



3425 Corporate Way
Duluth, GA 30096



Patient: **STEPHEN VAUGHAN**
DOB: November 02, 1982
Sex: M
MRN: 1232709382

Order Number: **J9300073**
Completed: August 09, 2016
Received: July 30, 2016
Collected: July 27, 2016

NutriPATH
Mary Cavaggion
18A Harker St
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GI Effects™ Comprehensive Profile - Stool

Interpretation At-a-Glance

INFECTION



INFLAMMATION

EPX ▲
Fecal secretory IgA ▲



INSUFFICIENCY

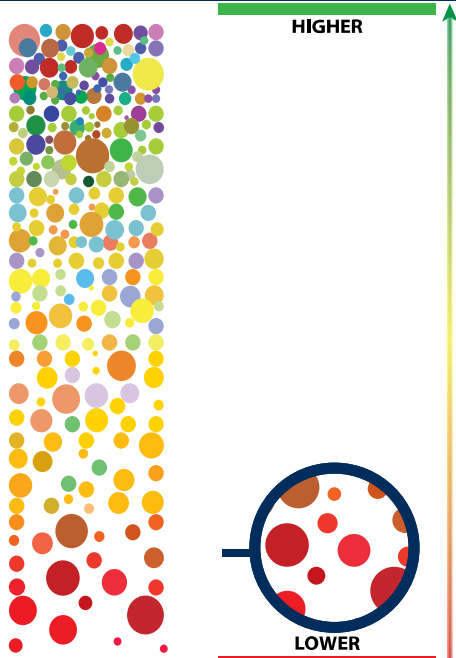


IMBALANCE

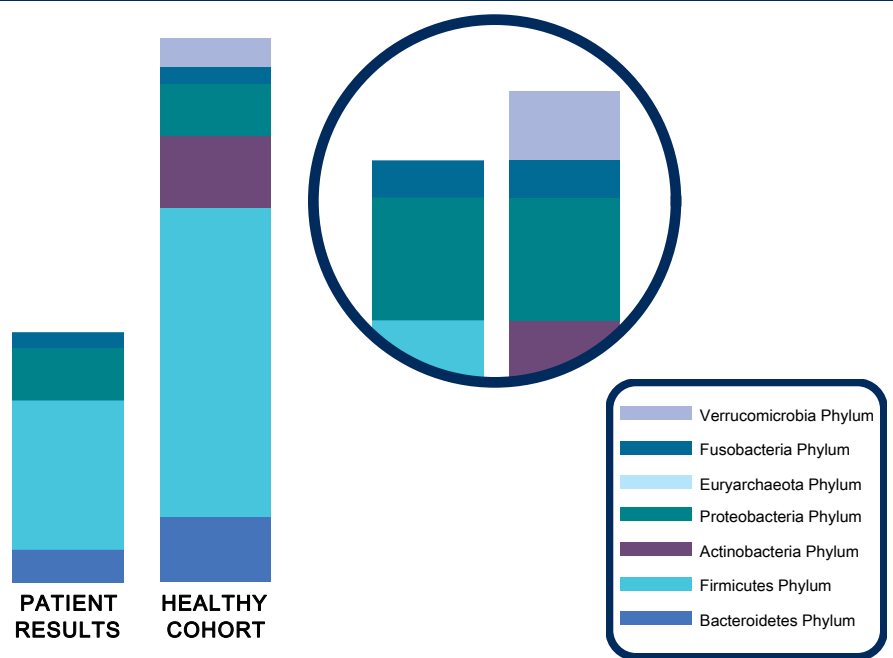
Beneficial Bacteria ▼
n-Butyrate ▼
Total SCFA ▼
PP Bacteria ▲



