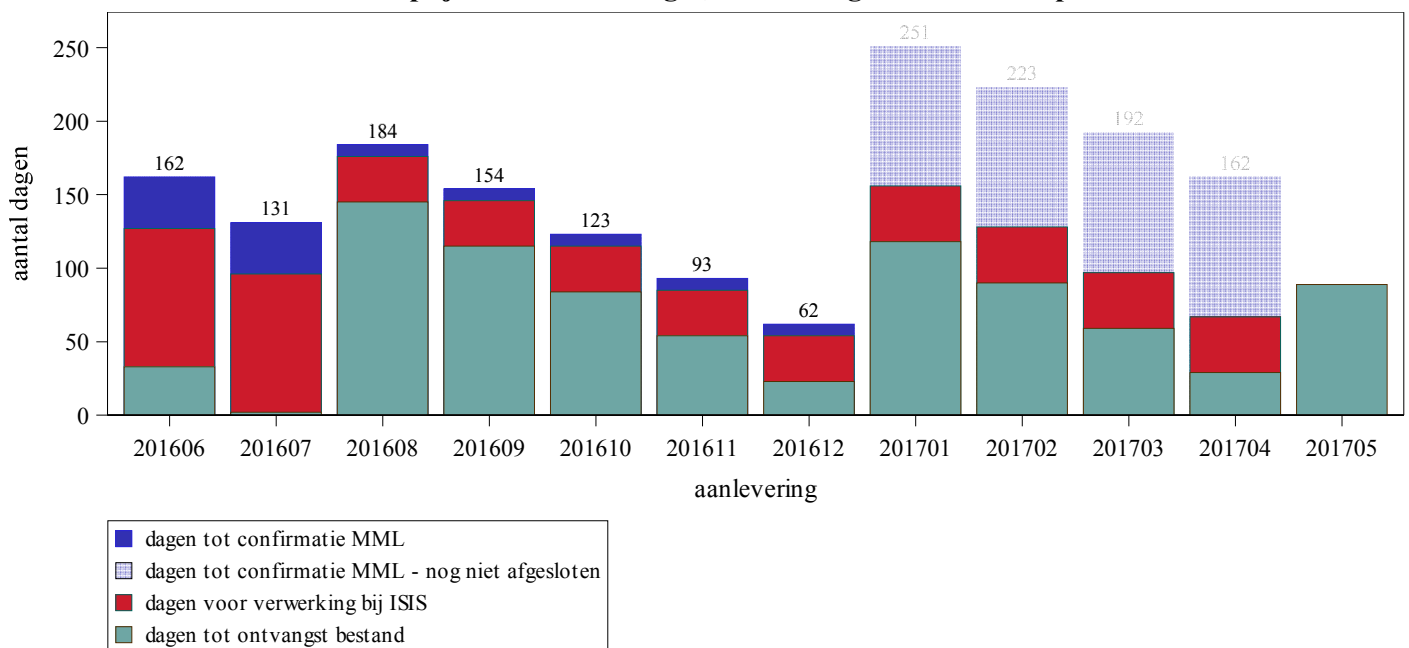


## Overzicht Aanlevering

|                                 |            |
|---------------------------------|------------|
| Laboratorium code               | ISIS005    |
| Maand - Jaar                    | Mei-2017   |
| Aanlever ID                     | 11010      |
| Datum ingelezen                 | 31/08/2017 |
| Aantal patiënten                | 1008       |
| Aantal isolaten                 | 1768       |
| Aantal isolaten ISIS organismen | 1650       |

