

**Accomplishing**

**Blood**

**Culture**

**Decision**

**Excellence**

✓ Selecting a new blood culture system with confidence

# A practical guide for **confident product decision making**

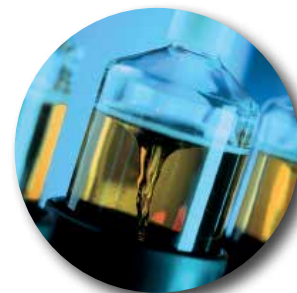


Healthcare providers continue to face significant challenges, such as increasing overhead costs, declining reimbursements, and labor shortages, all the while tasked with improving patient care and reducing length of stay. The laboratory plays a significant role in this effort, and product decision making is critical to success.

There are numerous variables to consider when purchasing new instrumentation for the laboratory, especially when it comes to one of the most important tests in the microbiology lab today — blood cultures.

This booklet has been provided as a means to assist you with your decision making process, and to help you find the best total solution to fulfill the needs and requirements of your laboratory and laboratory personnel as you evaluate your blood culture instrumentation options. Where applicable, responses for the Thermo Scientific VersaTREK™ System have been provided. It is recommended that the users of this document obtain the answers for the other blood culture systems listed in this booklet.

Your Thermo Scientific Instrument Sales Specialist would be happy to discuss any or all sections of this booklet with you.



**Please rank the following criteria from 1 (most important) to 5 (least important):**

Ease of use 1 2 3 4 5

Conversion support 1 2 3 4 5

GPO compliance 1 2 3 4 5

Rapid, accurate detection 1 2 3 4 5

Technical support 1 2 3 4 5

Cost 1 2 3 4 5

Employee satisfaction 1 2 3 4 5

Solution to current problem area(s) 1 2 3 4 5

Reliability 1 2 3 4 5

Data management 1 2 3 4 5

	VersaTREK™ System	BACTEC™/FX System	BacT/ALERT® System
Technologist preferred ergonomically-designed instrument	✓		
Calibration of locations not required	✓		
Ability to place any bottle anywhere on the system	✓		
Remote alarm capability	✓		
Simple bottle management	✓		
Easy to distinguish positive and negative bottles from the front of the instrument or software	✓		
Easy to identify unidentified bottles	✓		
Easy to resolve misplaced bottles	✓		
System alerts user if bottles are removed prior to completion	✓		
Ability to view patient data at the instrument	✓		
Excellence in delayed bottle entry performance	✓		
Flexibility to add capacity to existing base unit	✓		
Apheresis platelet QC for contamination	✓		
Blood, sterile body fluids, myco and <i>Mtb</i> susceptibility testing on a single instrument	✓		

# Instrument



	VersaTREK System	BACTEC/FX System	BacT/ALERT System
Remote diagnostic to bottle location	✓		
“Mean Time Before Failure”	4.7+ years		
VorTrexing™ method of agitation for aerobic bottles	✓		
Number of locations lost if agitation method fails	1		
System alerts user of expired media	✓		
Provides multi-layer security	✓		
Effective fastidious organism recovery in low volume samples	✓		
Instrument operates independently of PC	✓		
Instrument technology provides detection beyond CO <sub>2</sub> production	✓		
Uninterrupted aerobic agitation	✓		

	VersaTREK System	BACTEC/FX System	BacT/ALERT System
Large, prominent icons distinguish positive and negative bottles	✓		
Bi-directional interface	✓		
One touch access to data information	✓		
Automatic mirroring of database for up to the second back-up	✓		
Comprehensive report module	✓		
One touch to CAP reports	✓		
Automatic report scheduling based on laboratory specifications (date/time)	✓		
Electronic help manual available without the need for internet connectivity	✓		
Advanced data management included in standard package	✓		
Modem-based assistance from Technical Support	✓		
Firmware/software upgrades performed automatically via modem	✓		
Double hard drives included	✓		

# Software Package



	VersaTREK System	BACTEC/FX System	BacT/ALERT System
FDA-cleared direct draw bottle without butterfly	✓		
QC of media not needed	✓		
Clean pellet provides direct testing from positive blood culture bottles (preliminary and confirmatory testing)	✓		
FDA-cleared blood volume for adults:	<b>0.1-10mL (80 mL bottle)</b> <b>0.1-5mL (40mL bottle)</b>		
Anaerobic bottle for pediatric cultures	✓		
Media provides optimal recommended blood to broth dilution ratio	✓		
FDA-cleared for sterile body fluids (for all patient types)	✓		
Media shelf life:	<b>REDOX™ 1: 18 mo.</b> <b>REDOX 2: 12 mo.</b> <b>VersaTREK Myco: 18 mo.</b>		
Bottle device utilized for comprehensive detection and safety	✓		
Ease in inventory control	✓		
Decreased SPS to allow growth of organisms susceptible to higher SPS concentrations	✓		
No special adapter needed for phlebotomy	✓		

