Quest Diagnostics

SPECIMEN INFORMATION
SPECIMEN:
REQUISITION:
Lab ref no:

COLLECTED: 10/20/2022 07:02AM PDT
RECEIVED: 10/20/2022 07:02AM PDT
REPORTED: 10/26/2022 11:10AM PDT

PATIENT INFORMATION
**Name**
DOB:
AGE:
GENDER:
FASTING:

REPORT STATUS: FINAL
ORDERING PHYSICIAN
**Name**
CLIENT INFORMATION
Private MD Labs

| Test Name | Result | Flag | Reference Range | Lab |
|---|---|---|---|---|
| FASTING: YES | | | | |
| **Comprehensive Metabolic Panel** | | | | |
| GLUCOSE | 88 | NORMAL | 65-99 mg/dL | 01 |
| Fasting reference interval | | | | |
| UREA NITROGEN (BUN) | 24 | NORMAL | 7-25 mg/dL | 01 |
| CREATININE | 1.38 | HIGH | 0.70-1.30 mg/dL | 01 |
| EGFR | 62 | NORMAL | > OR = 60 mL/min/1.73m2 | 01 |
| The eGFR is based on the CKD-EPI 2021 equation. To calculate the new eGFR from a previous Creatinine or Cystatin C result, go to https://www.kidney.org/professionals/kdoqi/gfr%5Fcalculator | | | | |
| BUN/CREATININE RATIO | 17 | NORMAL | 6-22 (calc) | 01 |
| SODIUM | 139 | NORMAL | 135-146 mmol/L | 01 |
| POTASSIUM | 5.1 | NORMAL | 3.5-5.3 mmol/L | 01 |
| CHLORIDE | 102 | NORMAL | 98-110 mmol/L | 01 |
| CARBON DIOXIDE | 30 | NORMAL | 20-32 mmol/L | 01 |
| CALCIUM | 9.7 | NORMAL | 8.6-10.3 mg/dL | 01 |
| PROTEIN, TOTAL | 7.2 | NORMAL | 6.1-8.1 g/dL | 01 |
| ALBUMIN | 4.4 | NORMAL | 3.6-5.1 g/dL | 01 |
| GLOBULIN | 2.8 | NORMAL | 1.9-3.7 g/dL (calc) | 01 |
| ALBUMIN/GLOBULIN RATIO | 1.6 | NORMAL | 1.0-2.5 (calc) | 01 |
| BILIRUBIN, TOTAL | 0.8 | NORMAL | 0.2-1.2 mg/dL | 01 |
| ALKALINE PHOSPHATASE | 78 | NORMAL | 35-144 U/L | 01 |
| AST | 24 | NORMAL | 10-35 U/L | 01 |
| ALT | 22 | NORMAL | 9-46 U/L | 01 |
| **IGF-1, LC/MS** | | | | |
| IGF 1, LC/MS | 169 | NORMAL | 50-317 ng/mL | 03 |
| Z SCORE (MALE) | 0.4 | NORMAL | -2.0 - +2.0 SD | 03 |
| 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. | | | | |
| Z SCORE (FEMALE) | DNR | NORMAL | | 03 |
| **DHEA, (Dehydroepiandrosterone), Unconjugated** | | | | |
| DHEA, UNCONJUGATED | 228 | NORMAL | 147-1760 ng/dL | 03 |
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**Sex Hormone Binding Globulin (SHBG)**

| | | | | |
|---|---|---|---|---|
| SEX HORMONE BINDING GLOBULIN | 33 | NORMAL | 10-50 nmol/L | 01 |

**T3, FREE**

| | | | | |
|---|---|---|---|---|
| T3, FREE | 4.4 | HIGH | 2.3-4.2 pg/mL | 01 |

**Testosterone, Free (Dialysis) and Total, MS**

| | | | | |
|---|---|---|---|---|
| TESTOSTERONE, TOTAL, MS | 1533 | HIGH | 250-1100 ng/dL | 02 |

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

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| | | | | |
|---|---|---|---|---|
| TESTOSTERONE, FREE | 339.6 | HIGH | 35.0-155.0 pg/mL | 02 |