### Doorlooptijden voor ontvangst, verzending en reactie lab per bestand



### Doorlooptijden laatste 12 maanden

| Periode | Ontvangen ISIS-AR | dgn | Rapport naar Lab | dgn | Reactie Lab | dgn |
|---------|-------------------|-----|------------------|-----|-------------|-----|
| 201606  | 02/08/2016        | 33  | 04/11/2016       | 94  | 09/12/2016  | 35  |
| 201607  | 02/08/2016        | 2   | 04/11/2016       | 94  | 09/12/2016  | 35  |
| 201608  | 23/01/2017        | 145 | 23/02/2017       | 31  | 03/03/2017  | 8   |
| 201609  | 23/01/2017        | 115 | 23/02/2017       | 31  | 03/03/2017  | 8   |
| 201610  | 23/01/2017        | 84  | 23/02/2017       | 31  | 03/03/2017  | 8   |
| 201611  | 23/01/2017        | 54  | 23/02/2017       | 31  | 03/03/2017  | 8   |
| 201612  | 23/01/2017        | 23  | 23/02/2017       | 31  | 03/03/2017  | 8   |
| 201701  | 29/05/2017        | 118 | 06/07/2017       | 38  | .           | 0   |
| 201702  | 29/05/2017        | 90  | 06/07/2017       | 38  | .           | 0   |
| 201703  | 29/05/2017        | 59  | 06/07/2017       | 38  | .           | 0   |
| 201704  | 29/05/2017        | 29  | 06/07/2017       | 38  | .           | 0   |
| 201705  | 28/08/2017        | 89  | .                | .   | .           | 0   |

### Enterobacteriaceae, carbapenemase screen-positief volgens de NVMM richtlijn

|            |                       |             |   | Imipenem |      |       |         | Meropenem |      |       |         | 3e gen<br>cefalo-<br>sporines | Carbapenemases   |                  |
|------------|-----------------------|-------------|---|----------|------|-------|---------|-----------|------|-------|---------|-------------------------------|------------------|------------------|
| Patiënt    | Organisme             | Monster     | # | Auto     | Disk | etest | uitslag | Auto      | Disk | etest | Uitslag | Uitslag                       | feno-<br>typisch | geno-<br>typisch |
| 1594255548 | Klebsiella oxytoca    | 17E044109-1 | 1 | 0.5      |      |       | S       | 1         |      |       | S       | S                             | Leeg             | leeg             |
| 2031490962 | Klebsiella pneumoniae | 17E049127-1 | 4 | 1        |      |       | S       | 1         |      | 0.5   | S       | R                             | Leeg             | leeg             |
| 5822643256 | Enterobacter cloacae  | 17E055457-1 | 1 | 2        |      |       | S       | 1         |      |       | S       | R                             | Leeg             | leeg             |
| 4701728221 | Enterobacter cloacae  | 17E059834-1 | 1 | 1        |      |       | S       | 0.5       |      |       | S       | R                             | Leeg             | leeg             |

