Keene, Mandy
Patient ID:
Specimen ID: **358-535-0193-0**

DOB: **04/08/1978**
Age: **46**
Sex: **Female**

Patient Report
Account Number: **11005910**
Ordering Physician: **R VAWDREY**

labcorp

Date Collected: **12/23/2024** Date Received: **12/23/2024** Date Reported: **01/08/2025** Fasting: **Yes**

Ordered Items: **CBC With Differential/Platelet; Comp. Metabolic Panel (14); OmegaCheck(TM) (EPA+DPA+DHA); Lipid Panel w/ Chol/HDL Ratio; APOE Alzheimer's Risk; Vitamin E; Hgb A1c with eAG Estimation; Pregnenolone, MS; MTHFR; Thyroxine (T4) Free, Direct; Folate (Folic Acid), Serum; DHEA-Sulfate; Testosterone; TSH; FSH; Estradiol; Total Glutathione; Vitamin D, 25-Hydroxy; C-Reactive Protein, Cardiac; Homocyst(e)ine; Uric Acid; Thyroid Antibodies; Vitamin B12; Copper, Serum or Plasma; Zinc, Plasma or Serum; Progesterone; Insulin; Triiodothyronine (T3), Free; Magnesium, RBC; Cortisol - AM; Selenium, Serum/Plasma; Venipuncture**

Date Collected: **12/23/2024**

CBC With Differential/Platelet

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
WBC [01]	5.8	5.3	07/07/2023	x10E3/uL	3.4-10.8
RBC [01]	4.25	4.41	07/07/2023	x10E6/uL	3.77-5.28
Hemoglobin [01]	13.6	14.4	07/07/2023	g/dL	11.1-15.9
Hematocrit [01]	41.0	41.5	07/07/2023	%	34.0-46.6
MCV [01]	97	94	07/07/2023	fL	79-97
MCH [01]	32.0	32.7	07/07/2023	pg	26.6-33.0
MCHC [01]	33.2	34.7	07/07/2023	g/dL	31.5-35.7
RDW [01]	12.1	11.9	07/07/2023	%	11.7-15.4
Platelets [01]	159	160	07/07/2023	x10E3/uL	150-450
Neutrophils [01]	59	58	07/07/2023	%	Not Estab.
Lymphs [01]	33	31	07/07/2023	%	Not Estab.
Monocytes [01]	6	8	07/07/2023	%	Not Estab.
Eos [01]	1	2	07/07/2023	%	Not Estab.
Basos [01]	1	1	07/07/2023	%	Not Estab.
Neutrophils (Absolute) [01]	3.4	3.2	07/07/2023	x10E3/uL	1.4-7.0
Lymphs (Absolute) [01]	1.9	1.6	07/07/2023	x10E3/uL	0.7-3.1
Monocytes(Absolute) [01]	0.3	0.4	07/07/2023	x10E3/uL	0.1-0.9
Eos (Absolute) [01]	0.1	0.1	07/07/2023	x10E3/uL	0.0-0.4
Baso (Absolute) [01]	0.0	0.0	07/07/2023	x10E3/uL	0.0-0.2
Immature Granulocytes [01]	0	0	07/07/2023	%	Not Estab.
Immature Grans (Abs) [01]	0.0	0.0	07/07/2023	x10E3/uL	0.0-0.1

Comp. Metabolic Panel (14)

Test	Current Result and Flag		Previous Result and Date		Units	Reference Interval
Glucose [01]	78		84	07/07/2023	mg/dL	70-99
▼ **BUN** [01]	**5**	**Low**	**5**	07/07/2023	mg/dL	6-24
Creatinine [01]	0.69		0.81	07/07/2023	mg/dL	0.57-1.00
eGFR	108		91	07/07/2023	mL/min/1.73	>59
▼ **BUN/Creatinine Ratio**	**7**	**Low**	**6**	07/07/2023		9-23
Sodium [01]	139		138	07/07/2023	mmol/L	134-144
Potassium [01]	3.8		4.5	07/07/2023	mmol/L	3.5-5.2
Chloride [01]	106		105	07/07/2023	mmol/L	96-106
Carbon Dioxide, Total [01]	20				mmol/L	20-29
Calcium [01]	9.2		9.7	07/07/2023	mg/dL	8.7-10.2

Date Collected: **12/23/2024**

Comp. Metabolic Panel (14) (Cont.)

