

Specimen
 Requisition
 Lab Ref No

Collected Date
 Received Date

Legend

Result Value Colors

Normal Result is within the clinical reference range

Result Value Labels

L Below Low Normal

Result	Value	Reference Range	Lab
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Metabolic & Endocrine Health

Thyroid

T3 Reverse (RT3), LC/MS/MS

T3 REVERSE, LC/MS/MS	21 02/22/22	8-25 ng/dL	AMD
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Comments 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.

T3 Total

T3, TOTAL	127 02/22/22	76-181 ng/dL	MI
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T3 Uptake

T3 UPTAKE	27 02/22/22	22-35 %	MI
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T3, Free

Result	Value	Reference Range	Lab
T3, FREE	2.9 02/22/22	2.3-4.2 pg/mL	MI

T4 (Thyroxine), Total

T4 (THYROXINE), TOTAL	10.3 02/22/22	5.1-11.9 mcg/dL	MI
FREE T4 INDEX (T7)	2.8 02/22/22	1.4-3.8	MI

T4, Free

T4, FREE	1.3 02/22/22	0.8-1.8 ng/dL	MI
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TSH

TSH	1.47 02/22/22	mIU/L	MI
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Comments

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

Metabolic Hormones

Growth Hormone (GH)

GROWTH HORMONE (GH)	0.1 02/22/22	< OR = 7.1 ng/mL	TP
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Comments

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

Result	Value	Reference Range	Lab
	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		

IGF-I, LC/MS

IGF 1, LC/MS	143 02/22/22	52-328 ng/mL	EZ
Z SCORE (FEMALE)	0.0 02/22/22	-2.0 - +2.0 SD	EZ

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Reproductive Hormones

DHEA Sulfate, Immunoassay

DHEA SULFATE	8 L 02/22/22	15-205 mcg/dL	MI
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Comments 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	<15 02/22/22	pg/mL	MI
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Comments Reference Range
 Follicular Phase: 19-144
 Mid-Cycle: 64-357
 Luteal Phase: 56-214
 Postmenopausal: < or = 31

Result	Value	Reference Range	Lab
	<p>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).</p> <p>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.</p>		

Estrogen, Total, Serum

ESTROGEN, TOTAL, SERUM	317.3 02/22/22	pg/mL	EZ
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Comments	<p>Reference Ranges for Total Estrogen:</p> <p>Follicular Phase (1-12 days): 90-590 pg/mL Luteal Phase: 130-460 pg/mL Postmenopausal: 50-170 pg/mL</p> <p>The total estrogen assay is not recommended for use in pre-pubertal children.</p>		
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FSH and LH

FSH	45.7 02/22/22	mIU/mL	MI
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Comments	<p>Reference Range</p> <p>Follicular Phase 2.5-10.2 Mid-cycle Peak 3.1-17.7 Luteal Phase 1.5- 9.1 Postmenopausal 23.0-116.3</p>		
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LH	32.0 02/22/22	mIU/mL	MI
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Comments	<p>Reference Range</p> <p>Follicular Phase 1.9-12.5</p>		
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Result	Value	Reference Range	Lab
	Mid-Cycle Peak	8.7-76.3	
	Luteal Phase	0.5-16.9	
	Postmenopausal	10.0-54.7	

Progesterone, Immunoassay

PROGESTERONE	<0.5 02/22/22	ng/mL	MI
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Comments

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

Testosterone, Total And Free And Sex Hormone Binding Globulin

TESTOSTERONE, TOTAL, MS	3 02/22/22	2-45 ng/dL	AMD
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Comments

For additional information, please refer to <http://education.questdiagnostics.com/faq/TotalTestosteroneLCMSMSFAQ165>
 (This link is being provided for informational/educational purposes only.)

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TESTOSTERONE, FREE	0.4 02/22/22	0.1-6.4 pg/mL	AMD
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SEX HORMONE BINDING GLOBULIN	45 02/22/22	17-124 nmol/L	AMD
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Result	Value	Reference Range	Lab
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Other

Other

Pregnenolone, LC/MS/MS

PREGNENOLONE, LC/MS	29 02/22/22	22-237 ng/dL	EZ
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Comments

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