## Totaal aantal patiënten en isolaten per pathoog, isolaten onderverdeeld naar materiaal

| Organisme                                | #pat | #iso | Bloed | Urine | Respiratoir | Overige |
|--|------|------|-------|-------|-------------|---------|
| Candida species n.n.g.                   | 5    | 8    | 2     | 2     | 2           | 2       |
| Candida albicans                         | 95   | 120  | 1     | 13    | 71          | 35      |
| Candida species, ex. C. albicans         | 38   | 50   | 0     | 15    | 25          | 10      |
| Escherichia coli                         | 399  | 475  | 39    | 344   | 31          | 61      |
| Klebsiella pneumoniae                    | 61   | 85   | 12    | 55    | 12          | 6       |
| Klebsiella oxytoca                       | 29   | 32   | 5     | 15    | 5           | 7       |
| Enterobacter cloacae complex             | 23   | 29   | 0     | 8     | 4           | 17      |
| Enterobacter aerogenes                   | 7    | 7    | 0     | 4     | 3           | 0       |
| Citrobacter freundii complex             | 9    | 11   | 0     | 7     | 2           | 2       |
| Citrobacter koseri/diversus              | 17   | 24   | 1     | 13    | 6           | 4       |
| Serratia marcescens                      | 7    | 11   | 2     | 3     | 3           | 3       |
| Serratia liquefaciens                    | 1    | 1    | 0     | 1     | 0           | 0       |
| Morganella morganii                      | 8    | 9    | 0     | 6     | 1           | 2       |
| Pantoea species                          | 4    | 4    | 0     | 1     | 0           | 3       |
| Proteus mirabilis                        | 53   | 64   | 1     | 42    | 11          | 10      |
| Proteus vulgaris complex                 | 1    | 1    | 0     | 1     | 0           | 0       |
| Salmonella groep B                       | 1    | 2    | 0     | 0     | 0           | 2       |
| Salmonella groep C1                      | 1    | 1    | 0     | 0     | 0           | 1       |
| Hafnia alvei                             | 2    | 3    | 0     | 0     | 0           | 3       |
| Providencia rettgeri                     | 1    | 1    | 0     | 1     | 0           | 0       |
| Providencia stuartii                     | 1    | 1    | 0     | 0     | 0           | 1       |
| Bacteroides fragilis complex             | 5    | 6    | 2     | 0     | 0           | 4       |
| Acinetobacter calcoaceticus/baumannii    | 3    | 5    | 2     | 0     | 0           | 3       |
| Acinetobacter spp                        | 5    | 6    | 0     | 1     | 0           | 5       |
| Pseudomonas aeruginosa                   | 52   | 73   | 3     | 31    | 18          | 21      |
| Pseudomonas spp. non-aeruginosa          | 2    | 2    | 0     | 0     | 0           | 2       |
| Stenotrophomonas maltophilia             | 2    | 2    | 0     | 0     | 1           | 1       |
| Staphylococcus aureus                    | 149  | 239  | 27    | 18    | 46          | 148     |
| Staphylococcus epidermidis               | 32   | 48   | 13    | 4     | 0           | 31      |
| Staphylococcus lugdunensis               | 2    | 2    | 0     | 0     | 0           | 2       |
| Staphylococcus saprophyticus             | 3    | 3    | 0     | 3     | 0           | 0       |
| CNS nader geïdentificeerd                | 18   | 24   | 8     | 0     | 0           | 16      |
| Enterococcus faecalis                    | 54   | 65   | 3     | 44    | 1           | 17      |
| Enterococcus faecium                     | 13   | 15   | 0     | 8     | 0           | 7       |
| Enterococcus spp                         | 1    | 1    | 0     | 0     | 0           | 1       |
| Streptococcus pneumoniae                 | 18   | 24   | 5     | 0     | 13          | 6       |
| Groep A $\beta$ -haemolytic streptococci | 17   | 22   | 0     | 0     | 2           | 20      |
| Groep B $\beta$ -haemolytic streptococci | 46   | 51   | 2     | 13    | 1           | 35      |
| Groep C $\beta$ -haemolytic streptococci | 18   | 23   | 1     | 7     | 1           | 14      |
| Streptococcus mitis/oralis               | 6    | 9    | 1     | 0     | 0           | 8       |
| Listeria monocytogenes                   | 1    | 2    | 2     | 0     | 0           | 0       |
| Campylobacter jejuni                     | 5    | 5    | 0     | 0     | 0           | 5       |
| Haemophilus influenzae                   | 48   | 57   | 0     | 0     | 54          | 3       |
| Mycobacterium tuberculosis               | 2    | 2    | 0     | 0     | 2           | 0       |

| <b>Organisme</b>      | <b>#pat</b> | <b>#iso</b> | <b>Bloed</b> | <b>Urine</b> | <b>Respiratoir</b> | <b>Overige</b> |
|-----------------------|-------------|-------------|--------------|--------------|--------------------|----------------|
| Moraxella catarrhalis | 13          | 15          | 0            | 0            | 14                 | 1              |