	Protein, Total [01]	6.5		6.8	07/07/2023	g/dL	6.0-8.5
	Albumin [01]	4.4		4.5*	07/07/2023	g/dL	3.9-4.9
	Globulin, Total	2.1		2.3	07/07/2023	g/dL	1.5-4.5
	Bilirubin, Total [01]	0.6		0.3	07/07/2023	mg/dL	0.0-1.2
	Alkaline Phosphatase [01]	99		94	07/07/2023	IU/L	44-121
▲	**AST (SGOT) [01]**	**47**	**High**	20	07/07/2023	IU/L	0-40
	ALT (SGPT) [01]	21		16	07/07/2023	IU/L	0-32

* Previous Reference Interval: (Albumin: 3.8-4.8 g/dL)

OmegaCheck(TM) (EPA+DPA+DHA)

	Test	Current Result and Flag		Previous Result and Date		Units	Reference Interval
▼	**OmegaCheck(TM) [02]**	**2.4**	**Low**	**3.6**	07/07/2023	% by wt	>5.4
	Relative Risk: HIGH Increasing blood levels of long-chain n-3 fatty acids are associated with a lower risk of sudden cardiac death (1). Based on the top (75th percentile) and bottom (25th percentile) quartiles of the CHL reference population, the following risk categories were established for OmegaCheck: A cut-off of >=5.5% by wt defines a population at low relative risk, 3.8-5.4% by wt defines a population at moderate relative risk, and <=3.7% by wt defines a population at high relative risk of sudden cardiac death. The totality of the scientific evidence demonstrates that when consumption of fish oils is limited to 3 g/day or less of EPA and DHA, there is no significant risk for increased bleeding time beyond the normal range. A daily dosage of 1 gram of EPA and DHA lowers the circulating triglycerides by about 7-10% within 2 to 3 weeks. (Reference: 1-Albert et al. NEJM. 2002; 346: 1113-1118).						
	Arachidonic Acid/EPA Ratio [02]	37.7		21.2	07/07/2023		3.7-40.7
▲	**Omega-6/Omega-3 Ratio [02]**	**16.5**	**High**	10.1	07/07/2023		3.7-14.4
	Omega-3 total [02]	2.4		3.6	07/07/2023	% by wt	
	EPA [02]	0.3		0.5	07/07/2023	% by wt	0.2-2.3
	DPA [02]	0.8		1.1	07/07/2023	% by wt	0.8-1.8
▼	**DHA [02]**	**1.3**	**Low**	2.0	07/07/2023	% by wt	1.4-5.1
	Omega-6 total [02]	39.6		36.5	07/07/2023	% by wt	
	Cleveland HeartLab measures a number of omega-6 fatty acids with AA and LA being the two most abundant forms reported.						
	Arachidonic Acid [02]	12.1		9.6	07/07/2023	% by wt	8.6-15.6
	Linoleic Acid [02]	25.0		23.5	07/07/2023	% by wt	18.6-29.5
	This test is performed by a Liquid Chromatography-Tandem Mass Spectrometry (LC/MS/MS) method. This test was developed and its performance characteristics determined by the Cleveland HeartLab, Inc. It has not been cleared or approved by the U.S. FDA. The Cleveland HeartLab is regulated under Clinical Laboratory Improvement Amendments (CLIA) as qualified to perform high-complexity testing. This test is used for clinical purposes. It should not be regarded as investigational or for research.						

Date Collected: **12/23/2024**

OmegaCheck(TM) (EPA+DPA+DHA) (Cont.)

