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Subject: 17-Hydroxyprogesterone: assay change

LabPLUS will be changing to a different 17-hydroxyprogesterone (17-OHP) immunoassay, because the current assay (DPC Coat-a-Count RIA) is being discontinued by the manufacturer.

The 2 assays are well correlated, but the new assay (IBL) gives lower results than the current assay. This may be due to a calibration difference, or to lower cross-reactivity with 17-OHP metabolites, as the IBL (new) assay is reported to be closer to the true values for parent molecule measured by mass spectrometry (MS). LabPLUS plans to develop an MS assay in the future.

Our current practice of solvent-extraction of samples from newborns (first month of life), to remove sulphated and other metabolites, will continue.

New reference intervals have been adapted from data supplied by the manufacturer of the new assay.

New reference intervals

Age		17-OH-progesterone upper limit, nmol/L
0-<1 month (extracted)		<= 57
1-<2 months (direct)		<= 45
2-<6 months		<= 15
6-<12 months		<= 4.0
1-<8 years		<= 2.5
males 8y and older		1.8 to 10.4
females 8y and older	follicular phase	0.3 to 3.3
	luteal phase	2.9 to 15

Note: these RIs were adapted from the references below. Upper limits correspond to the 95th centiles for age groups less than 8 years and 97.5th centiles for 8 years and older.

References:

1. IBL International 17-OH-progesterone ELISA kit information, version 6/2011-05 (used for paediatric age groups)
2. IBL 17-OHP RIA kit information (used for age groups 8 years and older)