



Report Status: Final

DUPU, SORIN

Patient Information	Specimen Information	Client Information
<b>DUPU, SORIN</b> <b>DOB: 01/02/1980 AGE: 41</b> Gender: M Phone: 832.282.1330 Patient ID: 11351279 Health ID: 8573003470571922	Specimen: HL994667J Requisition: 0003271 Lab Ref #: 123593 Collected: 08/04/2021 / 09:32 CDT Received: 08/05/2021 / 04:43 CDT Reported: 08/11/2021 / 03:41 CDT	Client #: 2156300 IRV00FAX WINSTROM, MARGIT M WINSTROM, MARGIT, MD 3383 PETERS LN BRENHAM, TX 77833-2044

**COMMENTS:** MUST BE FASTING; THE RED BLOOD CELL VERSION

Test Name	In Range	Out Of Range	Reference Range	Lab
LIPID PANEL, STANDARD				
<b>CHOLESTEROL, TOTAL</b>		<b>270 H</b>	<200 mg/dL	RGA
HDL CHOLESTEROL	46		> OR = 40 mg/dL	RGA
<b>TRIGLYCERIDES</b>		<b>201 H</b>	<150 mg/dL	RGA

If a non-fasting specimen was collected, consider repeat triglyceride testing on a fasting specimen if clinically indicated.  
 Jacobson et al. J. of Clin. Lipidol. 2015;9:129-169.

<b>LDL-CHOLESTEROL</b>		<b>185 H</b>	mg/dL (calc)	RGA
Reference range: <100				

Desirable range <100 mg/dL for primary prevention; <70 mg/dL for patients with CHD or diabetic patients with > or = 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>)

<b>CHOL/HDLC RATIO</b>		<b>5.9 H</b>	<5.0 (calc)	RGA
<b>NON HDL CHOLESTEROL</b>		<b>224 H</b>	<130 mg/dL (calc)	RGA

Non-HDL level > or = 220 is very high and may indicate genetic familial hypercholesterolemia (FH). Clinical assessment and measurement of blood lipid levels should be considered for all first-degree relatives of patients with an FH diagnosis.

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.

HS CRP	0.8		mg/L	IG
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Reference Range

Optimal <1.0

Jellinger PS et al. Endocr Pract.2017;23(Suppl 2):1-87.

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.



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Test Name	In Range	Out Of Range	Reference Range	Lab
<b>HOMOCYSTEINE</b>		<b>17.8 H</b>	<11.4 umol/L	IG
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.				
COMPREHENSIVE METABOLIC PANEL				RGA
GLUCOSE	98		65-99 mg/dL	
Fasting reference interval				
UREA NITROGEN (BUN)	14		7-25 mg/dL	
CREATININE	1.04		0.60-1.35 mg/dL	
eGFR NON-AFR. AMERICAN	89		> OR = 60 mL/min/1.73m2	
eGFR AFRICAN AMERICAN	103		> OR = 60 mL/min/1.73m2	
BUN/CREATININE RATIO	NOT APPLICABLE		6-22 (calc)	
SODIUM	137		135-146 mmol/L	
POTASSIUM	4.7		3.5-5.3 mmol/L	
CHLORIDE	101		98-110 mmol/L	
CARBON DIOXIDE	27		20-32 mmol/L	
CALCIUM	10.0		8.6-10.3 mg/dL	
PROTEIN, TOTAL	7.6		6.1-8.1 g/dL	
ALBUMIN	4.8		3.6-5.1 g/dL	
GLOBULIN	2.8		1.9-3.7 g/dL (calc)	
ALBUMIN/GLOBULIN RATIO	1.7		1.0-2.5 (calc)	
BILIRUBIN, TOTAL	0.6		0.2-1.2 mg/dL	
ALKALINE PHOSPHATASE	99		36-130 U/L	
AST	27		10-40 U/L	
<b>ALT</b>		<b>55 H</b>	9-46 U/L	
HEMOGLOBIN A1c	5.4		<5.7 % of total Hgb	RGA
For the purpose of screening for the presence of diabetes:				
<5.7%      Consistent with the absence of diabetes				
5.7-6.4%      Consistent with increased risk for diabetes (prediabetes)				
> or =6.5%      Consistent with diabetes				
This assay result is consistent with a decreased risk of diabetes.				
Currently, no consensus exists regarding use of hemoglobin A1c for diagnosis of diabetes in children.				
According to American Diabetes Association (ADA) guidelines, hemoglobin A1c <7.0% represents optimal control in non-pregnant diabetic patients. Different metrics may apply to specific patient populations. Standards of Medical Care in Diabetes(ADA).				
URIC ACID	6.5		4.0-8.0 mg/dL	RGA
Therapeutic target for gout patients: <6.0 mg/dL				



