

## PCR-/NAT MRSA / cMRSA (RV 539) Nov 2025



**Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.**

*Sample composition and expected results.*

| Proben Nr.     | Erwartet / expected | Probenzusammensetzung / Sample composition                                                                                       |
|----------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 539A 251014 01 | Ø                   | 62 / 72, 73<br>MSSA + CoNS ( <i>S. aureus</i> , <i>S. epidermidis</i> oxa <sup>R</sup> , PVL-neg)<br>(~5x10 <sup>5</sup> CFU/mL) |
| 539A 251014 02 | ++                  | 61 / 72<br>MRSA ( <i>S. aureus</i> , oxa <sup>R</sup> , PVL-neg) (~ 5x10 <sup>4</sup> CFU/mL)                                    |
| 539A 251014 03 | Ø                   | 62<br><i>Escherichia coli</i> K12                                                                                                |
| 539A 251014 04 | +++                 | 61 / 72<br>MRSA ( <i>S. aureus</i> , oxa <sup>R</sup> , <b>mecC pos</b> , PVL-neg, spa:t10009)<br>(~ 5x10 <sup>5</sup> CFU/mL)   |

**Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.**

*Absolute numbers of reported individual results.*

| <i>n</i> = 230           | Proben Nr. (Sample no.) |     |     |     | Inhibition |     |     |     |
|--------------------------|-------------------------|-----|-----|-----|------------|-----|-----|-----|
| Befund<br>Result         | 01                      | 02  | 03  | 04  | 01         | 02  | 03  | 04  |
| Positiv                  | 19                      | 225 | 1   | 197 | n.d.       | 5   | 5   | 5   |
| Negativ                  | 208                     | 4   | 229 | 33  | nein<br>no | 225 | 225 | 225 |
| Fraglich<br>Questionable | 3                       | 1   | 0   | 0   | ja<br>yes  | 0   | 0   | 0   |

**Tabelle 3: Häufigkeit richtig positiver und richtig negativer NAT-Befunde bei Anwenden verschiedener Methoden.**

*Absolute numbers and relative frequency of reported true positive and true negative results among various NAT methods.*

| NAT-Methode<br>[Code] (total number) | NAT richtig positiv<br>True positive results |     |                     |     | NAT richtig negativ<br>True negative results |     |                     |     |
|--------------------------------------|----------------------------------------------|-----|---------------------|-----|----------------------------------------------|-----|---------------------|-----|
|                                      | 02                                           |     | 04                  |     | 01                                           |     | 03                  |     |
|                                      | Absolut<br>Absolute                          | %   | Absolut<br>Absolute | %   | Absolut<br>Absolute                          | %   | Absolut<br>Absolute | %   |
| Amplex eazyplex MRSA (n = 2)         | 2                                            | 100 | 2                   | 100 | 0                                            | 0   | 2                   | 100 |
| Amplex eazyplex MRSA plus (n = 3)    | 2                                            | 67  | 3                   | 100 | 0 <sup>§</sup>                               | 33  | 3                   | 100 |
| BD MAX / BD GeneOhm MRSA (n = 39)    | 39                                           | 100 | 39                  | 100 | 37                                           | 95  | 39                  | 100 |
| Bruker-HAIN FluoroType MRSA (n = 10) | 10                                           | 100 | 10                  | 100 | 10                                           | 100 | 10                  | 100 |
| Bruker-HAIN GenoType MRSA (n = 6)    | 4 <sup>§</sup>                               | 80  | 6                   | 100 | 2 <sup>§</sup>                               | 40  | 6                   | 100 |
| Cepheid Xpert MRSA (n = 118)         | 116                                          | 98  | 90                  | 76  | 114 <sup>§</sup>                             | 97  | 117                 | 99  |
| HOLOGIC Panther Fusion MRSA (n = 6)  | 6                                            | 100 | 6                   | 100 | 4                                            | 67  | 6                   | 100 |

|                                       |    |     |    |     |    |     |    |     |
|---------------------------------------|----|-----|----|-----|----|-----|----|-----|
| Immundiagnostik MutaPLEX MRSA (n = 4) | 4  | 100 | 4  | 100 | 4  | 100 | 4  | 100 |
| MIKROGEN alphaCube MRSA (n = 1)       | 1  | 100 | 1  | 100 | 1  | 100 | 1  | 100 |
| MIKROGEN alphaCube PVL-MRSA (n = 8)   | 8  | 100 | 8  | 100 | 8  | 100 | 8  | 100 |
| Cobas 5800, 6800 or 8800 MRSA (n = 2) | 2  | 100 | 2  | 100 | 2  | 100 | 2  | 100 |
| r-Biopharm RIDAGENE MRSA (n = 16)     | 16 | 100 | 16 | 100 | 15 | 94  | 16 | 100 |
| In house PCR assay (n = 11)           | 11 | 100 | 7  | 64  | 7  | 64  | 11 | 100 |
| Other commercial tests (n = 4)        | 4  | 100 | 3  | 75  | 4  | 100 | 4  | 100 |

§ Fraglich Due to reporting questionable results, the number of true results has been reduced.

#### Comments:

1. The following tests are listed under "Other commercial tests": r-Biopharm / BOSCH Vivalytic MRSA/SA (2x), BD MAX MRSA-XT (1x) and Bioexen MRSA qPCR (1x).
2. Bei Teilnehmern, die die Verwendung eines Testsystems aufgeführt haben, das auf einer getrennten Erfassung von *S. aureus*-spezifischen Markern und dem *mecA* Gen beruht, wurden die als "fraglich" klassifizierten Ergebnisse bei der Erteilung der Zertifikate als "richtig" bewertet.  
*For participants who indicated the use of assay concepts for the independent detection of the mecA gene and a S. aureus species marker gene, "questionable" results were accepted in the course of issuing the official QC certificates.*