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**CORTISOL, TOTAL**

| | | | | |
|---|---|---|---|---|
| CORTISOL, TOTAL | 15.7 | NORMAL | mcg/dL | 01 |

Reference Range: For 8 a.m.(7-9 a.m.) Specimen: 4.0-22.0
Reference Range: For 4 p.m.(3-5 p.m.) Specimen: 3.0-17.0
* Please interpret above results accordingly *

**DHEA SULFATE, IMMUNOASSAY**

| | | | | |
|---|---|---|---|---|
| DHEA SULFATE | 200 | NORMAL | 32-279 mcg/dL | 01 |

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

**Estradiol**

| | | | | |
|---|---|---|---|---|
| ESTRADIOL | 51 | HIGH | < OR = 39 pg/mL | 01 |

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.

**HEMOGLOBIN A1c**

| | | | | |
|---|---|---|---|---|
| HEMOGLOBIN A1c | 5.3 | NORMAL | <5.7 % of total Hgb | 01 |

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).

**PSA, TOTAL**

| | | | | |
|---|---|---|---|---|
| PSA, TOTAL | 0.47 | NORMAL | < OR = 4.00 ng/mL | 01 |

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 be should 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.

**CBC (includes Differential and Platelets)**

| | | | | |
|---|---|---|---|---|
| WHITE BLOOD CELL COUNT | 7.3 | NORMAL | 3.8-10.8 Thousand/uL | 01 |
| RED BLOOD CELL COUNT | 6.16 | HIGH | 4.20-5.80 Million/uL | 01 |
| HEMOGLOBIN | 18.8 | HIGH | 13.2-17.1 g/dL | 01 |
| HEMATOCRIT | 56.3 | HIGH | 38.5-50.0 % | 01 |
| MCV | 91.4 | NORMAL | 80.0-100.0 fL | 01 |
| MCH | 30.5 | NORMAL | 27.0-33.0 pg | 01 |
| MCHC | 33.4 | NORMAL | 32.0-36.0 g/dL | 01 |
| RDW | 13.7 | NORMAL | 11.0-15.0 % | 01 |
| PLATELET COUNT | 300 | NORMAL | 140-400 Thousand/uL | 01 |
| MPV | 10.1 | NORMAL | 7.5-12.5 fL | 01 |
| ABSOLUTE NEUTROPHILS | 4402 | NORMAL | 1500-7800 cells/uL | 01 |
| ABSOLUTE BAND NEUTROPHILS | DNR | NORMAL | 0-750 cells/uL | 01 |
| ABSOLUTE METAMYELOCYTES | DNR | NORMAL | 0 cells/uL | 01 |
| ABSOLUTE MYELOCYTES | DNR | NORMAL | 0 cells/uL | 01 |
| ABSOLUTE PROMYELOCYTES | DNR | NORMAL | 0 cells/uL | 01 |
| ABSOLUTE LYMPHOCYTES | 2358 | NORMAL | 850-3900 cells/uL | 01 |
| ABSOLUTE MONOCYTES | 402 | NORMAL | 200-950 cells/uL | 01 |
| ABSOLUTE EOSINOPHILS | 117 | NORMAL | 15-500 cells/uL | 01 |
| ABSOLUTE BASOPHILS | 22 | NORMAL | 0-200 cells/uL | 01 |
| ABSOLUTE BLASTS | DNR | NORMAL | 0 cells/uL | 01 |
| ABSOLUTE NUCLEATED RBC | DNR | NORMAL | 0 cells/uL | 01 |

