Quest Diagnostics

Report Status: Final

Patient Information	Specimen Information	Client Information

COMMENTS: FASTING:YES

Test Name	In Range	Out Of Range	Reference Range	Lab
THYROID PANEL WITH TSH				
THYROID PANEL				IG
T3 UPTAKE	31		22-35 %	
T4 (THYROXINE), TOTAL	7.5		5.1-11.9 mcg/dL	
FREE T4 INDEX (T7)	2.3		1.4-3.8	
TSH	2.25		mIU/L	IG
			Reference Range	
			> or = 20 Years 0.40-4.50	
			Pregnancy Ranges	
			First trimester 0.26-2.66	
			Second trimester 0.55-2.73	
			Third trimester 0.43-2.91	
LIPID PANEL, STANDARD				
CHOLESTEROL, TOTAL		**215 H**	<200 mg/dL	IG
HDL CHOLESTEROL	65		> OR = 50 mg/dL	IG
TRIGLYCERIDES	102		<150 mg/dL	IG
LDL-CHOLESTEROL		**130 H**	mg/dL (calc)	IG
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	3.3		<5.0 (calc)	IG
NON HDL CHOLESTEROL		**150 H**	<130 mg/dL (calc)	IG
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				IG
GLUCOSE	85		65-99 mg/dL	
			Fasting reference interval	
UREA NITROGEN (BUN)	11		7-25 mg/dL	
CREATININE	0.75		0.50-1.03 mg/dL	
EGFR	96		> 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	141		135-146 mmol/L	

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POTASSIUM	3.6		3.5-5.3 mmol/L	
CHLORIDE	101		98-110 mmol/L	
CARBON DIOXIDE	32		20-32 mmol/L	
CALCIUM	9.5		8.6-10.4 mg/dL	
PROTEIN, TOTAL	7.1		6.1-8.1 g/dL	
ALBUMIN	4.3		3.6-5.1 g/dL	
GLOBULIN	2.8		1.9-3.7 g/dL (calc)	
ALBUMIN/GLOBULIN RATIO	1.5		1.0-2.5 (calc)	
BILIRUBIN, TOTAL	0.4		0.2-1.2 mg/dL	
ALKALINE PHOSPHATASE	101		37-153 U/L	
AST	13		10-35 U/L	
ALT	14		6-29 U/L	
PHOSPHATE (AS PHOSPHORUS)	3.9		2.5-4.5 mg/dL	IG
URIC ACID	4.7		2.5-7.0 mg/dL	IG
Therapeutic target for gout patients: <6.0 mg/dL				
LD	157		120-250 U/L	IG
GGT	40		3-70 U/L	IG
IGF 1, LC/MS	135		50-317 ng/mL	EZ
Z SCORE (FEMALE)	-0.1		-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)				IG
WHITE BLOOD CELL COUNT	6.1		3.8-10.8 Thousand/uL	
RED BLOOD CELL COUNT	3.95		3.80-5.10 Million/uL	
HEMOGLOBIN	12.3		11.7-15.5 g/dL	
HEMATOCRIT	35.9		35.0-45.0 %	
MCV	90.9		80.0-100.0 fL	
MCH	31.1		27.0-33.0 pg	
MCHC	34.3		32.0-36.0 g/dL	
RDW	12.0		11.0-15.0 %	
PLATELET COUNT	290		140-400 Thousand/uL	
MPV	10.6		7.5-12.5 fL	
ABSOLUTE NEUTROPHILS	3764		1500-7800 cells/uL	
ABSOLUTE LYMPHOCYTES	1793		850-3900 cells/uL	
ABSOLUTE MONOCYTES	329		200-950 cells/uL	
ABSOLUTE EOSINOPHILS	171		15-500 cells/uL	
ABSOLUTE BASOPHILS	43		0-200 cells/uL	
NEUTROPHILS	61.7		%	
LYMPHOCYTES	29.4		%	
MONOCYTES	5.4		%	
EOSINOPHILS	2.8		%	
BASOPHILS	0.7		%	
URINALYSIS, COMPLETE				IG
COLOR	YELLOW		YELLOW	
APPEARANCE	CLEAR		CLEAR	
SPECIFIC GRAVITY	1.013		1.001-1.035	
PH	7.0		5.0-8.0	
GLUCOSE	NEGATIVE		NEGATIVE	
BILIRUBIN	NEGATIVE		NEGATIVE	

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KETONES	NEGATIVE		NEGATIVE	
OCCULT BLOOD	NEGATIVE		NEGATIVE	
PROTEIN	NEGATIVE		NEGATIVE	
NITRITE	NEGATIVE		NEGATIVE	
LEUKOCYTE ESTERASE		**1+**	NEGATIVE	
WBC	NONE SEEN		< OR = 5 /HPF	
RBC	NONE SEEN		< OR = 2 /HPF	
SQUAMOUS EPITHELIAL CELLS	0-5		< 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.

IRON AND TOTAL IRON BINDING CAPACITY				IG
IRON, TOTAL		**179 H**	45-160 mcg/dL	
IRON BINDING CAPACITY	273		250-450 mcg/dL (calc)	
% SATURATION		**66 H**	16-45 % (calc)	
DHEA SULFATE	105		5-167 mcg/dL	IG

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)	0.9		< OR = 7.1 ng/mL	IG

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		ng/mL	IG

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ESTRADIOL	<15		Reference Ranges Female Follicular Phase < 1.0 Luteal Phase 2.6-21.5 Post menopausal < 0.5 Pregnancy 1st Trimester 4.1-34.0 2nd Trimester 24.0-76.0 3rd Trimester 52.0-302.0 pg/mL Reference Range Follicular Phase: 19-144 Mid-Cycle: 64-357 Luteal Phase: 56-214 Postmenopausal: < or = 31	IG

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.

TESTOSTERONE, FREE (DIALYSIS) AND TOTAL,MS				Z3E
TESTOSTERONE, TOTAL, MS	29		2-45 ng/dL	

For additional information, please refer to https://education.questdiagnostics.com/faq/FAQ165 (This link is being provided for informational/educational purposes only.) (Note)

This test was developed and its analytical performance characteristics have been determined by medfusion. 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, FREE (Note)	2.6		0.1-6.4 pg/mL	

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MDF
med fusion
2501 South State Highway 121,Suite 1100
Lewisville TX 75067
972-966-7300
Michael Chaump, MD

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Test Name	Result	Reference Range	Lab
VITAMIN D,25-OH,TOTAL,IA	39	30-100 ng/mL	IG

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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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