

Quest Diagnostics

SPECIMEN INFORMATION

SPECIMEN: LV340301F
 REQUISITION: 00954919
 Lab ref no:

COLLECTED: 2019/02/14 12:54
 RECEIVED: 2019/02/14 12:55
 REPORTED: 2019/02/19 14:43

PATIENT INFORMATION

John, Smith
 DOB: September 11, 1984
 AGE: 20
 GENDER: Male
 FASTING: Unknown

Clinical Info:

REPORT STATUS: FINAL

ORDERING PHYSICIAN

Jane, Doe

CLIENT INFORMATION

2019-02-19 14:43:00 -0800
 Lab Testing API
 280 Madison Avenue
 Room 912, 9th Floor
 New York, NY 10016

Test Name	Result	Flag	Reference Range	Lab
FASTING: YES				
FASTING: YES				
IRON, TIBC AND FERRITIN PANEL				
IRON, TOTAL	99	NORMAL	45-160 mcg/dL	01
IRON BINDING CAPACITY	251	NORMAL	250-450 mcg/dL (calc)	01
% SATURATION	39	NORMAL	16-45 % (calc)	01
FERRITIN	82	NORMAL	16-288 ng/mL	01
LIPID PANEL, STANDARD				
CHOLESTEROL, TOTAL	204	HIGH	<200 mg/dL	01
HDL CHOLESTEROL	46	LOW	>50 mg/dL	01
TRIGLYCERIDES	150	HIGH	<150 mg/dL	01
LDL-CHOLESTEROL	132	HIGH	mg/dL (calc)	01

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	4.4	NORMAL	<5.0 (calc)	01
NON HDL CHOLESTEROL	158	HIGH	<130 mg/dL (calc)	01

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.

FSH AND LH

FSH	41.6	NORMAL	mIU/mL	01
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Reference Range

Follicular Phase 2.5-10.2

Mid-cycle Peak 3.1-17.7

Luteal Phase 1.5- 9.1

Postmenopausal 23.0-116.3

LH	21.0	NORMAL	mIU/mL	01
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Reference Range

Follicular Phase 1.9-12.5

Mid-Cycle Peak 8.7-76.3

Luteal Phase 0.5-16.9

Postmenopausal 10.0-54.7

MAGNESIUM

MAGNESIUM	2.3	NORMAL	1.5-2.5 mg/dL	01
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URIC ACID

URIC ACID	4.9	NORMAL	2.5-7.0 mg/dL	01
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Therapeutic target for gout patients: <6.0 mg/dL

COMPREHENSIVE METABOLIC PANEL

GLUCOSE	87	NORMAL	65-99 mg/dL	01
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Fasting reference interval

