

BAGER,ARWA

DOB: 03/31/1981
Sex: F
Phone: (305) 788-5319
Patient ID: 10513

Age: 44
Fasting: Y

Specimen: MZ503408K
Requisition: 0002441
Lab Reference ID: 71730
Report Status: FINAL / SEE REPORT

Collected: 07/08/2025 05:32
Received: 07/08/2025 05:33
Reported: 08/01/2025 15:55

Client #: 73916914
WILLS,NAYO
PARSLEY HEALTH LA
8550 SANTA MONICA BLVD FL 2
WEST HOLLYWOOD, CA 90069-4496
Phone: (833) 447-2775

FASTING: YES

▲ CARDIO IQ® HS CRP

Analyte	Value
▲ HS CRP Reference Range: Optimal <1.0 mg/L, according to Jellinger PS et al. Endocr Pract.2017;23(Suppl 2):1-87. The AHA/CDC Guidelines recommend hs-CRP ranges for identifying Relative Cardiovascular Risk in patients ages >17 years: <1.0 mg/L Lower Relative Cardiovascular Risk; 1.0-3.0 mg/L Average Relative Cardiovascular Risk; 3.1-10.0 mg/L Higher Relative Cardiovascular Risk. If result is between 3.1 and 10.0 mg/L, consider retesting in 1-2 weeks to exclude a benign transient elevation secondary to infection or inflammation from the baseline CRP value. Persistent elevations of >10.0 mg/L upon retesting may be associated with infection and inflammation. The AHA/CDC recommendations are based on Pearson TA, Mensah GA, Alexander RW, et al. Markers of inflammation and cardiovascular disease: application to clinical and public health practice: A statement for healthcare professionals from the Centers for Disease Control and Prevention and the American Heart Association. Circulation 2003; 107(3): 499-511. For ages >17 Years: hs-CRP mg/L Risk According to AHA/CDC Guidelines <1.0 Lower relative cardiovascular risk. 1.0-3.0 Average relative cardiovascular risk. 3.1-10.0 Higher relative cardiovascular risk. Consider retesting in 1 to 2 weeks to exclude a benign transient elevation in the baseline CRP value secondary to infection or inflammation. >10.0 Persistent elevation, upon retesting, may be associated with infection and inflammation. Pearson TA, Mensah GA, Alexander RW, et al. Markers of inflammation and cardiovascular disease: application to clinical and public health practice: A statement for healthcare professionals from the Centers for Disease Control and Prevention and the American Heart Association. Circulation 2003; 107(3): 499-511.	4.2 H Reference Range: <1.0 mg/L

▲ CARDIO IQ® HEMOGLOBIN A1c

Analyte	Value
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▲ HEMOGLOBIN A1c

5.7 H Reference Range: <5.7 %

For someone without known diabetes, a hemoglobin A1c value between 5.7% and 6.4% is consistent with prediabetes and should be confirmed with a follow-up test. For someone with known diabetes, a value <7% indicates that their diabetes is well controlled. A1c targets should be individualized based on duration of diabetes, age, co-morbid conditions and other considerations. This assay result is consistent with an increased risk of diabetes. Currently, no consensus exists regarding use of hemoglobin A1c for diagnosis of diabetes in children. This test was performed on the Roche cobas c503 platform. Effective 3/5/2024, a change in test platforms from the Abbott Architect to the Roche cobas c503 may have shifted HbA1c results compared to historical results. Based on laboratory validation testing conducted at Quest, the Roche platform relative to the Abbott platform had an average increase in HbA1c value of ≤0.3%. This difference is within accepted variability established by the National Glycohemoglobin Standardization Program. Note that not all individuals will have had a shift in their results and direct comparisons between historical and current results for testing conducted on different platforms is not recommended.

