invivo

GI ECOLOGIX™ REPORT

REPORT ID: S004431

TEST REPORTED: 01/02/2021
TEST RECEIVED:
PATIENT NAME: JOHN DOE
PATIENT DOB: 01/01/1980
GENDER: MALE

REPORT STATUS: COMPLETED
CLINICIAN NAME: JANE DOE
ACCESSION NO:
SAMPLE TYPE: STOOL

The Invivo GI EcologiX™ profile utilises quantitative real-time PCR (qRT-PCR) for analysis of gastrointestinal microbiota. qRT-PCR results are reported as quantification of microbial gene of interest copies in a community sample relative to endogenous gene control (i.e. gut, vaginal). qRT-PCR reactions are performed using Taqman technology. The results show representative numbers proportional to normalised qRT-PCR value.

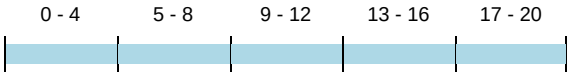
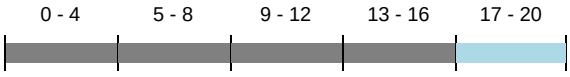
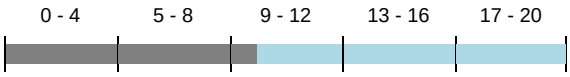
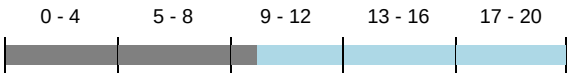
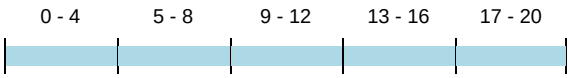
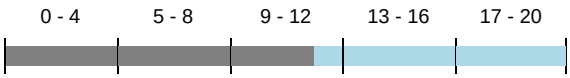
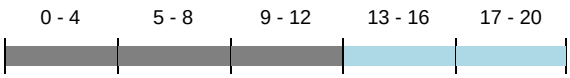
GI Health Markers

	RESULTS:		RATING:
Beta Defensin 2 RANGE:<68.0ng/g	0ng/g	<68.0ng/g	NORMAL
Bile Acids RANGE:<4000.0umol/L	3umol/L	<4000.0umol/L	NORMAL
Calprotectin RANGE:<50ug/g	45ug/g	<50ug/g	NORMAL
FIT (Occult Blood) RANGE:<10.0ug/g	2ug/g	<10.0ug/g	NORMAL
Pancreatic Elastase RANGE:>200.0ug/g	620ug/g	>200.0ug/g	NORMAL
Secretory IgA RANGE:<750.0ug/g	163ug/g	<750.0ug/g	NORMAL
Zonulin RANGE:<100.0ng/g	4ng/g	<100.0ng/g	NORMAL

▲ Health immune markers are quantified using relevant protein-based assays. Please refer to the Invivo interpretive guide for more details on health markers.

Commensal Bacteria

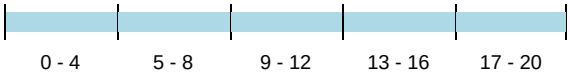
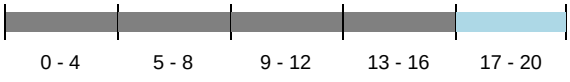
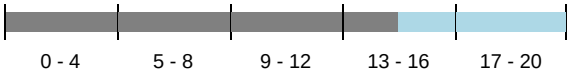
	RESULTS:		ABUNDANCE:
Akkermansia muciniphila	<DL	0 - 4 | 5 - 8 | 9 - 12 | 13 - 16 | 17 - 20	<DL
Anaerostipes caccae	10.32	0 - 4 | 5 - 8 | 9 - 12 | 13 - 16 | 17 - 20	MODERATE

		0 - 4 / 5 - 8 / 9 - 12 / 13 - 16 / 17 - 20	
Bacteroides spp.	16.8		VERY HIGH
Bifidobacterium spp.	<DL		<DL
Escherichia coli	16.08		VERY HIGH
Eubacterium rectale	15.92		HIGH
Faecalibacterium prausnitzii	8.96		MODERATE
Lactobacillus spp.	8.8		MODERATE
Roseburia homini	<DL		<DL
Ruminococcus bromii	11.36		MODERATE
Subdoligranulum variabile	12.4		HIGH

▲ Commensal bacteria live in symbiosis with the host under normal conditions. To learn more about associations between commensal bacteria and clinical conditions, please refer to the Invivo interpretive guide. <DL: Microorganism is not detected/below detection limit.

