

| Patient Information | Specimen Information | Client Information |
|--|--|--|
| EPSTEIN, JEFFREY DOB: 01/20/1953 AGE: 64 Gender: M Phone: ██████████ Patient ID: 19530120MJE Health ID: 8573003290851249 | Specimen: MR156329E Requisition: 0004002 Collected: 01/05/2018 Received: 01/05/2018 / 22:36 EST Reported: 01/08/2018 / 23:26 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 |
|---------------------------|----------|--------------|-----------------|-----|
| LIPID PANEL | | | | |
| CHOLESTEROL, TOTAL | | 207 H | <200 mg/dL | MI |
| HDL CHOLESTEROL | | 28 L | >40 mg/dL | MI |
| TRIGLYCERIDES | | 510 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 patients with CHD or diabetes and <70 mg/dL for diabetic patients with known heart disease.

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 | | 7.4 H | <5.0 (calc) | MI |
| NON HDL CHOLESTEROL | | 179 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 | 1.2 | | mg/L | TP |
|--------|-----|--|------|----|

Average relative cardiovascular risk according to AHA/CDC guidelines.

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 | | 13.7 H | <11.4 umol/L | MI |
|---------------------|--|---------------|--------------|----|

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.

| Patient Information | Specimen Information | Client Information |
|--|--|--|
| EPSTEIN, JEFFREY DOB: 01/20/1953 AGE: 64 Gender: M Patient ID: 19530120MJE Health ID: 8573003290851249 | Specimen: MR156329E Collected: 01/05/2018 Received: 01/05/2018 / 22:36 EST Reported: 01/08/2018 / 23:26 EST | Client #: 78300020 MOSKOWITZ, BRUCE W |

| Test Name | In Range | Out Of Range | Reference Range | Lab |
|--|----------------|--------------|---|-----|
| COMPREHENSIVE METABOLIC PANEL | | | | MI |
| GLUCOSE | 90 | | 65-99 mg/dL Fasting reference interval | |
| UREA NITROGEN (BUN) | 20 | | 7-25 mg/dL | |
| CREATININE | 1.10 | | 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 | 71 | | > OR = 60 mL/min/1.73m2 | |
| eGFR AFRICAN AMERICAN | 82 | | > OR = 60 mL/min/1.73m2 | |
| BUN/CREATININE RATIO | NOT APPLICABLE | | 6-22 (calc) | |
| SODIUM | | 147 H | 135-146 mmol/L | |
| POTASSIUM | 4.7 | | 3.5-5.3 mmol/L | |
| CHLORIDE | | 112 H | 98-110 mmol/L | |
| CARBON DIOXIDE | 23 | | 20-31 mmol/L | |
| CALCIUM | 9.8 | | 8.6-10.3 mg/dL | |
| PROTEIN, TOTAL | 7.3 | | 6.1-8.1 g/dL | |
| ALBUMIN | 4.3 | | 3.6-5.1 g/dL | |
| GLOBULIN | 3.0 | | 1.9-3.7 g/dL (calc) | |
| ALBUMIN/GLOBULIN RATIO | 1.4 | | 1.0-2.5 (calc) | |
| BILIRUBIN, TOTAL | 0.8 | | 0.2-1.2 mg/dL | |
| ALKALINE PHOSPHATASE | 56 | | 40-115 U/L | |
| AST | 22 | | 10-35 U/L | |
| ALT | 26 | | 9-46 U/L | |
| HEMOGLOBIN Alc | 5.5 | | <5.7 % of total Hgb | MI |
| <p>For the purpose of screening for the presence of diabetes:</p> <p><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</p> <p>This assay result is consistent with a decreased risk of diabetes.</p> <p>Currently, no consensus exists regarding use of hemoglobin Alc for diagnosis of diabetes in children.</p> <p>According to American Diabetes Association (ADA) guidelines, hemoglobin Alc <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).</p> | | | | |
| URIC ACID | 8.0 | | 4.0-8.0 mg/dL | MI |
| <p>Therapeutic target for gout patients: <6.0 mg/dL</p> | | | | |
| TSH | 3.05 | | 0.40-4.50 mIU/L | MI |
| T4 (THYROXINE), TOTAL | 7.8 | | 4.5-12.0 mcg/dL | MI |
| FREE T4 INDEX (T7) | 2.1 | | 1.4-3.8 | |
| T3 UPTAKE | 27 | | 22-35 % | MI |

| Patient Information | Specimen Information | Client Information |
|--|--|--|
| EPSTEIN, JEFFREY DOB: 01/20/1953 AGE: 64 Gender: M Patient ID: 19530120MJE Health ID: 8573003290851249 | Specimen: MR156329E Collected: 01/05/2018 Received: 01/05/2018 / 22:36 EST Reported: 01/08/2018 / 23:26 EST | Client #: 78300020 MOSKOWITZ, BRUCE W |