▲ TSH

Analyte	Value
▲ TSH	7.16 H mIU/L
Reference Range	
> or = 20 Years	0.40-4.50
Pregnancy Ranges	
First trimester	0.26-2.66
Second trimester	0.55-2.73
Third trimester	0.43-2.91

▲ CBC (INCLUDES DIFF/PLT)

Analyte	Value
WHITE BLOOD CELL COUNT	9.9 Reference Range: 3.8-10.8 Thousand/uL
RED BLOOD CELL COUNT	4.35 Reference Range: 3.80-5.10 Million/uL
HEMOGLOBIN	12.4 Reference Range: 11.7-15.5 g/dL
HEMATOCRIT	38.4 Reference Range: 35.0-45.0 %
MCV	88.3 Reference Range: 80.0-100.0 fL
MCH	28.5 Reference Range: 27.0-33.0 pg
MCHC	32.3 Reference Range: 32.0-36.0 g/dL
For adults, a slight decrease in the calculated MCHC value (in the range of 30 to 32 g/dL) is most likely not clinically significant; however, it should be interpreted with caution in correlation with other red cell parameters and the patient's clinical condition.	
RDW	12.7 Reference Range: 11.0-15.0 %
▲ PLATELET COUNT	413 H Reference Range: 140-400 Thousand/uL
MPV	10.0 Reference Range: 7.5-12.5 fL
ABSOLUTE NEUTROPHILS	5534 Reference Range: 1500-7800 cells/uL
ABSOLUTE LYMPHOCYTES	3534 Reference Range: 850-3900 cells/uL

ABSOLUTE MONOCYTES	594	Reference Range: 200-950 cells/uL
ABSOLUTE EOSINOPHILS	168	Reference Range: 15-500 cells/uL
ABSOLUTE BASOPHILS	69	Reference Range: 0-200 cells/uL
NEUTROPHILS	55.9	%
LYMPHOCYTES	35.7	%
MONOCYTES	6.0	%
EOSINOPHILS	1.7	%
BASOPHILS	0.7	%

⚠ VITAMIN B12

Analyte	Value	
⚠ VITAMIN B12	>2000 H	Reference Range: 200-1100 pg/mL

⚠ DHEA SULFATE

Analyte	Value	
⚠ DHEA SULFATE	225 H	Reference Range: 15-205 mcg/dL

⚠ LIPOPROTEIN FRACTIONATION ION MOBILITY

Analyte	Value	
⚠ LDL PARTICLE NUMBER	1679 H	Reference Range: <1138 nmol/L Relative Risk: Optimal <1138; Moderate 1138-1409; High>1409. Male and Female Reference Range: 1016 to 2185 nmol/L.
⚠ LDL SMALL	270 H	Reference Range: <142 nmol/L Relative Risk: Optimal <142; Moderate 142-219; High>219. Male Reference Range: 123 to 441 nmol/L; Female Reference Range: 115 to 386 nmol/L.
⚠ LDL MEDIUM	362 H	Reference Range: <215 nmol/L Relative Risk: Optimal <215; Moderate 215-301; High>301. Male Reference Range: 167 to 485 nmol/L; Female Reference Range: 121 to 397 nmol/L.
HDL LARGE	6981	Reference Range: >6729 nmol/L Relative Risk: Optimal >6729; Moderate 6729-5353; High <5353. Male Reference Range: 4334 to 10815 nmol/L; Female Reference Range: 5038 to 17886 nmol/L.
LDL PATTERN	A	Reference Range: A Pattern Relative Risk: Optimal Pattern A; High Pattern B. Reference Range: Pattern A.

⚠ LDL PEAK SIZE	219.3 L	Reference Range: >222.9 Angstrom 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. Relative Risk: Optimal >222.9; Moderate 222.9-217.4; High <217.4. Male and Female Reference Range: 216 to 234.3 Angstrom. Adult cardiovascular event risk category cut points (optimal, moderate, high) are based on an adult U.S. reference population plus two large cohort study populations. Association between lipoprotein subfractions and cardiovascular events is based on Musunuru et al. ATVB.2009;29:1975. For additional information, please refer to http://education.QuestDiagnostics.com/faq/FAQ134 (This link is being provided for informational/educational purposes only.)
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⚠ CARDIO IQ® LIPID PANEL

