

Patient Information	Specimen Information	Client Information
<b>DOB:</b> <b>AGE:</b> Gender: Phone: Patient ID:	Specimen: Requisition:  Collected: Received: Reported:	

**COMMENTS:**      FASTING: YES

Test Name	In Range	Out Of Range	Reference Range	Lab
THYROID PANEL WITH TSH				
THYROID PANEL				
T3 UPTAKE	31		22-35 %	
T4 (THYROXINE), TOTAL	9.4		4.9-10.5 mcg/dL	
FREE T4 INDEX (T7)	2.9		1.4-3.8	
<b>TSH</b>		<b>5.43 H</b>	0.40-4.50 mIU/L	
LIPID PANEL, STANDARD				
<b>CHOLESTEROL, TOTAL</b>		<b>251 H</b>	<200 mg/dL	
<b>HDL CHOLESTEROL</b>		<b>40 L</b>	>40 mg/dL	
TRIGLYCERIDES	138		<150 mg/dL	
<b>LDL-CHOLESTEROL</b>		<b>183 H</b>	mg/dL (calc)	
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)				
<b>CHOL/HDL C RATIO</b>		<b>6.3 H</b>	<5.0 (calc)	
<b>NON HDL CHOLESTEROL</b>		<b>211 H</b>	<130 mg/dL (calc)	
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.				
COMPREHENSIVE METABOLIC PANEL				
GLUCOSE	88		65-99 mg/dL	
			Fasting reference interval	
UREA NITROGEN (BUN)	15		7-25 mg/dL	
CREATININE	1.09		0.70-1.33 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	75		> OR = 60 mL/min/1.73m2	
eGFR AFRICAN AMERICAN	87		> OR = 60 mL/min/1.73m2	
BUN/CREATININE RATIO	NOT APPLICABLE		6-22 (calc)	
SODIUM	139		135-146 mmol/L	
POTASSIUM	4.3		3.5-5.3 mmol/L	
CHLORIDE	101		98-110 mmol/L	
CARBON DIOXIDE	27		20-32 mmol/L	
CALCIUM	10.1		8.6-10.3 mg/dL	
PROTEIN, TOTAL	7.5		6.1-8.1 g/dL	
<b>ALBUMIN</b>		<b>5.2 H</b>	3.6-5.1 g/dL	
GLOBULIN	2.3		1.9-3.7 g/dL (calc)	

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ALBUMIN/GLOBULIN RATIO	2.3		1.0-2.5 (calc)	
BILIRUBIN, TOTAL	0.8		0.2-1.2 mg/dL	
ALKALINE PHOSPHATASE	76		40-115 U/L	
AST	13		10-35 U/L	
ALT	15		9-46 U/L	
PHOSPHATE (AS PHOSPHORUS)	3.8		2.5-4.5 mg/dL	
URIC ACID	7.5		4.0-8.0 mg/dL	
Therapeutic target for gout patients: <6.0 mg/dL				
LD	195		120-250 U/L	
GGT	25		3-85 U/L	
GROWTH HORMONE (GH)	<0.1		<=7.1 ng/mL	

Because of a pulsatile secretion pattern, random (unstimulated) growth hormone (GH) levels are frequently undetectable in normal children and adults and are not reliable for diagnosing GH deficiency. Regarding suppression tests, failure to suppress GH is diagnostic of acromegaly.

Typical GH response in healthy subjects:  
 Using the glucose tolerance (GH Suppression) test, acromegaly is ruled out if the patient's GH level is <1.0 ng/mL at any point in the timed sequence. [Katznelson L, Laws Jr ER, Melmed S, et al. Acromegaly: an Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab 2014; 99: 3933-3951].

Using GH stimulation testing, the following results at any point in the timed sequence makes GH deficiency unlikely:

- Adults (> or = 20 Years):
  - Insulin Hypoglycemia > or = 5.1 ng/mL
  - Arginine/GHRH > or = 4.1 ng/mL
  - Glucagon > or = 3.0 ng/mL
- Children (< 20 Years):
  - All Stimulation Tests > or = 10.0 ng/mL

IGF 1, LC/MS	107	50-317 ng/mL
Z SCORE (MALE)	-0.5	-2.0 - +2.0 SD

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.

CBC (INCLUDES DIFF/PLT)		
WHITE BLOOD CELL COUNT	8.1	3.8-10.8 Thousand/uL
RED BLOOD CELL COUNT	5.28	4.20-5.80 Million/uL
HEMOGLOBIN	16.3	13.2-17.1 g/dL
HEMATOCRIT	46.8	38.5-50.0 %
MCV	88.6	80.0-100.0 fL
MCH	30.9	27.0-33.0 pg

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MCHC	34.8		32.0-36.0 g/dL	
RDW	12.6		11.0-15.0 %	
PLATELET COUNT	366		140-400 Thousand/uL	
MPV	9.7		7.5-12.5 fL	
ABSOLUTE NEUTROPHILS	5063		1500-7800 cells/uL	
ABSOLUTE LYMPHOCYTES	1223		850-3900 cells/uL	
ABSOLUTE MONOCYTES	454		200-950 cells/uL	
<b>ABSOLUTE EOSINOPHILS</b>		<b>1304 H</b>	15-500 cells/uL	
ABSOLUTE BASOPHILS	57		0-200 cells/uL	
NEUTROPHILS	62.5		%	
LYMPHOCYTES	15.1		%	
MONOCYTES	5.6		%	
EOSINOPHILS	16.1		%	
BASOPHILS	0.7		%	
URINALYSIS, COMPLETE				
COLOR	YELLOW		YELLOW	
APPEARANCE	CLEAR		CLEAR	
SPECIFIC GRAVITY	1.008		1.001-1.035	
PH	6.5		5.0-8.0	
GLUCOSE	NEGATIVE		NEGATIVE	
BILIRUBIN	NEGATIVE		NEGATIVE	
<b>KETONES</b>		<b>TRACE</b>	NEGATIVE	
OCCULT BLOOD	NEGATIVE		NEGATIVE	
PROTEIN	NEGATIVE		NEGATIVE	
NITRITE	NEGATIVE		NEGATIVE	
LEUKOCYTE ESTERASE	NEGATIVE		NEGATIVE	
WBC	NONE SEEN		< OR = 5 /HPF	
RBC	NONE SEEN		< OR = 2 /HPF	
SQUAMOUS EPITHELIAL CELLS	NONE SEEN		< OR = 5 /HPF	
BACTERIA	NONE SEEN		NONE SEEN /HPF	
HYALINE CAST	NONE SEEN		NONE SEEN /LPF	
IRON AND TOTAL IRON				
BINDING CAPACITY				
IRON, TOTAL	180		50-180 mcg/dL	
IRON BINDING CAPACITY	337		250-425 mcg/dL (calc)	
% SATURATION	53		15-60 % (calc)	
DHEA SULFATE	292		38-313 mcg/dL	

DHEA-S values fall with advancing age. For reference, the reference intervals for 31-40 year old patients are:

Male: 106-464 mcg/dL  
 Female: 23-266 mcg/dL

ESTRADIOL 22 < OR = 39 pg/mL  
 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



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**Endocrinology**

Test Name	Result	Reference Range	Lab
VITAMIN D,25-OH,TOTAL,IA	44	30-100 ng/mL	KS
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: <a href="http://education.questdiagnostics.com/faq/FAQ163">http://education.questdiagnostics.com/faq/FAQ163</a> (This link is being provided for informational/educational purposes only.)			
Physician Comments:			

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