

**Supplemental Table 1. Subject Demographics by Collection Type**

	<b>Prospectively Collected</b>	<b>Retrospectively Collected</b>
	<b>(N=349)</b>	<b>(N=577)</b>
<1 yr.	7 (2.0)	9 (1.6)
1-17 yrs.	10 (2.9)	20 (3.5)
18-44 yrs.	50 (14.3)	78 (13.5)
45-64 yrs.	124 (35.5)	193 (33.4)
65-84 yrs.	125 (35.8)	226 (39.2)
85+ yrs.	33 (9.5)	49 (8.5)
Unknown	---	2 (0.3)

**Supplemental Table 2. Blood Culture Bottle Type\***

	Prospective		Prospective	Retrospective		
	All	Fresh	Frozen	Retrospective	Pan Only	Contrived
	(N=2444)	(N=167)	(N=182)	(N=577)	(N=741)	(N=777)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
BacT/Alert - SA (Standard Aerobic)	130 (5.3)	0 (0.0)	37 (20.3)	5 (0.9)	88 (11.9)	0 (0.0)
BacT/Alert - SN (Standard Anaerobic)	90 (3.7)	0 (0.0)	20 (11.0)	8 (1.4)	62 (8.4)	0 (0.0)
BACTEC - Lytic/10 Anaerobic/F	517 (21.2)	51 (30.5)	44 (24.2)	144 (25.0)	150 (20.2)	128 (16.5)
BACTEC - PLUS Aerobic/F	1147 (46.9)	65 (38.9)	54 (29.7)	197 (34.1)	285 (38.5)	546 (70.3)
BACTEC - PLUS Anaerobic/F	68 (2.8)	10 (6.0)	6 (3.3)	17 (2.9)	21 (2.8)	14 (1.8)
BACTEC - Peds Plus /F	145 (5.9)	3 (1.8)	6 (3.3)	21 (3.6)	26 (3.5)	89 (11.5)
BACTEC - Standard/10 Aerobic/F	117 (4.8)	4 (2.4)	6 (3.3)	60 (10.4)	47 (6.3)	0 (0.0)
BACTEC - Standard/10 Anaerobic/F	23 (0.9)	5 (3.0)	2 (1.1)	7 (1.2)	9 (1.2)	0 (0.0)
BACTEC - Standard Anaerobic/F	36 (1.5)	1 (0.6)	7 (3.8)	20 (3.5)	8 (1.1)	0 (0.0)
VersaTREK - Redox 1	102 (4.2)	25 (15.0)	0 (0.0)	50 (8.7)	27 (3.6)	0 (0.0)
VersaTREK - Redox 1 EZ Draw	39 (1.6)	0 (0.0)	0 (0.0)	25 (4.3)	14 (1.9)	0 (0.0)
VersaTREK - Redox 2	24 (1.0)	3 (1.8)	0 (0.0)	17 (2.9)	4 (0.5)	0 (0.0)
VersaTREK - Redox 2 EZ Draw	6 (0.2)	0 (0.0)	0 (0.0)	6 (1.0)	0 (0.0)	0 (0.0)

	Prospective	Prospective	Retrospective		
All	Fresh	Frozen	Retrospective	Pan Only	Contrived
(N=2444)	(N=167)	(N=182)	(N=577)	(N=741)	(N=777)
n (%)	n (%)	n (%)	n (%)	n (%)	n (%)

**\*Based on analysis of stored sample testing during the study, no meaningful difference was observed for room temperature storage up to seven days, refrigerated storage up to one month, and at -80°C to -20°C for up to 18 months after bottle positivity, as listed in the published FDA product summary.**