Analyte	Value	
CHOLESTEROL, TOTAL	169	Reference Range: <200 mg/dL

▲ HDL CHOLESTEROL	49 L	Reference Range: >49 mg/dL
TRIGLYCERIDES	97	Reference Range: <150 mg/dL
▲ LDL-CHOLESTEROL Desirable range <100 mg/dL for primary prevention; <70 mg/dL for patients with CHD or diabetic patients with ≥ 2 CHD risk factors. LDL-C is now calculated using the Martin-Hopkins calculation, which is a validated novel method providing better accuracy than the Friedewald equation in the estimation of LDL-C. Martin SS et al. JAMA. 2013;310(19): 2061-2068 (http://education.QuestDiagnostics.com/faq/FAQ164) LDL-C is now calculated using the Martin-Hopkins calculation, which is a validated novel method providing better accuracy than the Friedewald equation in the estimation of LDL-C. Martin SS et al. JAMA. 2013;310(19): 2061-2068 (http://education.QuestDiagnostics.com/faq/FAQ164)	101 H	Reference Range: <100 mg/dL (calc)
CHOL/HDLC RATIO	3.4	Reference Range: <5.0 calc
NON HDL CHOLESTEROL For patients with diabetes plus 1 major ASCVD risk factor, treating to a non-HDL-C goal of <100 mg/dL (LDL-C of <70 mg/dL) is considered a therapeutic option. For patients with diabetes plus 1 major ASCVD risk factor, treating to a non-HDL-C goal of <100 mg/dL (LDL-C of <70 mg/dL) is considered a therapeutic option.	120	Reference Range: <130 mg/dL (calc)

▲ OMEGACHECK®

Analyte	Value	
▲ EPA+DPA+DHA 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. 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).	4.8 L	Reference Range: >5.4 % by wt
ARACHIDONIC ACID/EPA RATIO	10.3	Reference Range: 3.7-40.7
OMEGA-6/OMEGA-3 RATIO	8.4	Reference Range: 3.7-14.4
OMEGA-3 TOTAL	4.8	% by wt
EPA	0.9	Reference Range: 0.2-2.3 % by wt
DPA	0.8	Reference Range: 0.8-1.8 % by wt
DHA	3.1	Reference Range: 1.4-5.1 % by wt
OMEGA-6 TOTAL Cleveland HeartLab measures a number of omega-6 fatty acids with AA and LA being the two most abundant forms reported.	40.1	% by wt
ARACHIDONIC ACID	9.1	Reference Range: 8.6-15.6 % by wt
LINOLEIC ACID	29.2	Reference Range: 18.6-29.5 % by wt

COMPREHENSIVE METABOLIC PANEL

Analyte	Value	
BAGER,ARWA (MZ503408K)	4 / 10	

GLUCOSE Fasting reference interval	97	Reference Range: 65-99 mg/dL
UREA NITROGEN (BUN)	12	Reference Range: 7-25 mg/dL
CREATININE	0.65	Reference Range: 0.50-0.99 mg/dL
EGFR	111	Reference Range: > OR = 60 mL/min/1.73m2
BUN/CREATININE RATIO Not Reported: BUN and Creatinine are within reference range.	SEE NOTE:	Reference Range: 6-22 (calc)
SODIUM	138	Reference Range: 135-146 mmol/L
POTASSIUM	4.2	Reference Range: 3.5-5.3 mmol/L
CHLORIDE	106	Reference Range: 98-110 mmol/L
CARBON DIOXIDE	23	Reference Range: 20-32 mmol/L
CALCIUM	9.6	Reference Range: 8.6-10.2 mg/dL
PROTEIN, TOTAL	6.8	Reference Range: 6.1-8.1 g/dL
ALBUMIN	4.6	Reference Range: 3.6-5.1 g/dL
GLOBULIN	2.2	Reference Range: 1.9-3.7 g/dL (calc)
ALBUMIN/GLOBULIN RATIO	2.1	Reference Range: 1.0-2.5 (calc)
BILIRUBIN, TOTAL	0.5	Reference Range: 0.2-1.2 mg/dL
ALKALINE PHOSPHATASE	45	Reference Range: 31-125 U/L
AST	14	Reference Range: 10-30 U/L
ALT	11	Reference Range: 6-29 U/L

VITAMIN D,25-OH,TOTAL,IA

Analyte	Value
VITAMIN D,25-OH,TOTAL,IA	64 Reference Range: 30-100 ng/mL
Vitamin D Status	25-OH Vitamin D:
Deficiency:	<20 ng/mL
Insufficiency:	20 - 29 ng/mL
Optimal:	> or = 30 ng/mL
For 25-OH Vitamin D testing on patients on D2-supplementation and patients for whom quantitation of D2 and D3 fractions is required, the QuestAssured(TM) 25-OH VIT D, (D2,D3), LC/MS/MS is recommended: order code 92888 (patients >2yrs).	
COMMENT	
See Note 1	

TESTOSTERONE, FREE (DIALYSIS), TOTAL (MS) AND SEX HORMONE BINDING GLOBULIN

Analyte	Value
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TESTOSTERONE, TOTAL, MS**22** Reference Range: 2-45 ng/dL

For additional information, please refer to <http://education.questdiagnostics.com/faq/TotalTestosteroneLCMSMSFAQ165>
(This link is being provided for informational/educational purposes only.)

