethoprim	NA
<i>Citrobacter amalonaticus</i>	Amoxicillin	NA
<i>Citrobacter amalonaticus</i>	Ampicillin	NA
<i>Citrobacter freundii</i>	Amoxicillin and clavulanic acid	NA
<i>Citrobacter freundii</i>	Amoxicillin	NA
<i>Citrobacter freundii</i>	Ampicillin	NA
<i>Citrobacter freundii</i>	Ampicillin and sulbactam	NA
<i>Citrobacter freundii</i>	Cefadroxil	NA
<i>Citrobacter freundii</i>	Cefalexin	NA
<i>Citrobacter freundii</i>	Cefazolin	NA
<i>Citrobacter freundii</i>	Cefoxitin	NA
<i>Citrobacter freundii</i>	Cephalothin	NA
<i>Citrobacter koseri</i>	Amoxicillin	NA
<i>Citrobacter koseri</i>	Ampicillin	NA
<i>Elizabethkingia anophelis</i>	Ampicillin	NA
<i>Elizabethkingia anophelis</i>	Amoxicillin	NA
<i>Elizabethkingia anophelis</i>	Amoxicillin and clavulanic acid	NA
<i>Elizabethkingia anophelis</i>	Ampicillin and sulbactam	NA
<i>Elizabethkingia anophelis</i>	Aztreonam	NA
<i>Elizabethkingia anophelis</i>	Cefepime	NA
<i>Elizabethkingia anophelis</i>	Ceftazidime	NA

A summary on isolates with infrequent phenotypes that is rarely seen and may potentially be errors in antimicrobial resistant testing results. The proportion represents the number of patients with discordant AST results (numerator) over the total number of patients with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". AST: antimicrobial-susceptibility test

**Table 3 (continue): Summary of infrequent phenotypes or potential errors in AST results based on the indicators that the organisms are intrinsically resistant to an antibiotic but are reported as susceptible**

Organisms	Antibiotic that intrinsically resistant but reported as susceptible	Proportion of blood samples (n)
<i>Elizabethkingia anophelis</i>	Ceftriaxone	NA
<i>Elizabethkingia anophelis</i>	Ertapenem	NA
<i>Elizabethkingia anophelis</i>	Imipenem	NA
<i>Elizabethkingia anophelis</i>	Meropenem	NA
<i>Elizabethkingia anophelis</i>	Ticarcillin	NA
<i>Elizabethkingia anophelis</i>	Ticarcillin and clavulanic acid	NA
<i>Elizabethkingia meningoseptica</i>	Ampicillin	NA
<i>Elizabethkingia meningoseptica</i>	Amoxicillin	NA
<i>Elizabethkingia meningoseptica</i>	Amoxicillin and clavulanic acid	NA
<i>Elizabethkingia meningoseptica</i>	Ampicillin and sulbactam	NA
<i>Elizabethkingia meningoseptica</i>	Aztreonam	NA
<i>Elizabethkingia meningoseptica</i>	Cefepime	NA
<i>Elizabethkingia meningoseptica</i>	Ceftazidime	NA
<i>Elizabethkingia meningoseptica</i>	Ceftriaxone	NA
<i>Elizabethkingia meningoseptica</i>	Colistin	NA
<i>Elizabethkingia meningoseptica</i>	Ertapenem	NA
<i>Elizabethkingia meningoseptica</i>	Imipenem	NA
<i>Elizabethkingia meningoseptica</i>	Meropenem	NA
<i>Elizabethkingia meningoseptica</i>	Ticarcillin	NA
<i>Elizabethkingia meningoseptica</i>	Ticarcillin and clavulanic acid	NA
<i>Enterobacter cloacae</i> complex	Amoxicillin	NA
<i>Enterobacter cloacae</i> complex	Amoxicillin and clavulanic acid	NA
<i>Enterobacter cloacae</i> complex	Ampicillin	NA
<i>Enterobacter cloacae</i> complex	Ampicillin and sulbactam	NA
<i>Enterobacter cloacae</i> complex	Cefadroxil	NA
<i>Enterobacter cloacae</i> complex	Cefalexin	NA
<i>Enterobacter cloacae</i> complex	Cefazolin	NA
<i>Enterobacter cloacae</i> complex	Cefoxitin	NA
<i>Enterobacter cloacae</i> complex	Cephalothin	NA
<i>Enterococcus casseliflavus</i>	Vancomycin	NA