PDF [02]	.	.	07/07/2023		

Lipid Panel w/ Chol/HDL Ratio

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
Cholesterol, Total [01]	133	142	07/07/2023	mg/dL	100-199
Triglycerides [01]	51	76	07/07/2023	mg/dL	0-149
HDL Cholesterol [01]	70	57	07/07/2023	mg/dL	>39
VLDL Cholesterol Cal	12	15	07/07/2023	mg/dL	5-40
LDL Chol Calc (NIH)	51	70	07/07/2023	mg/dL	0-99
T. Chol/HDL Ratio	1.9	2.5	07/07/2023	ratio	0.0-4.4

Please Note: [01]

T. Chol/HDL Ratio

	Men	Women
1/2 Avg.Risk	3.4	3.3
Avg.Risk	5.0	4.4
2X Avg.Risk	9.6	7.1
3X Avg.Risk	23.4	11.0

APOE Alzheimer's Risk

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Methodology: [03]				

Patient DNA is assayed for the APOE genotype by PCR amplification of a specific region in exon 4 of the APOE gene followed by digestion with restriction enzyme Hha I and separation of fragments by polyacrylamide gel electrophoresis. This approach allows the APOE E2, E3, and E4 alleles to be distinguished. Analytical sensitivity and specificity are >99.5%. Individuals are interpreted as having one of the following genotypes: E2/E2, E3/E3, E4/E4, E2/E3, E2/E4, E3/E4.

APO E Genotyping Result: [03]	E2/E3			

Interpretation: [03]

Negative for the APOE4 variant that is associated with increased risk for late onset Alzheimer's disease (AD). APOE2 may have some protective effect against the development of AD.

RECOMMENDATIONS
Genetic counseling is recommended.
Due to the lack of measures to prevent the development of AD, the ACMG/NSGC guidelines do not recommend presymptomatic testing, but if it is performed, guidelines are provided (Goldman JS et al. 2011). The APOE Genotyping: Alzheimer's Risk test is not recommended for children.

NOTE: This is not a diagnostic test. Results should be interpreted along with clinical findings and other data. This test evaluates only for the APOE genotype and cannot detect genetic abnormalities elsewhere in the genome. It should be realized that there are possible sources of error including sample misidentification, rare technical errors,

APOE Alzheimer's Risk (Cont.)

trace contamination of PCR reactions, and rare genetic variants that may interfere with analysis.

For inquiries or genetic consultation, please call Esoterix at 1-800-444-9111.

Comment: [03]

INFORMATION ABOUT THE APOE GENOTYPE AND ALZHEIMER'S DISEASE

Alzheimer's disease (AD) is the most common form of dementia in the elderly and currently affects more than 5 million Americans. It is a progressive neurodegenerative disorder with brain findings of plaques and neurofibrillary tangles containing beta-amyloid and tau protein respectively.

The predominant form of AD is late onset (age > 60-65), which can be familial (15-20%) or sporadic. The APOE4 variant increases the risk for late onset AD and may contribute to the pathology of the disease. This risk is increased by approximately 2 to 3-fold for individuals with one copy of the APOE4 variant and by approximately 10 to15-fold for individuals with two copies of this variant (E4/E4 genotype). The APOE2 variant has some protective effect against development of late onset AD. The lifetime risk for late onset AD is approximately 10-12% in the general population, though it is higher in women than men and doubles when there is a first degree relative with this disorder. The lifetime risk is approximately 9% for individuals negative for APOE4, and for individuals with E4/E4 may be as high as 25% for males and 45% for females. Among patients with late onset AD, the presence of APOE4 may lead to earlier development of symptoms.

However, APOE4 is neither necessary nor sufficient for the development of AD. Approximately 30-50% of patients with late onset AD do not have an APOE4 allele.

APOE4 is common, with 25% of the general population having one copy and 1% having two copies of this variant. Among patients with late onset AD, 50-70% are positive for APOE4.

The development of late onset AD is influenced by many factors other than APOE4 including age, gender, family history, level of education and history of head trauma. Midlife cardiovascular risk factors in individuals with APOE4 also increase risk for cognitive decline. A number of genetic influences in addition to APOE4 have also been reported and are under investigation.

This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary.

REFERENCES

APOE Alzheimer's Risk (Cont.)

