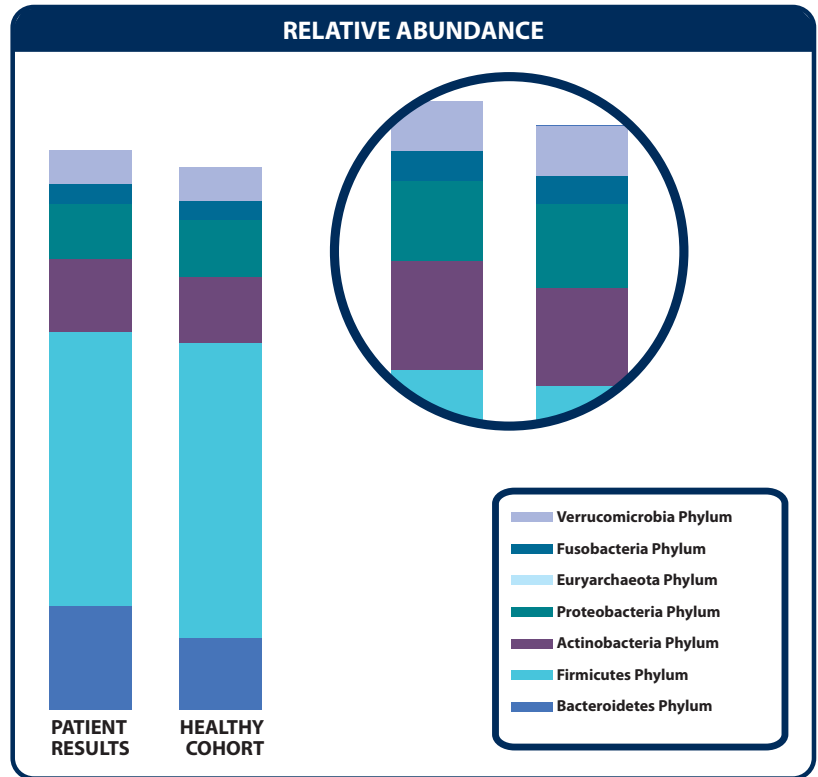
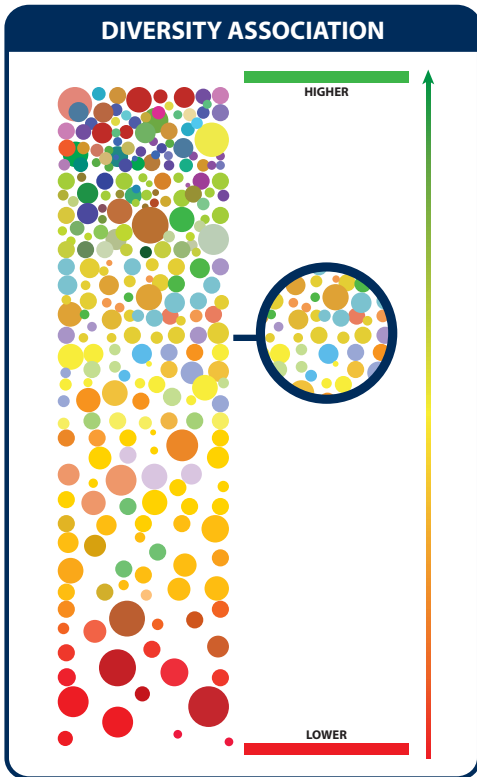
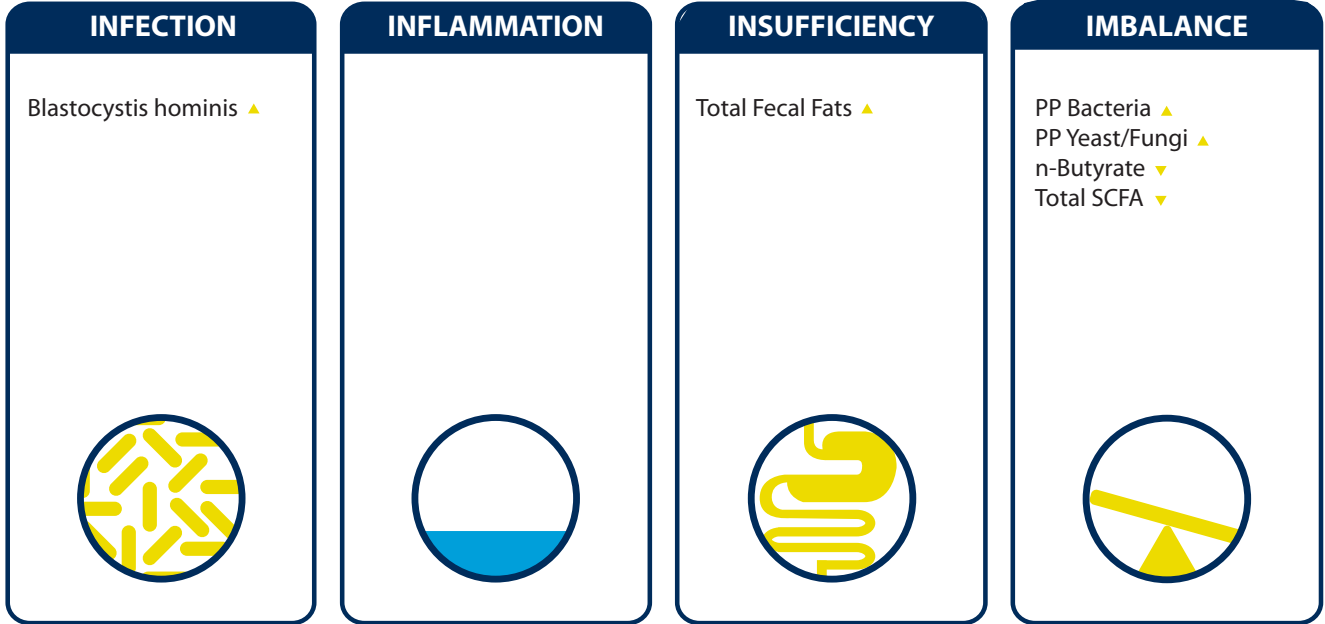


