



VIASURE *Pneumocystis jirovecii* Real Time PCR Detection Kit for BD MAX[™] System

The need for reliable Pneumocystis jirovecii detection

Pneumocystis jirovecii pneumonia (PCP) is an acute and life-threatening lung disease caused by the fungus *Pneumocystis jirovecii*. PCP is especially dangerous to immunocompromised patients, particularly patients with HIV. The **mortality rate remains significantly high** with an average of 30.6% in non-HIV patient with PCP.¹

PCP is **difficult to diagnose** due to its associated nonspecific signs and symptoms.

Because *P. jirovecii* cannot be propagated in culture, the standard procedure for detection involves **DNA amplification and/or the microscopic visualisation of cysts or trophic forms in pulmonary specimens with cytochemical or immunofluorescent staining with monoclonal antibodies.**

Discover the assay

The **VIASURE** *Pneumocystis jirovecii* assay is an automated assay including real-time polymerase chain reaction (PCR) for qualitative detection of *Pneumocystis jirovecii* DNA in respiratory samples from patients suspected of respiratory infection by their healthcare professional.

This test also includes a sample processing control.

This assay can be run on the BD MAX[™] System **in combination with a BD MAX[™] TNA-3 extraction kit** that contains dried extraction reagents, the sample buffer tube as well as the unitised reagent strip containing all liquid reagents and disposable pipette tips required for specimen processing and total nucleic acid (TNA) extraction.

Sample types

• Bronchoalveolar lavage

Workflow and time to results





Results obtained in about **2 hours for 24 samples**

Less than **1.5 minutes of hands-on time** in sample preparation



Compatibility to run alongside other BD MAX[™] assays for greater flexibility. To be noted that the VIASURE *Pneumocystis jirovecii* assay is **ONLY rack compatible with other VIASURE assays.** The second rack can be loaded with other types of BD MAX[™] assays.

Ready-to-use reagents storable at room temperature

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REF	Contents	Quantity
444209	VIASURE <i>Pneumocystis jirovecii</i> assay – Reaction tube Lyophilised PCR Master Mix containing specific molecular probes and primers along with Sample Processing Control and PCR enzyme	24 tests (2 x 12 tubes)
	VIASURE <i>Pneumocystis jirovecii</i> assay – Rehydration Buffer Tube Solution to reconstitute the stabilised product	24 tubes

Requires BD MAX[™] ExK[™] TNA-3

442828	BD MAX [™] ExK [™] TNA Extraction Tube (B4) Dried extraction reagent: magnetic affinity beads, Proteinase K and Specimen Processing Control	24 tests (2 x 12 tubes)
	BD MAX™ ExK™ TNA-3 Sample Buffer Tube	24 tubes
	BD MAX [™] TNA Reagent Strip Unitised reagent strip containing wash buffer, elution buffer and neutralisation buffer reagents, as well as disposable pipette tips necessary for sample processing and TNA extraction	24 strips
	Conical Tubes	24
	Septum Caps	25

Rapid, targeted testing on the BD MAX[™] System

The innovation of the BD MAX[™] System offers you a **fully integrated, automated real-time PCR platform** with the possibility of running multiple assays simultaneously.* Its automated workflow **reduces manual tasks** to achieve rapid, reliable results and facilitates off-hour testing, helping to **offset molecular testing costs**.**^{5,6}



3. J.R. Harris et al. Pneumocystis Jirovecii Pneumonia: Current Knowledge and Outstanding Public Health Issues. Current Fungal Infection Reports Journal, 2010; 4(4): 229-237.

4. P. Rohner et al. Detection of Pneumocystis jirovecii by two staining methods and two quantitative PCR assays. Infection, 2009; 37(3):261-5

Mortensen JE, et al. Comparison of time-motion analysis of conventional stool culture and the BD MAX Enteric Bacterial Panel (EBP). BMC Clin Pathol. 2015;15:9.
Hirvonen JJ, et al. Comparison of BD Max Cdiff and GenomEra C. difficile molecular assays for detection of toxigenic Clostridium difficile from stools in conventional sample containers and in FecalSwabs. Eur J Clin Microbiol Infect Dis. 2015;34(5):1005-1009

* BD assays are run & rack compatible – Only MDR-TB and GBS are not run and rack compatible / Vaginal Panel and open systems' assays are only run compatible. ** When compared to culture or immunochromatographic antigen (IA).

*** Time is assay dependent. 4 hours for full results on MDR-TB assay.

The BD MAX[™] System and VIASURE *Pneumocystis jirovecii* Real Time PCR Detection Kit for BD MAX[™] System are in-vitro diagnostic medical devices bearing a CE-mark. BD MAX[™] ExK[™] TNA-3 is a LUO product. BD, the BD Logo, BD MAX are trademarks of Becton, Dickinson and Company or its affiliates. All other trademarks are the property of their respective owners. BD-78061 © 2022 BD. All rights reserved.