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute Chantilly, VA. 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.

TESTOSTERONE, FREE**2.5** Reference Range: 0.1-6.4 pg/mL [See Note 1](#)**SEX HORMONE BINDING GLOBULIN****44** Reference Range: 17-124 nmol/L**HOMOCYSTEINE****Analyte****Value****HOMOCYSTEINE****7.6** Reference Range: < or = 11.0 umol/L

Homocysteine is increased by functional deficiency of folate or vitamin B12. Testing for methylmalonic acid differentiates between these deficiencies. Other causes of increased homocysteine include renal failure, folate antagonists such as methotrexate and phenytoin, and exposure to nitrous oxide.
Selhub J, et al., Ann Intern Med. 1999;131(5):331-9.

APOLIPOPROTEIN B**Analyte****Value****APOLIPOPROTEIN B****85** Reference Range: <90 mg/dL

Reference Range: <90

Risk Category:

Optimal	<90
Moderate	90-129
High	> or = 130

A desirable treatment target may be <80 mg/dL or lower depending on the risk category of the patient including patients on lipid lowering therapies, patients with ASCVD, diabetes with >1 risk factors, Stage 3 or greater CKD with albuminuria, or heterozygous familial hypercholesterolemia. ApoB relative risk category cut points are based AACE/ACE and ACC/AHA recommendations.
(Grundy SM, et al. 2019.doi:10.1016/j.jacc.2018.11.002; Handelsman Y, et al. 2020. doi:10.4158/CS-2020-0490).

MAGNESIUM, RBC**Analyte****Value****MAGNESIUM, RBC****5.9** Reference Range: 4.0-6.4 mg/dL [See Note 1](#)**GGT****Analyte****Value****GGT****13** Reference Range: 3-55 U/L**T4, FREE**

Analyte	Value
T4, FREE	1.8 Reference Range: 0.8-1.8 ng/dL

T3, FREE

Analyte	Value
T3, FREE	3.7 Reference Range: 2.3-4.2 pg/mL

T3 REVERSE, LC/MS/MS

Analyte	Value
T3 REVERSE, LC/MS/MS	20 Reference Range: 8-25 ng/dL See Note 1

THYROGLOBULIN ANTIBODIES

Analyte	Value
THYROGLOBULIN ANTIBODIES	<1 Reference Range: < or = 1 IU/mL

THYROID PEROXIDASE ANTIBODIES

Analyte	Value
THYROID PEROXIDASE ANTIBODIES	<1 Reference Range: <9 IU/mL

COPPER

Analyte	Value
COPPER	100 Reference Range: 70-175 mcg/dL See Note 1

MERCURY, BLOOD

Analyte	Value
MERCURY, BLOOD	<4 Reference Range: <=10 mcg/L See Note 1

ZINC

Analyte	Value
ZINC	83 Reference Range: 60-130 mcg/dL See Note 1

METHYLMALONIC ACID

Analyte	Value
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METHYLMALONIC ACID

112 Reference Range: 55-335 nmol/L

Serum methylmalonic acid (MMA) levels are used to diagnose and monitor several rare inborn errors of metabolism, including methylmalonic aciduria. The enzymatic conversion of MMA to succinic acid requires vitamin B12 (adenosyl-cobalamin) as a cofactor. Serum MMA levels are also used for assessing functional vitamin B12 deficiency. Vitamin B12 is essential for fetal neurodevelopment, particularly early in pregnancy. Undiagnosed maternal vitamin B12 deficiency may be associated with adverse fetal/neonatal outcomes, such as neural tube defects and intrauterine growth restriction.