| Test Name | In Range | Out Of Range | Reference Range | Lab |
|---------------------------------|------------|--------------|----------------------|-----|
| SED RATE BY MODIFIED WESTERGREN | 9 | | < OR = 20 mm/h | MI |
| CBC (INCLUDES DIFF/PLT) | | | | MI |
| WHITE BLOOD CELL COUNT | 6.2 | | 3.8-10.8 Thousand/uL | |
| RED BLOOD CELL COUNT | 5.17 | | 4.20-5.80 Million/uL | |
| HEMOGLOBIN | 14.9 | | 13.2-17.1 g/dL | |
| HEMATOCRIT | 43.8 | | 38.5-50.0 % | |
| MCV | 84.7 | | 80.0-100.0 fL | |
| MCH | 28.8 | | 27.0-33.0 pg | |
| MCHC | 34.0 | | 32.0-36.0 g/dL | |
| RDW | 13.7 | | 11.0-15.0 % | |
| PLATELET COUNT | 265 | | 140-400 Thousand/uL | |
| MPV | 10.3 | | 7.5-12.5 fL | |
| ABSOLUTE NEUTROPHILS | 2895 | | 1500-7800 cells/uL | |
| ABSOLUTE LYMPHOCYTES | 2331 | | 850-3900 cells/uL | |
| ABSOLUTE MONOCYTES | 515 | | 200-950 cells/uL | |
| ABSOLUTE EOSINOPHILS | 391 | | 15-500 cells/uL | |
| ABSOLUTE BASOPHILS | 68 | | 0-200 cells/uL | |
| NEUTROPHILS | 46.7 | | % | |
| LYMPHOCYTES | 37.6 | | % | |
| MONOCYTES | 8.3 | | % | |
| EOSINOPHILS | 6.3 | | % | |
| BASOPHILS | 1.1 | | % | |
| URINALYSIS, COMPLETE | | | | MI |
| COLOR | YELLOW | | YELLOW | |
| APPEARANCE | CLEAR | | CLEAR | |
| SPECIFIC GRAVITY | 1.023 | | 1.001-1.035 | |
| PH | < OR = 5.0 | | 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 | 0-2 | | < OR = 2 /HPF | |
| SQUAMOUS EPITHELIAL CELLS | NONE SEEN | | < OR = 5 /HPF | |
| BACTERIA | NONE SEEN | | NONE SEEN /HPF | |
| HYALINE CAST | NONE SEEN | | NONE SEEN /LPF | |
| VITAMIN B12 | 471 | | 200-1100 pg/mL | MI |
| C-REACTIVE PROTEIN | 1.4 | | <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.

| | | | | |
|--|--------------|--|---------------|----|
| TESTOSTERONE, TOTAL | | | | MI |
| MALES (ADULT), IA | | | | |
| TESTOSTERONE, TOTAL, MALES (ADULT), IA | 150 L | | 250-827 ng/dL | |
| In hypogonadal males, Testosterone, Total, LC/MS/MS, is the recommended assay due to the diminished accuracy of immunoassay at levels below 250 ng/dL. | | | | |

| Patient Information | Specimen Information | Client Information |
|---|--|--|
| EPSTEIN, JEFFREY DOB: 01/20/1953 AGE: 64 Gender: M Patient ID: 19530120MJE Health ID: 8573003290851249 | Specimen: MR156329E Collected: 01/05/2018 Received: 01/05/2018 / 22:36 EST Reported: 01/08/2018 / 23:26 EST | Client #: 78300020 MOSKOWITZ, BRUCE W |

| Test Name | In Range | Out Of Range | Reference Range | Lab |
|---|----------|--------------|------------------|-----|
| PSA, TOTAL This test code (15983) must be collected in a red-top tube with no gel. 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. | 0.5 | | < OR = 4.0 ng/mL | MI |

| Patient Information | Specimen Information | Client Information |
|---|--|--|
| EPSTEIN, JEFFREY DOB: 01/20/1953 AGE: 64 Gender: M Patient ID: 19530120MJE Health ID: 8573003290851249 | Specimen: MR156329E Collected: 01/05/2018 Received: 01/05/2018 / 22:36 EST Reported: 01/08/2018 / 23:26 EST | Client #: 78300020 MOSKOWITZ, BRUCE W |

Endocrinology

| Test Name | Result | Reference Range | Lab |
|--------------------------|--------|-----------------|-----|
| VITAMIN D,25-OH,TOTAL,IA | 35 | 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:

AT QUEST DIAGNOSTICS-ATLANTA, 1777 MONTREAL CIRCLE, TUCKER, GA 30084-6802 Laboratory Director: ANDREW N YOUNG,MD,PHD, CLIA: 11D0255931
 MI QUEST DIAGNOSTICS-MIAMI, 10200 COMMERCE PARKWAY, MIRAMAR, FL 33025-3938 Laboratory Director: GLEN L. HORTIN MD PHD, CLIA: 10D0277334
 TP QUEST DIAGNOSTICS-TAMPA, 4225 E. FOWLER AVE, TAMPA, FL 33617-2026 Laboratory Director: GLEN L HORTIN,MD,PHD, CLIA: 10D0291120