UREA NITROGEN (BUN)	14	NORMAL	7-25 mg/dL	01
CREATININE	0.79	NORMAL	0.50-0.99 mg/dL	01
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	79	NORMAL	> OR = 60 mL/min/1.73m2	01
eGFR AFRICAN AMERICAN	91	NORMAL	> OR = 60 mL/min/1.73m2	01
BUN/CREATININE RATIO	NOT APPLICABLE	NORMAL	6-22 (calc)	01
SODIUM	142	NORMAL	135-146 mmol/L	01
POTASSIUM	4.1	NORMAL	3.5-5.3 mmol/L	01
CHLORIDE	105	NORMAL	98-110 mmol/L	01
CARBON DIOXIDE	28	NORMAL	20-32 mmol/L	01
CALCIUM	9.4	NORMAL	8.6-10.4 mg/dL	01
PROTEIN, TOTAL	7.5	NORMAL	6.1-8.1 g/dL	01
ALBUMIN	4.5	NORMAL	3.6-5.1 g/dL	01
GLOBULIN	3.0	NORMAL	1.9-3.7 g/dL (calc)	01
ALBUMIN/GLOBULIN RATIO	1.5	NORMAL	1.0-2.5 (calc)	01
BILIRUBIN, TOTAL	0.6	NORMAL	0.2-1.2 mg/dL	01
ALKALINE PHOSPHATASE	114	NORMAL	33-130 U/L	01
AST	20	NORMAL	10-35 U/L	01
ALT	10	NORMAL	6-29 U/L	01
CBC (INCLUDES DIFF/PLT)				
WHITE BLOOD CELL COUNT	4.2	NORMAL	3.8-10.8 Thousand/uL	01
RED BLOOD CELL COUNT	4.89	NORMAL	3.80-5.10 Million/uL	01
HEMOGLOBIN	14.1	NORMAL	11.7-15.5 g/dL	01
HEMATOCRIT	44.0	NORMAL	35.0-45.0 %	01
MCV	90.0	NORMAL	80.0-100.0 fL	01
MCH	28.8	NORMAL	27.0-33.0 pg	01
MCHC	32.0	NORMAL	32.0-36.0 g/dL	01
RDW	13.8	NORMAL	11.0-15.0 %	01
PLATELET COUNT	241	NORMAL	140-400 Thousand/uL	01
MPV	10.8	NORMAL	7.5-12.5 fL	01
ABSOLUTE NEUTROPHILS	2293	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	1399	NORMAL	850-3900 cells/uL	01
ABSOLUTE MONOCYTES	290	NORMAL	200-950 cells/uL	01
ABSOLUTE EOSINOPHILS	181	NORMAL	15-500 cells/uL	01
ABSOLUTE BASOPHILS	38	NORMAL	0-200 cells/uL	01
ABSOLUTE BLASTS	DNR	NORMAL	0 cells/uL	01
ABSOLUTE NUCLEATED RBC	DNR	NORMAL	0 cells/uL	01
NEUTROPHILS	54.6	NORMAL	%	01
BAND NEUTROPHILS	DNR	NORMAL	%	01
METAMYELOCYTES	DNR	NORMAL	%	01
MYELOCYTES	DNR	NORMAL	%	01
PROMYELOCYTES	DNR	NORMAL	%	01
LYMPHOCYTES	33.3	NORMAL	%	01
REACTIVE LYMPHOCYTES	DNR	NORMAL	0-10 %	01
MONOCYTES	6.9	NORMAL	%	01
EOSINOPHILS	4.3	NORMAL	%	01
BASOPHILS	0.9	NORMAL	%	01
BLASTS	DNR	NORMAL	%	01
NUCLEATED RBC	DNR	NORMAL	0 /100 WBC	01
COMMENT(S)	DNR	NORMAL		01
HS CRP				
HS CRP	0.9	NORMAL	mg/L	02

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.

T4, FREE

T4, FREE	1.1	NORMAL	0.8-1.8 ng/dL	01
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TSH

TSH	0.07	LOW	0.40-4.50 mIU/L	01
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T3, FREE

T3, FREE	2.6	NORMAL	2.3-4.2 pg/mL	01
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ESTRADIOL

ESTRADIOL	<15	NORMAL	pg/mL	01
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Reference Range

Follicular Phase: 19-144

Mid-Cycle: 64-357

Luteal Phase: 56-214

Postmenopausal: < or = 31

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.

VITAMIN B12/FOLATE, SERUM PANEL

VITAMIN B12	640	NORMAL	200-1100 pg/mL	01
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FOLATE, SERUM	19.6	NORMAL	ng/mL	01
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Reference Range

Low: <3.4

Borderline: 3.4-5.4

Normal: >5.4

VITAMIN D, 25-OH, TOTAL, IA

VITAMIN D, 25-OH, TOTAL, IA	42	NORMAL	30-100 ng/mL	02
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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.)

HEMOGLOBIN A1c

HEMOGLOBIN A1c	5.5	NORMAL	<5.7 % of total Hgb	01
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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).

Performing Laboratory Information:

01: Quest Diagnostics-Sacramento - Northgate, 3714 Northgate Blvd, Sacramento CA, phone: ,
Director: MD Rose Akin
02: Quest Diagnostics-West Hills, 8401 Fallbrook Ave, West Hills CA, phone: , Director: Tab
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