**Supplement Table 3: PPA for Species Detected in Genus and Group Assays**

Target Species or Groups Detected by Comparator Method	PPA					
	Clinical Samples		Contrived Samples		Combined Samples	
	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)
<b><i>Citrobacter</i> spp.</b>	<b>20/21</b>	<b>95.2 (77.3-99.2)</b>	<b>43/43</b>	<b>100 (91.8-100)</b>	<b>68/69</b>	<b>98.6 (92.2-99.7)</b>
<i>Citrobacter braakii</i>	2/3	66.7 (20.8-93.9)	8/8	100 (67.6-100)	10/11	90.9 (62.3-98.4)
<i>Citrobacter freundii</i>	13/13	100 (77.2-100)	27/27	100 (87.5-100)	44/44	100 (92.0-100)
<i>Citrobacter koseri</i>	4/4	100 (51.0-100)	4/4	100 (51.0-100)	9/9	100 (70.1-100)
<i>Citrobacter youngae</i>	1/1	100 (20.7-100)	4/4	100 (51.0-100)	5/5	100 (56.6-100)
<b><i>Enterobacter</i> (non-cloacae complex)</b>	<b>12/12</b>	<b>100 (75.8-100)</b>	<b>36/36</b>	<b>100 (90.4-100)</b>	<b>56/58</b>	<b>96.6 (88.3-99.0)</b>
<i>Enterobacter aerogenes</i>	12/12	100 (75.8-100)	26/26	100 (87.1-100)	45/47	95.7 (85.8-98.8)
<i>Enterobacter amnigenus</i>			10/10	100 (72.2-100)	10/10	100 (72.2-100)
<i>Enterobacter gergoviae</i>					1/1	100 (20.7-100)
<b><i>Enterobacter cloacae</i> complex</b>	<b>47/50</b>	<b>94.0 (83.8-97.9)</b>	<b>35/37</b>	<b>94.6 (82.3-98.5)</b>	<b>101/106</b>	<b>95.3 (89.4-98.0)</b>
<i>Enterobacter asburiae</i>			6/8	75.0 (40.9-92.9)	6/8	75.0 (40.9-92.9)
<i>Enterobacter cloacae</i>	46/49	93.9 (83.5-97.9)	28/28	100 (87.9-100)	93/96	96.9 (91.2-98.9)
<i>Enterobacter hormaechei</i>	1/1	100 (20.7-100)	1/1	100 (20.7-100)	2/2	100 (34.2-100)

Target Species or Groups Detected by Comparator Method	PPA					
	Clinical Samples		Contrived Samples		Combined Samples	
	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)
<b><i>Proteus spp.</i></b>	<b>54/55</b>	<b>98.2 (90.4-99.7)</b>	<b>9/9</b>	<b>100 (70.1-100)</b>	<b>85/87</b>	<b>97.7 (92.0-99.4)</b>
<i>Proteus mirabilis</i>	50/51	98.0 (89.7-99.7)	9/9	100 (70.1-100)	81/83	97.6 (91.6-99.3)
<i>Proteus vulgaris</i>	5/5	100 (56.6-100)			5/5	100 (56.6-100)
<b><i>Salmonella spp.</i></b>	<b>18/19</b>	<b>94.7 (75.4-99.1)</b>	<b>34/35</b>	<b>97.1 (85.5-99.5)</b>	<b>54/56</b>	<b>96.4 (87.9-99.0)</b>
<i>Salmonella</i>	15/15	100 (79.6-100)			17/17	100 (81.6-100)
<i>Salmonella</i> 4,5,12:i:-			2/2	100 (34.2-100)	2/2	100 (34.2-100)
<i>Salmonella</i> Heidelberg			2/2	100 (34.2-100)	2/2	100 (34.2-100)
<i>Salmonella</i> Infantis			2/2	100 (34.2-100)	2/2	100 (34.2-100)
<i>Salmonella</i> Javiana			1/1	100 (20.7-100)	1/1	100 (20.7-100)
<i>Salmonella</i> Montevideo			7/8	87.5 (52.9-97.8)	7/8	87.5 (52.9-97.8)
<i>Salmonella</i> Muenchen			1/1	100 (20.7-100)	1/1	100 (20.7-100)
<i>Salmonella</i> Newport			6/6	100 (61.0-100)	6/6	100 (61.0-100)
<i>Salmonella</i> Typhimurium			7/7	100 (64.6-100)	7/7	100 (64.6-100)
<i>Salmonella choleraesuis</i> subsp. <i>arizonae</i>	0/1	0.0 (0.0-79.3)			0/1	0.0 (0.0-79.3)

Target Species or Groups Detected by Comparator Method	PPA					
	Clinical Samples		Contrived Samples		Combined Samples	
	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)
<i>Salmonella enterica</i> subsp. <i>enterica</i> Enteritidis (Group D1)			6/6	100 (61.0-100)	6/6	100 (61.0-100)
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhimurium	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Salmonella</i> Typhi	2/2	100 (34.2-100)			2/2	100 (34.2-100)
<b><i>Serratia</i> spp.</b>	<b>34/34</b>	<b>100 (89.8-100)</b>	<b>36/36</b>	<b>100 (90.4-100)</b>	<b>80/80</b>	<b>100 (95.4-100)</b>
<i>Serratia ficaria</i>			4/4	100 (51.0-100)	4/4	100 (51.0-100)
<i>Serratia grimesii</i>			3/3	100 (43.9-100)	3/3	100 (43.9-100)
<i>Serratia liquefaciens</i>					1/1	100 (20.7-100)
<i>Serratia marcescens</i>	34/34	100 (89.8-100)	19/19	100 (83.2-100)	62/62	100 (94.2-100)
<i>Serratia plymuthica</i>			3/3	100 (43.9-100)	3/3	100 (43.9-100)
<i>Serratia rubidaea</i>			7/7	100 (64.6-100)	7/7	100 (64.6-100)
<b>Pan <i>Candida</i> spp.</b>	104/110	94.5 (88.6-97.5)	<b>N/A</b>	<b>N/A</b>	104/110	94.5 (88.6-97.5)
<i>Candida albicans</i>	50/53	94.3 (84.6-98.1)			50/53	94.3 (84.6-98.1)
<i>Candida glabrata</i>	38/40	95.0 (83.5-98.6)			38/40	95.0 (83.5-98.6)