Quest Diagnostics utilized Multi-Modal Decomposition (MMD) analysis to establish first and second trimester-specific MMA reference intervals in pregnancy, as given below:

MMA, First trimester (<13 wks gestation): 58-167 nmol/L
MMA, Second trimester (13-23 wks gestation): 63-241 nmol/L

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics. It has not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

SED RATE BY MODIFIED WESTERGREN

Analyte	Value
SED RATE BY MODIFIED WESTERGREN	11 Reference Range: < OR = 20 mm/h

IRON, TOTAL

Analyte	Value
IRON, TOTAL	58 Reference Range: 40-190 mcg/dL

FERRITIN

Analyte	Value
FERRITIN	24 Reference Range: 16-232 ng/mL

FOLATE, RBC

Analyte	Value
FOLATE, RBC	612 Reference Range: >280 ng/mL RBC

ESTRONE

Analyte	Value
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ESTRONE

48 pg/mL

Adult Female Reference Ranges for Estrone:

Follicular Phase: 10-138 pg/mL
Luteal Phase: 16-173 pg/mL
Postmenopausal Phase: < or = 65 pg/mL

Pediatric Female Reference Ranges for Estrone:

Pre-pubertal
(1-9 years): < or = 34 pg/mL
10-11 years: < or = 72 pg/mL
12-14 years: < or = 75 pg/mL
15-17 years: < or = 188 pg/mL

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics. It has not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

PROGESTERONE

Analyte	Value
PROGESTERONE	5.1 ng/mL
Reference Ranges	
Female	
Follicular Phase	< 1.0
Luteal Phase	2.6-21.5
Post menopausal	< 0.5
Pregnancy	
1st Trimester	4.1-34.0
2nd Trimester	24.0-76.0
3rd Trimester	52.0-302.0

ESTRADIOL

Analyte	Value
ESTRADIOL	67 pg/mL
Reference Range	
Follicular Phase:	19-144
Mid-Cycle:	64-357
Luteal Phase:	56-214
Postmenopausal:	< or = 31

Reference range established on post-pubertal patient population. No pre-pubertal reference range established using this assay. For any patients for whom low Estradiol levels are anticipated (e.g. males, pre-pubertal children and hypogonadal/post-menopausal females), the Quest Diagnostics Nichols Institute Estradiol, Ultrasensitive, LCMSMS assay is recommended (order code 30289).

Please note: patients being treated with the drug fulvestrant (Faslodex(R)) have demonstrated significant interference in immunoassay methods for estradiol measurement. The cross reactivity could lead to falsely elevated estradiol test results leading to an inappropriate clinical assessment of estrogen status. Quest Diagnostics order code 30289-Estradiol, Ultrasensitive LC/MS/MS demonstrates negligible cross reactivity with fulvestrant.

LEAD (VENOUS)

Analyte	Value
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LEAD (VENOUS)

<1.0 Reference Range: <3.5 mcg/dL

See Note 2

Note 1

For additional information, please refer to <http://education.QuestDiagnostics.com/faq/FAQ199>
(This link is being provided for informational/educational purposes only.)

Note 2

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics. It has not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

CARDIO IQ® INSULIN**Analyte****Value****INSULIN****8.3** Reference Range: <18.5 uIU/mL

Note 1

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute Chantilly, VA. 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 Sites



AMD Quest Diagnostics/Nichols Chantilly-Chantilly VA, 14225 Newbrook Dr, Chantilly, VA 20151-2228 Laboratory Director: Patrick W Mason M.D.,PhD

EZ Quest Diagnostics/Nichols SJC-San Juan Capistrano,, 33608 Ortega Hwy, San Juan Capistrano, CA 92675-2042 Laboratory Director: Irina Maramica MD,PhD,MBA

MI Quest Diagnostics-Miami, 10200 Commerce Pkwy, Miramar, FL 33025-3938 Laboratory Director: Julie L Friedman, MD

TP Quest Diagnostics-Tampa, 4225 E Fowler Ave, Tampa, FL 33617-2026 Laboratory Director: Weston H Rothrock MD

Z4M Cleveland HeartLab Inc.-Cleveland HeartLab Inc., 6701 Carnegie Ave, Suite 500, Cleveland, OH 44103-4623 Laboratory Director: Mohammad Q Ansari

Key Priority Out of Range  Out of Range

These results have been sent to the person who ordered the tests. Your receipt of these results should not be viewed as medical advice and is not meant to replace discussion with your doctor or other healthcare professional.

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