

Testosterone, Total, Bioavailable, and Free, Serum

Test ID: TTFB

Explanation:

Due to assay issues, bioavailable testosterone will be test down on the effective date. NYS samples will be performed at MCL with TGRP as the alternative. All other MCL specimens will be sent to the referral test below. An update will be provided when normal testing resumes.

Note:

The MCL account-specific fee for TTFB will be honored until 12/31/2024.

Recommended Alternative Test:

Testosterone, Free, Mass Spectrometry/Equilibrium Dialysis (Endocrine Sciences)

Test ID: FFTFD

Methodology:

Testosterone: High-Pressure Liquid Chromatography (HPLC)/Tandem Mass Spectrometry
Free Testosterone: Equilibrium dialysis

Reference Values:

Testosterone Expected Values:

Males:

Age:	Range (ng/dL):
Premature (26-28 weeks) Day 4	59-125
Premature (31-35 weeks) Day 4	37-198
Newborns (1 to 7 months)	75-400
Prepubertal (1 to 10 years)	<2.5-10
Adults (>18)	264-916

Females:

Age:	Range (ng/dL):
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Premature (26-28 weeks) Day 4	5-16
Premature (31-35 weeks) Day 4	5-22
Newborns (1 to 7 months)	20-64
Prepubertal (1 to 9 years)	<2.5-10
Premenopausal	10-55
Postmenopausal	7-40

Males:

Tanner Stage:	Age (years):	Testosterone (ng/dL):
I	<9.8	<2.5-10
II	9.8-14.5	18-150
III	10.7-15.4	100-320
IV	11.8-16.2	200-620
V	12.8-17.3	350-970

Females:

Tanner Stage:	Age (years):	Testosterone (ng/dL):
I	<9.2	<2.5-10
II	9.2-13.7	7-28
III	10.0-14.4	15-35
IV	10.7-15.6	13-32
V	11.8-18.6	20-38

Free Testosterone Expected Values:

Males:

Age:	% Free:	pg/mL
Full-term infants (1-15 days)	0.9-1.7	1.5-31
Full-term infants (1-2 months)	0.4-0.8	3.3-18
Full-term infants (3-4 months)	0.4-1.1	0.7-14
Full-term infants (5-6 months)	0.4-1.0	0.4-4.8
Prepubertal children (1-10 years)	0.4-0.9	0.15-0.6
Puberty	*	*
Adults	1.5-3.2	52-280

Females:

Age:	% Free:	pg/mL
Full-term infants (1-15 days)	0.8-1.5	0.5-2.5
Full-term infants (1-2 months)	0.4-1.1	0.1-1.3
Full-term infants (3-4 months)	0.5-1.0	0.3-1.1
Full-term infants (5-6 months)	0.5-0.8	0.2-0.6
Prepubertal children (1-10 years)	0.4-0.9	0.15-0.6
Puberty:	*	*
Adults	0.8-1.4	1.1-6.3

***Puberty:** Comprehensive values for free testosterone by dialysis for both males and females throughout puberty are currently unavailable.

Specimen Requirements:**Preferred:** Red Top**Acceptable:** Serum gel**Specimen Volume:** 2 mL**Collection Instructions:**
1. Draw blood in a plain red-top tube(s), serum gel tube(s) is acceptable.
2. Centrifuge within 45 min of draw and aliquot 2 mL of serum in a plastic vial.
3. Send frozen.**Minimum Volume:** 1 mL**Specimen Stability Information:**

Specimen Type	Temperature	Time
Serum Red	Frozen (Preferred)	
	Ambient	6 days
	Refrigerated	7 days

CPT Code:

84402, 84403

Day(s) Performed: Varies**Report Available:** 8 - 14 days**Questions**

Contact Joshua Yang, Laboratory Technologist Resource Coordinator at 800-533-1710.