A summary on isolates with infrequent phenotypes that is rarely seen and may potentially be errors in antimicrobial resistant testing results. The proportion represents the number of patients with discordant AST results (numerator) over the total number of patients with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". AST: antimicrobial-susceptibility test

**Table 3 (continue): Summary of infrequent phenotypes or potential errors in AST results based on the indicators that the organisms are intrinsically resistant to an antibiotic but are reported as susceptible**

Organisms	Antibiotic that intrinsically resistant but reported as susceptible	Proportion of blood samples (n)
<i>Enterococcus faecalis</i>	Ceftazidime	NA
<i>Enterococcus faecalis</i>	Aminoglycosides	NA
<i>Enterococcus faecalis</i>	Ceftazidime	NA
<i>Enterococcus faecalis</i>	3GC	NA
<i>Enterococcus faecalis</i>	Clindamycin	NA
<i>Enterococcus faecalis</i>	Fusidic acid	NA
<i>Enterococcus faecium</i>	Macrolides	NA
<i>Enterococcus faecium</i>	Dalfopristin and quinupristin	NA
<i>Enterococcus faecium</i>	Sulfonamides	NA
<i>Enterococcus gallinarum</i>	Vancomycin	NA
<i>Escherichia hermannii</i>	Ampicillin	NA
<i>Escherichia hermannii</i>	Ticarcillin	NA
<i>Hafnia alvei</i>	Amoxicillin	NA
<i>Hafnia alvei</i>	Amoxicillin and clavulanic acid	NA
<i>Hafnia alvei</i>	Ampicillin	NA
<i>Hafnia alvei</i>	Colistin	NA
<i>Klebsiella aerogenes</i>	Amoxicillin	NA
<i>Klebsiella aerogenes</i>	Amoxicillin and clavulanic acid	NA
<i>Klebsiella aerogenes</i>	Ampicillin	NA
<i>Klebsiella aerogenes</i>	Ampicillin and sulbactam	NA
<i>Klebsiella aerogenes</i>	Cefadroxil	NA
<i>Klebsiella aerogenes</i>	Cefalexin	NA
<i>Klebsiella aerogenes</i>	Cefazolin	NA
<i>Klebsiella aerogenes</i>	Cefoxitin	NA
<i>Klebsiella aerogenes</i>	Cephalothin	NA
<i>Klebsiella oxytoca</i>	Amoxicillin	NA
<i>Klebsiella oxytoca</i>	Ampicillin	NA
<i>Klebsiella pneumoniae</i>	Amoxicillin	NA
<i>Klebsiella pneumoniae</i>	Ampicillin	NA
<i>Klebsiella variicola</i>	Amoxicillin	NA

A summary on isolates with infrequent phenotypes that is rarely seen and may potentially be errors in antimicrobial resistant testing results. The proportion represents the number of patients with discordant AST results (numerator) over the total number of patients with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". AST: antimicrobial-susceptibility test

**Table 3 (continue): Summary of infrequent phenotypes or potential errors in AST results based on the indicators that the organisms are intrinsically resistant to an antibiotic but are reported as susceptible**