Target Species or Groups Detected by Comparator Method	PPA					
	Clinical Samples		Contrived Samples		Combined Samples	
	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)
<i>Candida krusei</i>	4/4	100 (51.0-100)			4/4	100 (51.0-100)
<i>Candida parapsilosis</i>	15/16	93.8 (71.7-98.9)			15/16	93.8 (71.7-98.9)
<b>Pan Gram-Positive</b>	<b>628/649</b>	<b>96.8 (95.1-97.9)</b>	<b>N/A</b>	<b>N/A</b>	<b>628/649</b>	<b>96.8 (95.1-97.9)</b>
<i>Bacillus</i> (species identification not determined)	5/8	62.5 (30.6-86.3)			5/8	62.5 (30.6-86.3)
<i>Bacillus cereus</i>	4/5	80.0 (37.6-96.4)			4/5	80.0 (37.6-96.4)
<i>Bacillus cereus</i> group - not <i>anthracis</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Enterococcus</i>	½	50.0 (9.5-90.5)			1/2	50.0 (9.5-90.5)
<i>Enterococcus casseliflavus</i>	0/1	0.0 (0.0-79.3)			0/1	0.0 (0.0-79.3)
<i>Enterococcus faecalis</i>	57/61	93.4 (84.3-97.4)			57/61	93.4 (84.3-97.4)
<i>Enterococcus faecium</i>	23/24	95.8 (79.8-99.3)			23/24	95.8 (79.8-99.3)
Coagulase-negative Staphylococci (CoNS)	14/14	100 (78.5-100)			14/14	100 (78.5-100)
<i>Staphylococcus</i> (species identification not determined)	93/95	97.9 (92.6-99.4)			93/95	97.9 (92.6-99.4)
<i>Staphylococcus aureus</i>	180/182	98.9 (96.1-99.7)			180/182	98.9 (96.1-99.7)
<i>Staphylococcus auricularis</i>	3/3	100 (43.9-100)			3/3	100 (43.9-100)

Target Species or Groups Detected by Comparator Method	PPA					
	Clinical Samples		Contrived Samples		Combined Samples	
	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)
<i>Staphylococcus capitis</i>	7/7	100 (64.6-100)			7/7	100 (64.6-100)
<i>Staphylococcus cohnii</i>	2/2	100 (34.2-100)			2/2	100 (34.2-100)
<i>Staphylococcus epidermidis</i>	89/91	97.8 (92.3-99.4)			89/91	97.8 (92.3-99.4)
<i>Staphylococcus haemolyticus</i>	8/8	100 (67.6-100)			8/8	100 (67.6-100)
<i>Staphylococcus hominis</i>	23/23	100 (85.7-100)			23/23	100 (85.7-100)
<i>Staphylococcus hominis subsp. hominis</i>	21/21	100 (84.5-100)			21/21	100 (84.5-100)
<i>Staphylococcus intermedius</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Staphylococcus lugdunensis</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Staphylococcus saccharolyticus</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Staphylococcus saprophyticus</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Staphylococcus sciuri</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Staphylococcus simulans</i>	2/2	100 (34.2-100)			2/2	100 (34.2-100)
<i>Staphylococcus warneri</i>	4/4	100 (51.0-100)			4/4	100 (51.0-100)
Alpha-hemolytic <i>Streptococcus</i> spp.	1/1	100 (20.7-100)			1/1	100 (20.7-100)