Altmann A et al. Sex modifies the APOE-related risk of developing Alzheimer disease. Annal Neurol 2014;75(4):563-573

Bird TD. Alzheimer Disease Overview. GeneReviews (internet). Pagon RA et al., editors. Seattle WA: University of Washington, Seattle, WA. Last revised 2014.

Goldman JS et al. Genetic counseling and testing for Alzheimer disease: Joint practice guidelines of the American College of Medical Genetics and the National Society of Genetic Counselors. Genet in Med 2011;13(6)597-605.

Schipper HM. Apolipoprotein E: Implications for AD neurobiology, epidemiology and risk assessment. Neurobiology of Aging 2011;32:778-790

Vitamin E

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Vitamin E(Alpha Tocopherol) [A, 04]	10.3		mg/L	7.0-25.1
▼ **Vitamin E(Gamma Tocopherol)** [A, 04]	**0.4 Low**		mg/L	0.5-5.5

Reference intervals for alpha and gamma-tocopherol determined from National Health and Nutrition Examination Survey, 2005-2006. Individuals with alpha-tocopherol levels less than 5.0 mg/L are considered vitamin E deficient.

Hgb A1c with eAG Estimation

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Hemoglobin A1c [01]	4.9	4.9 07/07/2023	%	4.8-5.6
Please Note: [01]				

Prediabetes: 5.7 - 6.4
Diabetes: >6.4
Glycemic control for adults with diabetes: <7.0

Estim. Avg Glu (eAG)	94		mg/dL	

Pregnenolone, MS

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Pregnenolone, MS [05]	44		ng/dL	

This test was developed and its performance characteristics determined by Labcorp. It has not been cleared or approved by the Food and Drug Administration.
Reference Range:
Adults: <151

MTHFR

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
MTHFR, DNA Analysis [06]				

Result:

MTHFR (Cont.)

c.665C>T (p. Ala222Val), legacy name: C677T - Detected, homozygous
c.1286A>C (p. Glu429Ala), legacy name: A1298C - Not Detected
Interpretation:
This result may increase the risk for hyperhomocysteinemia. See Additional Clinical Information and Comments.

Please Note: [06]

Additional Clinical Information:
Hyperhomocysteinemia is multifactorial involving genetic, clinical, and environmental risk factors. Reduced enzyme activity of methylenetetrahydrofolate reductase (MTHFR) is a genetic risk factor for hyperhomocysteinemia, particularly when serum folate levels are low. There are two common variants in the MTHFR gene that can decrease enzyme activity; c.665C>T (p. Ala222Val), legacy name C677T, and c.1286A>C (p. Glu429Ala), legacy name A1298C. These variants do not independently increase risk of conditions related to hyperhomocysteinemia in the absence of elevated homocysteine levels. Measurement of total plasma homocysteine is recommended. Patients should share their MTHFR genotype with physicians who are making decisions regarding chemotherapy treatments that depend on folate, such as methotrexate.
Guidelines do not recommend genotyping of these two MTHFR variants in the evaluation of venous thrombosis or obstetric risk due to limited evidence of clinical utility (PMID: 23288205).
Comments:
Genetic Coordinators are available for health care providers to discuss results at 1-800-345-GENE (4363).
Test Details:
Variants Analyzed: c.665C>T (p. Ala222Val), legacy name: C677T and c.1286A>C (p. Glu429Ala), legacy name: A1298C
Methods/Limitations:
DNA analysis of the MTHFR gene was performed by PCR amplification followed by restriction enzyme analysis. The diagnostic sensitivity is >99%. Results must be combined with clinical information for the most accurate interpretation. Molecular-based testing is highly accurate, but as in any laboratory test, diagnostic errors may occur. False positive or false negative results may occur for reasons that include genetic variants, blood transfusions, bone marrow transplantation, somatic or tissue-specific mosaicism, mislabeled samples, or erroneous representation of family relationships.
This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.
References:
Hickey SE, Curry CJ, Toriello HV. ACMG Practice Guideline: lack of evidence for MTHFR polymorphism testing. Genet Med. 2013 Feb;15(2):153-6. doi: 10.1038/gim.2012.165. Epub 2013 Jan 3. PMID: 23288205.
American College of Obstetricians and Gynecologists' Committee on Practice Bulletins-Obstetrics. ACOG Practice Bulletin No. 197: Inherited Thrombophilias in Pregnancy. Obstet Gynecol. 2018 Jul;132(1):e18-e34. doi: 10.1097/AOG.0000000000002703. Erratum in: Obstet Gynecol. 2018 Oct;132(4):1069. PMID: 29939939.