Organisms	Antibiotic that intrinsically resistant but reported as susceptible	Proportion of blood samples (n)
<i>Klebsiella variicola</i>	Ampicillin	NA
<i>Leclercia adecarboxylata</i>	Fosfomycin	NA
<i>Morganella morganii</i>	Amoxicillin	NA
<i>Morganella morganii</i>	Amoxicillin and clavulanic acid	NA
<i>Morganella morganii</i>	Ampicillin	NA
<i>Morganella morganii</i>	Cefadroxil	NA
<i>Morganella morganii</i>	Cefalexin	NA
<i>Morganella morganii</i>	Cefazolin	NA
<i>Morganella morganii</i>	Cephalothin	NA
<i>Morganella morganii</i>	Colistin	NA
<i>Morganella morganii</i>	Nitrofurantoin	NA
<i>Morganella morganii</i>	Tetracyclines	NA
<i>Ochrobactrum anthropi</i>	Ampicillin	NA
<i>Ochrobactrum anthropi</i>	Amoxicillin	NA
<i>Ochrobactrum anthropi</i>	Amoxicillin and clavulanic acid	NA
<i>Ochrobactrum anthropi</i>	Ampicillin and sulbactam	NA
<i>Ochrobactrum anthropi</i>	Aztreonam	NA
<i>Ochrobactrum anthropi</i>	Cefepime	NA
<i>Ochrobactrum anthropi</i>	Ceftazidime	NA
<i>Ochrobactrum anthropi</i>	Ceftriaxone	NA
<i>Ochrobactrum anthropi</i>	Ertapenem	NA
<i>Ochrobactrum anthropi</i>	Piperacillin	NA
<i>Ochrobactrum anthropi</i>	Piperacillin and tazobactam	NA
<i>Ochrobactrum anthropi</i>	Ticarcillin	NA
<i>Ochrobactrum anthropi</i>	Ticarcillin and clavulanic acid	NA
<i>Proteus mirabilis</i>	Colistin	NA
<i>Proteus mirabilis</i>	Nitrofurantoin	NA
<i>Proteus mirabilis</i>	Tetracyclines	NA
<i>Proteus mirabilis</i>	Tigecycline	NA
<i>Proteus penneri</i>	Amoxicillin	NA

A summary on isolates with infrequent phenotypes that is rarely seen and may potentially be errors in antimicrobial resistant testing results. The proportion represents the number of patients with discordant AST results (numerator) over the total number of patients with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". AST: antimicrobial-susceptibility test

**Table 3 (continue): Summary of infrequent phenotypes or potential errors in AST results based on the indicators that the organisms are intrinsically resistant to an antibiotic but are reported as susceptible**

Organisms	Antibiotic that intrinsically resistant but reported as susceptible	Proportion of blood samples (n)
<i>Proteus penneri</i>	Ampicillin	NA
<i>Proteus penneri</i>	Cefadroxil	NA
<i>Proteus penneri</i>	Cefalexin	NA
<i>Proteus penneri</i>	Cefazolin	NA
<i>Proteus penneri</i>	Cefuroxime	NA
<i>Proteus penneri</i>	Cephalothin	NA
<i>Proteus penneri</i>	Colistin	NA
<i>Proteus penneri</i>	Nitrofurantoin	NA
<i>Proteus penneri</i>	Tetracyclines	NA
<i>Proteus penneri</i>	Tigecycline	NA
<i>Proteus rettgeri</i>	Amoxicillin	NA
<i>Proteus rettgeri</i>	Amoxicillin and clavulanic acid	NA
<i>Proteus rettgeri</i>	Ampicillin	NA
<i>Proteus rettgeri</i>	Ampicillin and sulbactam	NA
<i>Proteus rettgeri</i>	Cefadroxil	NA
<i>Proteus rettgeri</i>	Cefalexin	NA
<i>Proteus rettgeri</i>	Cefazolin	NA
<i>Proteus rettgeri</i>	Cephalothin	NA
<i>Proteus rettgeri</i>	Colistin	NA
<i>Proteus rettgeri</i>	Nitrofurantoin	NA
<i>Proteus rettgeri</i>	Tetracyclines	NA
<i>Proteus stuartii</i>	Amoxicillin and clavulanic acid	NA
<i>Proteus stuartii</i>	Amoxicillin	NA
<i>Proteus stuartii</i>	Ampicillin	NA
<i>Proteus stuartii</i>	Ampicillin and sulbactam	NA
<i>Proteus stuartii</i>	Cefadroxil	NA
<i>Proteus stuartii</i>	Cefalexin	NA
<i>Proteus stuartii</i>	Cefazolin	NA
<i>Proteus stuartii</i>	Cephalothin	NA
<i>Proteus stuartii</i>	Colistin	NA

