Patient Information	Specimen Information	Client Information

Test Name	In Range	Out Of Range	Reference Range	Lab
THYROID PANEL WITH TSH				
THYROID PANEL				NL1
T3 UPTAKE	31		22-35 %	
T4 (THYROXINE), TOTAL	5.5		4.9-10.5 mcg/dL	
FREE T4 INDEX (T7)	1.7		1.4-3.8	
TSH	0.82		0.40-4.50 mIU/L	NL1
LIPID PANEL, STANDARD				
CHOLESTEROL, TOTAL	163		<200 mg/dL	NL1
HDL CHOLESTEROL	57		> OR = 40 mg/dL	NL1
TRIGLYCERIDES	48		<150 mg/dL	NL1
LDL-CHOLESTEROL	92		mg/dL (calc)	NL1
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/HDLC RATIO	2.9		<5.0 (calc)	NL1
NON HDL CHOLESTEROL	106		<130 mg/dL (calc)	NL1
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	0.8		mg/L	NL1
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.			
HOMOCYSTEINE	6.7		<11.4 umol/L	NL1
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				

Patient Information	Specimen Information	Client Information

Test Name	In Range	Out Of Range	Reference Range	Lab
exposure to nitrous oxide. Selhub J, et al., Ann Intern Med. 1999;131(5):331-9.				
COMPREHENSIVE METABOLIC PANEL				NL1
GLUCOSE	84		65-99 mg/dL Fasting reference interval	
UREA NITROGEN (BUN)	16		7-25 mg/dL	
CREATININE	1.15		0.60-1.29 mg/dL	
EGFR	78		> OR = 60 mL/min/1.73m2	
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	NOT APPLICABLE		6-22 (calc)	
SODIUM	138		135-146 mmol/L	
POTASSIUM	4.8		3.5-5.3 mmol/L	
CHLORIDE	105		98-110 mmol/L	
CARBON DIOXIDE	22		20-32 mmol/L	
CALCIUM	9.2		8.6-10.3 mg/dL	
PROTEIN, TOTAL	6.3		6.1-8.1 g/dL	
ALBUMIN	4.1		3.6-5.1 g/dL	
GLOBULIN	2.2		1.9-3.7 g/dL (calc)	
ALBUMIN/GLOBULIN RATIO	1.9		1.0-2.5 (calc)	
BILIRUBIN, TOTAL	0.6		0.2-1.2 mg/dL	
ALKALINE PHOSPHATASE		**30 L**	36-130 U/L	
AST	23		10-40 U/L	
ALT	20		9-46 U/L	
HEMOGLOBIN A1c	5.1		<5.7 % of total Hgb	NL1
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).				
PHOSPHATE (AS PHOSPHORUS)	3.4		2.5-4.5 mg/dL	NL1
URIC ACID	5.5		4.0-8.0 mg/dL	NL1
Therapeutic target for gout patients: <6.0 mg/dL				
LD	119		100-220 U/L	NL1
GGT	21		3-95 U/L	NL1

Patient Information	Specimen Information	Client Information

Test Name	In Range	Out Of Range	Reference Range	Lab
T4, FREE	0.9		0.8-1.8 ng/dL	NL1
T3, FREE	2.7		2.3-4.2 pg/mL	NL1
IGF 1, LC/MS	139		52-328 ng/mL	EZ
Z SCORE (MALE)	0.0		-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)				NL1
WHITE BLOOD CELL COUNT	3.8		3.8-10.8 Thousand/uL	
RED BLOOD CELL COUNT	4.95		4.20-5.80 Million/uL	
HEMOGLOBIN	13.5		13.2-17.1 g/dL	
HEMATOCRIT	40.7		38.5-50.0 %	
MCV	82.2		80.0-100.0 fL	
MCH	27.3		27.0-33.0 pg	
MCHC	33.2		32.0-36.0 g/dL	
RDW	12.9		11.0-15.0 %	
PLATELET COUNT	225		140-400 Thousand/uL	
MPV	9.4		7.5-12.5 fL	
ABSOLUTE NEUTROPHILS	1965		1500-7800 cells/uL	
ABSOLUTE LYMPHOCYTES	1376		850-3900 cells/uL	
ABSOLUTE MONOCYTES	448		200-950 cells/uL	
ABSOLUTE EOSINOPHILS		**11 L**	15-500 cells/uL	
ABSOLUTE BASOPHILS	0		0-200 cells/uL	
NEUTROPHILS	51.7		%	
LYMPHOCYTES	36.2		%	
MONOCYTES	11.8		%	
EOSINOPHILS	0.3		%	
BASOPHILS	0.0		%	
URINALYSIS, COMPLETE				NL1
COLOR	YELLOW		YELLOW	
APPEARANCE	CLEAR		CLEAR	
SPECIFIC GRAVITY	1.013		1.001-1.035	
PH	8.0		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	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	

This urine was analyzed for the presence of WBC, RBC, bacteria, casts, and other formed elements. Only those elements seen were reported.

Patient Information	Specimen Information	Client Information

Test Name	In Range	Out Of Range	Reference Range	Lab
IRON AND TOTAL IRON BINDING CAPACITY				NL1
IRON, TOTAL	76		50-180 mcg/dL	
IRON BINDING CAPACITY	301		250-425 mcg/dL (calc)	
% SATURATION	25		20-48 % (calc)	
DHEA SULFATE	150		61-442 mcg/dL	NL1

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

GROWTH HORMONE (GH)	0.1		< OR = 7.1 ng/mL	NL1

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 result 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

PROGESTERONE	<0.5		<1.4 ng/mL	NL1
ESTRADIOL	19		< OR = 39 pg/mL	NL1

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

Patient Information	Specimen Information	Client Information

Test Name	In Range	Out Of Range	Reference Range	Lab
inappropriate clinical assessment of estrogen status. Quest Diagnostics order code 30289-Estradiol, Ultrasensitive LC/MS/MS demonstrates negligible cross reactivity with fulvestrant.				
PSA, TOTAL	2.30		< OR = 4.00 ng/mL	NL1
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	508		250-1100 ng/dL	
For additional information, please refer to http://education.questdiagnostics.com/faq/TotalTestosteroneLCMSMSFAQ165 (This link is being provided for informational/educational purposes only.)				
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.				
TESTOSTERONE, FREE	73.7		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.				

Patient Information	Specimen Information	Client Information

Endocrinology

Test Name	Result	Reference Range	Lab
VITAMIN D,25-OH,TOTAL,IA	27 L	30-100 ng/mL	NL1

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

Physician Comments:

PERFORMING SITE:

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