

Patient Information	Specimen Information	Client Information
EPSTEIN, JEFFREY DOB: 01/20/1953 AGE: 65 Gender: M Phone: 561.366.0084 Patient ID: 19530120MJE Health ID: 8573003290851249	Specimen: MR839110N Requisition: 0006872 Collected: 11/23/2018 Received: 11/27/2018 / 09:51 EST Reported: 11/28/2018 / 09:22 EST	Client #: 78300020 56W5265 MOSKOWITZ, BRUCE W BRUCE MOSKOWITZ, MD Attn: NATIONWIDE ACCOUNT 1411 N FLAGLER DR STE 7100 WEST PALM BEACH, FL 33401-3418

Test Name	In Range	Out Of Range	Reference Range	Lab
PROTEIN, TOTAL AND PROTEIN ELECTROPHORESIS				
PROTEIN, TOTAL, SERUM				MI
PROTEIN, TOTAL	7.1		6.1-8.1 g/dL	
PROTEIN ELECTROPHORESIS				TP
ALBUMIN	4.2		3.8-4.8 g/dL	
ALPHA 1 GLOBULIN	0.3		0.2-0.3 g/dL	
ALPHA 2 GLOBULIN	0.7		0.5-0.9 g/dL	
BETA 1 GLOBULIN	0.6		0.4-0.6 g/dL	
BETA 2 GLOBULIN	0.4		0.2-0.5 g/dL	
GAMMA GLOBULIN	1.0		0.8-1.7 g/dL	
INTERPRETATION				

Normal Electrophoretic Pattern

The above test was performed; however, the specimen was lipemic.

LIPID PANEL, STANDARD				
CHOLESTEROL, TOTAL		216 H	<200 mg/dL	MI
HDL CHOLESTEROL		23 L	>40 mg/dL	MI
TRIGLYCERIDES		935 H	<150 mg/dL	MI
LDL-CHOLESTEROL			mg/dL (calc)	MI

LDL cholesterol not calculated. Triglyceride levels greater than 400 mg/dL invalidate calculated LDL results.

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>)

CHOL/HDL-C RATIO		9.4 H	<5.0 (calc)	MI
NON HDL CHOLESTEROL		193 H	<130 mg/dL (calc)	MI

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	1.1		mg/L	TP
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The above test was performed; however, the specimen was lipemic.

Average relative cardiovascular risk according to AHA/CDC guidelines.

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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	12.7 H	<11.4 umol/L	MI
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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.

COMPREHENSIVE METABOLIC PANEL			MI
GLUCOSE	111 H	65-99 mg/dL	

Fasting reference interval

For someone without known diabetes, a glucose value between 100 and 125 mg/dL is consistent with prediabetes and should be confirmed with a follow-up test.

UREA NITROGEN (BUN)	20	7-25 mg/dL
CREATININE	0.95	0.70-1.25 mg/dL

For patients >49 years of age, the reference limit for Creatinine is approximately 13% higher for people identified as African-American.

eGFR NON-AFR. AMERICAN	84	> OR = 60 mL/min/1.73m2
eGFR AFRICAN AMERICAN	97	> OR = 60 mL/min/1.73m2
BUN/CREATININE RATIO	NOT APPLICABLE	6-22 (calc)
SODIUM	138	135-146 mmol/L
POTASSIUM	4.4	3.5-5.3 mmol/L
CHLORIDE	105	98-110 mmol/L
CARBON DIOXIDE	24	20-32 mmol/L
CALCIUM	9.9	8.6-10.3 mg/dL
PROTEIN, TOTAL	7.1	6.1-8.1 g/dL
ALBUMIN	4.4	3.6-5.1 g/dL
GLOBULIN	2.7	1.9-3.7 g/dL (calc)
ALBUMIN/GLOBULIN RATIO	1.6	1.0-2.5 (calc)
BILIRUBIN, TOTAL	0.7	0.2-1.2 mg/dL
ALKALINE PHOSPHATASE	60	40-115 U/L
AST	23	10-35 U/L
ALT	36	9-46 U/L

