
LAB ALERT: Reference Range Updates for A1c and Testosterone

Dear Regional Pathology Services Clients,

On Tuesday September 5th, we will publish new reference ranges for Hemoglobin A1c ([SA1CB](#)) and Testosterone ([TST](#)). Collection requirements remain unchanged.

HEMOGLOBIN A1c (SA1Cb)—Updated Reference Intervals

A1c LEVEL	INTERPRETIVE COMMENT
< 5.7%	Normal
5.7 – 6.4%	Prediabetes
≥ 6.5%	Diabetes Mellitus

International Expert Committee. International Expert Committee report on the role of the A1C assay in the diagnosis of diabetes. Diabetes Care. 2009 Jul;32(7):1327-34. doi: 10.2337/dc09-9033. Epub 2009 Jun 5. PMID: 19502545; PMCID: PMC2699715.

TESTOSTERONE (TST)—Updated Reference Intervals

MALES	
Age	Testosterone
1 – 10 years	< 21 ng/dL
10 – 14 years	10 – 50 ng/dL
14 – 18 years	100 – 950 ng/dL
> 18 years	250 – 950 ng/dL

FEMALES	
Age	Testosterone
1 – 10 years	< 21 ng/dL
10 – 14 years	10 – 50 ng/dL
14 – 18 years	10 – 75 ng/dL
> 18 years	10 – 90 ng/dL

Bhasin S, Pencina M, Jasuja GK, Travison TG, Coviello A, Orwoll E, Wang PY, Nielson C, Wu F, Tajar A, Labrie F, Vesper H, Zhang A, Ulloor J, Singh R, D'Agostino R, Vasani RS. Reference ranges for testosterone in men generated using liquid chromatography tandem mass spectrometry in a community-based sample of healthy nonobese young men in the Framingham Heart Study and applied to three geographically distinct cohorts. J Clin Endocrinol Metab. 2011 Aug;96(8):2430-9. doi: 10.1210/jc.2010-3012. Epub 2011 Jun 22. PMID: 21697255; PMCID: PMC3146796.

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