	VersaTREK System	BACTEC/FX System	BacT/ALERT System
One bottle FDA-cleared for all samples	✓		
FDA-cleared for <i>Mtb</i> susceptibility testing	✓		
Ability to test high and low concentration of Ethambutol from the same kit	✓		
Availability of Rifampin	✓		
Ability to test high and low concentration of Isoniazid from the same kit	✓		
Availability of PZA	✓		
Automated <i>Mtb</i> susceptibility results	✓		
Same broth bottle type for myco detection and <i>Mtb</i> susceptibility	✓		

# Mycobacteria (performed on blood culture instrument)





**VersaTREK  
System**

**BACTEC/FX  
System**

**BacT/ALERT  
System**

No SPS-sensitive organism restriction



No high white blood count restriction



No low CO<sub>2</sub> producing organism restriction



	VersaTREK System	BACTEC/FX System	BacT/ALERT System
Willing to provide FDA warning letters	N/A*		
Willing to provide FDA required action plans	N/A*		
Willing to provide FDA non-compliance (483s) issued over the past 24 mo.	N/A*		
Willing to provide ISO major non-conformance information	N/A*		
Willing to provide Establishment Inspection Records (EIRs) for all blood culture support locations	✓		
Meets OSHA laboratory standards for safety	✓		
Meets OSHPD (for California earthquakes)	✓		
Underwriters Laboratories certification for electrical safety for Laboratory Use Electrical Equipment	UL Certification No. E223494		
Number of class 1 or class 2 recalls in the past 3 years	None		
ISO 9001:2000 and ISO 13485:2003 (Cmdcas for Canada) accredited for all facilities	✓		

\*Not applicable, as no warning letters, FDA action plans, or non-conformance information exists for the VersaTREK System

	VersaTREK System	BACTEC/FX System	BacT/ALERT System
Standard onsite training program	✓		
Flexible training programs	✓		
Conversion support with onsite staff, documentation and Technical Support	✓		
P.A.C.E.® credits offered for training	✓		
Validation protocols provided	✓		
Dedicated conversion support program	✓		

	VersaTREK System	BACTEC/FX System	BacT/ALERT System
24/7 Technical Support	✓		
≥ 92% of customer calls answered by Technical Support Representative, eliminating messages and call backs	✓		
Remote diagnostic support for instrument and database	✓		
Modem delivery for software/firmware upgrades	✓		

# Technical Support



## faster time to detection

"A comparative VersaTREK and BACTEC 9240 instrument validation was performed using seeded blood cultures. Both systems grew all isolates tested but, importantly, the VersaTREK instrument had a shorter time to detection for most isolates. The BACTEC did not have a shorter time to detection for any of the isolates evaluated in this study."

"Something that we noted quite early on was the 'time to positivity' seemed shorter than with our previous instrument. This was especially apparent with anaerobes and slower growing organisms such as yeast and *Brucella* spp."

## simple, two-bottle media system

"We really like the fact that we only have to maintain an inventory of two bottle types instead of three with our old system."

"The VersaTREK two-bottle media system was equivalent when compared to the BACTEC 9240 Standard, Lytic and Plus media."

"The excellent isolation results obtained illustrated the quality of the VersaTREK media, often producing better results than competitive systems."

References available upon request.



## trusted results

"Our recovery rate has increased from approximately 9% to 11% since we switched to the VersaTREK system."

"We found overall that VersaTREK was better than the BacT/ALERT in low blood volume collections. In addition, VersaTREK anaerobic bottles do not contain any SPS, therefore allowing those organisms that are SPS sensitive to grow."

## versatility

"We currently have two VersaTREK 528 units for blood and body fluids and one 240 for mycobacteria samples and Mtb susceptibility. It is nice to know that if we ever have an influx of blood cultures, I can simply place them in our 240 system."

"We liked the fact that as our business grows we can double our volume of bottles incubating in the VersaTREK system without having to buy a new instrument."

## lower cost per test

"... Cost was also a factor and VersaTREK offered our laboratory a cost-effective alternative to our previous system, while improving patient care."

"In addition to less costly media, the VersaTREK system offers additional flexibility with verified protocols for culturing platelets, FDA clearance for body fluids, and the ability to co-incubate mycobacterial cultures within the same instrument."

# The VersaTREK Solution

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