2200 GI Effects™ Comprehensive Profile – Stool

Interpretation At-a-Glance



Test nr. E1210572

Patient Name Jane Doe

Practitioner Name

Patient nr.

Practitioner Address

Age 53 Sex Female

Collected 09/20/2013 Received 09/21/2013

Tested 10/05/2013 DOB 09/19/1960

2200 GI Effects™ Comprehensive Profile – Stool

Methodology: GC/MS, Automated Chemistry, EIA

Results 1st 2nd 3rd 4th 5th Reference Range

Digestion and Absorption

Parameter	Results	Quintile Distribution	Reference Range
Pancreatic Elastase 1†◆	606	100 200	>200 mcg/g
Products of Protein Breakdown (Total) (Valerate+Isobutyrate+Isovalerate)	2.8		1.8 - 9.9 micromol/g
Fecal Fat (Total*)	32.2		3.2 - 38.6 mg/g
Triglycerides	2.0		0.3 - 2.8 mg/g
Long Chain Fatty Acids	21.7		1.2 - 29.1 mg/g
Cholesterol	1.6		0.4 - 4.8 mg/g
Phospholipids	6.9		0.2 - 6.9 mg/g

Inflammation and Immunology

Parameter	Results	Quintile Distribution	Reference Range
Calprotectin†◆	19.7	50 120	<= 50 mcg/g
Eosinophil Protein X (EPX)†	1.4	2 7	<= 7.0 mcg/g
Fecal sIgA	622		<1019 mcg/g

Gastrointestinal Microbiome

Metabolic

Parameter	Results	Quintile Distribution	Reference Range
SCFA (Total*) (Acetate, n-Butyrate, Propionate)	25.6		> = 23.3 micromol/g
n-Butyrate Concentration	4.0		> = 3.6 micromol/g
n-Butyrate %	15.4		11.8 - 33.3 %
Acetate%	25.6		48.1 - 69.2 %
Propionate%	16.2		11.9 - 29.7%
Beta-Glucuronidase	1514		368 - 6266 U/g

Testing performed by Metamatrix Inc. for Nordic Laboratories ApS.