### Totaal aantal patiënten en isolaten per materiaal

| Materiaal                                | RIVM Code | #Patiënten | #Isolaten |
|--|-----------|------------|-----------|
| Bloed                                    | 1         | 66         | 132       |
| Liquor                                   | 2         | 11         | 18        |
| Urine (niet gespecificeerd)              | 3         | 538        | 665       |
| Urine                                    | 3a        | 0          | 0         |
| Catheter urine                           | 3b        | 0          | 0         |
| Genitaal                                 | 4         | 69         | 85        |
| Respiratoir (niet gespecificeerd)        | 5         | 0          | 0         |
| Respiratoir (Lage Luchtwegen)            | 5a        | 150        | 306       |
| Respiratoir (Hoge Luchtwegen)            | 5b        | 22         | 25        |
| Faeces                                   | 6         | 20         | 27        |
| Wond/huid (niet gespecificeerd)          | 7         | 0          | 0         |
| Wond/ulcus                               | 7a        | 49         | 73        |
| Huid                                     | 7b        | 76         | 133       |
| Haar/nagel/huidschilder                  | 7c        | 1          | 1         |
| Pus (niet gespecificeerd)                | 8         | 0          | 0         |
| Pus                                      | 8a        | 4          | 5         |
| Ascites                                  | 8b        | 0          | 0         |
| Steriel weefsel of vocht                 | 8c        | 74         | 156       |
| C.A.P.D.-vloeistof                       | 8d        | 0          | 0         |
| Oog (niet gespecificeerd)                | 8e        | 4          | 4         |
| Oog steriel                              | 8f        | 0          | 0         |
| Oog niet steriel                         | 8g        | 0          | 0         |
| Vruchtwater                              | 8h        | 0          | 0         |
| Onbekende origine/overig                 | 9a        | 0          | 0         |
| Bloedprodukt/plasma/serum                | 9b        | 0          | 0         |
| Catheter punt (vasc)                     | 9c        | 12         | 20        |
| Drain punt (chir)                        | 9d        | 0          | 0         |
| Drain punt (neurochir)                   | 9e        | 0          | 0         |
| Maaginhoud                               | 9f        | 0          | 0         |
| Urinewegcatheter                         | 9g        | 0          | 0         |
| Niet humaan implantatie-materiaal n.n.o. | 9h        | 0          | 0         |
| C.A.P.D.-catheter                        | 9i        | 0          | 0         |
| Niet klinisch                            | 9x        | 0          | 0         |
| Slijmvlies Maag / Darm                   | 10        | 0          | 0         |

### Totaal aantal patiënten en isolaten per type instelling

| Type Instelling          | #patiënten | #Isolaten |
|--------------------------|------------|-----------|
| Huisarts                 | 307        | 345       |
| Dagbehandeling           | 9          | 10        |
| Kliniek                  | 308        | 739       |
| Spoedeisende Hulp        | 99         | 158       |
| Openbare Gezondheidszorg | 1          | 1         |
| Overige                  | 14         | 17        |
| Polikliniek              | 222        | 289       |
| Revalidatiecentrum       | 3          | 4         |
| Verpleeg/verzorgingshuis | 6          | 7         |
| Verpleeghuis             | 43         | 80        |

### Aantal patiënten en isolaten per afdeling in kliniek of dagbehandeling

| Afdeling                                | #Patiënten | #Isolaten |
|---|------------|-----------|
| Algemene Afdeling                       | 114        | 235       |
| Cardiologie                             | 9          | 11        |
| Chirurgie                               | 21         | 46        |
| Gastroenterologie                       | 9          | 17        |
| ICU niet gespecificeerd                 | 61         | 248       |
| Interne Geneeskunde niet gespecificeerd | 4          | 4         |
| Kindergeneeskunde                       | 5          | 7         |
| Niet aangeleverd                        | 4          | 5         |
| Oncologie                               | 10         | 20        |
| Psychiatrie                             | 1          | 1         |
| Urologie                                | 5          | 6         |
| Verloskunde/Obstetrie                   | 9          | 16        |
| Verpleegafdeling                        | 90         | 133       |

### Overzicht van het aantal screenings-, inventarisatie- en klinische isolaten

|  | #pat | #Iso | Klinisch | Invent. klinisch | Inventarisatie | Screening | Onbekend |
|--|------|------|----------|------------------|----------------|-----------|----------|
| MRSA   | 8    | 24   | 19       | 0                | 0              | 5         | 0        |
| Enterobacteriaceae met ESBL                  | 22   | 28   | 28       | 0                | 0              | 0         | 0        |
| Aminoglycoside resistente enterobacteriaceae | 37   | 46   | 45       | 0                | 0              | 1         | 0        |
| Penicilline resistente pneumokokken          | 0    | 0    | 0        | 0                | 0              | 0         | 0        |
| Groep a $\beta$ -haemolytische streptokokken | 17   | 22   | 22       | 0                | 0              | 0         | 0        |

