

**PCR-/NAT *Pneumocystis jirovecii*
 (RV 560) November 2022**



Tabelle 1: Probenzusammensetzung und erwartetes Ergebnis.

Sample composition and expected results.

| | <i>Erwartet / expected</i> | | <i>Probenzusammensetzung / Sample composition</i> |
|---------|----------------------------|-----------|--|
| 2225601 | + | 61 | <i>Pneumocystis jirovecii</i> (~ 5x10 ³ organisms/mL) |
| 2225602 | ∅ | 62 | <i>Escherichia coli</i> K12 |
| 2225603 | ++ | 61 | <i>Pneumocystis jirovecii</i> (~ 5x10 ⁴ organisms/mL) |
| 2225604 | +++ | 61 | <i>Pneumocystis jirovecii</i> (~ 5x10 ⁵ organisms/mL) |

Tabelle 2: Häufigkeit der Mitteilung verschiedener Befunde.

Absolute numbers of reported individual results.

| <i>n = 122</i> | Probennummer (Sample no.) | | | | | Inhibition | | | |
|--|----------------------------------|----------------|----------------|----------------|-------------------|-------------------|----------------|----------------|----------------|
| | 2225601 | 2225602 | 2225603 | 2225604 | | 2225601 | 2225602 | 2225603 | 2225604 |
| Befund <i>Result</i> | | | | | | | | | |
| Positiv | 113 | 1 | 120 | 121 | n.d. | 0 | 0 | 0 | 0 |
| Negativ | 9 | 120 | 1 | 1 | nein <i>no</i> | 122 | 121 | 122 | 122 |
| Fraglich <i>Questionable</i> | 0 | 1 | 1 | 0 | ja <i>yes</i> | 0 | 1 | 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 | |
|---|--|------------|-----------------------------------|------------|-----------------------------------|------------|-----------------------------------|------------|
| | 2225601 | | 2225603 | | 2225604 | | 2225602 | |
| | Absolut <i>Absolute</i> | % | Absolut <i>Absolute</i> | % | Absolut <i>Absolute</i> | % | Absolut <i>Absolute</i> | % |
| Altona RealStar P. jirovecii (n= 17) | 17 | 100 | 17 | 100 | 17 | 100 | 17 | 100 |
| Amplex eazyplex P. jirovecii (n= 10) | 4 | 40 | 9 | 90 | 9 | 90 | 10 | 100 |
| AmpliGnost P.jirovecii (n= 6) | 6 | 100 | 6 | 100 | 6 | 100 | 6 | 100 |
| BioGX P. jirovecii (n= 11) | 11 | 100 | 11 | 100 | 11 | 100 | 11 | 100 |
| Biologio Atypical Pneumonia-1 (n = 2) | 2 | 100 | 2 | 100 | 2 | 100 | 2 | 100 |
| FTD P. jirovecii (n 1) | 1 | 100 | 1 | 100 | 1 | 100 | 0** | 0 |
| PathoNostics PneumoGenius (n= 2) | 2 | 100 | 2 | 100 | 2 | 100 | 2 | 100 |

| | | | | | | | | |
|--|-----------|------------|------------|------------|-----------|------------|-----------|------------|
| Sacace C. trachomatis Real TM (n= 2) | 2 | 100 | 2 | 100 | 2 | 100 | 2 | 100 |
| LightMix P.jirovecii (n= 10) | 10 | 100 | 10 | 100 | 10 | 100 | 10 | 100 |
| VIASURE P. jirovecii real time PCR (n= 3) | 2 | 67 | 3 | 100 | 3 | 100 | 2 | 67 |
| RIDAGENE P. jirovecii (n= 27) | 26 | 96 | 26* | 96 | 27 | 100 | 27 | 100 |
| In house PCR assay (n= 25) | 24 | 96 | 25 | 100 | 25 | 100 | 25 | 100 |
| Other commercial tests (n= 6) | 6 | 100 | 6 | 100 | 6 | 100 | 6 | 100 |

* Questionable ** Inhibition

Comments:

1. Unter "Andere kommerzielle Testsysteme" sind folgende Testsysteme aufgeführt: ELITechGroup Pneumocystis ELITE MGB Kit (1x), Bruker Fungiplex Pneumocystis IVD PCR (1x), r-Biopharm RIDAGENE CAPbac-Panel (1x), BioEvolution Eurolmmun (1x) und Progenie RealCycler PJIR (1x).