



Patient Information	Specimen Information	Client Information
Gender: M Phone: Patient ID: Health ID: AGE: 45 Fasting: Y	Collected: 03/07/2022 Received: 03/08/2022 Reported: 03/14/2022	DISCOUNTED LABS 1302 WAUGH DR # 143 HOUSTON, TX 77019-3908

COMMENTS: FASTING:YES

Test Name	In Range	Out Of Range	Reference Range	Lab
TESTOSTERONE, FREE (DIALYSIS) AND TOTAL (MS) TESTOSTERONE, TOTAL, MS	763		250-1100 ng/dL	SLI
For additional information, please refer to http://education.questdiagnostics.com/faq/TotalTestosteroneLCMSMS (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. 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.				
TESTOSTERONE, FREE (DIALYSIS) TESTOSTERONE, FREE		164.5 H	35.0-155.0 pg/mL	SLI
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HS CRP	0.4		mg/L	EN
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.				
HOMOCYSTEINE	8.3		<11.4 umol/L	UL
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 GLUCOSE	82		65-99 mg/dL	UL



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Test Name	In Range	Out Of Range	Reference Range	Lab
VITAMIN B12/FOLATE, SERUM PANEL				UL
VITAMIN B12	743		200-1100 pg/mL	
FOLATE, SERUM	22.5		ng/mL	
			Reference Range	
			Low: <3.4	
			Borderline: 3.4-5.4	
			Normal: >5.4	
C-REACTIVE PROTEIN	0.5		<8.0 mg/L	UL
PREGNENOLONE, LC/MS	87		22-237 ng/dL	EZ

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DHEA SULFATE	244		61-442 mcg/dL	EN
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DHEA-S values fall with advancing age. For reference, the reference intervals for 31-40 year old patients are:

Male: 93-415 mcg/dL
 Female: 19-237 mcg/dL

SEX HORMONE BINDING GLOBULIN	21		10-50 nmol/L	EN
PROGESTERONE	0.5		<1.4 ng/mL	UL
PROLACTIN	6.9		2.0-18.0 ng/mL	UL
PSA, TOTAL	0.58		< OR = 4.00 ng/mL	UL

The total PSA value from this assay system is standardized against the WHO standard. The test result will be approximately 20% lower when compared to the equimolar-standardized total PSA (Beckman Coulter). Comparison of serial PSA results should be interpreted with this fact in mind.

This test was performed using the Siemens chemiluminescent method. Values obtained from different assay methods cannot be used interchangeably. PSA levels, regardless of value, should not be interpreted as absolute evidence of the presence or absence of disease.



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Endocrinology

Test Name	Result	Reference Range	Lab
VITAMIN D,25-OH,TOTAL,IA	24 L	30-100 ng/mL	UL
<p>Vitamin D Status 25-OH Vitamin D:</p> <p>Deficiency: <20 ng/mL</p> <p>Insufficiency: 20 - 29 ng/mL</p> <p>Optimal: > or = 30 ng/mL</p> <p>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).</p>			
ESTRADIOL,ULTRASENSITIVE, LC/MS	48 H	< OR = 29 pg/mL	EZ
<p>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.</p>			
<p>Physician Comments:</p>			

End Notes:

VITAMIN D,25-OH,TOTAL,IA

UL

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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Cardio IQ®

Test Name	Current Result & Risk		Risk/Reference Interval			Units	Historical Result & Risk
	Optimal	Non-Optimal	Optimal	Moderate	High		
LIPID PANEL							
CHOLESTEROL, TOTAL	198		<200	N/A	>=200	mg/dL	
HDL CHOLESTEROL	55		>=40	N/A	<40	mg/dL	
TRIGLYCERIDES	91		<150	150-199	>=200	mg/dL	
LDL-CHOLESTEROL		124	<100	100-129	>129	mg/dL (calc)	
CHOL/HDLC RATIO		3.6	<=3.5	3.6-5.0	>5.0	calc	
NON-HDL CHOLESTEROL		143	<130	130-189	>=190	mg/dL (calc)	
LIPOPROTEIN FRACTIONATION, ION MOBILITY							
LDL PARTICLE NUMBER		2040	<1138	1138-1409	>1409	nmol/L	
LDL SMALL		387	<142	142-219	>219	nmol/L	
LDL MEDIUM		556	<215	215-301	>301	nmol/L	
HDL LARGE	7218		>6729	6729-5353	<5353	nmol/L	
LDL PATTERN	A		A	N/A	B	Pattern	
LDL PEAK SIZE		218.7	>222.9	222.9-217.4	<217.4	Angstrom	
APOLIPOPROTEINS							
APOLIPOPROTEIN B		111	<90	90-119	>=120	mg/dL	
LIPOPROTEIN (a)	58		<75	75-125	>125	nmol/L	

