

# Supplementary report Annex C:

## Cluster signals identified by AMASS-SaTScan

**Hospital name:** Hypothetical Hospital

**Country name:** Hypothetical Country

**Data from:**

**02 Jan 2016 to 31 Dec 2016**

This is a detailed report for cluster signals identified by AMASS-SaTScan. This report, together with the full list of patients within each cluster in Excel files (in the Report\_with\_patient\_identifiers folder), is for users to check and validate the clusters and the patients in each cluster identified by SaTScan. The information available in this PDF file include ward names used in the dictionary files.

**Generated on:** 15 Jul 2025 00:47

# Blood specimens: MRSA

## Baseline information

No. of patients = 19

No. of wards = 2

No. of AMR profiles = 2

## List of AST results

AST results	Cefoxitin	Oxacillin by MIC	Vancomycin	Clindamycin	Chloramphenicol	Erythromycin	Ofloxacin	Gentamicin	Amikacin	Co-trimoxazole	Rifampicin	Teicoplanin	Daptomycin	Linezolid	Ceftaroline	Piperacillin/tazobactam
R	19	-	3	16	-	-	-	-	-	-	-	-	-	-	-	-
I	0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-
S	0	-	16	3	-	-	-	-	-	-	-	-	-	-	-	-
NA	0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-
C1:≥90%	P	-	P	P	-	-	-	-	-	-	-	-	-	-	-	-
C2:variation	F	-	P	P	-	-	-	-	-	-	-	-	-	-	-	-
Summary	F	-	P	P	-	-	-	-	-	-	-	-	-	-	-	-

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having ≥90% of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

## Blood specimens: MRSA

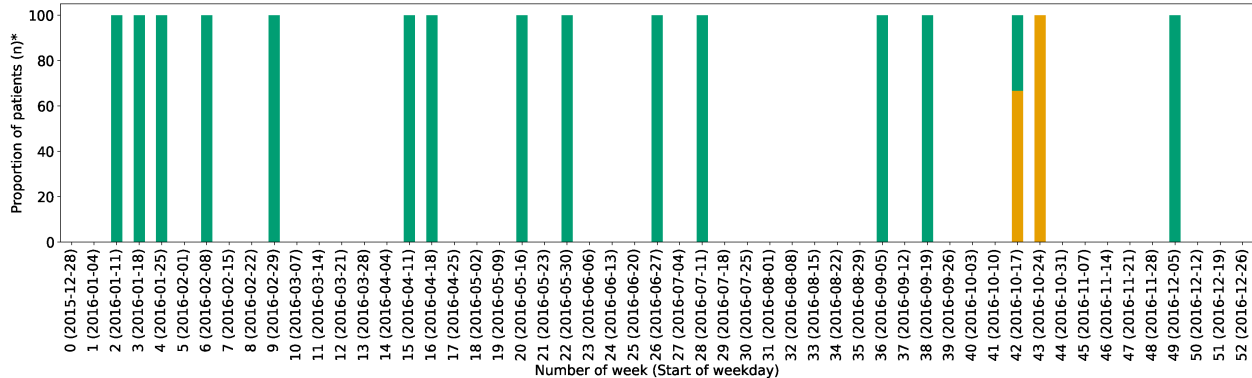
(No. of patients = 19)

Proportion of patients with and without AST results for each antibiotic that passes both criteria over time

Labels : R I S NA

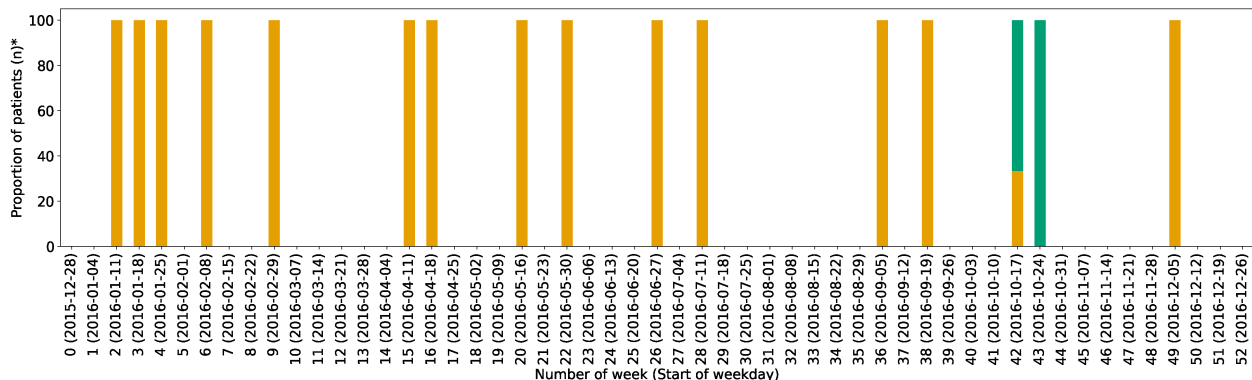
Antibiotic : Vancomycin

Proportion of NA = 0% (0/19)



Antibiotic : Clindamycin

Proportion of NA = 0% (0/19)



The figures on this page are designed to help users assess whether patients without AST results (i.e., marked as NA) are distributed at random. In case that patients without AST results for a specific antibiotic are concentrated within a short time period (e.g., during a temporary shortage of the AST discs for that antibiotic), this may result in a cluster signal of infection caused by an AMR profile with NA results for that antibiotic during that period. This phenomenon will suggest that cluster signal (of that AMR profile with NA result) is likely a false-positive cluster signal.

## Blood specimens: MRSA

### List of profiles

Profile ID	Cefoxitin	Oxacillin by MIC	Vancomycin	Clindamycin	Chloramphenicol	Erythromycin	Ofloxacin	Gentamicin	Amikacin	Co-trimoxazole	Rifampicin	Teicoplanin	Daptomycin	Linezolid	Ceftaroline	Piperacillin/tazobactam	No. of patients
MRSA_BL_2	-	-	S	R	-	-	-	-	-	-	-	-	-	-	-	-	16
MRSA_BL_1	-	-	R	S	-	-	-	-	-	-	-	-	-	-	-	-	3
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>19</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available) represents the number of isolates for which AST data is not available against the antibiotic. The hyphen ("-") is used to indicate that the antibiotic is not marked as "P" (Pass) and is excluded from the list of profiles.

## Blood specimens: MRSA

### List of ward

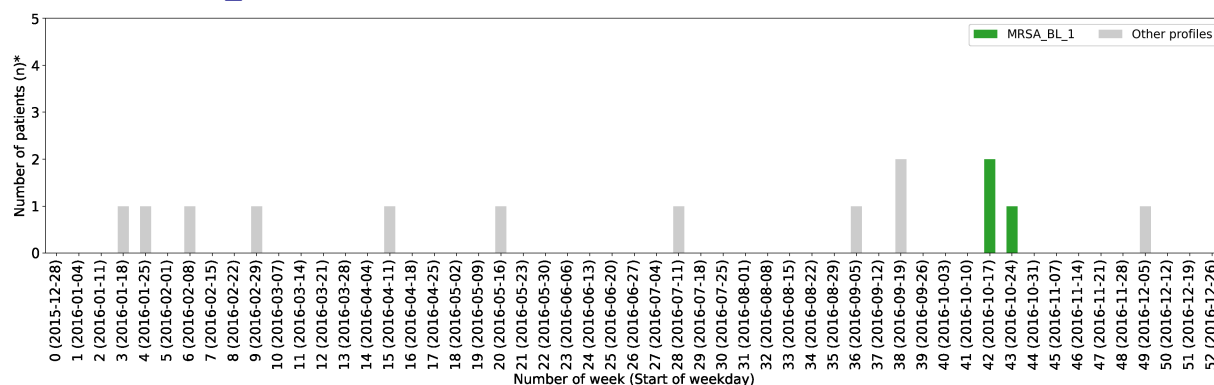
Ward ID	No. of patients
ward_001	14
ward_002	5
<b>Total</b>	<b>19</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization.