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Test Name	In Range	Out Of Range	Reference Range	Lab
LD	139		100-220 U/L	RGA
GGT	49		3-95 U/L	RGA
T4 (THYROXINE), TOTAL	7.8		4.9-10.5 mcg/dL	RGA
T3, FREE	3.4		2.3-4.2 pg/mL	RGA
T3, TOTAL	106		76-181 ng/dL	RGA
T3 REVERSE, LC/MS/MS	14		8-25 ng/dL	EZ

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

THYROID PEROXIDASE AND THYROGLOBULIN ANTIBODIES				
THYROGLOBULIN ANTIBODIES	<1		< or = 1 IU/mL	IG
THYROID PEROXIDASE ANTIBODIES	1		<9 IU/mL	IG
CBC (INCLUDES DIFF/PLT)				RGA
WHITE BLOOD CELL COUNT	6.8		3.8-10.8 Thousand/uL	
RED BLOOD CELL COUNT	5.04		4.20-5.80 Million/uL	
HEMOGLOBIN	15.5		13.2-17.1 g/dL	
HEMATOCRIT	47.2		38.5-50.0 %	
MCV	93.7		80.0-100.0 fL	
MCH	30.8		27.0-33.0 pg	
MCHC	32.8		32.0-36.0 g/dL	
RDW	12.3		11.0-15.0 %	
PLATELET COUNT	261		140-400 Thousand/uL	
MPV	10.5		7.5-12.5 fL	
ABSOLUTE NEUTROPHILS	3563		1500-7800 cells/uL	
ABSOLUTE LYMPHOCYTES	2632		850-3900 cells/uL	
ABSOLUTE MONOCYTES	483		200-950 cells/uL	
ABSOLUTE EOSINOPHILS	82		15-500 cells/uL	
ABSOLUTE BASOPHILS	41		0-200 cells/uL	
NEUTROPHILS	52.4		%	
LYMPHOCYTES	38.7		%	
MONOCYTES	7.1		%	
EOSINOPHILS	1.2		%	
BASOPHILS	0.6		%	
URINALYSIS, COMPLETE				RGA
COLOR	YELLOW		YELLOW	
APPEARANCE	CLEAR		CLEAR	
SPECIFIC GRAVITY	1.013		1.001-1.035	
PH	7.0		5.0-8.0	
GLUCOSE	NEGATIVE		NEGATIVE	
BILIRUBIN	NEGATIVE		NEGATIVE	
KETONES	NEGATIVE		NEGATIVE	
OCCULT BLOOD	NEGATIVE		NEGATIVE	
PROTEIN	NEGATIVE		NEGATIVE	
NITRITE	NEGATIVE		NEGATIVE	
LEUKOCYTE ESTERASE	NEGATIVE		NEGATIVE	
WBC	NONE SEEN		< OR = 5 /HPF	
RBC	NONE SEEN		< OR = 2 /HPF	
SQUAMOUS EPITHELIAL CELLS	NONE SEEN		< OR = 5 /HPF	
BACTERIA	NONE SEEN		NONE SEEN /HPF	
HYALINE CAST	NONE SEEN		NONE SEEN /LPF	



