

PCR-/NAT Carbapenemasen (RV 544) Mai 2014



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

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
1415441	+++	61 / 75	<i>E. coli</i> NDM-1 (~ 1x10 ⁷ genome copies/mL)
1415442	+++	61 / 72	<i>E. cloacae</i> VIM-1 (~ 1x10 ⁷ genome copies/mL)
1415443	∅	62	<i>Escherichia coli</i> K12
1315444	+++	61 / 71	<i>K. pneumoniae</i> KPC-3 (~ 1x10 ⁷ genome copies/mL)

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

<i>n = 26</i>	<i>Probennummer (Sample no.)</i>				<i>Inhibition</i>				
	1415441	1415442	1415443	1415444	1415441	1415442	1415443	1415444	
Befund <i>Result</i>									
Positiv	26 ¹⁾	26 ¹⁾	0	23 ¹⁾	n.d.	0	0	0	0
Negativ	0	0	26	3	nein <i>no</i>	26	26	26	26
Fraglich <i>Questionable</i>	0	0	0	0	ja <i>yes</i>	0	0	0	0

Tabelle 3: Häufigkeit richtig positiver und richtig negativer NAT-Befunde bei Anwendern 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>	%
Check MDR Carba test [20] (n=1)	3	3 / 3	100	1	1 / 1	100
Check direct CPE oder MDR [21] (n=4)	12	12 / 12	100	4	4 / 4	100
Hyplex Superbug [22] (n=2)	6	6 / 6	100	2	2 / 2	100
Hyplex Eazyplex [23] (n=1)	3	3 / 3	100	1	1 / 1	100
LightMix (TIB Molbiol) [24] (n=2)	6	6 / 6	100	2	2 / 2	100
Commercial assay / kit [27] (n=3)	8	8 / 9	89	3	3 / 3	100
<i>In house</i> PCR assay [28] (n = 13)	37	37 / 39	95	66	66 / 13	100

Comments: ¹⁾ 22 participants reported dedicated carbapenemase identification (carbapenemase genes). All reported results were correct.