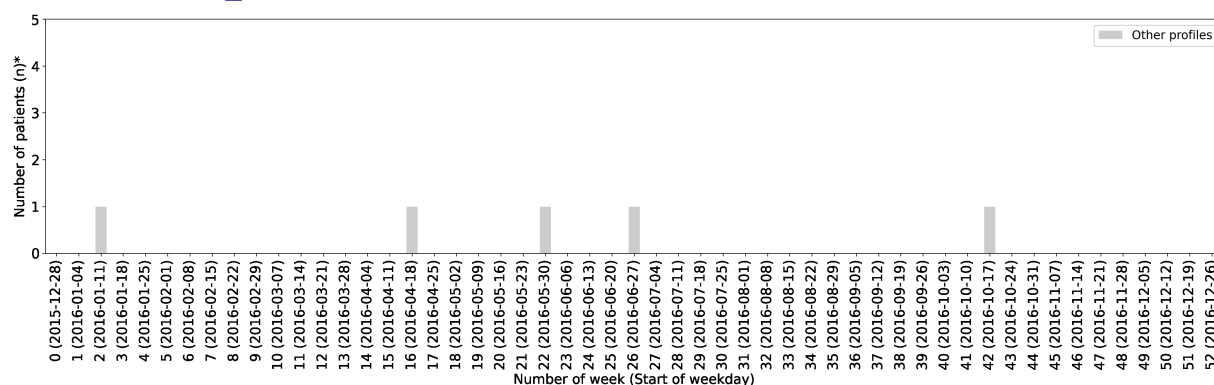
## Blood specimens: MRSA

Display of patients with blood culture positive for MRSA in each ward over time

Ward : ward\_001



Ward : ward\_002



**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: MRSA

## Baseline information

No. of patients = 56

No. of wards = 2

No. of AMR profiles = 2

## List of AST results

AST results	Cefoxitin	Oxacillin by MIC	Vancomycin	Clindamycin	Chloramphenicol	Erythromycin	Ofloxacin	Gentamicin	Amikacin	Co-trimoxazole	Rifampicin	Teicoplanin	Daptomycin	Linezolid	Ceftaroline	Piperacillin/tazobactam
R	56	-	3	53	-	-	-	-	-	-	-	-	-	-	-	-
I	0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-
S	0	-	53	3	-	-	-	-	-	-	-	-	-	-	-	-
NA	0	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-
C1:≥90%	P	-	P	P	-	-	-	-	-	-	-	-	-	-	-	-
C2:variation	F	-	P	P	-	-	-	-	-	-	-	-	-	-	-	-
Summary	F	-	P	P	-	-	-	-	-	-	-	-	-	-	-	-

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having ≥90% of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

## All specimens: MRSA

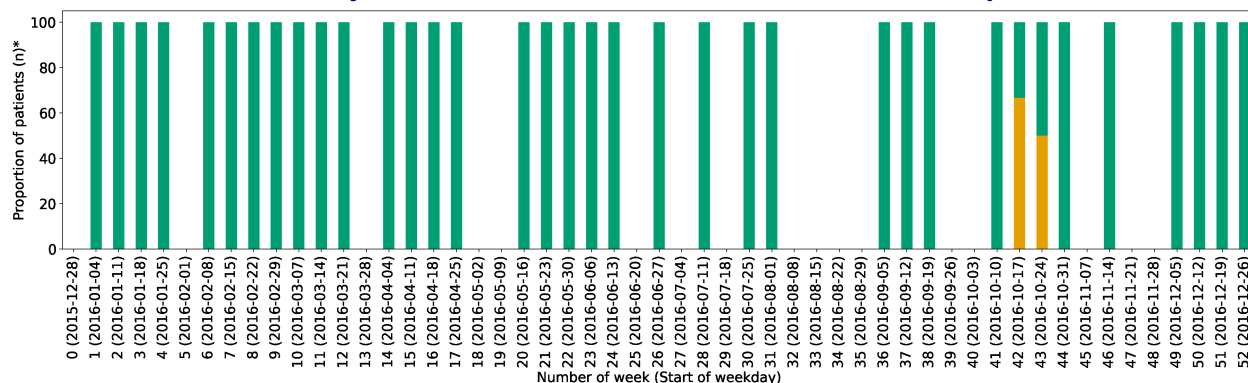
(No. of patients = 56)

Proportion of patients with and without AST results for each antibiotic that passes both criteria over time

Labels : R I S NA

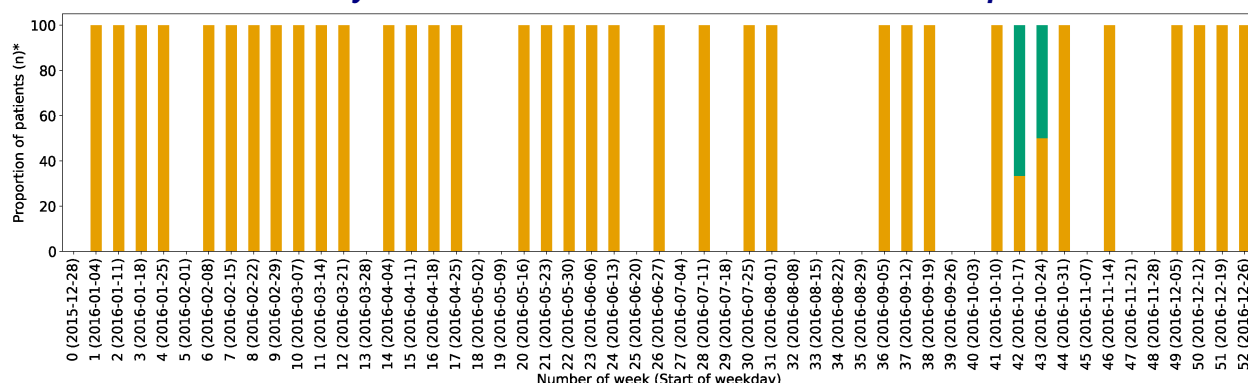
Antibiotic : Vancomycin

Proportion of NA = 0% (0/56)



Antibiotic : Clindamycin

Proportion of NA = 0% (0/56)



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## All specimens: MRSA

### List of profiles

Profile ID	Cefoxitin	Oxacillin by MIC	Vancomycin	Clindamycin	Chloramphenicol	Erythromycin	Ofloxacin	Gentamicin	Amikacin	Co-trimoxazole	Rifampicin	Teicoplanin	Daptomycin	Linezolid	Ceftaroline	Piperacillin/tazobactam	No. of patients
MRSA_ALL_2	-	-	S	R	-	-	-	-	-	-	-	-	-	-	-	-	53
MRSA_ALL_1	-	-	R	S	-	-	-	-	-	-	-	-	-	-	-	-	3
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>56</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available) represents the number of isolates for which AST data is not available against the antibiotic. The hyphen ("-") is used to indicate that the antibiotic is not marked as "P" (Pass) and is excluded from the list of profiles.

## All specimens: MRSA

### List of ward

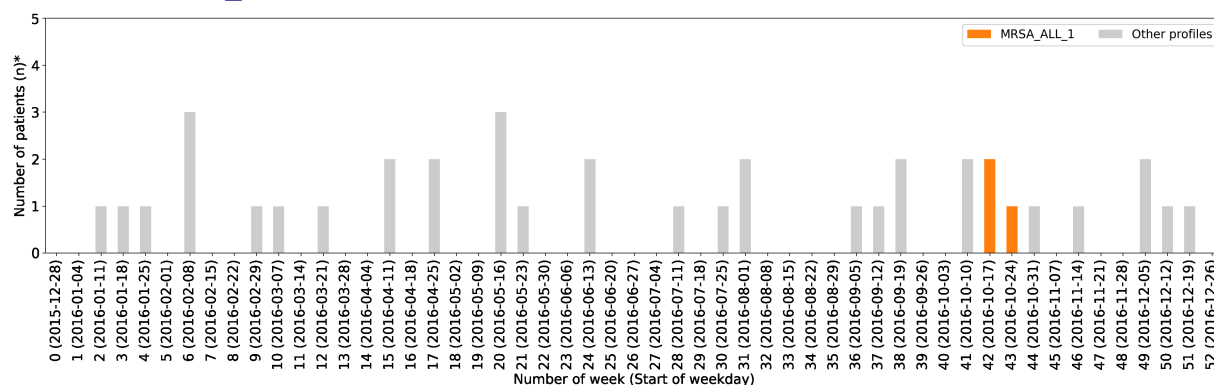
Ward ID	No. of patients
ward_001	38
ward_002	18
<b>Total</b>	<b>56</b>

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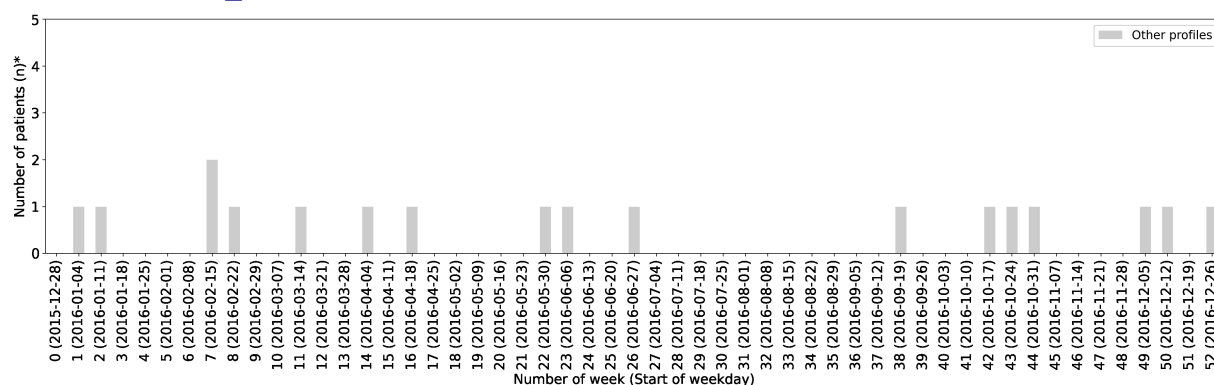
## All specimens: MRSA