Target Species or Groups Detected by Comparator Method	PPA					
	Clinical Samples		Contrived Samples		Combined Samples	
	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)
Beta-hemolytic streptococci, Group G	1/1	100 (20.7-100)			1/1	100 (20.7-100)
Gamma-hemolytic <i>Streptococcus</i> spp.	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Streptococcus</i> (species identification not determined)	9/10	90.0 (59.6-98.2)			9/10	90.0 (59.6-98.2)
<i>Streptococcus</i> - viridans group	18/19	94.7 (75.4-99.1)			18/19	94.7 (75.4-99.1)
<i>Streptococcus agalactiae</i>	21/21	100 (84.5-100)			21/21	100 (84.5-100)
<i>Streptococcus anginosus</i>	2/2	100 (34.2-100)			2/2	100 (34.2-100)
<i>Streptococcus anginosus</i> group	5/6	83.3 (43.6-97.0)			5/6	83.3 (43.6-97.0)
<i>Streptococcus bovis</i>	2/2	100 (34.2-100)			2/2	100 (34.2-100)
<i>Streptococcus constellatus</i> subsp. <i>constellatus</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Streptococcus dysgalactiae</i> (Group G)	4/4	100 (51.0-100)			4/4	100 (51.0-100)
<i>Streptococcus gordonii</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Streptococcus infantarius</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Streptococcus intermedius</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Streptococcus mitis</i>	11/12	91.7 (64.6-98.5)			11/12	91.7 (64.6-98.5)

Target Species or Groups Detected by Comparator Method	PPA					
	Clinical Samples		Contrived Samples		Combined Samples	
	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)	TP/TP+F N	% (95% CI)
<i>Streptococcus mitis group</i>	3/3	100 (43.9-100)			3/3	100 (43.9-100)
<i>Streptococcus oralis</i>	1/1	100 (20.7-100)			1/1	100 (20.7-100)
<i>Streptococcus pneumoniae</i>	23/23	100 (85.7-100)			23/23	100 (85.7-100)
<i>Streptococcus pyogenes</i>	9/9	100 (70.1-100)			9/9	100 (70.1-100)
<i>Streptococcus salivarius</i>	3/3	100 (43.9-100)			3/3	100 (43.9-100)

**Supplemental Table 4: GN Clinical Study: Organisms Identified by Standard-of-Care Methods that are not Targeted by the BCID-GN (Prospective/Retrospective Samples)**

<b>Organism Type</b>	<b>Off-Panel Organism Identified by SOC</b>	<b>Count</b>
Gram positive	Aerobic Gram-Positive Bacilli/No further identification	1
Gram positive	<i>Aerococcus viridans</i>	1
Gram positive	<i>Clostridium perfringens</i>	1
Gram positive	<i>Clostridium</i> species	1
Gram positive	<i>Cutibacterium acnes</i> ( <i>P. acnes</i> )	1
Gram positive	<i>Lactococcus lactis</i>	1
Gram positive	<i>Micrococcus luteus</i>	2
Gram positive	<i>Peptostreptococcus anaerobius</i>	1
Gram positive	<i>Propionibacterium</i>	1
Gram negative	<i>Achromobacter</i> species	1
Gram negative	<i>Achromobacter xylosoxidans</i>	1
Gram negative	<i>Achromobacter xylosoxidans</i> subsp. <i>xylosoxidans</i>	1

Gram negative	<i>Acinetobacter</i>	1
Gram negative	<i>Acinetobacter baumannii</i> complex ( <i>baum-calcoac-13TU</i> )	1
Gram negative	<i>Acinetobacter lwoffii</i>	1
Gram negative	<i>Acinetobacter radioresistens</i>	3
Gram negative	<i>Aeromonas caviae</i>	1
Gram negative	<i>Aeromonas veronii</i>	1
Gram negative	<i>Aggregatibacter actinomycetemcomitans</i>	1
Gram negative	<i>Bacteroides ovatus</i>	1
Gram-negative	<i>Bacteroides thetaiotaomicron</i>	1
Gram negative	<i>Burkholderia cepacia</i> complex	1
Gram negative	<i>Campylobacter jejuni</i>	1
Gram negative	<i>Citrobacter amalonaticus</i>	1
Gram negative	<i>Enterobacteriaceae</i> , unable to further speciate	1
Gram negative	<i>Kluyvera</i> species	1
Gram negative	<i>Leclercia adecarboxylata</i>	2
Gram negative	<i>Moraxella osloensis</i>	1
Gram negative	<i>Moraxella</i> species	1

Gram negative	<i>Pantoea</i> species	1
Gram negative	<i>Prevotella</i> species	1
Gram negative	<i>Providencia stuartii</i>	6
Gram negative	<i>Pseudomonas putida</i>	1
Gram negative	<i>Roseomonas</i> species	1
Gram negative	<i>Sphingomonas (Pseudomonas) paucimobilis</i>	2
Gram negative	<i>Wolinella</i> species	1
Gram negative	Non-fermenting Gram-negative bacilli	1
<i>Candida</i> spp.	<i>Candida lusitaniae</i>	1

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44 of 926 Samples Tested

Total Gram-positive missed = 9

Total Gram-negative missed = 33