

## Testosterone, Total and Bioavailable, Serum

**Test ID:** TTBS

**Explanation:** Due to concerns around acceptable turnaround times, TTBS will be placed test down on the effective date. Pending samples received at Mayo Clinic Laboratories will be performed by Mayo Clinic Laboratories with extended turnaround times. The test down is indefinite.

**Note:**

The client-specific fee will be honored for the first 30 days of this event.

**Recommended Alternative Test:**

**Testosterone, Free and Weakly Bound, With Total Testosterone, LC/MS-MS**

**Test ID:** FFTST

**Methodology:**

Ammonium sulfate precipitation; liquid chromatography/tandem mass spectrometry (LC/MS-MS)

**Reference Values:**

Males:

Age:	Range (ng/dL):
Premature Infants (26 to 28 weeks) Day 4	59.0-125.0
Premature (31-35 weeks) Day 4	37.0-198.0
Newborns	75.0-400.0
Prepubertal (1 to 10 years)	<2.5-10.0

**1 to 7 Months**

Levels decrease rapidly the first week to 20.0-50.0 ng/dL, then increase to 60.0-400.0 ng/dL (mean=190.0) between 20-60 days. Levels then decline to prepubertal range of <2.5-10.0 by seven months.

Females:

Age:	Range (ng/dL):
Premature Infants (26 to 28 weeks) Day 4	5.0-16.0
Premature (31-35 weeks) Day 4	5.0-22.0
Newborns	20.0-64.0
Prepubertal (1 to 9 years)	<2.5-10.0

**1 to 7 Months**

Levels decrease during the first month to <10.0 ng/dL and remain there until puberty.

**Puberty:**

Tanner Stage (Males)	Age (Years)	Range (ng/dL)	Mean (ng/dL)
1	<9.8	<2.5-10.0	4.9
2	9.8-14.5	18.0-150.0	42.0
3	10.7-15.4	100.0-320.0	190.0
4	11.8-16.2	200.0-620.0	372.0
5	12.8-17.3	350.0-970.0	546.0

Tanner Stage (Females)	Age (Years)	Range (ng/dL)	Mean (ng/dL)
1	<9.2	<2.5-10.0	4.9
2	9.2-13.7	7.0-28.0	18.0
3	10.0-14.4	15.0-35.0	25.0
4	10.7-15.6	13.0-32.0	22.0
5	11.8-18.6	20.0-38.0	28.0

**Adults:**

> or =18 Years	Range (ng/dL)
<b>Males</b>	350.0-1030.0
<b>Females</b>	
Premenopausal	10.0-55.0
Postmenopausal	7.0-40.0

**Testosterone % Free+Weakly Bound:**

Female: 3.0-18.0%

Male: 9.0-46.0%

**Testosterone, F+W Bound:**

Female: 0.0-9.5 ng/dL

Male: 40.0-250.0 ng/dL

**Specimen Requirements:**

**Preferred:** Red top

**Acceptable:** Serum gel

**Specimen Volume:** 2 mL

**Collection Instructions:**

1. Within one hour of collection, centrifuge and aliquot 2 mL serum into a plastic vial.
2. Ship refrigerated.

**Minimum Volume:** 1.4 mL (does not allow for repeat testing)

**Specimen Stability Information:**

Specimen Type	Temperature	Time
Serum	Refrigerated (preferred)	7 days
	Ambient	7 days

**CPT Code:**

84410

**Miscellaneous Referral Test Fee:**

\$104

**Day(s) Performed:** Daily**Report Available:** 6 to 10 days**Questions**

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