Display of patients with a clinical specimen culture positive for MRSA in each ward over time

Ward : ward\_001



Ward : ward\_002



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## Blood specimens: VREfs

### Baseline information

*No. of patients = 0*

*No. of wards = 0*

*No. of AMR profiles = 0*

### List of AST results

None

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having  $\geq 90\%$  of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

## Blood specimens: VREfs

*(No. of patients = 0)*

**Proportion of patients with and without AST results for each antibiotic that passes both criteria over time**

None

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## Blood specimens: VREfs

### list of profiles

None

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## Blood specimens: VREfs

### List of wards

None

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization.

## Blood specimens: VREfs

**Display of patients with blood culture positive for VREfs in each ward over time**

None

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## All specimens: VREfs

### Baseline information

*No. of patients = 0*

*No. of wards = 0*

*No. of AMR profiles = 0*

### List of AST results

None

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having  $\geq 90\%$  of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

All specimens: VREfs

*(No. of patients = 0)*

**Proportion of patients with and without AST results for each antibiotic that passes both criteria over time**

None

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## All specimens: VREfs

### list of profiles

None

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## All specimens: VREfs

### List of wards

None

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## All specimens: VREfs

**Display of patients with a clinical specimen culture positive for VREfs in each ward over time**

None

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## Blood specimens: VREfm

### Baseline information

*No. of patients = 0*

*No. of wards = 0*

*No. of AMR profiles = 0*

### List of AST results

None

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Blood specimens: VREfm

*(No. of patients = 0)*

**Proportion of patients with and without AST results for each antibiotic that passes both criteria over time**

None

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## Blood specimens: VREfm

### list of profiles

None

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## Blood specimens: VREfm

### List of wards

None

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## Blood specimens: VREfm

### Display of patients with blood culture positive for VREfm in each ward over time

None

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## All specimens: VREfm

### Baseline information

*No. of patients = 0*

*No. of wards = 0*

*No. of AMR profiles = 0*

### List of AST results

None

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having  $\geq 90\%$  of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

All specimens: VREfm

*(No. of patients = 0)*

**Proportion of patients with and without AST results for each antibiotic that passes both criteria over time**

None

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## All specimens: VREfm

### list of profiles

None

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## All specimens: VREfm

### List of wards

None

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## All specimens: VREfm

**Display of patients with a clinical specimen culture positive for VREfm in each ward over time**

None

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# Blood specimens: CREC

## Baseline information

No. of patients = 4

No. of wards = 1

No. of AMR profiles = 1

## List of AST results

AST results	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam
R	4	4	-	4	4	-	-	4	4	4	4	4	4	4	-	-	-	-
I	0	0	-	0	0	-	-	0	0	0	0	0	0	0	-	-	-	-
S	0	0	-	0	0	-	-	0	0	0	0	0	0	0	-	-	-	-
NA	0	0	-	0	0	-	-	0	0	0	0	0	0	0	-	-	-	-
C1:≥90%	P	P	-	P	P	-	-	P	P	P	P	P	P	P	-	-	-	-
C2:variation	F	F	-	F	F	-	-	F	F	F	F	F	F	F	-	-	-	-
Summary	F	F	-	F	F	-	-	F	F	F	F	F	F	F	-	-	-	-

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having ≥90% of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).



## Blood specimens: CREC

*(No. of patients = 4)*

**Proportion of patients with and without AST results for each antibiotic that passes both criteria over time**

None

**The figures on this page are designed to help users assess whether patients without AST results (i.e., marked as NA) are distributed at random.** In case that patients without AST results for a specific antibiotic are concentrated within a short time period (e.g., during a temporary shortage of the AST discs for that antibiotic), this may result in a cluster signal of infection caused by an AMR profile with NA results for that antibiotic during that period. This phenomenon will suggest that cluster signal (of that AMR profile with NA result) is likely a false-positive cluster signal.

## Blood specimens: CREC

### List of profiles

Profile ID	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
CREC_BL_na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>4</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available) represents the number of isolates for which AST data is not available against the antibiotic. The hyphen ("-") is used to indicate that the antibiotic is not marked as "P" (Pass) and is excluded from the list of profiles.

## Blood specimens: CREC

### List of ward

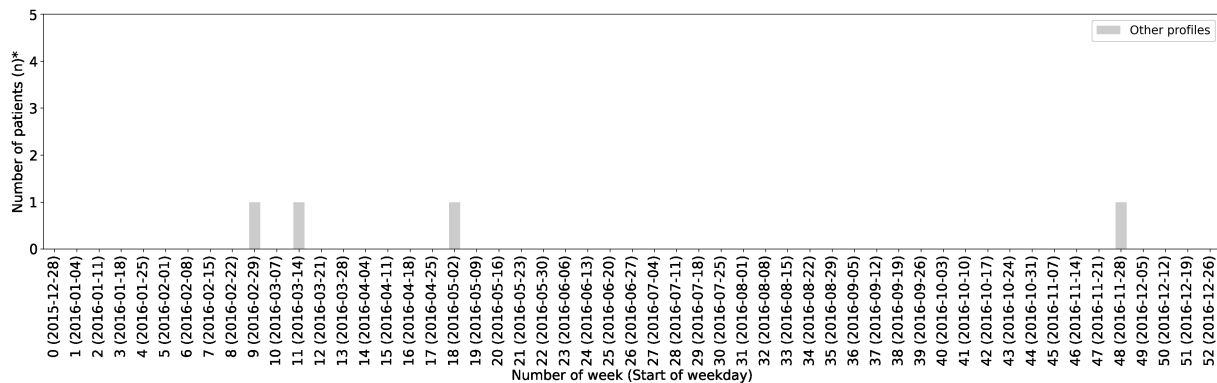
Ward ID	No. of patients
ward_003	4
<b>Total</b>	<b>4</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization.

## Blood specimens: CREC

Display of patients with blood culture positive for CREC in each ward over time

Ward : ward\_003



**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: CREC

## Baseline information

No. of patients = 12

No. of wards = 1

No. of AMR profiles = 1

## List of AST results

AST results	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam
R	12	12	-	12	12	-	-	12	12	12	12	12	12	12	0	-	-	-
I	0	0	-	0	0	-	-	0	0	0	0	0	0	0	0	-	-	-
S	0	0	-	0	0	-	-	0	0	0	0	0	0	0	1	-	-	-
NA	0	0	-	0	0	-	-	0	0	0	0	0	0	0	11	-	-	-
C1:≥90%	P	P	-	P	P	-	-	P	P	P	P	P	P	P	F	-	-	-
C2:variation	F	F	-	F	F	-	-	F	F	F	F	F	F	F	F	-	-	-
Summary	F	F	-	F	F	-	-	F	F	F	F	F	F	F	F	-	-	-

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having ≥90% of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

All specimens: CREC

*(No. of patients = 12)*

Proportion of patients with and without AST results for each antibiotic that passes both criteria over time

None

**The figures on this page are designed to help users assess whether patients without AST results (i.e., marked as NA) are distributed at random.** In case that patients without AST results for a specific antibiotic are concentrated within a short time period (e.g., during a temporary shortage of the AST discs for that antibiotic), this may result in a cluster signal of infection caused by an AMR profile with NA results for that antibiotic during that period. This phenomenon will suggest that cluster signal (of that AMR profile with NA result) is likely a false-positive cluster signal.

## All specimens: CREC

### List of profiles

Profile ID	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
CREC_ALL_na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>12</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available) represents the number of isolates for which AST data is not available against the antibiotic. The hyphen ("-") is used to indicate that the antibiotic is not marked as "P" (Pass) and is excluded from the list of profiles.