DIVERSITY ASSOCIATION



RELATIVE ABUNDANCE





GI Effects™ Comprehensive Profile - Stool

Methodology: GC/MS, Automated Chemistry, EIA

GI Effects™ Comprehensive Profile - Stool		QUINTILE DISTRIBUTION					Reference Range
		1st	2nd	3rd	4th	5th	
Methodology: GC/MS, Automated Chemistry, EIA		Results					
Digestion and Absorption							
Pancreatic Elastase 1 † ♦	>500						>200 mcg/g
Products of Protein Breakdown (Total*) (Valerate, Isobutyrate, Isovalerate)	2.6						1.8-9.9 micromol/g
Fecal Fat (Total*)	7.1						3.2-38.6 mg/g
Triglycerides	1.0						0.3-2.8 mg/g
Long-Chain Fatty Acids	2.6						1.2-29.1 mg/g
Cholesterol	1.7						0.4-4.8 mg/g
Phospholipids	1.8						0.2-6.9 mg/g
Inflammation and Immunology							
Calprotectin † ♦	<17						<=50 mcg/g
Eosinophil Protein X (EPX)†	2.1						<=4.6 mcg/g
Fecal secretory IgA	436						<=885 mcg/g
Gastrointestinal Microbiome							
Metabolic							
Short-Chain Fatty Acids (SCFA) (Total*) (Acetate, n-Butyrate, Propionate)	12.2 L						>=23.3 micromol/g
n-Butyrate Concentration	2.3 L						>=3.6 micromol/g
n-Butyrate %	18.9						11.8-33.3 %
Acetate %	55.3						48.1-69.2 %
Propionate %	25.6						<=29.3 %
Beta-glucuronidase	276 L						368-6,266 U/g



*Total value is equal to the sum of all measurable parts.

†These results are not represented by quintile values.

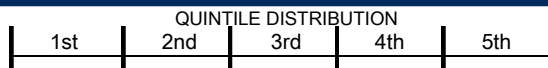
A. L. Peace-Brewer, PhD, D(ABMLI), Lab Director · CLIA Lic. #34D0655571 · Medicare Lic. #34-8475

Tests were developed and their performance characteristics determined by Genova Diagnostics. Unless otherwise noted with ♦, the assays have not been cleared or approved by the U.S. Food and Drug Administration.

Methodology: DNA by PCR

Gastrointestinal Microbiome

Commensal Bacteria (PCR)

Result
CFU/g stoolReference Range
CFU/g stool

Bacteroidetes Phylum

<i>Bacteroides-Prevotella</i> group	<DL L		3.4E6-1.5E9
<i>Bacteroides vulgatus</i>	2.5E7		<=2.2E9
<i>Barnesiella</i> spp.	<DL		<=1.6E8
<i>Odoribacter</i> spp.	6.2E7		<=8.0E7
<i>Prevotella</i> spp.	2.2E6		1.4E5-1.6E7

Firmicutes Phylum

<i>Anaerotruncus colihominis</i>	<DL		<=3.2E7
<i>Butyrivibrio crossotus</i>	<DL L		5.5E3-5.9E5
<i>Clostridium</i> spp.	1.5E8 L		1.7E8-1.5E10
<i>Coprococcus eutactus</i>	<DL		<=1.2E8
<i>Faecalibacterium prausnitzii</i>	4.0E8		5.8E7-4.7E9
<i>Lactobacillus</i> spp.	<DL L		8.3E6-5.2E9
<i>Pseudoflavonifractor</i> spp.	1.4E7		4.2E5-1.3E8
<i>Roseburia</i> spp.	<DL L		1.3E8-1.2E10
<i>Ruminococcus</i> spp.	6.2E7 L		9.5E7-1.6E9
<i>Veillonella</i> spp.	3.9E5		1.2E5-5.5E7

Actinobacteria Phylum

<i>Bifidobacterium</i> spp.	<DL		<=6.4E9
<i>Bifidobacterium longum</i>	<DL		<=7.2E8
<i>Collinsella aerofaciens</i>	<DL L		1.4E7-1.9E9

Proteobacteria Phylum

<i>Desulfovibrio piger</i>	<DL		<=1.8E7
<i>Escherichia coli</i>	3.2E7		9.0E4-4.6E7
<i>Oxalobacter formigenes</i>	4.0E5		<=1.5E7

Euryarchaeota Phylum

<i>Methanobrevibacter smithii</i>	<DL		<=8.6E7
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Fusobacteria Phylum

<i>Fusobacterium</i> spp.	8.8E3		<=2.4E5
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Verrucomicrobia Phylum

<i>Akkermansia muciniphila</i>	<DL		>=1.2E6
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Firmicutes/Bacteroidetes Ratio

<i>Firmicutes/Bacteroidetes</i> (F/B Ratio)	11 L		12-620
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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 7.3×10^6 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.

