



Memorandum

Date: June 5 2015

To: Calgary Zone Physicians

From: Dr Lawrence de Koning

Re: Changes to total testosterone reference intervals

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Key Messages:

- On June 22 2015, reference intervals for total testosterone will change from:

Age	Male	Female	Units
1 day - 15 years	0 - 1.0	0 - 1.0	nmol/L
16 years - 150 years	8.0 - 29.0	0.5 - 2.0	nmol/L

To:

Age	Male	Female	Units
1 day - 9 years	0 - 1.0	0 - 1.0	nmol/L
10 years - 17 years, Tanner Stage 1	0 - 1.0	0 - 1.0	nmol/L
10 years - 17 years, Tanner Stage 2	0 - 15.0	0 - 1.0	nmol/L
10 years - 17 years, Tanner Stage 3	2.2 - 27.0	0 - 1.0	nmol/L
10 years - 17 years, Tanner Stage 4	6.2 - 26.5	0 - 1.0	nmol/L
10 years - 17 years, Tanner Stage 5	6.5 - 29.0	0.2 - 1.3	nmol/L
18 years - 150 years:	8.0 - 29.0	0.5 - 2.0	nmol/L

- Results for patients 10-17 years of age will no longer be flagged as 'high' or 'low'
- Adult reference intervals now begin at 18 years of age

Importance/Impact:

- Previous reference intervals for males between 1 day and 15 years of age were too narrow, leading to unnecessary endocrine consultations for boys undergoing puberty.

Background / Action Required:

- Results for patients aged 10-17 years must be reviewed manually along with patient tanner stage

Inquiries and feedback may be directed to:

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