Reviewed by: [06]

Yanjun Jiang, PhD FACMG

Date Collected: **12/23/2024**

Thyroxine (T4) Free, Direct

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
T4,Free(Direct) [01]	1.12		ng/dL	0.82-1.77

Folate (Folic Acid), Serum

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Folate (Folic Acid), Serum [01]	3.2		ng/mL	>3.0
Note: [01]	A serum folate concentration of less than 3.1 ng/mL is considered to represent clinical deficiency.			

DHEA-Sulfate

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
DHEA-Sulfate [01]	117.0		ug/dL	41.2-243.7

Testosterone

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Testosterone [01]	21		ng/dL	4-50

TSH

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
TSH [01]	3.310	3.090	07/07/2023	uIU/mL	0.450-4.500

FSH

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
FSH [01]	86.6		mIU/mL	
		Adult Female	Range	
		Follicular phase	3.5 - 12.5	
		Ovulation phase	4.7 - 21.5	
		Luteal phase	1.7 - 7.7	
		Postmenopausal	25.8 - 134.8	

Estradiol

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Estradiol [01]	<5.0		pg/mL	
		Adult Female	Range	
		Follicular phase	12.5 - 166.0	
		Ovulation phase	85.8 - 498.0	
		Luteal phase	43.8 - 211.0	
		Postmenopausal	<6.0 - 54.7	
		Pregnancy		
		1st trimester	215.0 - >4300.0	
	Roche ECLIA methodology			

Total Glutathione

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Total Glutathione [07]	209		ug/mL	176-323

Total Glutathione (Cont.)

Results of this test are for Investigational Purposes Only. The performance characteristics of this assay have been determined by LabCorp. The result should not be used as a diagnostic procedure without confirmation of the diagnosis by another medically established diagnostic product or procedure.

Vitamin D, 25-Hydroxy

	Test	Current Result and Flag		Previous Result and Date		Units	Reference Interval
▼	**Vitamin D, 25-Hydroxy** [01]	**21.6**	**Low**	**29.6**	07/07/2023	ng/mL	30.0-100.0

Vitamin D deficiency has been defined by the Institute of Medicine and an Endocrine Society practice guideline as a level of serum 25-OH vitamin D less than 20 ng/mL (1,2). The Endocrine Society went on to further define vitamin D insufficiency as a level between 21 and 29 ng/mL (2).

1. IOM (Institute of Medicine). 2010. Dietary reference intakes for calcium and D. Washington DC: The National Academies Press.
2. Holick MF, Binkley NC, Bischoff-Ferrari HA, et al. Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. JCEM. 2011 Jul; 96(7):1911-30.

C-Reactive Protein, Cardiac

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
C-Reactive Protein, Cardiac [01]	0.24		mg/L	0.00-3.00

Relative Risk for Future Cardiovascular Event	
Low	<1.00
Average	1.00 - 3.00
High	>3.00

Homocyst(e)ine

	Test	Current Result and Flag		Previous Result and Date	Units	Reference Interval
▲	**Homocyst(e)ine** [01]	**20.5**	**High**		umol/L	0.0-14.5

Uric Acid

Test	Current Result and Flag	Previous Result and Date		Units	Reference Interval
Uric Acid [01]	3.3	4.4	07/07/2023	mg/dL	2.6-6.2

Therapeutic target for gout patients: <6.0

Thyroid Antibodies

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Thyroid Peroxidase (TPO) Ab [01]	<9		IU/mL	0-34
Thyroglobulin Antibody [04]	<1.0		IU/mL	0.0-0.9

Thyroglobulin Antibody measured by Beckman Coulter Methodology
It should be noted that the presence of thyroglobulin antibodies may not be pathogenic nor diagnostic, especially at very low levels. The assay manufacturer has found that four percent of individuals without evidence of thyroid disease or autoimmunity will have positive TgAb levels up to 4 IU/mL.