A summary on isolates with infrequent phenotypes that is rarely seen and may potentially be errors in antimicrobial resistant testing results. The proportion represents the number of patients with discordant AST results (numerator) over the total number of patients with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". AST: antimicrobial-susceptibility test

**Table 3 (continue): Summary of infrequent phenotypes or potential errors in AST results based on the indicators that the organisms are intrinsically resistant to an antibiotic but are reported as susceptible**

Organisms	Antibiotic that intrinsically resistant but reported as susceptible	Proportion of blood samples (n)
<i>Proteus stuartii</i>	Gentamicin	NA
<i>Proteus stuartii</i>	Nitrofurantoin	NA
<i>Proteus stuartii</i>	Tetracyclines	NA
<i>Proteus vulgaris</i>	Ampicillin	NA
<i>Proteus vulgaris</i>	Amoxicillin	NA
<i>Proteus vulgaris</i>	Cefadroxil	NA
<i>Proteus vulgaris</i>	Cefalexin	NA
<i>Proteus vulgaris</i>	Cefazolin	NA
<i>Proteus vulgaris</i>	Cefuroxime	NA
<i>Proteus vulgaris</i>	Cephalothin	NA
<i>Proteus vulgaris</i>	Colistin	NA
<i>Proteus vulgaris</i>	Nitrofurantoin	NA
<i>Proteus vulgaris</i>	Tetracyclines	NA
<i>Proteus vulgaris</i>	Tigecycline	NA
<i>Pseudomonas aeruginosa</i>	Ampicillin	NA
<i>Pseudomonas aeruginosa</i>	Amoxicillin	NA
<i>Pseudomonas aeruginosa</i>	Amoxicillin and clavulanic acid	NA
<i>Pseudomonas aeruginosa</i>	Ampicillin and sulbactam	NA
<i>Pseudomonas aeruginosa</i>	Ceftriaxone	NA
<i>Pseudomonas aeruginosa</i>	Chloramphenicol	NA
<i>Pseudomonas aeruginosa</i>	Ertapenem	NA
<i>Pseudomonas aeruginosa</i>	Kanamycin	NA
<i>Pseudomonas aeruginosa</i>	Neomycin	NA
<i>Pseudomonas aeruginosa</i>	Tigecycline	NA
<i>Pseudomonas aeruginosa</i>	Trimethoprim	NA
<i>Raoultella</i> spp.	Amoxicillin	NA
<i>Raoultella</i> spp.	Ampicillin	NA
<i>Raoultella</i> spp.	Ticarcillin	NA
<i>Serratia marcescens</i>	Amoxicillin and clavulanic acid	NA
<i>Serratia marcescens</i>	Amoxicillin	NA

A summary on isolates with infrequent phenotypes that is rarely seen and may potentially be errors in antimicrobial resistant testing results. The proportion represents the number of patients with discordant AST results (numerator) over the total number of patients with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". AST: antimicrobial-susceptibility test

**Table 3 (continue): Summary of infrequent phenotypes or potential errors in AST results based on the indicators that the organisms are intrinsically resistant to an antibiotic but are reported as susceptible**