HEMOGLOBIN A1c	5.7 H	<5.7 % of total Hgb	MI
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Test Name	In Range	Out Of Range	Reference Range	Lab
<p>For someone without known diabetes, a hemoglobin Alc value between 5.7% and 6.4% is consistent with prediabetes and should be confirmed with a follow-up test.</p> <p>For someone with known diabetes, a value <7% indicates that their diabetes is well controlled. Alc targets should be individualized based on duration of diabetes, age, comorbid conditions, and other considerations.</p> <p>This assay result is consistent with an increased risk of diabetes.</p> <p>Currently, no consensus exists regarding use of hemoglobin Alc for diagnosis of diabetes for children.</p>				
CALCIUM, IONIZED	5.2		4.8-5.6 mg/dL	TP
URIC ACID	6.9		4.0-8.0 mg/dL	MI
Therapeutic target for gout patients: <6.0 mg/dL				
IMMUNOFIXATION, SERUM INTERPRETATION	NO MONOCLONAL PROTEIN DETECTED			TP
TSH	2.44		0.40-4.50 mIU/L	MI
T4 (THYROXINE), TOTAL	7.6		4.9-10.5 mcg/dL	MI
FREE T4 INDEX (T7)	2.3		1.4-3.8	
T3 UPTAKE	30		22-35 %	MI
SED RATE BY MODIFIED WESTERGREN	11		< OR = 20 mm/h	MI
CBC (INCLUDES DIFF/PLT)				MI
WHITE BLOOD CELL COUNT	6.0		3.8-10.8 Thousand/uL	
RED BLOOD CELL COUNT	5.28		4.20-5.80 Million/uL	
HEMOGLOBIN	15.4		13.2-17.1 g/dL	
HEMATOCRIT	44.3		38.5-50.0 %	
MCV	83.9		80.0-100.0 fL	
MCH	29.2		27.0-33.0 pg	
MCHC	34.8		32.0-36.0 g/dL	
RDW	13.0		11.0-15.0 %	
PLATELET COUNT	273		140-400 Thousand/uL	
MPV	10.6		7.5-12.5 fL	
ABSOLUTE NEUTROPHILS	2892		1500-7800 cells/uL	
ABSOLUTE LYMPHOCYTES	2298		850-3900 cells/uL	
ABSOLUTE MONOCYTES	492		200-950 cells/uL	
ABSOLUTE EOSINOPHILS	270		15-500 cells/uL	
ABSOLUTE BASOPHILS	48		0-200 cells/uL	
NEUTROPHILS	48.2		%	
LYMPHOCYTES	38.3		%	
MONOCYTES	8.2		%	
EOSINOPHILS	4.5		%	
BASOPHILS	0.8		%	
URINALYSIS, COMPLETE				MI
See Endnote 1				
IRON AND TOTAL IRON BINDING CAPACITY				MI

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Test Name	In Range	Out Of Range	Reference Range	Lab
IRON, TOTAL	91		50-180 mcg/dL	
IRON BINDING CAPACITY	336		250-425 mcg/dL (calc)	
% SATURATION	27		15-60 % (calc)	
FERRITIN	57		20-380 ng/mL	MI
VITAMIN B12	325		200-1100 pg/mL	MI

Please Note: Although the reference range for vitamin B12 is 200-1100 pg/mL, it has been reported that between 5 and 10% of patients with values between 200 and 400 pg/mL may experience neuropsychiatric and hematologic abnormalities due to occult B12 deficiency; less than 1% of patients with values above 400 pg/mL will have symptoms.

C-REACTIVE PROTEIN	1.3		<8.0 mg/L	MI
MERCURY, BLOOD	<5		<OR=10 mcg/L	AT

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.

PSA, TOTAL	0.6		< OR = 4.0 ng/mL	MI
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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.

TESTOSTERONE, FREE (DIALYSIS) AND TOTAL, MS				AMD
TESTOSTERONE, TOTAL, MS	153 L		250-1100 ng/dL	

Men with clinically significant hypogonadal symptoms and testosterone values repeatedly in the range of the 200-300 ng/dL or less, may benefit from testosterone treatment after adequate risk and benefits counseling.

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

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Test Name	In Range	Out Of Range	Reference Range	Lab
Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes. TESTOSTERONE, FREE	42.5		35.0-155.0 pg/mL	

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.

Endnote 1 *****
 * Test not performed. *
 * No specimen received. *

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Endocrinology

Test Name	Result	Reference Range	Lab
VITAMIN D,25-OH,TOTAL,IA	24 L	30-100 ng/mL	MI

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).

For more information on this test, go to: <http://education.questdiagnostics.com/faq/FAQ163> (This link is being provided for informational/educational purposes only.)

Physician Comments:

PERFORMING SITE:

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