Date Collected: **12/23/2024**

Vitamin B12

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Vitamin B12 [01]	1223		pg/mL	232-1245

Copper, Serum or Plasma

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▼ **Copper, Serum or Plasma** [A, 04]	**63** **Low**		ug/dL Detection Limit = 5	80-158

Zinc, Plasma or Serum

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Zinc, Plasma or Serum [A, 04]	58		ug/dL Detection Limit = 5	44-115

Progesterone

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Progesterone [01]	0.3		ng/mL	
		Follicular phase	0.1 - 0.9	
		Luteal phase	1.8 - 23.9	
		Ovulation phase	0.1 - 12.0	
		Pregnant		
		First trimester	11.0 - 44.3	
		Second trimester	25.4 - 83.3	
		Third trimester	58.7 - 214.0	
		Postmenopausal	0.0 - 0.1	

Insulin

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Insulin [01]	3.5		uIU/mL	2.6-24.9

Triiodothyronine (T3), Free

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Triiodothyronine (T3), Free [01]	3.0	3.3 07/07/2023	pg/mL	2.0-4.4

Magnesium, RBC

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Magnesium, RBC [A, 07]	4.4		mg/dL	3.7-7.0

Cortisol - AM

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Cortisol - AM [01]	16.2		ug/dL	6.2-19.4

Selenium, Serum/Plasma

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Selenium, Serum/Plasma [A, 04]	106		ug/L	93-198

Disclaimer
The Previous Result is listed for the most recent test performed by Labcorp in the past 5 years where there is sufficient patient demographic data to match the result to the patient. Results from certain tests are excluded from the Previous Result display.

Icon Legend
▲ Out of Reference Range ■ Critical or Alert

Comments
A: This test was developed and its performance characteristics determined by Labcorp. It has not been cleared or approved by the Food and Drug Administration.

Performing Labs
01: SE - Labcorp Seattle, 550 17th Avenue Ste 300, Seattle, WA 98122-5789 Dir: Daniel Toweill, MD
02: CLHRT - Cleveland Heartlab Inc, 6701 Carnegie Avenue Ste 500, Cleveland, OH 44103-4623 Dir: Bill Richendollar, MD
03: UY - Esoterix Inc, 8490 Upland Drive Ste 100, Englewood, CO 80112-7116 Dir: Brian F. Poirier, MD
04: SPOWA - Labcorp Spokane, 110 W Cliff Dr. Ste 100-200, Spokane, WA 99204-3614 Dir: Shefali Goyal, MD
05: ES - Esoterix Inc, 4301 Lost Hills Road, Calabasas Hills, CA 91301-5358 Dir: Brian Poirier, MD
06: TG - Labcorp RTP, 1912 TW Alexander Drive, RTP, NC 27709-0150 Dir: Anjen Chenn, MDPhD
07: BN - Labcorp Burlington, 1447 York Court, Burlington, NC 27215-3361 Dir: Sanjai Nagendra, MD
For inquiries, the physician may contact Branch: 800-598-3345 Lab: 206-861-7000

Patient Details
Keene, Mandy
3964 N CHELMSFORD AVE, MERIDIAN, ID, 83646

Phone: **208-391-1314**
Date of Birth: **04/08/1978**
Age: **46**
Sex: **Female**
Patient ID:
Alternate Patient ID:

Physician Details
R VAWDREY
A Mind For All Seasons
7655 W Riverside Dr, Boise, ID, 83714

Phone: **208-378-2860**
Account Number: **11005910**
Physician ID:
NPI: **1376568493**

Specimen Details
Specimen ID: **358-535-0193-0**
Control ID: **L2409097642**
Alternate Control Number: **L2409097642**
Date Collected: **12/23/2024 0832 Local**
Date Received: **12/23/2024 0000 ET**
Date Entered: **12/23/2024 1433 ET**
Date Reported: **01/08/2025 0306 ET**

Quest Diagnostics™

ClevelandHeartLab®
Know your risk.

