

**PCR-/NAT MRSA / cMRSA
 (RV 539) November 2012**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.
Sample composition and expected results.

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
1225391	++	61 / 72	LA-MRSA (<i>S. aureus</i> , oxa ^R , PVL-neg) (~ 10 ⁵ CFU/mL)
1225392	∅	62 / 72	MSSA (SCCmec pos, mecA neg, spa:t 310) (~10 ⁵ CFU/mL)
1225393	∅	62 / 71,72	cMSSA (<i>S. aureus</i> , oxa ^S , PVL-pos) (~ 10 ⁵ CFU/mL)
1225394	∅	62	<i>Escherichia coli</i> K12

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.
Absolute numbers of reported individual results.

<i>n = 210</i>	<i>Probennummer (Sample no.)</i>					<i>Inhibition</i>			
	1225391	1225392	1225393	1225394		1225391	1225392	1225393	1225394
Befund <i>Result</i>									
Positiv	204	145	3	2	n.d.	0	0	0	0
Negativ	4	63	207 ¹⁾	207	nein <i>no</i>	210	210	210	209
Fraglich <i>Questionable</i>	2	2	0	1	ja <i>yes</i>	0	0	0	1

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 [Code] (total number *)	NAT richtig positiv <i>True positive results</i>			NAT richtig negativ <i>True negative results</i>		
	Absolut <i>Absolute</i>	Relativ <i>Relative</i>	%	Absolut <i>Absolute</i>	Relativ <i>Relative</i>	%
BD GeneOhm MRSA [20] (n=31)	31	31 / 31	100	65	65 / 93	70
GenoType MRSA Direct [21] (n=29)	29	29 / 29	100	60	60 / 87	69
Hyplex <i>StaphyloResist</i> [22] (n=4)	4	4 / 4	100	12	12 / 12	100
LightCycler Kits [23] (n=1)	1	1 / 1	100	3	3 / 3	100
GeneXpert (Cepheid) [24] (n=55)	55	55 / 55	100	123	123 / 163 [§]	75
LC MRSA Advanced (Roche) [25] (n=25)	24	24 / 25	96	63	63 / 74 [§]	85
LightMix MRSA (TIB Molbiol) [26] (n=1)	1	1 / 1	100	3	3 / 3	100
Commercial assay kit [27] (n=23)	23	23 / 23	100	58	58 / 69	84
<i>In house</i> PCR assay [28] (n=42)	37	37 / 40 [§]	93	106	106 / 125 [§]	85
Andere / k.A. / other [29] (n=15)	15	15 / 15	100	35	35 / 45	78

* Durch Mehrfachnennung oder fehlende Angabe kann die absolute Zahl der Ergebnisse (Tab. 2) von der Anzahl der Teilnehmer abweichen.
 Due to reporting results of multiple assay systems or missing specifications, the effective numbers are not correlating with the number of participants.

§ Due to reporting questionable results, the number of true results (denominator in the „relative“ column) has been reduced.

Comments: ¹⁾ A dedicated cMRSA identification (*lukFS* gene detection) was performed by 55 laboratories. All reported results were correct.