| | | | | |
|---|---|---|---|---|
| NEUTROPHILS | 60.3 | NORMAL | % | 01 |
| BAND NEUTROPHILS | DNR | NORMAL | % | 01 |
| METAMYELOCYTES | DNR | NORMAL | % | 01 |
| MYELOCYTES | DNR | NORMAL | % | 01 |
| PROMYELOCYTES | DNR | NORMAL | % | 01 |
| LYMPHOCYTES | 32.3 | NORMAL | % | 01 |
| REACTIVE LYMPHOCYTES | DNR | NORMAL | 0-10 % | 01 |
| MONOCYTES | 5.5 | NORMAL | % | 01 |
| EOSINOPHILS | 1.6 | NORMAL | % | 01 |
| BASOPHILS | 0.3 | NORMAL | % | 01 |
| BLASTS | DNR | NORMAL | % | 01 |
| NUCLEATED RBC | DNR | NORMAL | 0 /100 WBC | 01 |
| COMMENT(S) | DNR | NORMAL | | 01 |
| **FSH and LH** | | | | |
| FSH | 2.0 | NORMAL | 1.6-8.0 mIU/mL | 01 |
| LH | 0.2 | LOW | 1.5-9.3 mIU/mL | 01 |
| **T4 FREE, (FT4)** | | | | |
| T4, FREE | 1.6 | NORMAL | 0.8-1.8 ng/dL | 01 |
| **TSH** | | | | |
| TSH | 1.82 | NORMAL | 0.40-4.50 mIU/L | 01 |
| **QuestAssureD™ 25-Hydroxyvitamin D (D2, D3)** | | | | |
| VITAMIN D, 25-OH, TOTAL | 40 | NORMAL | 30-100 ng/mL | 02 |

Vitamin D, 25-Hydroxy reports concentrations of two common forms, 25-OHD2 and 25-OHD3. 25-OHD3 indicates both endogenous production and supplementation. 25-OHD2 is an indicator of exogenous sources, such as diet or supplementation. Therapy is based on measurement of Total 25-OHD, with levels <20 ng/mL indicative of Vitamin D deficiency, while levels between 20 ng/mL and 30 ng/mL suggest insufficiency. Optimal levels are > or = 30 ng/mL.

Vitamin D is fat-soluble and therefore inadvertent or intentional ingestion of excessively high amounts could be toxic. Studies in children and adults suggest blood levels would need to exceed 150 ng/mL before there is any concern. Holick MF, Binkley NC, Bischoff-ferrari HA, et al., Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. J Clin. Endocrinol. Metab. 2011;96(7):1911-30.

| | | | | |
|---|---|---|---|---|
| VITAMIN D, 25-OH, D3 | 40 | NORMAL | See Note: ng/mL | 02 |

Reference Range:

Reference Range
Not established

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| | | | | |
|---|---|---|---|---|
| VITAMIN D, 25-OH, D2 | <4 | NORMAL | See Note: ng/mL | 02 |

Reference Range:

Reference Range
Not established

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See Note 1

Note 1

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

**HEPATIC FUNCTION PANEL (ALB, TBILI, DDILI, AP, AST, ALT, AND TP)**

| | | | | |
|---|---|---|---|---|
| PROTEIN, TOTAL | 7.0 | NORMAL | 6.1-8.1 g/dL | 01 |
| ALBUMIN | 4.3 | NORMAL | 3.6-5.1 g/dL | 01 |
| GLOBULIN | 2.7 | NORMAL | 1.9-3.7 g/dL (calc) | 01 |
| ALBUMIN/GLOBULIN RATIO | 1.6 | NORMAL | 1.0-2.5 (calc) | 01 |
| BILIRUBIN, TOTAL | 0.9 | NORMAL | 0.2-1.2 mg/dL | 01 |
| BILIRUBIN, DIRECT | 0.2 | NORMAL | < OR = 0.2 mg/dL | 01 |
| BILIRUBIN, INDIRECT | 0.7 | NORMAL | 0.2-1.2 mg/dL (calc) | 01 |
| ALKALINE PHOSPHATASE | 102 | NORMAL | 37-153 U/L | 01 |
| AST | 27 | NORMAL | 10-35 U/L | 01 |
| ALT | 17 | NORMAL | 6-29 U/L | 01 |