Report Status: Final

KEENE, MANDY

Patient Information	Specimen Information	Client Information
KEENE, MANDY **DOB: 04/08/1978** **AGE: 46** Gender: Female Fasting: Fasting Phone: Patient ID: 2435853501930	Order ID: 2436000152 Requisition: 2436000152 Collected: 12/23/2024, 08:32 AM Received: 12/27/2024, 11:26 AM Reported: 12/29/2024, 5:57 PM	PROVIDER LABCORP 12485 LABCORP SEATTLE 550 17TH AVENUE SUITE 300 SEATTLE, WA 98122

Cardiometabolic Report

Test Name	Current Result & Relative Risk		Reference Range/Relative Risk Categories				Historical Result & Relative Risk	
	Optimal	Non-Optimal	Optimal	Moderate	High	Units	/ /	/ /
FATTY ACIDS								
OmegaCheck® (Whole Blood: EPA+DPA+DHA)(1)		2.4	≥5.5	3.8-5.4	≤3.7	% by wt		
Arachidonic Acid/EPA Ratio	37.7			3.7-40.7				
Omega-6/Omega-3 Ratio		16.5 H		3.7-14.4				
Omega-3 total		2.4				% by wt		
EPA	0.3			0.2-2.3		% by wt		
DPA	0.8			0.8-1.8		% by wt		
DHA		1.3 L		1.4-5.1		% by wt		
Omega-6 total		39.6				% by wt		
Arachidonic Acid	12.1			8.6-15.6		% by wt		
Linoleic Acid	25.0			18.6-29.5		% by wt		

UND = UNDETECTABLE **INC = INCOMPUTABLE**

Medical Information For Healthcare Providers: If you have any questions about any of the tests in our Cardiometabolic Report, please call Cleveland HeartLab Client Services at 866.358.9828, option 1 to arrange a consult with our clinical education team.

Cardiometabolic Comment Report

FATTY ACIDS

OmegaCheck® (Whole Blood: EPA+DPA+DHA)(1) Lab: Z4M

Increasing blood levels of long-chain n-3 fatty acids are associated with a lower risk of sudden cardiac death (1). Based on the top (75th percentile) and bottom (25th percentile) quartiles of the CHL reference population, the following relative risk categories were established for OmegaCheck: A cut-off of >=5.5% by wt defines a population at optimal relative risk, 3.8-5.4% by wt defines a population at moderate relative risk, and <=3.7% by wt defines a population at high relative risk of sudden cardiac death. The totality of the scientific evidence demonstrates that when consumption of fish oils is limited to 3 g/day or less of EPA and DHA, there is no significant risk for increased bleeding time beyond the normal range. A daily dosage of 1 gram of EPA and DHA lowers the circulating triglycerides by about 7-10% within 2 to 3 weeks. (Reference: 1-Albert et al. NEJM. 2002; 346: 1113-1118).

Omega-6 total Lab: Z4M

Cleveland HeartLab measures a number of omega-6 fatty acids with AA and LA being the two most abundant forms reported.

Patient Information	Specimen Information	Client Information
KEENE, MANDY **DOB: 04/08/1978** **AGE: 46** Gender: Female Fasting: Fasting Patient ID: 2435853501930	Order ID: 2436000152 Collected: 12/23/2024, 08:32 AM Received: 12/27/2024, 11:26 AM Reported: 12/29/2024, 5:57 PM	PROVIDER LABCORP

Footnotes

(1) This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Cardiometabolic Center of Excellence at Cleveland HeartLab. It has not been cleared or approved by the U.S. Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

PERFORMING SITE:

Z4M CLEVELAND HEARTLAB INC, 6701 CARNEGIE AVENUE SUITE 500, CLEVELAND, OH 44103-4623 Medical Director: Sami Albeiroti, PhD, D(ABCC) CLIA:36D1032987