

**PCR-/NAT MRSA / cMRSA
 (RV 539) November 2014**



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

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
1425391	+++	61 / 72	MRSA (<i>S. aureus</i> , oxa ^S , mecA pos., PVL neg., spa:t1613) Genotype: MRSA; Phenotype: MSSA (~ 1x10 ⁵ CFU/mL)
1425392	+++	61 / 71,72	cMRSA (<i>S. aureus</i> , oxa ^R , PVL-pos) (~1x10 ⁵ CFU/mL)
1425393	Ø	62 / 73	CoNS (<i>S. epidermidis</i> , oxa ^R) (~5x10 ⁵ CFU/mL)
1425394	Ø	62 / 73	CoNS (<i>S. epidermidis</i> , oxa ^S) (~1x10 ⁵ CFU/mL)

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

<i>n = 279</i>	<i>Probennummer (Sample no.)</i>				<i>Inhibition</i>				
	1425391	1425392	1425393	1425394	1425391	1425392	1425393	1425394	
Befund <i>Result</i>									
Positiv	276	277 ¹⁾	3	1	n.d.	1	1	1	1
Negativ	2	2	276	277	nein <i>no</i>	278	278	278	277
Fraglich <i>Questionable</i>	1	0	0	1	ja <i>yes</i>	0	0	0	1

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

Absolute numbers and relative frequency of 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 MAX / GeneOhm MRSA [20] (n=34)	68	68 / 68	100	68	68 / 68	100
GT MRSA Direct / GQ MRSA [21] (n=27)	53	53 / 54	98	53	53 / 54	98
RIDAGENE MRSA [22] (n=19)	38	38 / 38	100	37	37 / 38	97
Cepheid Xpert / GeneXpert [24] (n=115)	228	228 / 230	99	227	227 / 229 [§]	99
LC MRSA Advanced (Roche) [25] (n=29)	57	57 / 58	98	58	58 / 58	100
TIB Molbiol LightMix MRSA [26] (n=2)	4	4 / 4	100	4	4 / 4	100
Commercial assay kit [27] (n=28)	55	55 / 56	98	56	56 / 56	100
<i>In house</i> PCR assay [28] (n=30)	59	59 / 59 [§]	100	60	60 / 60	100
Andere / k.A. / other [29] (n=13)	26	26 / 26	100	26	26 / 26	100

* 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 61 laboratories, but obviously only positive results (if observed) were reported. All reported results for cMRSA were correct.