Bacteroides Sub Group

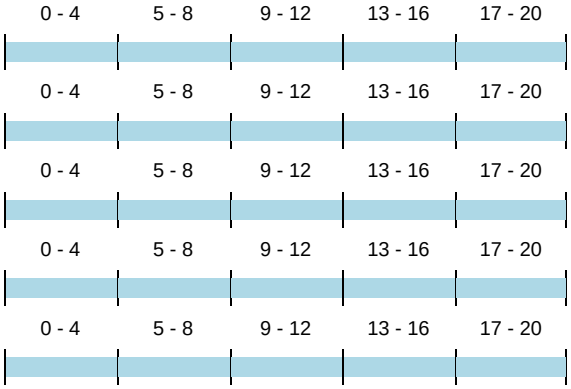
RESULTS: **ABUNDANCE:**

		0 - 4 / 5 - 8 / 9 - 12 / 13 - 16 / 17 - 20	
Bacteroides dorei	<DL		<DL
Bacteroides fragilis	16.48		VERY HIGH
Bacteroides fragilis (Enterotoxigenic)	<DL		<DL
Bacteroides ovatus	14.08		HIGH
Bacteroides thetaiotaomicron	7.36		LOW
Bacteroides uniformis	4.8		LOW
Bacteroides vulgatus	16.72		VERY HIGH

▲ Bacteroides bacteria are gram-negative members of the GI microbiota. Please refer to the Invivo interpretive guide for information on associations with dysbiosis, clinical conditions and disease. <DL: Microorganism is not detected/below detection limit.

Clostridium Sub Group

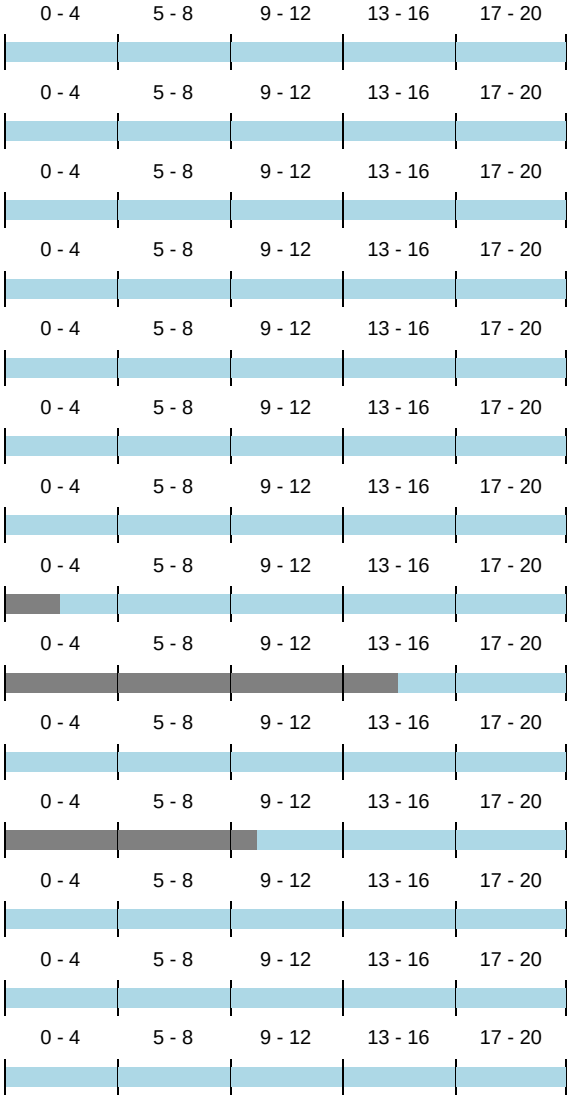
	RESULTS:	ABUNDANCE:
Clostridium difficile	<DL	<DL
Clostridium difficile (tox A)	<DL	<DL
Clostridium difficile (tox B)	<DL	<DL
Clostridium perfringens	<DL	<DL
Clostridium sporogenes	<DL	<DL



▲ Clostridium bacteria are gram-positive members of the GI microbiota. Please refer to the Invivo interpretive guide for information on associations with dysbiosis, clinical conditions and disease. <DL: Microorganism is not detected/below detection limit.

Gram Negative (-) Bacteria

	RESULTS:	ABUNDANCE:
Bilophila wadsworthia	<DL	<DL
Citrobacter freundii	<DL	<DL
Citrobacter koseri	<DL	<DL
Citrobacter spp.	<DL	<DL
Desulfovibrio spp.	<DL	<DL
Enterobacter aerogenes	<DL	<DL
Enterobacter cloacae	<DL	<DL
Fusobacterium nucleatum	1.76	VERY LOW
Hafnia alvei	14.08	HIGH
Klebsiella oxytoca	<DL	<DL
Klebsiella pneumoniae	8.56	MODERATE
Morganella morganii	<DL	<DL
Oxalobacter formigenes	<DL	<DL
Prevotella copri	<DL	<DL



		0 - 4 / 5 - 8 / 9 - 12 / 13 - 16 / 17 - 20	
Proteus mirabilis	<DL		<DL
Pseudomonas aeruginosa	<DL		<DL
Serratia marcescens	<DL		<DL
Veillonella spp.	7.04		LOW
Yersinia enterocolitica	<DL		<DL

▲ Gram-negative bacteria are members of the healthy GI microbiota. Please refer to the Invivo interpretive guide for information on associations with clinical conditions, LPS endotoxemia and disease. <DL: Microorganism is not detected/below detection limit.