## All specimens: CREC

### List of ward

Ward ID	No. of patients
ward_003	12
<b>Total</b>	<b>12</b>

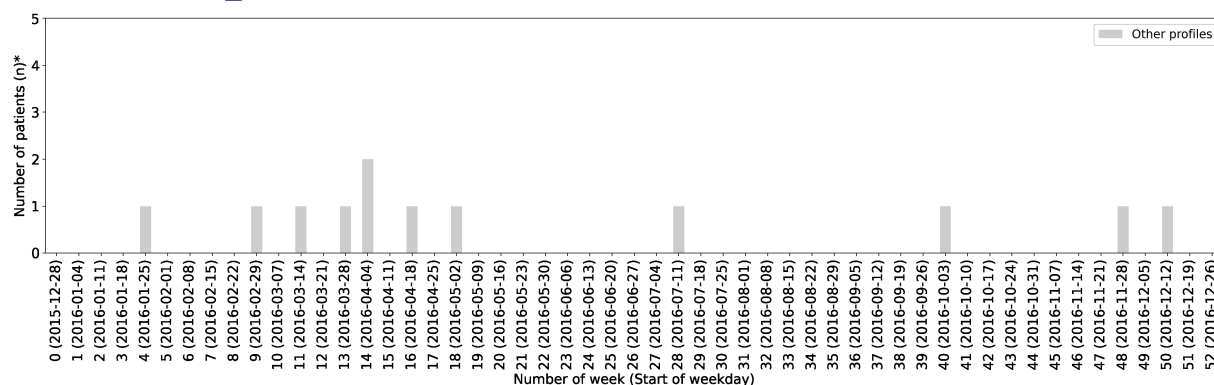
**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization.



## All specimens: CREC

Display of patients with a clinical specimen culture positive for CREC in each ward over time

Ward : ward\_003



**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# Blood specimens: CRKP

## Baseline information

No. of patients = 2

No. of wards = 1

No. of AMR profiles = 1

## List of AST results

AST results	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam
R	-	2	-	2	2	-	-	2	2	2	2	0	-	2	-	-	-	-
I	-	0	-	0	0	-	-	0	0	0	0	0	-	0	-	-	-	-
S	-	0	-	0	0	-	-	0	0	0	0	2	-	0	-	-	-	-
NA	-	0	-	0	0	-	-	0	0	0	0	0	-	0	-	-	-	-
C1:≥90%	-	P	-	P	P	-	-	P	P	P	P	P	-	P	-	-	-	-
C2:variation	-	F	-	F	F	-	-	F	F	F	F	F	-	F	-	-	-	-
Summary	-	F	-	F	F	-	-	F	F	F	F	F	-	F	-	-	-	-

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having ≥90% of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

## Blood specimens: CRKP

*(No. of patients = 2)*

**Proportion of patients with and without AST results for each antibiotic that passes both criteria over time**

None

**The figures on this page are designed to help users assess whether patients without AST results (i.e., marked as NA) are distributed at random.** In case that patients without AST results for a specific antibiotic are concentrated within a short time period (e.g., during a temporary shortage of the AST discs for that antibiotic), this may result in a cluster signal of infection caused by an AMR profile with NA results for that antibiotic during that period. This phenomenon will suggest that cluster signal (of that AMR profile with NA result) is likely a false-positive cluster signal.

## Blood specimens: CRKP

### List of profiles

Profile ID	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
CRKP_BL_na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>2</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available) represents the number of isolates for which AST data is not available against the antibiotic. The hyphen ("-") is used to indicate that the antibiotic is not marked as "P" (Pass) and is excluded from the list of profiles.

## Blood specimens: CRKP

### List of ward

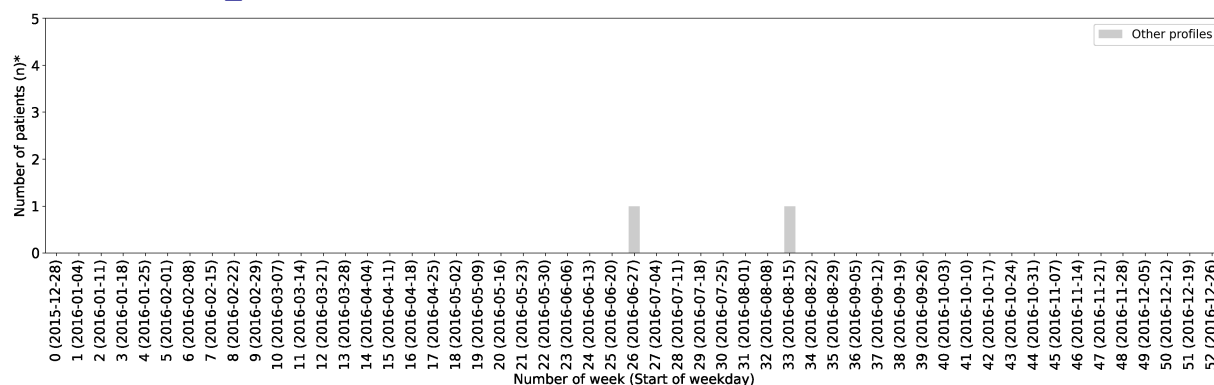
Ward ID	No. of patients
ward_001	2
<b>Total</b>	<b>2</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization.

## Blood specimens: CRKP

Display of patients with blood culture positive for CRKP in each ward over time

Ward : ward\_001



**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: CRKP

## Baseline information

No. of patients = 15

No. of wards = 1

No. of AMR profiles = 2

## List of AST results

AST results	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam
R	-	15	-	15	15	-	-	15	15	15	15	4	7	15	-	-	-	-
I	-	0	-	0	0	-	-	0	0	0	0	0	0	0	-	-	-	-
S	-	0	-	0	0	-	-	0	0	0	0	11	0	0	-	-	-	-
NA	-	0	-	0	0	-	-	0	0	0	0	0	8	0	-	-	-	-
C1:≥90%	-	P	-	P	P	-	-	P	P	P	P	P	F	P	-	-	-	-
C2:variation	-	F	-	F	F	-	-	F	F	F	F	P	F	F	-	-	-	-
Summary	-	F	-	F	F	-	-	F	F	F	F	P	F	F	-	-	-	-

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having ≥90% of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

## All specimens: CRKP

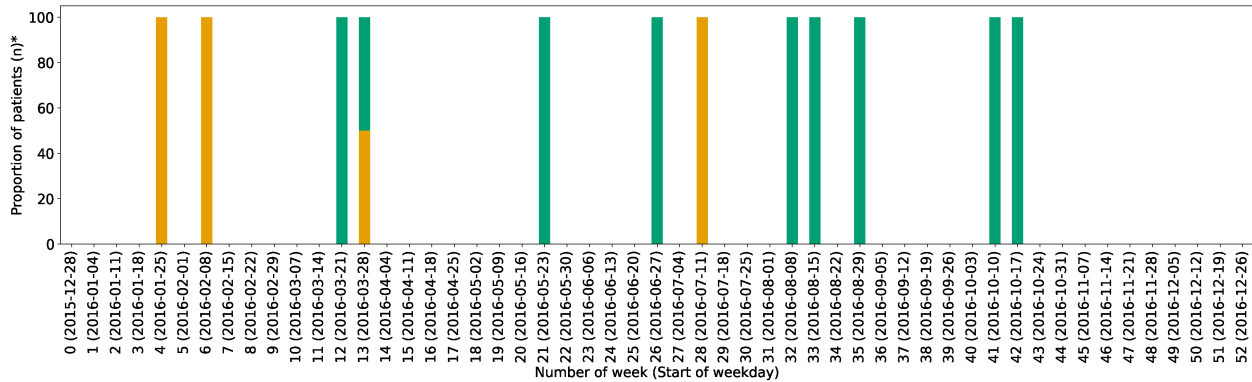
(No. of patients = 15)

Proportion of patients with and without AST results for each antibiotic that passes both criteria over time

Labels : R I S NA

Antibiotic : Imipenem

Proportion of NA = 0% (0/15)



The figures on this page are designed to help users assess whether patients without AST results (i.e., marked as NA) are distributed at random. In case that patients without AST results for a specific antibiotic are concentrated within a short time period (e.g., during a temporary shortage of the AST discs for that antibiotic), this may result in a cluster signal of infection caused by an AMR profile with NA results for that antibiotic during that period. This phenomenon will suggest that cluster signal (of that AMR profile with NA result) is likely a false-positive cluster signal.



## All specimens: CRKP

### List of profiles

Profile ID	Ampicillin	Gentamicin	Amikacin	Co-trimoxazole	Ciprofloxacin	Levofloxacin	Cefpodoxime	Ceftriaxone	Ceftazidime	Cefotaxime	Cefepime	Imipenem	Meropenem	Ertapenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
CRKP_ALL_2	-	-	-	-	-	-	-	-	-	-	-	S	-	-	-	-	-	-	11
CRKP_ALL_1	-	-	-	-	-	-	-	-	-	-	-	R	-	-	-	-	-	-	4
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>15</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available) represents the number of isolates for which AST data is not available against the antibiotic. The hyphen ("-") is used to indicate that the antibiotic is not marked as "P" (Pass) and is excluded from the list of profiles.