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Test Name	In Range	Out Of Range	Reference Range	Lab
IRON AND TOTAL IRON BINDING CAPACITY				RGA
IRON, TOTAL	130		50-180 mcg/dL	
IRON BINDING CAPACITY	394		250-425 mcg/dL (calc)	
% SATURATION	33		20-48 % (calc)	
FERRITIN	179		38-380 ng/mL	RGA
INSULIN	11.0		uIU/mL	IG

Reference Range &lt; or = 19.6

Risk:  
 Optimal < or = 19.6  
 Moderate NA  
 High >19.6

Adult cardiovascular event risk category cut points (optimal, moderate, high) are based on Quest Diagnostics population data from 12/2011.

This insulin assay shows strong cross-reactivity for some insulin analogs (lispro, aspart, and glargine) and much lower cross-reactivity with others (detemir, glulisine).

MAGNESIUM, RBC	4.2		4.0-6.4 mg/dL	SLI
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## Endocrinology

Test Name	Result	Reference Range	Lab
<b>VITAMIN D,25-OH,TOTAL,IA</b>	<b>28 L</b>	30-100 ng/mL	RGA
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).			
Physician Comments:			

## End Notes:

VITAMIN D,25-OH,TOTAL,IA

RGA

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



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### OMEGA-3 (EPA+DHA) INDEX REPORT

RISK		
High (<2.2%)	Moderate (2.2%-3.2%)	Low (>3.2%)
✓		
<p>The Omega-3 index is associated with a high risk of cardiovascular disease because it is in the bottom population quartile. The Omega-3 index categories are based on the top (75th percentile) and bottom (25th percentile) quartiles of the reference population. Consumption of foods high in omega-3 fatty acids (EPA and DHA) or supplements containing omega-3 fatty acids can increase the omega-3 index.</p> <p>Index &lt;2.2: High            Index 2.2-3.2: Moderate            Index &gt;3.2: Optimal</p>		

Test Name	In Range	Out of Range	Reference Range/Comments
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#### OMEGA 3 AND 6 FATTY ACIDS, PLASMA

Lab: EZ

OMEGA 3 (EPA+DHA) INDEX	2.1		1.4-4.9 % See Note 1
OMEGA 6/OMEGA 3 RATIO	10.9		5.7-21.3
EPA/ARACHIDONIC ACID RATIO	<0.1		0.2 OR LESS
ARACHIDONIC ACID	8.7		5.2-12.9 %
EPA	0.6		0.2-1.5 %
DHA	1.5		1.2-3.9 % See Note 2

Foods High in Omega-3*			
Fish	Oils	Nuts and Seeds	Grains and Beans
Salmon	Walnut	Walnuts	Soybeans
Mackerel	Soybean	Flax seeds	Tofu
Sardines	Flax	Pecans	
Swordfish	Canola		
Bluefish	Cod liver		
Crab	Olive		
Cod	Sardine		
Scallops			

\* Adapted from [http://www.tufts.edu/med/nutrition-infection/hiv/health\\_omega3.html](http://www.tufts.edu/med/nutrition-infection/hiv/health_omega3.html), March 13, 2012

- Note 1 Risk: Optimal > 3.2%; Moderate 2.2-3.2%; High < 2.2%  
 Cardiovascular event risk category cut points for Omega3 index (optimal, moderate, high) are based on quartiles of adult U.S reference population. Association between Omega3 index and cardiovascular events is based on Albert et al. NEJM. 2002;346:1113.
- Note 2 This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute San Juan Capistrano. It has not been cleared or approved by FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.  
 The Cardio IQ(R) Omega 3 & 6 test will be discontinued June 24, 2019. Please consider changing any custom panels and custom requisitions now to prepare for the discontinuation. Quest currently offers the OmegaCheck test (Test Code 92701) and it will be the only Omega test offering after the discontinuation of Cardio IQ Omega 3 & 6. Contact your Cardiovascular specialty representative for assistance.



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**PERFORMING SITE:**

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