Organisms	Antibiotic that intrinsically resistant but reported as susceptible	Proportion of blood samples (n)
<i>Serratia marcescens</i>	Ampicillin	NA
<i>Serratia marcescens</i>	Ampicillin and sulbactam	NA
<i>Serratia marcescens</i>	Cefadroxil	NA
<i>Serratia marcescens</i>	Cefalexin	NA
<i>Serratia marcescens</i>	Cefazolin	NA
<i>Serratia marcescens</i>	Cefoxitin	NA
<i>Serratia marcescens</i>	Cefuroxime	NA
<i>Serratia marcescens</i>	Cephalothin	NA
<i>Serratia marcescens</i>	Colistin	NA
<i>Serratia marcescens</i>	Nitrofurantoin	NA
<i>Serratia marcescens</i>	Tetracyclines	NA
<i>Yersinia enterocolitica</i>	Amoxicillin	NA
<i>Yersinia enterocolitica</i>	Amoxicillin and clavulanic acid	NA
<i>Yersinia enterocolitica</i>	Ampicillin	NA
<i>Yersinia enterocolitica</i>	Ampicillin and sulbactam	NA
<i>Yersinia enterocolitica</i>	Cefadroxil	NA
<i>Yersinia enterocolitica</i>	Cefalexin	NA
<i>Yersinia enterocolitica</i>	Cefazolin	NA
<i>Yersinia enterocolitica</i>	Cefoxitin	NA
<i>Yersinia enterocolitica</i>	Cephalothin	NA
<i>Yersinia enterocolitica</i>	Ticarcillin	NA
<i>Yersinia pseudotuberculosis</i>	Colistin	NA

A summary on isolates with infrequent phenotypes that is rarely seen and may potentially be errors in antimicrobial resistant testing results. The proportion represents the number of patients with discordant AST results (numerator) over the total number of patients with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". AST: antimicrobial-susceptibility test

**Table 4: Summary of infrequent phenotypes or potential errors in AST results based on the indicators that the isolates exhibit discordant AST results**

Organisms	Antibiotic class that the isolates exhibit discordant AST results	Proportion of blood samples (n)
All	Penicillins, Betalactam combinations*	NA
All	Penicillins**	NA
All	Quinolones, Fluoroquinolones***	NA
Enterobacteriaceae	Aminoglycosides****	NA
Enterobacteriaceae	Cephems*****	NA
<i>Pseudomonas aeruginosa</i>	Aminoglycosides****	NA

A summary on isolates with infrequent phenotypes that is rarely seen and may potentially be errors in antimicrobial resistant testing results. The proportion represents the number of patients with discordant AST results (numerator) over the total number of patients with blood culture positive and AST result available in the raw microbiology data (denominator). Details of the criteria are available in "list\_of\_indicators.xlsx" in the folder "Configuration". AST: antimicrobial-susceptibility test

\*The numerator counts the number of isolates that exhibit discordant AST results between penicillin and beta-lactam combinations. For example, an isolate which is reported as susceptible to amoxicillin but non-susceptible to amoxicillin/clavulanic acid.

\*\*The numerator counts the number of isolates that exhibit discordant AST results in penicillin antibiotics. For example, an isolate which is reported as is susceptible to ampicillin/sulbactam but non-susceptible to piperacillin/tazobactam OR ticarcillin/clavulanic acid.

\*\*\*The numerator counts the number of isolates that exhibit discordant AST results between quinolone and fluoroquinolone. For example, an isolate which is reported as susceptible to nalidixic acid but non-susceptible to fluoroquinolones.

\*\*\*\*The numerator counts the number of Enterobacteriaceae or *P. aeruginosa* isolates that exhibit discordant AST in aminoglycosides. For example, an Enterobacteriaceae isolate which is reported as non-susceptible to amikacin but susceptible to gentamicin, netilmicin, or tobramycin.

\*\*\*\*\*The numerator counts the number of Enterobacteriaceae isolates that exhibit discordant AST in cepheems. For example, an Enterobacteriaceae isolate which is reported as susceptible to first generation cephalosporin or second-generation cephalosporin, but non-susceptible to third-generation cephalosporin.



**Table 5: List of specimens culture positive for notifiable organisms**

Hospital number	Specimen collection date	Specimen type	Organisms
_3351596206_	11 Jan 1995	Others	<i>Neisseria meningitidis</i>
_3491549456_	17 Jan 1995	Others	<i>Neisseria meningitidis</i>

\*CSF = Cerebrospinal fluid; RTS = Respiratory tract specimens; Others = Others sample types