**E. coli gevoeliheidsbepalingen**

| Antibioticum               | #patienten | #Isolaten | % S  | % I | % R  |
|----------------------------|------------|-----------|------|-----|------|
| amoxicilline               | 399        | 475       | 53%  | 0%  | 47%  |
| ampicilline                | 399        | 475       | 53%  | 0%  | 47%  |
| piperacilline              | 399        | 475       | 55%  | 2%  | 43%  |
| amoxicilline/clavulaanzuur | 399        | 475       | 68%  | 0%  | 32%  |
| piperacilline/tazobactam   | 399        | 475       | 96%  | 0%  | 4%   |
| cefoxitine                 | 399        | 475       | 96%  | 0%  | 4%   |
| cefuroxim                  | 399        | 475       | 89%  | 0%  | 11%  |
| cefotaxim                  | 399        | 475       | 95%  | 1%  | 4%   |
| ceftazidim                 | 399        | 475       | 94%  | 3%  | 3%   |
| ceftriaxon                 | 399        | 475       | 95%  | 1%  | 4%   |
| cefepime                   | 399        | 475       | 95%  | 3%  | 3%   |
| ertapenem                  | 399        | 475       | 99%  | 1%  | 0%   |
| imipenem                   | 399        | 475       | 100% | 0%  | 0%   |
| meropenem                  | 399        | 475       | 100% | 0%  | 0%   |
| ciprofloxacine             | 399        | 475       | 80%  | 4%  | 15%  |
| levofloxacine              | 399        | 475       | 82%  | 4%  | 15%  |
| moxifloxacine              | 63         | 72        | 0%   | 0%  | 100% |
| norfloxacine               | 399        | 475       | 76%  | 8%  | 16%  |
| amikacine                  | 399        | 475       | 100% | 0%  | 0%   |
| gentamicine                | 399        | 475       | 94%  | 2%  | 5%   |
| tobramycine                | 399        | 475       | 93%  | 1%  | 5%   |
| colistine                  | 399        | 475       | 99%  | 0%  | 1%   |
| cotrimoxazole              | 399        | 475       | 75%  | 0%  | 25%  |
| trimethoprim               | 399        | 475       | 53%  | 0%  | 47%  |
| tigecycline                | 399        | 475       | 99%  | 0%  | 0%   |
| fosfomycine                | 399        | 475       | 72%  | 0%  | 28%  |
| nitrofurantoïne            | 399        | 475       | 69%  | 0%  | 31%  |

*De berekening berust op alle isolaten van een patiënt en is gebaseerd op deze maandaanlevering, daarom alleen bedoeld als terugkoppeling*

**Relatie tussen gevoeligheid ceftriaxon/cefotaxim en ESBL confirmatie**

| Organisme             | ceftriaxon cefotaxim | #pat | #Iso | ESBL + | ESBL - |
|-----------------------|----------------------|------|------|--------|--------|
| Escherichia coli      | S                    | 381  | 451  | 0      | 9      |
|                       | I                    | 1    | 3    | 0      | 3      |
|                       | R                    | 19   | 21   | 19     | 2      |
| Klebsiella pneumoniae | S                    | 54   | 77   | 0      | 1      |
|                       | I                    | 1    | 1    | 0      | 1      |
|                       | R                    | 6    | 7    | 5      | 2      |
| Klebsiella oxytosa    | S                    | 26   | 28   | 0      | 0      |
|                       | I                    | 1    | 1    | 0      | 1      |
|                       | R                    | 2    | 3    | 0      | 3      |