## All specimens: CRKP

### List of ward

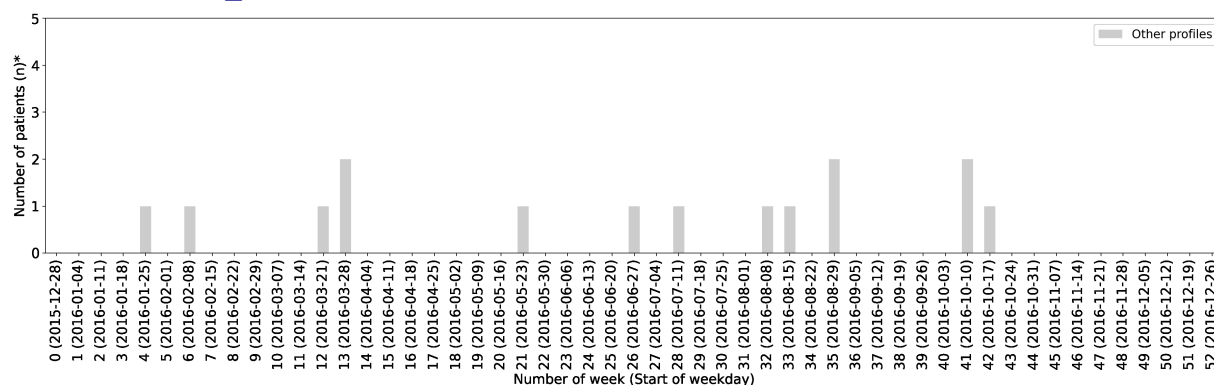
Ward ID	No. of patients
ward_001	15
<b>Total</b>	<b>15</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization.

## All specimens: CRKP

Display of patients with a clinical specimen culture positive for CRKP in each ward over time

Ward : ward\_001



**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# Blood specimens: CRPA

## Baseline information

No. of patients = 4

No. of wards = 1

No. of AMR profiles = 2

## List of AST results

AST results	Ceftazidime	Ciprofloxacin	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam
R	4	2	4	-	4	4	-	-	1	-
I	0	0	0	-	0	0	-	-	0	-
S	0	2	0	-	0	0	-	-	0	-
NA	0	0	0	-	0	0	-	-	3	-
C1:≥90%	P	P	P	-	P	P	-	-	F	-
C2:variation	F	P	F	-	F	F	-	-	F	-
Summary	F	P	F	-	F	F	-	-	F	-

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having ≥90% of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

## Blood specimens: CRPA

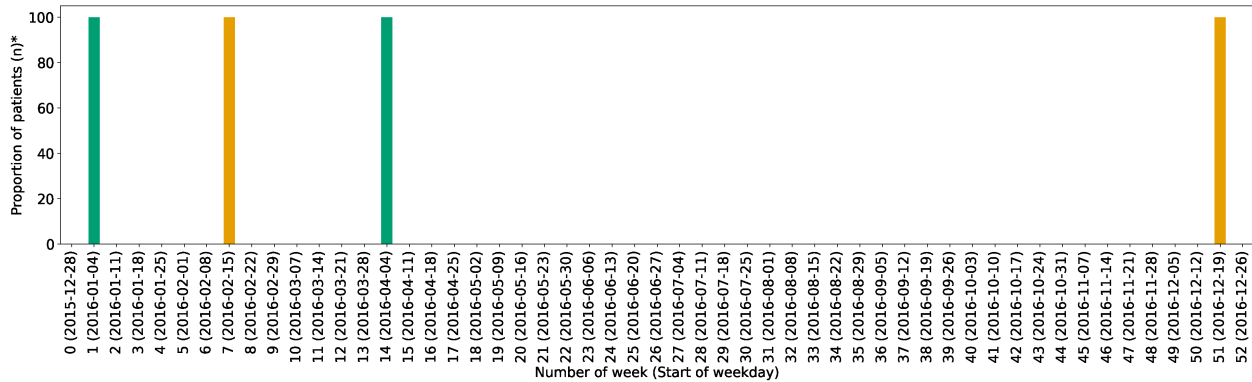
(No. of patients = 4)

Proportion of patients with and without AST results for each antibiotic that passes both criteria over time

Labels : R I S NA

Antibiotic : Ciprofloxacin

Proportion of NA = 0% (0/4)



The figures on this page are designed to help users assess whether patients without AST results (i.e., marked as NA) are distributed at random. In case that patients without AST results for a specific antibiotic are concentrated within a short time period (e.g., during a temporary shortage of the AST discs for that antibiotic), this may result in a cluster signal of infection caused by an AMR profile with NA results for that antibiotic during that period. This phenomenon will suggest that cluster signal (of that AMR profile with NA result) is likely a false-positive cluster signal.

## Blood specimens: CRPA

### List of profiles

Profile ID	Ceftazidime	Ciprofloxacin	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
CRPA_BL_1	-	R	-	-	-	-	-	-	-	-	2
CRPA_BL_2	-	S	-	-	-	-	-	-	-	-	2
Total	-	-	-	-	-	-	-	-	-	-	4

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available) represents the number of isolates for which AST data is not available against the antibiotic. The hyphen ("-") is used to indicate that the antibiotic is not marked as "P" (Pass) and is excluded from the list of profiles.

## Blood specimens: CRPA

### List of ward

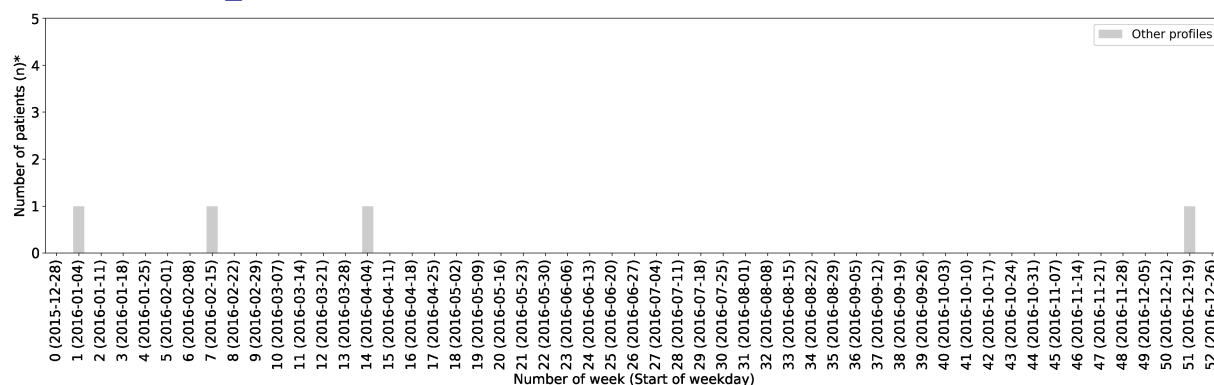
Ward ID	No. of patients
ward_001	4
<b>Total</b>	<b>4</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization.

## Blood specimens: CRPA

Display of patients with blood culture positive for CRPA in each ward over time

Ward : ward\_001



**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.



## All specimens: CRPA

### Baseline information

*No. of patients = 28*

*No. of wards = 1*

*No. of AMR profiles = 3*

### List of AST results

AST results	Ceftazidime	Ciprofloxacin	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam
R	21	14	21	-	28	21	-	-	8	-
I	0	0	0	-	0	0	-	-	0	-
S	7	14	7	-	0	0	-	-	0	-
NA	0	0	0	-	0	7	-	-	20	-
C1:≥90%	P	P	P	-	P	F	-	-	F	-
C2:variation	P	P	P	-	F	F	-	-	F	-
Summary	P	P	P	-	F	F	-	-	F	-

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having ≥90% of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