Georgia Lab Lic. Code #067-007
CLIA ID# 11D0255349

New York Clinical Lab PFI #4578
Florida Clinical Lab Lic. #800008124

Laboratory Director: Robert M. David, PhD

Methodology: DNA by PCR

Gastrointestinal Microbiome

Commensal Bacteria (PCR)	Result CFU/g stool	QUINTILE DISTRIBUTION					Reference Range CFU/g stool
		1st	2nd	3rd	4th	5th	
Bacteroidetes Phylum							
<i>Bacteroides-Prevotella</i> group	4.3E7						7.3E6 - 2.3E9
<i>Bacteroides vulgatus</i>	1.2E8						<4.6E9
<i>Barnesiella</i> spp.	<DL						<3.3E8
<i>Odoribacter</i> spp.	5.6E7						<2.0E8
<i>Prevotella</i> spp.	8.6E5						2.4E5 - 3.0E7
Firmicutes Phylum							
<i>Anaerotruncus colihominis</i>	6.4E6						<6.1E7
<i>Butyrivibrio crossotus</i>	1.5E5						7.8E3 - 8.6E5
<i>Clostridium</i> spp.	2.7E9						3.1E8 - 3.2E10
<i>Coprococcus eutactus</i>	2.7E7						<2.0E8
<i>Faecalibacterium prausnitzii</i>	8.2E8						1.2E5 - 7.1E7
<i>Lactobacillus</i> spp.	6.9E8						1.5E7 - 7.6E9
<i>Pseudoflavonifractor</i> spp.	2.9E7						1.2E5 - 2.1E8
<i>Roseburia</i> spp.	2.8E9						1.7E8 - 4.1E9
<i>Ruminococcus</i> spp.	8.9E8						1.2E8 - 6.9E11
<i>Veillonella</i> spp.	1.4E6						2.6E5 - 1.0E8
Actinobacteria Phylum							
<i>Bifidobacterium</i> spp.	<DL						<1.5E10
<i>Bifidobacterium longum</i>	<DL						<1.3E9
<i>Collinsella aerofaciens</i>	1.4E8						1.5E7 - 3.7E9
Proteobacteria Phylum							
<i>Desulfovibrio piger</i>	<DL						<2.8E7
<i>Escherichia coli</i>	6.0E7						5.5E4 - 7.9E8
<i>Oxalobacter formigenes</i>	3.9E6						<2.8E7
Euryarchaeota Phylum							
<i>Methanobrevibacter smithii</i>	<DL						<1.9E8
Fusobacteria Phylum							
<i>Fusobacterium</i> spp.	1.9E4						<4.8E5
Verrucomicrobia Phylum							
<i>Akkermansia muciniphila</i>	1.8E7						>1.7E6
Firmicutes/Bacteroidetes Ratio							
<i>Firmicutes/Bacteroidetes</i> (F/B Ratio)	53						21 - 620

The gray-shaded portion of a quintile reporting bar represents the proportion of the reference population with results below detection limit.

Commensal results and reference range values are displayed in a computer version of scientific notation, where the capital letter "E" indicates the exponent value (e.g., 7.3E6 equates to 7.3 x 10⁶ or 7,300,000).

The Firmicutes/Bacteroidetes ratio (F/B Ratio) is estimated by utilizing the lowest and highest values of the reference range for individual organisms when patient results are reported as <DL or >UL.

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 Florida Clinical Lab Lic. #800008124

Laboratory Director: Robert M. David, PhD

Methodology: culture/MALDI-TOF MS, Automated and Manual Biochemical Methods, Vitek 2® System Microbial identification and Antibiotic susceptibility

Gastrointestinal Microbiome

Bacteriology (Culture)

Lactobacillus spp.

+3 NP



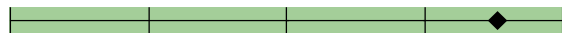
Escherichia coli

NG



Bifidobacterium spp.

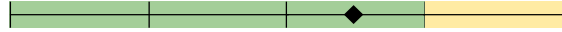
+4 NP



Additional Bacteria

Alphahaemolytic streptococcus

+3 NP



Gammahaemolytic streptococcus

+3 NP



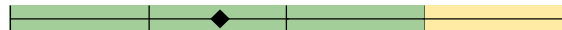
Citrobacter freundii

+4 PP



Streptococcus agalactiae gp B

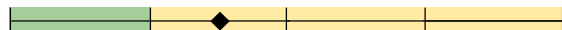
+2 NP



Mycology (Culture)

Candida albicans/dubliniensis

+2 PP



Yeast, not *Candida albicans*

+1 NP



Human microflora is influenced by environmental factors and the competitive ecosystem of the organisms in the GI tract. Pathogenic significance should be based upon clinical symptoms.

Microbiology Legend			
NG	NP	PP	P
			
No Growth	Non-Pathogen	Potential Pathogen	Pathogen

Additional bacteria

Non-pathogen: Organisms that fall under this category are those that constitute normal, commensal flora, or have not been recognized as etiological agents of disease.

Potential Pathogen: Organisms that fall under this category are considered potential or opportunistic pathogens when present in heavy growth.

Pathogen: The organisms that fall under this category are well-recognized pathogens in clinical literature that have a clearly recognized mechanism of pathogenicity and are considered significant regardless of the quantity that appears in culture.

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Laboratory Director: Robert M. David, PhD

Test nr.	E1210572		
Patient Name	Jane Doe	Practitioner Name	
Patient nr.		Practitioner Address	
Age	53	Sex	Female
Collected	09/20/2013	Received	09/21/2013
Tested	10/05/2013	DOB	09/19/1960

Methodology: Direct Microscopic Examination, EIA

Parasitology

Microscopic Exam Results:

Blastocystis hominis: Many

Parasitology

Parasite Recovery: Literature suggests that >90% of enteric parasitic infections may be detected in a sample from a single stool collection. Increased sensitivity results from the collection of additional specimens on separate days.

