

PCR-/NAT *Borrelia burgdorferi* (RV 535) Mai 2013



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

	<i>Erwartet / expected</i>		<i>Probenzusammensetzung / Sample composition</i>
1315351	+	61	<i>Borrelia garinii</i> OspA Typ3 (~1x10 ⁴ organisms/mL)
1315352	++	61	<i>Borrelia garinii</i> OspA Typ3 (~1x10 ⁵ organisms/mL)
1315353	+++	61	<i>Borrelia garinii</i> OspA Typ3 (~1x10 ⁶ organisms/mL)
1315354	(+)	61	<i>Borrelia garinii</i> OspA Typ3 (~1x10 ³ organisms/mL)

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

<i>n</i> = 119	Probennummer (Sample no.)					Inhibition			
	1315351	1315352	1315353	1315354		1315351	1315352	1315353	1315354
Befund <i>Result</i>									
Positiv	108	112	117	83	n.d.	2	2	2	2
Negativ	10	6	2	33 ¹⁾	nein <i>no</i>	117	117	117	117
Fraglich <i>Questionable</i>	1	1	0	3 ¹⁾	ja <i>yes</i>	0	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 [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>	%
artus <i>Borrelia</i> LC Kit [20] (n = 21)	84	84 / 84	100	0	0 / 0	0
Demeditec GenFlow [21] (n = 9)	33	33 / 36	92	0	0 / 0	0
LightMix <i>Borrelia</i> [22] (n = 4)	12	12 / 16	75	0	0 / 0	0
Other/commercial tests [27] (n = 27)	95	95 / 106 [§]	90	0	0 / 0	0
<i>In house</i> PCR assay [28] (n = 57)	192	192 / 225 [§]	85	0	0 / 0	0
Andere/ k.A. / other [29] (n = 1)	4	4 / 4	100	0	0 / 0	0

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

Comments: ¹⁾ As sample #1315374 contained a very low number of *B. garinii* target organisms, negative PCR results were not rated as “false negative”, but the participants may consider to improve the analytical sensitivity of their corresponding PCR assays.