**Relatie tussen gevoeligheid ceftazidim en ESBL confirmatie**

| Organisme             | ceftazidim | #pat | #Iso | ESBL + | ESBL - |
|-----------------------|------------|------|------|--------|--------|
| Escherichia coli      | S          | 376  | 446  | 2      | 2      |
|                       | I          | 14   | 16   | 7      | 9      |
|                       | R          | 11   | 13   | 10     | 3      |
| Klebsiella pneumoniae | S          | 55   | 78   | 0      | 2      |
|                       | I          | 2    | 2    | 1      | 1      |
|                       | R          | 4    | 5    | 4      | 1      |
| Klebsiella oxytosa    | S          | 29   | 32   | 0      | 4      |
|                       | I          | 0    | 0    | 0      | 0      |
|                       | R          | 0    | 0    | 0      | 0      |



**S. aureus gevoeligheidsbepalingen**

| Antibioticum                | #patienten | #Isolaten | % S  | % I | % R  |
|-----------------------------|------------|-----------|------|-----|------|
| doripenem                   | 149        | 239       | 90%  | 0%  | 10%  |
| penicilline                 | 149        | 239       | 33%  | 0%  | 67%  |
| flucloxacilline             | 149        | 239       | 90%  | 0%  | 10%  |
| cloxacilline                | 149        | 239       | 90%  | 0%  | 10%  |
| dicloxacilline              | 149        | 239       | 90%  | 0%  | 10%  |
| oxacilline                  | 149        | 239       | 90%  | 0%  | 10%  |
| amoxicilline                | 149        | 239       | 0%   | 0%  | 100% |
| ampicilline                 | 149        | 239       | 0%   | 0%  | 100% |
| ticarcilline                | 149        | 239       | 0%   | 0%  | 100% |
| piperacilline               | 149        | 239       | 0%   | 0%  | 100% |
| amoxicilline/clavulaanzuur  | 149        | 239       | 90%  | 0%  | 10%  |
| piperacilline/tazobactam    | 149        | 239       | 90%  | 0%  | 10%  |
| cefalexine                  | 149        | 239       | 90%  | 0%  | 10%  |
| cefadroxil                  | 149        | 239       | 90%  | 0%  | 10%  |
| cefazoline                  | 149        | 239       | 90%  | 0%  | 10%  |
| cefaclor                    | 149        | 239       | 90%  | 0%  | 10%  |
| cefoxitine                  | 149        | 238       | 90%  | 0%  | 10%  |
| cefuroxim                   | 149        | 239       | 90%  | 0%  | 10%  |
| cefotaxim                   | 149        | 239       | 90%  | 0%  | 10%  |
| cefpodoxim                  | 149        | 239       | 90%  | 0%  | 10%  |
| ceftriaxon                  | 149        | 239       | 90%  | 0%  | 10%  |
| cefepime                    | 149        | 239       | 90%  | 0%  | 10%  |
| ceftaroline                 | 149        | 238       | 100% | 0%  | 0%   |
| ertapenem                   | 149        | 239       | 90%  | 0%  | 10%  |
| imipenem                    | 149        | 239       | 99%  | 0%  | 1%   |
| ciprofloxacin               | 149        | 239       | 95%  | 0%  | 5%   |
| levofloxacin                | 149        | 239       | 96%  | 0%  | 4%   |
| moxifloxacin                | 149        | 239       | 96%  | 0%  | 4%   |
| ofloxacin                   | 5          | 10        | 0%   | 0%  | 100% |
| teicoplanine                | 149        | 239       | 100% | 0%  | 0%   |
| vancomycine                 | 149        | 239       | 100% | 0%  | 0%   |
| azitromycine                | 149        | 239       | 85%  | 0%  | 15%  |
| claritromycine              | 149        | 239       | 85%  | 0%  | 15%  |
| erytromycine                | 149        | 239       | 85%  | 0%  | 15%  |
| roxitromycine               | 149        | 239       | 85%  | 0%  | 15%  |
| clindamycine                | 149        | 239       | 97%  | 0%  | 3%   |
| amikacine                   | 149        | 239       | 93%  | 0%  | 7%   |
| gentamicine                 | 149        | 239       | 97%  | 0%  | 3%   |
| kanamycine                  | 149        | 239       | 93%  | 0%  | 7%   |
| tobramycine                 | 149        | 239       | 96%  | 0%  | 4%   |
| quinupristine/dalfopristine | 149        | 239       | 100% | 0%  | 0%   |
| colistine                   | 4          | 6         | 0%   | 0%  | 100% |
| cotrimoxazole               | 149        | 238       | 93%  | 0%  | 7%   |
| trimethoprim                | 149        | 239       | 63%  | 28% | 9%   |