## All specimens: CRPA

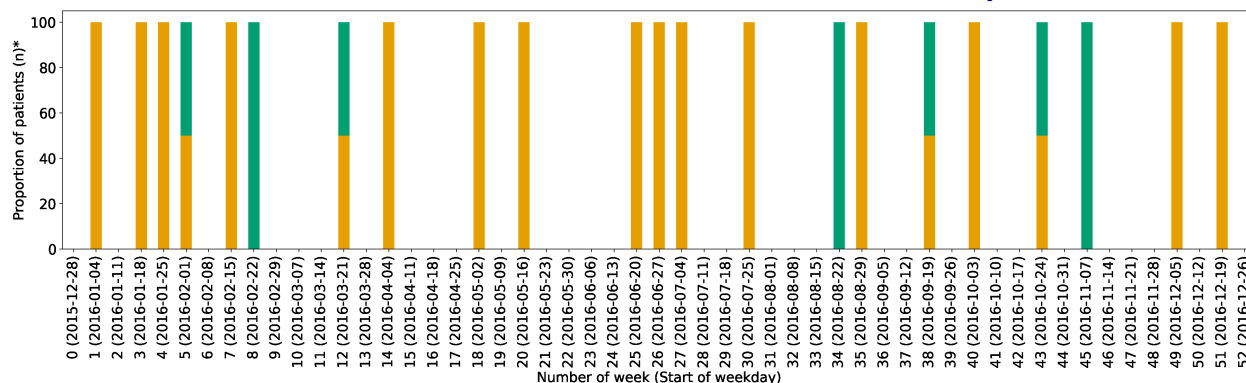
(No. of patients = 28)

Proportion of patients with and without AST results for each antibiotic that passes both criteria over time

Labels : R I S NA

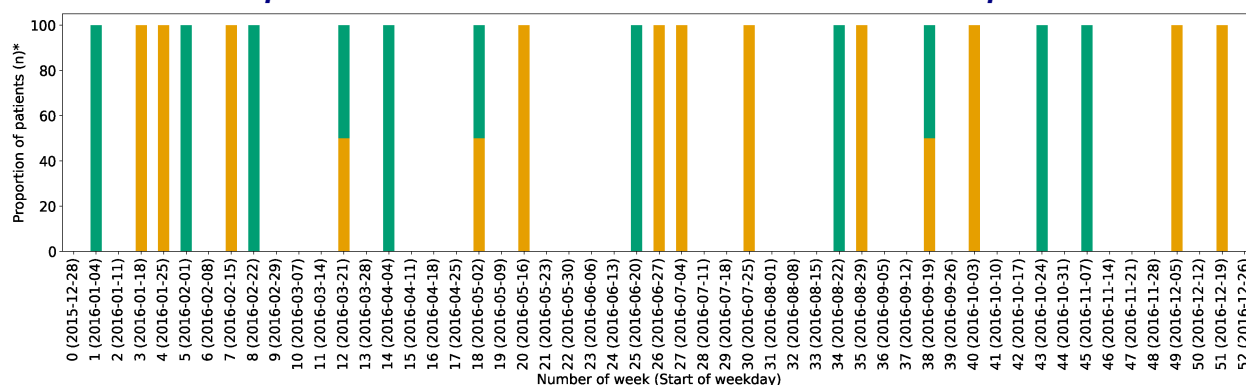
Antibiotic : Ceftazidime

Proportion of NA = 0% (0/28)



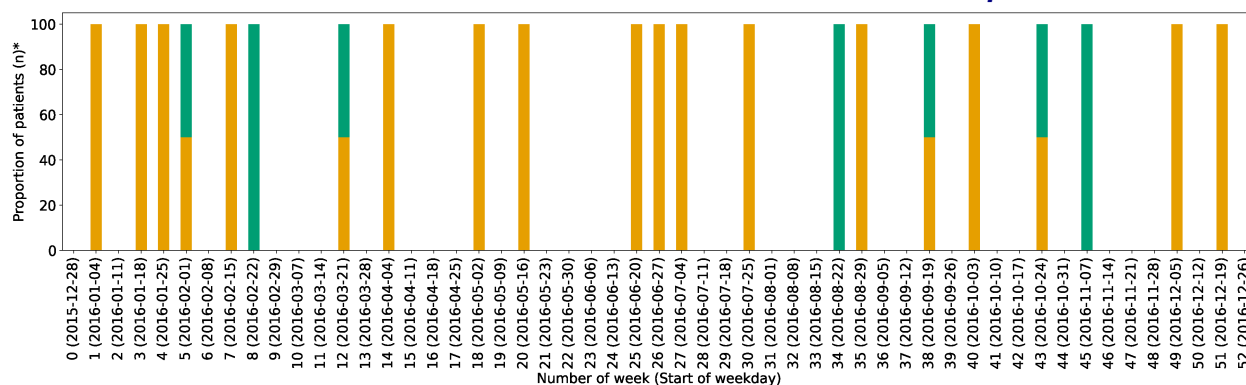
Antibiotic : Ciprofloxacin

Proportion of NA = 0% (0/28)



Antibiotic : Gentamicin

Proportion of NA = 0% (0/28)



The figures on this page are designed to help users assess whether patients without AST results (i.e., marked as NA) are distributed at random. In case that patients without AST results for a specific antibiotic are concentrated within a short time period (e.g., during a temporary shortage of the AST discs for that antibiotic), this may result in a cluster signal of infection caused by an AMR profile with NA results for that antibiotic during that period. This phenomenon will suggest that cluster signal (of that AMR profile with NA result) is likely a false-positive cluster signal.

## All specimens: CRPA

### List of profiles

Profile ID	Ceftazidime	Ciprofloxacin	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
CRPA_ALL_1	R	R	R	-	-	-	-	-	-	-	14
CRPA_ALL_2	R	S	R	-	-	-	-	-	-	-	7
CRPA_ALL_3	S	S	S	-	-	-	-	-	-	-	7
Total	-	-	-	-	-	-	-	-	-	-	28

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available) represents the number of isolates for which AST data is not available against the antibiotic. The hyphen ("-") is used to indicate that the antibiotic is not marked as "P" (Pass) and is excluded from the list of profiles.

## All specimens: CRPA

### List of ward

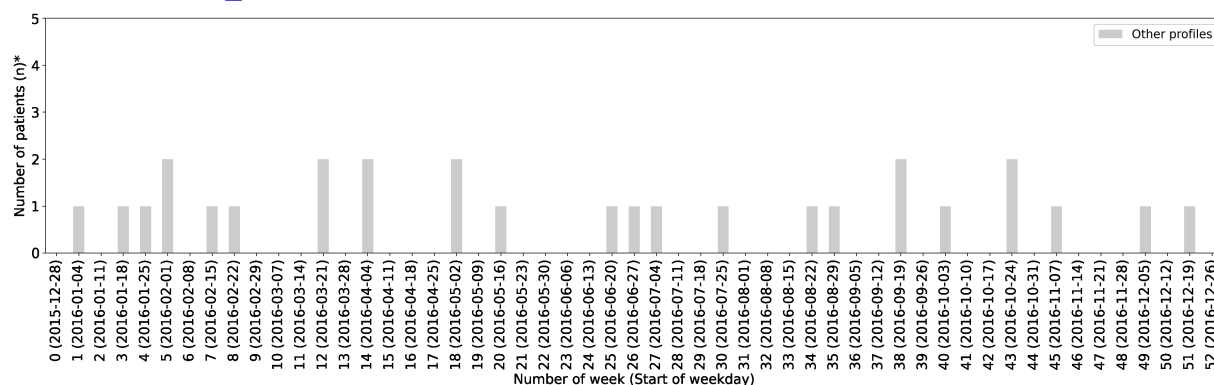
Ward ID	No. of patients
ward_001	28
<b>Total</b>	<b>28</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization.

## All specimens: CRPA

Display of patients with a clinical specimen culture positive for CRPA in each ward over time

Ward : ward\_001



**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# Blood specimens: CRAB

## Baseline information

*No. of patients = 44*

*No. of wards = 2*

*No. of AMR profiles = 4*

## List of AST results

AST results	Tigecycline	Minocycline	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam
R	0	-	38	-	44	39	-	-	-	-
I	0	-	0	-	0	4	-	-	-	-
S	44	-	6	-	0	1	-	-	-	-
NA	0	-	0	-	0	0	-	-	-	-
C1:≥90%	P	-	P	-	P	P	-	-	-	-
C2:variation	F	-	P	-	F	P	-	-	-	-
Summary	F	-	P	-	F	P	-	-	-	-

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having ≥90% of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

## Blood specimens: CRAB

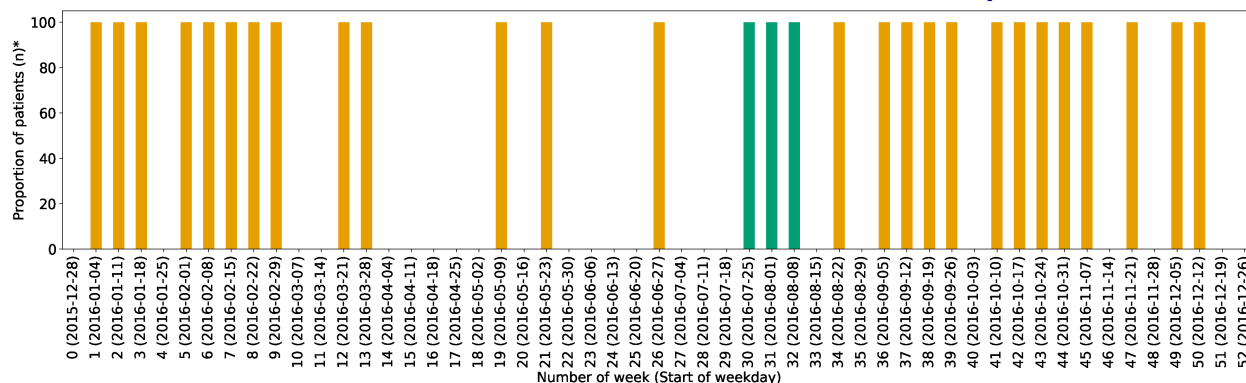
(No. of patients = 44)

