

MEMO

TO: CCLS Clients

FROM: CCLS – Specimen Referral Center

DATE: 6/9/2022

SUBJECT: Testosterone, Free

Effective June 30, 2022, Mayo will be making changes to the following tests:

TESTOSTERONE, TOTAL AND FREE, SERUM (LAB0202523) and TESTOSTERONE, TOTAL, BIOAVAILABLE, AND FREE, SERUM (LAB0241068)

Explanation:

On the effective date, free testosterone will be performed with a new method that will result in changes in established reference ranges.

Current Method	New Method
Equilibrium Dialysis	Equilibrium Dialysis/ Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)
Current Reference Range	New Reference Range
<p>TESTOSTERONE, FREE</p> <p>Males (adult): 20-<25 years: 5.25-20.7 ng/dL 25-<30 years: 5.05-19.8 ng/dL 30-<35 years: 4.85-19.0 ng/dL 35-<40 years: 4.65-18.1 ng/dL 40-<45 years: 4.46-17.1 ng/dL 45-<50 years: 4.26-16.4 ng/dL 50-<55 years: 4.06-15.6 ng/dL 55-<60 years: 3.87-14.7 ng/dL 60-<65 years: 3.67-13.9 ng/dL 65-<70 years: 3.47-13.0 ng/dL 70-<75 years: 3.28-12.2 ng/dL 75-<80 years: 3.08-11.3 ng/dL 80-<85 years: 2.88-10.5 ng/dL 85-<90 years: 2.69-9.61 ng/dL 90-<95 years: 2.49-8.76 ng/dL 95-100+ years: 2.29-7.91 ng/dL</p> <p>Males (children): <1 year: Term infants 1-15 days: 0.20-3.10 ng/dL* 16 days-1 year: Values decrease gradually from newborn (0.20-3.10 ng/dL) to prepubertal levels</p> <p>*J Clin Endocrinol Metab 1973;36(6):1132-1142</p> <p>1-8 years: <0.04-0.11 ng/dL 9 years: <0.04-0.45 ng/dL 10 years: <0.04-1.26 ng/dL 11 years: <0.04-5.52 ng/dL</p>	<p>TESTOSTERONE, FREE</p> <p>Males (adult): 20-<25 years: 5.25-20.7 ng/dL 25-<30 years: 5.05-19.8 ng/dL 30-<35 years: 4.85-19.0 ng/dL 35-<40 years: 4.65-18.1 ng/dL 40-<45 years: 4.46-17.1 ng/dL 45-<50 years: 4.26-16.4 ng/dL 50-<55 years: 4.06-15.6 ng/dL 55-<60 years: 3.87-14.7 ng/dL 60-<65 years: 3.67-13.9 ng/dL 65-<70 years: 3.47-13.0 ng/dL 70-<75 years: 3.28-12.2 ng/dL 75-<80 years: 3.08-11.3 ng/dL 80-<85 years: 2.88-10.5 ng/dL 85-<90 years: 2.69-9.61 ng/dL 90-<95 years: 2.49-8.76 ng/dL 95-100+ years: 2.29-7.91 ng/dL</p> <p>Males (children): <1 year: Term infants 1-15 days: 0.20-3.10 ng/dL* 16 days-1 year: Values decrease gradually from newborn (0.20-3.10 ng/dL) to prepubertal levels</p> <p>*J Clin Endocrinol Metab 1973;36(6):1132-1142</p> <p>1-8 years: <0.13 ng/dL 9 years: <0.13-0.45 ng/dL 10 years: <0.13-1.26 ng/dL 11 years: <0.13-5.52 ng/dL</p>

12 years: <0.04-9.28 ng/dL
 13 years: <0.04-12.6 ng/dL
 14 years: 0.48-15.3 ng/dL
 15 years: 1.62-17.7 ng/dL
 16 years: 2.93-19.5 ng/dL
 17 years: 4.28-20.9 ng/dL
 18 years: 5.40-21.8 ng/dL
 19 years: 5.36-21.2 ng/dL

Females (adult):

20-<25 years: 0.06-1.08 ng/dL
 25-<30 years: 0.06-1.06 ng/dL
 30-<35 years: 0.06-1.03 ng/dL
 35-<40 years: 0.06-1.00 ng/dL
 40-<45 years: 0.06-0.98 ng/dL
 45-<50 years: 0.06-0.95 ng/dL
 50-<55 years: 0.06-0.92 ng/dL
 55-<60 years: 0.06-0.90 ng/dL
 60-<65 years: 0.06-0.87 ng/dL
 65-<70 years: 0.06-0.84 ng/dL
 70-<75 years: 0.06-0.82 ng/dL
 75-<80 years: 0.06-0.79 ng/dL
 80-<85 years: 0.06-0.76 ng/dL
 85-<90 years: 0.06-0.73 ng/dL
 90-<95 years: 0.06-0.71 ng/dL
 95-100+ years: 0.06-0.68 ng/dL

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*J Clin Endocrinol Metab 1973;36(6):1132-1142

1-4 years: <0.04 ng/dL
 5 years: <0.04-0.07 ng/dL
 6 years: <0.04-0.14 ng/dL
 7 years: <0.04-0.23 ng/dL
 8 years: <0.04-0.34 ng/dL
 9 years: <0.04-0.46 ng/dL
 10 years: <0.04-0.59 ng/dL
 11 years: <0.04-0.72 ng/dL
 12 years: <0.04-0.84 ng/dL
 13 years: <0.04-0.96 ng/dL
 14 years: <0.04-1.06 ng/dL
 15-18 years: <0.04-1.09 ng/dL
 19 years: 0.06-1.08 ng/dL

12 years: <0.13-9.28 ng/dL
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Please feel free to contact the Specimen Referrals Center with any questions at 320-251-2700 Ext. 57320.