

BD BACTEC™ 9000

Comparison Chart

The BD BACTEC™ Blood Culture instruments and media options are designed to meet the wide range of needs required by hospitals. The combination of BACTEC instruments and media help to improve patient care while providing enhanced safety to healthcare workers. BACTEC media with patented resins can effectively remove antibiotics to include penicillins, cephalosporins and vancomycins when other systems fail. The selection of the patented resin-containing media can also have a positive financial impact on DRG reimbursements for institutions.

Highlights

Performance

BACTEC Media allow increased recovery and significantly faster time to detection facilitating quicker and more appropriate therapy compared to other automated systems.

Safety

Unique bottle design allows use of standard and readily available safety adapters for blood collection, thus improving healthcare worker safety.

Financial Impact

Patented media containing resins have shown¹ to have higher rates of recovery. This higher rate can correctly allow for billing of septicemia instead of fever of unknown origin.

Feature	BD BACTEC™ 9000	Competition bioMérieux 3D®	Trek VersaTREK®
Technology	Yes - Measures fluorescent changes in CO ₂ .	Measures colorimetric changes in CO ₂ concentrations.	Measures the pressure change within headspace of culture bottle.
Algorithms	Yes - Provides 37 proprietary algorithms depending on such factors as media type, extended delayed vial capability, fastidious bacteria, mycobacteria, yeast and fungi, blood volumes and others to improve recovery.	Limited to 3 "proprietary algorithms for blood culture and body fluids."	—
Antibiotic Neutralization	Yes - Patented resins neutralize antibiotics to include penicillins, cephalosporins and vancomycins to improve recovery.	Yes - Antibiotic neutralization yet not effective for penicillins, cephalosporins and vancomycins. ²	Not available.
Peds Media	Yes - Also neutralizes penicillins, cephalosporins and vancomycins to improve recovery.	Yes - Yet does not effectively neutralize penicillins, cephalosporins and vancomycins. ²	Not available.
Integrated Safety	Yes - Integrated with standard tube holders, uses familiar and readily available safety devices to reduce needlestick risks.	No - Requires special non-routine adapters and additional safety devices.	No - Requires special non-routine adapters and additional safety devices.



Helping all people
live healthy lives

Feature	BD BACTEC™ 9000	Competition bioMérieux 3D®	Trek VersaTREK®
Ease of Reading Gram Stain with Premium Media	Yes - No interference of reading Gram stain from resin particles to help assure proper test results.	Interference with reading Gram stain due to background of FAN media, requires modified Gram stain procedure.	Premium media not available.
Contamination Rates with Premium Media	Yes - No change in contamination rates seen between Plus resin media and Standard media which reduces costs and improves time to result.	Higher contamination rates proven on FAN media vs. Standard media. ³	Premium media not available.
Superior Workflow with Vial Entry	Yes - Bottles can be scanned and placed directly into the station which improves workflow.	Bottles can be scanned and placed directly into the cell.	Every bottle must have a connector attached before being loaded. A bottle load list must be created on ESP® Systems and the bottles must go in their assigned position.
Superior Workflow Instrument Operation	Yes - ICON Menu inside of every testing cabinet with scanner, allows for operator interface without going to system computer which improves workflow.	3D System – Touch Screen on controller unit, must go to this location for vial scanning or system operations. Classic 240 – Must go back to computer and key board to navigate program.	VersaTREK – Touch Screen on controller unit, must go to this location for vial scanning or system operations. ESP – Must go back to computer and keyboard to navigate program.
Easy to Interpret – LED's Associated with the Vials	Yes - LED's are multi-colored to indicate the status of the vial and located very close to the station which improves workflow and reduces errors.	LED's are all the same color "green."	LED's are on the sides of the drawers which may be difficult to see.
Superior Organism Recovery (Documented in published articles and abstracts)	Yes - BACTEC/F resin media have demonstrated the ability to recover more significant isolates than any other system. 3% better than BMx FAN, 18.5% better than BMx Std, 9.5% better than BMx FAN & Std, 15% better than ESP 80 mL. ⁴	See BACTEC column.	See BACTEC column.
Faster Time to Result (Documented in published articles and abstracts)	Yes - BACTEC/F resin media have demonstrated the ability to recover more significant isolates faster than any other system. Up to 6.5 hours faster than BMx. Up to 4 hours faster than ESP. ⁵	See BACTEC column.	See BACTEC column.

¹ S. Whittier, ASM, 2003.

² R. F. Pfeltz, ASM, 2003.

³ M. Weinstein, JCM, 1995, p 978-981.

⁴ J.H. Jorgensen, JCM 1997, p 53-58.

J. Smith, JCM 1995, p 1905-1908.

P. Lanzafame, ECCMID, 1997.

⁵ Tamborini, Microbiologia #25, p 9-16.

E. Viganò, Diag. Micro. and Infect. Dis. #44, p 202.

B. Foster, ICAAC, 1995.