Lab Comments

SENSI'S: All yeast, add'l bacteria

Parasitology EIA Tests:

	In Range	Out of Range
<i>Cryptosporidium</i> ◆	Negative	<input type="text"/>
<i>Giardia lamblia</i> ◆	Negative	<input type="text"/>
<i>Entamoeba histolytica</i> ◆	Negative	<input type="text"/>

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Age	53	Sex	Female
Collected	09/20/2013	Received	09/21/2013
Tested	10/05/2013	DOB	09/19/1960

Methodology: Vitek 2® System Microbial Antibiotic susceptibility, Manual Minimum Inhibition Concentration

Bacteria Sensitivity

Prescriptive Agents

	S	I	R
Citrobacter freundii	S	I	R
Ampicillin			R
Amox./Clavulanic Acid			R
Cephalothin			R
Ciprofloxacin	S		
Tetracycline	S		
Trimethoprim/Sulfa	S		

Prescriptive Agents:

Microbial testing has been performed in vitro to determine antibiotic sensitivity and resistance at standard dosages. Prudent use of antimicrobials requires knowledge of appropriate blood or tissue levels of those agents. Antibiotics that appear in the "S" (susceptible) column are more effective at inhibiting the growth of this organism. Antibiotics that appear in the "I" (intermediate) column are partially effective at inhibiting the growth of this organism. Antibiotics that appear in the "R" (resistant) column allow continued growth of the organism in vitro and are usually less effective clinically. Inappropriate use of antibiotics often results in the emergence of resistance.

Natural Agents

Citrobacter freundii	LOW INHIBITION	HIGH INHIBITION
Berberine		
Oregano		
Plant tannins		
Uva Ursi		

Natural Agents:

In this assay, "inhibition" is defined as the reduction level on organism growth as a direct result of inhibition by a natural substance. The level of inhibition is an indicator of how effective the natural substance was at limiting the growth of an organism in an in vitro environment. High Inhibition indicates a greater ability by the natural substance to limit growth, while Low Inhibition a lesser ability to limit growth. In accordance with laboratory guidelines for reporting sensitivities, results for Nystatin are now being reported with natural antifungals in this category.

Testing performed by Metamatrix Inc. for Nordic Laboratories ApS.

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CLIA ID# 11D0255349

New York Clinical Lab PFI #4578
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Patient nr.		Practitioner Address	
Age	53	Sex	Female
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Methodology: Vitek 2® System Microbial Antibiotic susceptibility, Manual Minimum Inhibition Concentration

Mycology Sensitivity

Azole Antifungals

	S	I	R
Candida albicans/dubliniensis	S	I	R
Fluconazole	=0.25		
Caspofungin		=0.25	
Voriconazole	=0.25		

Prescriptive Agents:

Microbial testing has been performed in vitro to determine antibiotic sensitivity and resistance at standard dosages. Prudent use of antimicrobials requires knowledge of appropriate blood or tissue levels of those agents. Antibiotics that appear in the "S" (susceptible) column are more effective at inhibiting the growth of this organism. Antibiotics that appear in the "I" (intermediate) column are partially effective at inhibiting the growth of this organism. Antibiotics that appear in the "R" (resistant) column allow continued growth of the organism in vitro and are usually less effective clinically. Inappropriate use of antibacterials often results in the emergence of resistance.

Non-absorbed Antifungals

Candida albicans/dubliniensis	LOW INHIBITION	HIGH INHIBITION
Nystatin		

Natural Agents

Candida albicans/dubliniensis	LOW INHIBITION	HIGH INHIBITION
Berberine		
Caprylic Acid		
Garlic		
Undecylenic Acid		
Plant tannins		
Uva Ursi		

Natural Agents:

In this assay, "inhibition" is defined as the reduction level on organism growth as a direct result of inhibition by a natural substance. The level of inhibition is an indicator of how effective the natural substance was at limiting the growth of an organism in an in vitro environment. High Inhibition indicates a greater ability by the natural substance to limit growth, while Low Inhibition a lesser ability to limit growth. In accordance with laboratory guidelines for reporting sensitivities, results for Nystatin are now being reported with natural antifungals in this category.

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Test nr.	E1210572		
Patient Name	Jane Doe		Practitioner Name
Patient nr.			Practitioner Address
Age	53	Sex	Female
Collected	09/20/2013	Received	09/21/2013
Tested	10/05/2013	DOB	09/19/1960

Methodology: EIA, Fecal Immunochemical Testing (FIT)



Additional Results

	Result	Expected Value
Fecal Occult Blood ♦	Negative	Negative
Color††	Brown	
Consistency††	Formed/Normal	

†† Results provided from patient input.

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