Proportion of patients with and without AST results for each antibiotic that passes both criteria over time

Labels : R I S NA

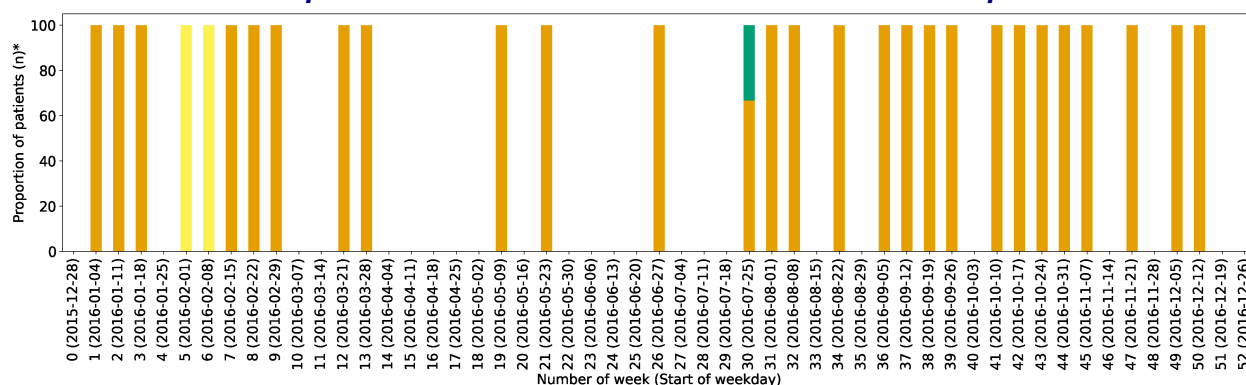
Antibiotic : Gentamicin

Proportion of NA = 0% (0/44)



Antibiotic : Meropenem

Proportion of NA = 0% (0/44)



The figures on this page are designed to help users assess whether patients without AST results (i.e., marked as NA) are distributed at random. In case that patients without AST results for a specific antibiotic are concentrated within a short time period (e.g., during a temporary shortage of the AST discs for that antibiotic), this may result in a cluster signal of infection caused by an AMR profile with NA results for that antibiotic during that period. This phenomenon will suggest that cluster signal (of that AMR profile with NA result) is likely a false-positive cluster signal.

## Blood specimens: CRAB

### List of profiles

Profile ID	Tigecycline	Minocycline	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
CRAB_BL_2	-	-	R	-	-	R	-	-	-	-	34
CRAB_BL_3	-	-	S	-	-	R	-	-	-	-	5
CRAB_BL_1	-	-	R	-	-	I	-	-	-	-	4
CRAB_BL_4	-	-	S	-	-	S	-	-	-	-	1
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	<b>44</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available) represents the number of isolates for which AST data is not available against the antibiotic. The hyphen ("-") is used to indicate that the antibiotic is not marked as "P" (Pass) and is excluded from the list of profiles.



## Blood specimens: CRAB

### List of ward

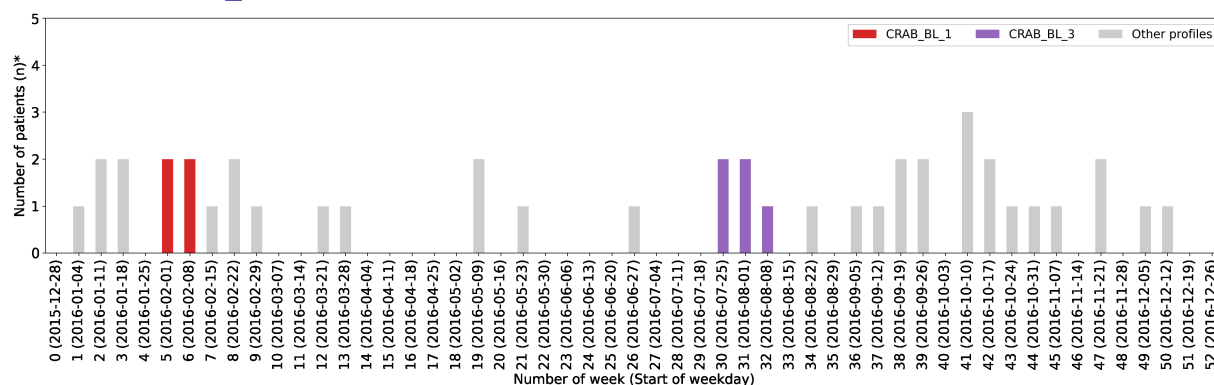
Ward ID	No. of patients
ward_004	43
ward_001	1
<b>Total</b>	<b>44</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization.

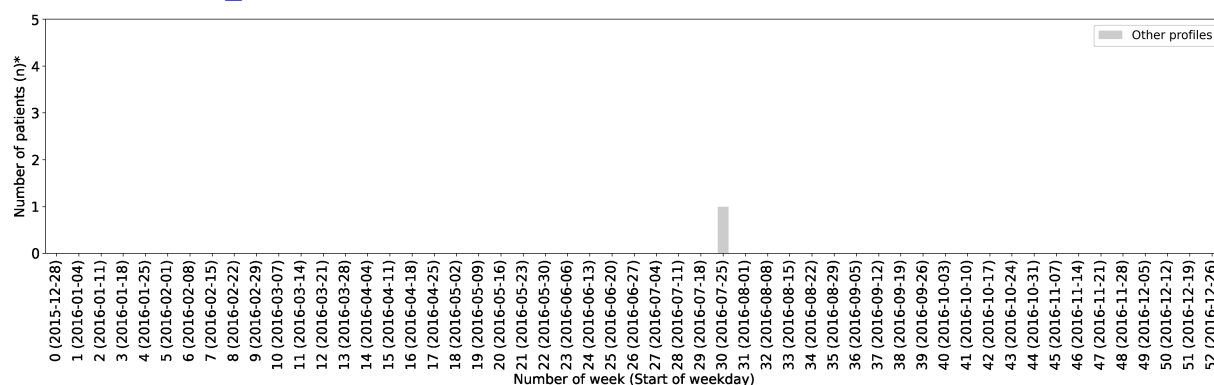
## Blood specimens: CRAB

Display of patients with blood culture positive for CRAB in each ward over time

Ward : ward\_004



Ward : ward\_001



**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. Bar graphs show patients with blood culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

# All specimens: CRAB

## Baseline information

No. of patients = 143

No. of wards = 2

No. of AMR profiles = 4

## List of AST results

AST results	Tigecycline	Minocycline	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam
R	0	-	135	-	143	135	-	-	-	-
I	0	-	0	-	0	4	-	-	-	-
S	143	-	8	-	0	4	-	-	-	-
NA	0	-	0	-	0	0	-	-	-	-
C1:≥90%	P	-	P	-	P	P	-	-	-	-
C2:variation	F	-	P	-	F	P	-	-	-	-
Summary	F	-	P	-	F	P	-	-	-	-

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available; "-") represents the number of isolates for which AST data is not available against the antibiotic. Criteria 1 (C1) is defined as having ≥90% of all patients (i.e., isolates) with available AST results for the antibiotic of interest. Criteria 2 (C2) is defined as having variation in AST results (e.g., not 100% R and not 100% S). The summary is marked as P (Pass) when both C1 and C2 are met. Otherwise, it is marked as F (Fail).