For details on reference ranges please refer to the reference range/comment section of the report.



Patient Information	Specimen Information
	Specimen: SZ788887E Collected: 03/07/2022 Received: 03/08/2022 Reported: 03/14/2022

4myheart Diet & Exercise Coaching Program: Need help achieving and maintaining an optimal weight? Managing stress? Trying to improve physical fitness levels? The 4myheart program provides support and personalized lifestyle guidance to help improve heart health. Please talk to your provider, visit 4myheart.com or call 1-800-432-7889 opt 2 to learn more.

Medical Information For Healthcare Providers: If you have questions about any of the tests in our Cardio IQ offering, please call Client Services at our Quest Diagnostics-Cleveland HeartLab Cardiometabolic Center of Excellence. They can be reached at 866.358.9828, option 1 to arrange a consult with our clinical education team.



Reference Range/Comments

Analyte Name	In Range	Out Range	Reference Range	Lab
APOLIPOPROTEIN B		111	<90 mg/dL	Z4M
Risk: Optimal <90 mg/dL; Moderate 90-119 mg/dL; High >= 120 mg/dL; Cardiovascular event risk category cut points (optimal, moderate, high) are based on National Lipid Association recommendations- Jacobson TA et al. J of Clin Lipid. 2015; 9: 129-169 and Jellinger PS et al. Endocr Pract. 2017;23(Suppl 2):1-87.				
CHOL/HDL C RATIO		3.6	<3.6 calc	Z4M
LDL MEDIUM		556	<215 nmol/L	Z4M
Relative Risk: Optimal <215; Moderate 215-301; High >301. Reference Range: <215 nmol/L.				
LDL PARTICLE NUMBER		2040	<1138 nmol/L	Z4M
Relative Risk: Optimal <1138; Moderate 1138-1409; High >1409. Reference Range: <1138 nmol/L.				
LDL PEAK SIZE		218.7	>222.9 Angstrom	Z4M
Relative Risk: Optimal >222.9; Moderate 222.9-217.4; High <217.4. Reference Range: >222.9 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.) This test is performed by an Ion Mobility 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.				
LDL SMALL		387	<142 nmol/L	Z4M
Relative Risk: Optimal <142; Moderate 142-219; High >219. Reference Range: <142 nmol/L.				
LDL-CHOLESTEROL		124	<100 mg/dL (calc)	Z4M
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)				
NON HDL CHOLESTEROL		143	<130 mg/dL (calc)	Z4M
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.				
CHOLESTEROL, TOTAL	198		<200 mg/dL	Z4M
HDL CHOLESTEROL	55		>39 mg/dL	Z4M
HDL LARGE	7218		>6729 nmol/L	Z4M
Relative Risk: Optimal >6729; Moderate 6729-5353; High <5353. Reference Range: >6729 nmol/L.				
LDL PATTERN	A		A Pattern	Z4M
Relative Risk: Optimal Pattern A; High Pattern B. Reference Range: Pattern A.				
LIPOPROTEIN (a)	58		<75 nmol/L	Z4M
Risk: Optimal <75 nmol/L; Moderate 75-125 nmol/L; High >125 nmol/L. Cardiovascular event risk category cut points (optimal, moderate, high) are based on Tsimika S. JACC 2017;69:692-711.				
TRIGLYCERIDES	91		<150 mg/dL	Z4M

PERFORMING SITE:

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