MAYO CLINIC LABORATORIES

Test Definition: TTBS

Testosterone, Total and Bioavailable, Serum

Reporting Title: Testosterone, Total and Bioavail, S
Performing Location: Mayo Clinic Laboratories - Rochester Superior Drive

Ordering Guidance:

This is the preferred second-level test for suspected increases or decreases in physiologically active testosterone.

Necessary Information:

Patient's age and sex are required.

Specimen Requirements:

Supplies: Sarstedt Aliquot Tube, 5 mL (T914)
Collection Container/Tube: Red top (serum gel/SST are **not acceptable**)
Submission Container/Tube: Plastic vial
Specimen Volume: 1 mL
Collection Instructions: Centrifuge and aliquot serum into a plastic vial.

Specimen Type	Temperature	Time	Special Container
Serum Red	Refrigerated (preferred)	14 days	
	Frozen	60 days	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
82978	Testosterone, Bioavailable, S	Numeric	ng/dL	2990-0
8533	Testosterone, Total, S	Numeric	ng/dL	2986-8

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

Components:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
BATS	Testosterone, Bioavailable, S	1	84410	Yes	No
TTST	Testosterone, Total, S	1	84403	Yes	Yes

CPT Code Information:

84403
84410

Reference Values:

TESTOSTERONE, TOTAL:
Males

0-5 months: 75-400 ng/dL
6 months-9 years: <7-20 ng/dL
10-11 years: <7-130 ng/dL
12-13 years: <7-800 ng/dL
14 years: <7-1,200 ng/dL
15-16 years: 100-1,200 ng/dL
17-18 years: 300-1,200 ng/dL
> or =19 years: 240-950 ng/dL
Tanner Stages*
I (prepubertal): <7-20
II: 8-66
III: 26-800
IV: 85-1,200
V (young adult): 300-950

Females
0-5 months: 20-80 ng/dL
6 months-9 years: <7-20 ng/dL
10-11 years: <7-44 ng/dL
12-16 years: <7-75 ng/dL
17-18 years: 20-75 ng/dL
> or =19 years: 8-60 ng/dL
Tanner Stages*
I (prepubertal): <7-20
II: <7-47
III: 17-75
IV: 20-75
V (young adult): 12-60

*Puberty onset (transition from Tanner stage I to Tanner stage II) occurs for boys at a median age of 11.5 (+/-2) years and for girls at a median age of 10.5 (+/-2) years. There is evidence that it may occur up to 1 year earlier in obese girls and in African American girls. For boys, there is no definite proven relationship between puberty onset and body weight or ethnic origin. Progression through Tanner stages is variable. Tanner stage V (young adult) should be reached by age 18.

TESTOSTERONE, BIOAVAILABLE:
Males
< or =19 years: Not established
20-29 years: 83-257 ng/dL
30-39 years: 72-235 ng/dL
40-49 years: 61-213 ng/dL
50-59 years: 50-190 ng/dL
60-69 years: 40-168 ng/dL
> or =70 years: Not established

Females (non-oophorectomized)
< or =19 years: not established
20-50 years (on oral estrogen): 0.80-4.0 ng/dL
20-50 years (not on oral estrogen): 0.80-10 ng/dL
>50 years: Not established