| Antibioticum    | #patienten | #Isolaten | % S  | % I | % R  |
|-----------------|------------|-----------|------|-----|------|
| doxycycline     | 149        | 239       | 95%  | 0%  | 5%   |
| tetracycline    | 149        | 239       | 95%  | 0%  | 5%   |
| tigecycline     | 149        | 239       | 100% | 0%  | 0%   |
| rifampicine     | 149        | 239       | 98%  | 0%  | 2%   |
| daptomycine     | 149        | 239       | 96%  | 0%  | 4%   |
| fosfomycine     | 149        | 239       | 0%   | 0%  | 100% |
| linezolid       | 148        | 237       | 100% | 0%  | 0%   |
| nitrofurantoin  | 149        | 239       | 0%   | 0%  | 100% |
| mupirocine      | 149        | 239       | 100% | 0%  | 0%   |
| fusidinezuur    | 149        | 239       | 93%  | 0%  | 7%   |
| chlooramfenicol | 148        | 238       | 84%  | 0%  | 16%  |

*De berekening berust op alle isolaten van een patiënt en is gebaseerd op deze maandaanlevering, daarom alleen bedoeld als terugkoppeling*

### Confrmatie MRSA screen positief (PCR mecA of PBP2a agglutinatie)

| S. aureus patiënten | S. aureus isolaten | MRSA SP patiënten | MRSA SP isolaten | Pos geconfirmeerd | Neg geconfirmeerd |
|---------------------|--------------------|-------------------|------------------|-------------------|-------------------|
| 149                 | 239                | 8                 | 24               | 15                | 0                 |

*MRSA SP = R voor Cefoxitin of Methiciline (equivalent)*

**Gevoeligheid van Candida albicans**

| <b>Antibioticum</b> | <b>#patienten</b> | <b>#Isolaten</b> | <b>% S</b> | <b>% I</b> | <b>% R</b> |
|---------------------|-------------------|------------------|------------|------------|------------|
| 5-fluorocytosine    | 95                | 120              | 100%       | 0%         | 0%         |
| amfotericine B      | 95                | 120              | 100%       | 0%         | 0%         |
| anidulafungin       | 95                | 120              | 96%        | 0%         | 4%         |
| casprofungin        | 95                | 120              | 100%       | 0%         | 0%         |
| fluconazol          | 95                | 120              | 100%       | 0%         | 0%         |
| itraconazol         | 95                | 120              | 99%        | 0%         | 1%         |
| micafungin          | 95                | 120              | 100%       | 0%         | 0%         |
| posaconazol         | 95                | 120              | 98%        | 0%         | 2%         |
| voriconazol         | 95                | 120              | 100%       | 0%         | 0%         |

**Gevoeligheid van Candida glabrata**

| <b>Antibioticum</b> | <b>#patienten</b> | <b>#Isolaten</b> | <b>% S</b> | <b>% I</b> | <b>% R</b> |
|---------------------|-------------------|------------------|------------|------------|------------|
| 5-fluorocytosine    | 27                | 34               | 97%        | 3%         | 0%         |
| amfotericine B      | 27                | 34               | 100%       | 0%         | 0%         |
| anidulafungin       | 27                | 34               | 100%       | 0%         | 0%         |
| casprofungin        | 27                | 34               | 100%       | 0%         | 0%         |
| fluconazol          | 27                | 34               | 97%        | 0%         | 3%         |
| itraconazol         | 27                | 33               | 30%        | 52%        | 18%        |
| micafungin          | 27                | 34               | 100%       | 0%         | 0%         |
| posaconazol         | 27                | 34               | 0%         | 0%         | 100%       |
| voriconazol         | 27                | 34               | 3%         | 0%         | 97%        |