## All specimens: CRAB

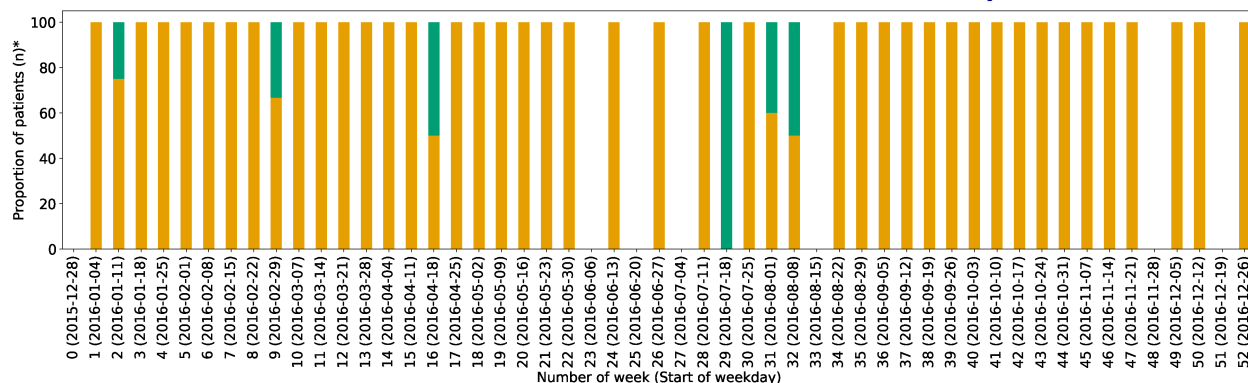
(No. of patients = 143)

Proportion of patients with and without AST results for each antibiotic that passes both criteria over time

Labels : R I S NA

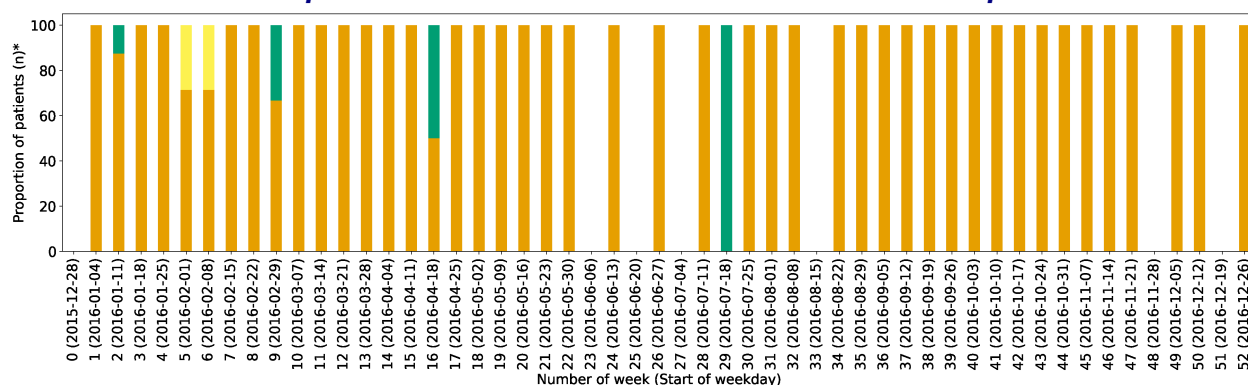
Antibiotic : Gentamicin

Proportion of NA = 0% (0/143)



Antibiotic : Meropenem

Proportion of NA = 0% (0/143)



The figures on this page are designed to help users assess whether patients without AST results (i.e., marked as NA) are distributed at random. In case that patients without AST results for a specific antibiotic are concentrated within a short time period (e.g., during a temporary shortage of the AST discs for that antibiotic), this may result in a cluster signal of infection caused by an AMR profile with NA results for that antibiotic during that period. This phenomenon will suggest that cluster signal (of that AMR profile with NA result) is likely a false-positive cluster signal.

## All specimens: CRAB

### List of profiles

Profile ID	Tigecycline	Minocycline	Gentamicin	Amikacin	Imipenem	Meropenem	Doripenem	Colistin	Piperacillin/tazobactam	Cefoperazone/sulbactam	No. of patients
CRAB_ALL_2	-	-	R	-	-	R	-	-	-	-	131
CRAB_ALL_1	-	-	R	-	-	I	-	-	-	-	4
CRAB_ALL_3	-	-	S	-	-	R	-	-	-	-	4
CRAB_ALL_4	-	-	S	-	-	S	-	-	-	-	4
Total	-	-	-	-	-	-	-	-	-	-	143

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. **The first AMR isolate** per patient per evaluation period is included in AMASS-SaTScan analysis. R, I and S represent the number of isolates that are resistant, intermediate and susceptible to the antibiotic, respectively. NA (Not Available) represents the number of isolates for which AST data is not available against the antibiotic. The hyphen ("-") is used to indicate that the antibiotic is not marked as "P" (Pass) and is excluded from the list of profiles.

## All specimens: CRAB

### List of ward

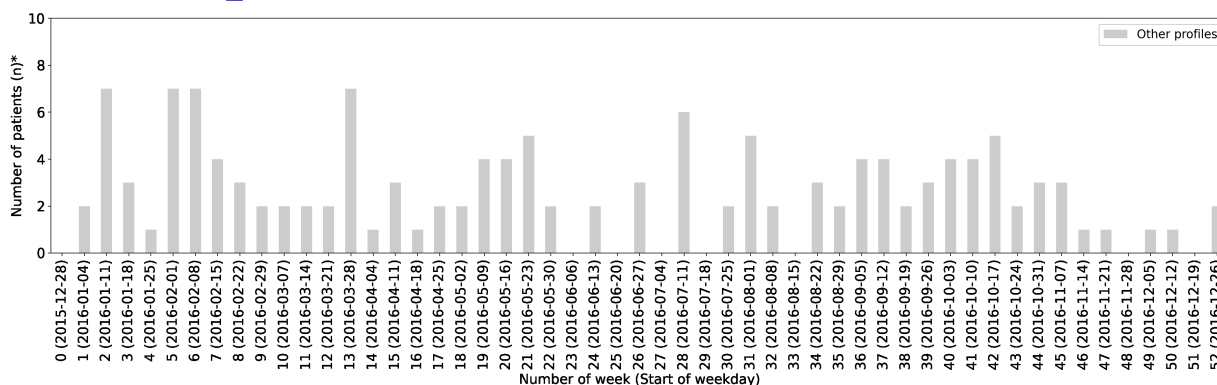
Ward ID	No. of patients
ward_004	139
ward_001	4
<b>Total</b>	<b>143</b>

**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization.

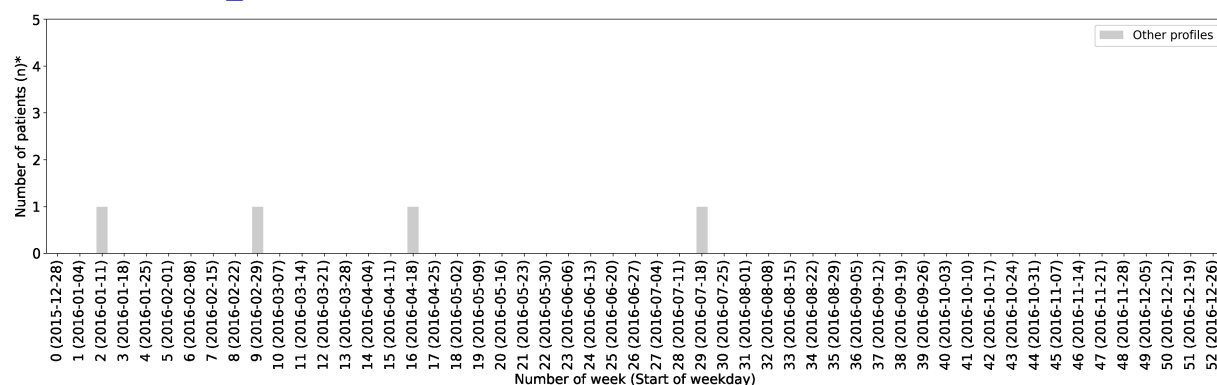
## All specimens: CRAB

Display of patients with a clinical specimen culture positive for CRAB in each ward over time

Ward : ward\_004



Ward : ward\_001



**\*Please note that the patients included in the analysis for cluster signals (Annex C) were not exactly similar to those included in the analysis for the AMR surveillance report (Section 2-6).** AMASS-SaTScan (Annex C) included patients who had a specimen culture positive for the AMR pathogen of interest, with the first culture-positive specimen collected after the first two calendar days of hospitalization. Bar graphs show patients with a clinical specimen culture positive with the organism with a profile identified in at least one cluster signal. Gray bars (Other profiles) represents patients with blood culture positive for organisms with profiles that were not included in any cluster signals. Only wards with a cluster signal identified or having the top three highest number of patients are displayed.

## Table S1: List of ward names in your microbiology data file

### List of ward

Ward ID	Ward name
ward_001	male medical ward 1
ward_002	ICU med.
ward_003	male medical ward 2
ward_004	female medical ward
ward_005	female surgery ward
ward_006	male medical ward 3

\* In case that there are ward names in your hospital admission data file, this list and the analysis will prioritize the ward names in the microbiology data file over the ones in hospital admission data file.