

PCR-/NAT *Pneumocystis jirovecii*
(RV 560) Mai / Juni 2018



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

| | <i>Erwartet / expected</i> | | <i>Probenzusammensetzung / Sample composition</i> |
|---------|----------------------------|----|--|
| 1815601 | +++ | 61 | <i>Pneumocystis jirovecii</i> (~ 1x10 ⁵ CFU/mL) |
| 1815602 | ++ | 61 | <i>Pneumocystis jirovecii</i> (~ 1x10 ⁴ CFU/mL) |
| 1815603 | + | 61 | <i>Pneumocystis jirovecii</i> (~ 1x10 ³ CFU/mL) |
| 1815604 | ∅ | 62 | <i>Escherichia coli</i> K12 |

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

| <i>n = 105</i> | <i>Probennummer (Sample no.)</i> | | | | <i>Inhibition</i> | | | | |
|--|----------------------------------|----------------|------------------|----------------|-------------------|----------------|----------------|----------------|-----|
| | <i>1815601</i> | <i>1815602</i> | <i>1815603</i> | <i>1815604</i> | <i>1815601</i> | <i>1815602</i> | <i>1815603</i> | <i>1815604</i> | |
| <i>Befund Result</i> | | | | | | | | | |
| Positiv | 104 | 103 | 82 | 1 | n.d. | 0 | 0 | 0 | 0 |
| Negativ | 1 | 2 | 23 ¹⁾ | 103 | nein no | 105 | 105 | 105 | 105 |
| Fraglich <i>Questionable</i> | 0 | 0 | 0 | 1 | ja yes | 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> | | |
|---|--|-----------------------------|----------|--|-----------------------------|----------|
| | <i>Absolut Absolute</i> | <i>Relativ Relative</i> | <i>%</i> | <i>Absolut Absolute</i> | <i>Relativ Relative</i> | <i>%</i> |
| TIB Molbiol LightMix PJ [21] (n = 11) | 32 | 32 / 33 | 97 | 11 | 11 / 11 | 100 |
| r-Biopharm RIDAGENE PJ [22] (n = 25) | 66 | 66 / 75 | 88 | 24 | 24 / 25 | 96 |
| AmpliGnost PJ PCR Kit [23] (n = 7) | 21 | 21 / 21 | 100 | 7 | 7 / 7 | 100 |
| Sacace PJ Real TM [24] (n = 3) | 9 | 9 / 9 | 100 | 3 | 3 / 3 | 100 |
| Commercial assay / kit [27] (n = 21) | 60 | 60 / 63 | 95 | 21 | 21 / 21 | 100 |
| <i>In house</i> PCR assay [28] (n = 36) | 98 | 98 / 108 | 91 | 35 | 35 / 35 [§] | 100 |
| <i>Andere / k.A. / other</i> [29] (n = 2) | 3 | 3 / 6 | 50 | 2 | 2 / 2 | 100 |

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

Comments: ¹⁾ As sample #1815603 contained a low number of *Pneumocystis jirovecii* target organisms, negative PCR results were not rated “false negative” in this EQAS distribution.