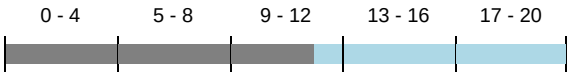
Gram Positive (+) Bacteria

	RESULTS:	0 - 4 / 5 - 8 / 9 - 12 / 13 - 16 / 17 - 20	**ABUNDANCE:**
Enterococcus faecalis	1.6		VERY LOW
Enterococcus faecium	<DL		<DL
Enterococcus gallinarum	<DL		<DL
Methanobrevibacter smithii	<DL		<DL
Mycobacterium avium	<DL		<DL
Ruminococcus gnavus	16.4		VERY HIGH
Ruminococcus torques	8.88		MODERATE
Staphylococcus aureus	<DL		<DL
Streptococcus agalactiae	3.2		VERY LOW
Streptococcus pneumoniae	<DL		<DL
Streptococcus pyogenes	<DL		<DL

▲ Gram-positive bacteria are members of the healthy GI microbiota. Please refer to the Invivo interpretive guide for information on associations with clinical conditions and disease. <DL: Microorganism is not detected/below detection limit.

H. pylori

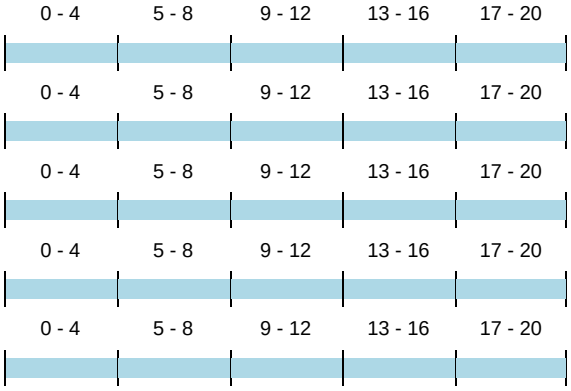
	RESULTS:	ABUNDANCE:
Helicobacter pylori	10.56	MODERATE
Helicobacter pylori Stool Antigen (as confirmatory reflex)	NEGATIVE	NEGATIVE



▲ Helicobacter pylori is a gram-negative bacterium usually found in the stomach. It is believed to be a stable member of the human microbiota and it is asymptomatic in 90% of the individuals. H. pylori Stool Antigen is run as a confirmatory test to establish potential pathogenicity to host. Please refer to the Invivo interpretive guide for information on associations with clinical conditions and disease. <DL: Microorganism is not detected/below detection limit.

Mycology

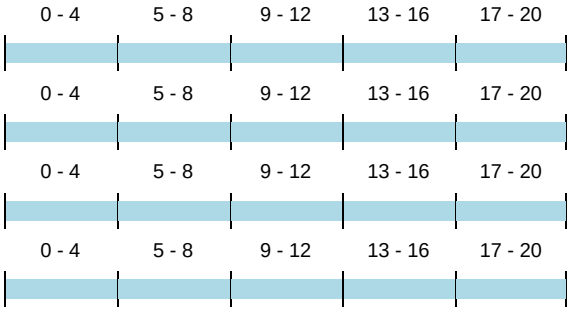
	RESULTS:	ABUNDANCE:
Aspergillus fumigatus	<DL	<DL
Candida albicans	<DL	<DL
Candida krusei	<DL	<DL
Candida tropicalis	<DL	<DL
Malassezia restricta	<DL	<DL



▲ Commensal yeast and fungi live in symbiosis with host under normal conditions. Following dysbiosis or imbalance, overgrowth of fungi can occur causing pathogenic activity Please refer to the Invivo interpretive guide for further information on commensal fungi. <DL: Microorganism is not detected/below detection limit.

Parasitology

	RESULTS:	ABUNDANCE:
Blastocystis hominis	<DL	<DL
Dientamoeba fragilis	<DL	<DL
Entamoeba histolytica	<DL	<DL
Giardia lamblia	<DL	<DL



▲ Parasites can be non-pathogenic in the human population. In specific circumstances they can become pathogenic. Please refer to the Invivo interpretive guide for information on associations with clinical conditions and disease. ND: Microorganism is not detected/below detection limit.

Lab Director:
Eviatar Natan, PhD