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

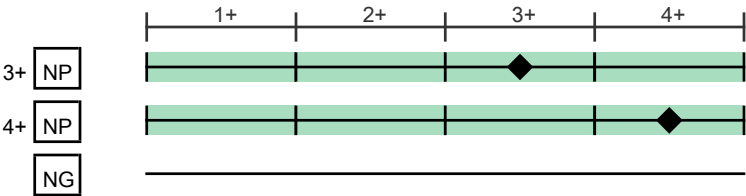
Gastrointestinal Microbiome **

Bacteriology (Culture)

Lactobacillus spp.

Escherichia coli

Bifidobacterium



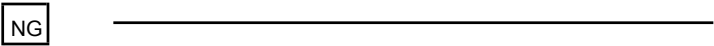
Additional Bacteria

Citrobacter freundii

gamma haemolytic Streptococcus



Mycology (Culture)



** Microbiology culture performed by Genova Diagnostics, Inc. 63 Zillico St., Asheville, NC 28801-0174
A. L. Peace-Brewer, PhD, D(ABMLI), Lab Director - CLIA Lic. #34D0655571 - Medicare Lic. #34-8475

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 have a well-recognized mechanism of pathogenicity in clinical literature and are considered significant regardless of the quantity that appears in the culture.

Parasitology

Microscopic Exam Results**

No Ova or Parasites seen

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.

Parasitology EIA Tests:

	In Range	Out of Range
<i>Cryptosporidium</i> ♦	Negative	
<i>Giardia lamblia</i> ♦	Negative	
<i>Entamoeba histolytica</i> ♦	Negative	



** Indicates testing performed by Genova Diagnostics, Inc. 63 Zillicoa St., Asheville, NC 28801-0174
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New York Clinical Lab PFI #4578 · Florida Clinical Lab Lic. #800008124

Additional Results

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

Lab Comments (if applicable)

Lab Comments
SENSI'S: All yeast, add'l bacteria



††Results provided from patient input.

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Bacteria Sensitivity ****Prescriptive Agents**

<i>Citrobacter freundii</i>	R	I	S-DD	S	NI
Ampicillin	R				
Amox./Clavulanic Acid	R				
Cephalothin	R				
Ciprofloxacin				S	
Tetracycline				S	
Trimethoprim/Sulfa				S	

Natural Agents

<i>Citrobacter freundii</i>	LOW INHIBITION	HIGH INHIBITION
Berberine		
Oregano		
Plant Tannins		
Uva-Ursi		

**Prescriptive Agents:**

The R (Resistant) category implies isolate is not inhibited by obtainable levels of pharmaceutical agent.

The I (Intermediate) category includes isolates for which the minimum inhibition concentration (MIC) values usually approach obtainable pharmaceutical agent levels and for which response rates may be lower than for susceptible isolates.

The S-DD (Susceptible-Dose Dependent) category implies clinical efficacy when higher than normal dosage of a drug can be used and maximal concentration achieved.

The S (Susceptible) column implies that isolates are inhibited by the usually achievable concentrations of the pharmaceutical agent.

NI (No Interpretive guidelines established) category is used for organisms that currently do not have established guidelines for MIC interpretation.

Refer to published pharmaceutical guidelines for appropriate dosage therapy.

Natural Agents:

In this assay, inhibition is defined as the reduction level on organism growth as a direct result of inhibition by a substance. The level of inhibition is an indicator of how effective the substance was at limiting the growth of an organism in an in vitro environment. High inhibition indicates a greater ability by the substance to limit growth, while Low Inhibition a lesser ability to limit growth. The designated natural products should be considered investigational in nature and not be viewed as standard clinical treatment substances.

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