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Collection Date First:	24-Dec-2013
Collection Date Last:	22-Jan-2014
Sample Received:	31-Jan-2014
Reported On:	14-Feb-2014

Month Long Hormone Assessment ***Accession Number : 400000***

Healthcare Professional:

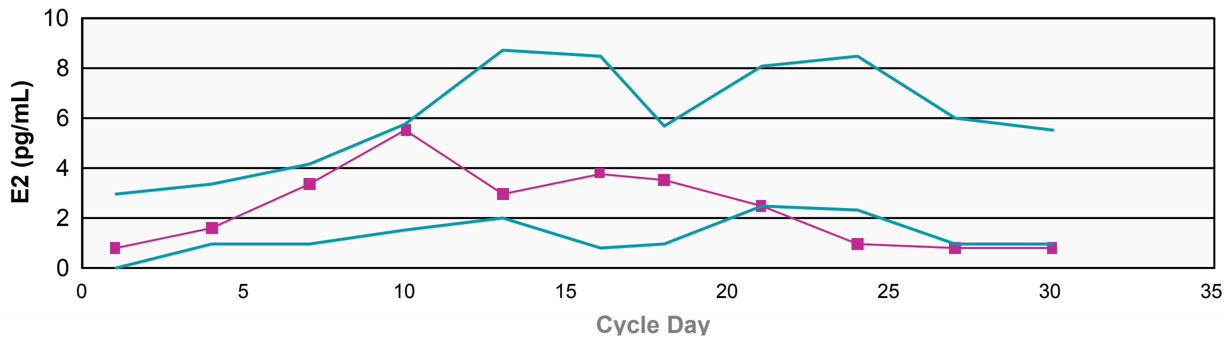
Client:

Age: 39
DOB:
Gender: F
Status: Regular

Phone:
Fax:

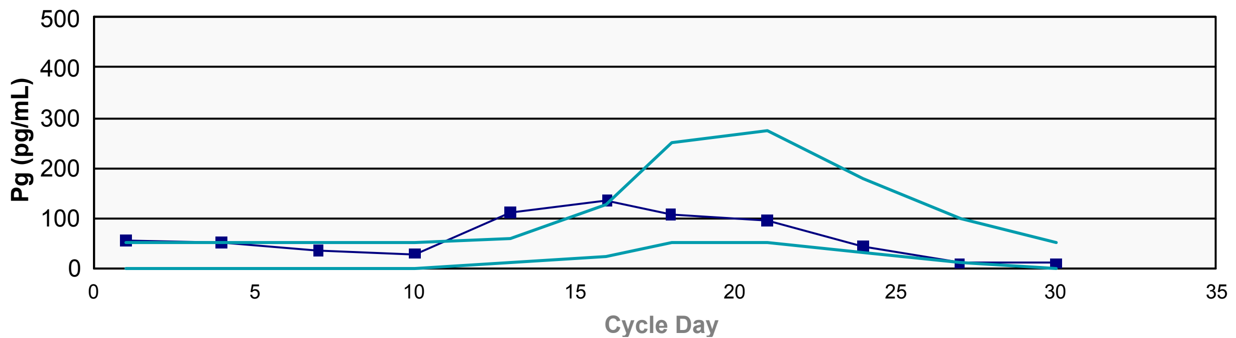
Estradiol

Legend ■ Estradiol ■ Normal Range (Upper and lower limits)



Progesterone

Legend ■ Progesterone ■ Normal Range (Upper and lower limits)



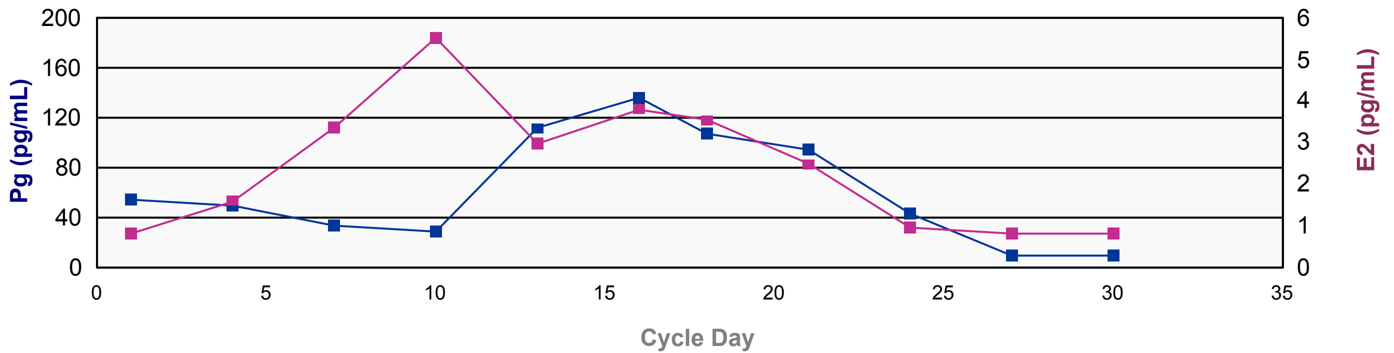
George Gillson MD, PhD
Medical Director

Co-Signing Physician:
Clare Westmacott, MD
Calgary, AB
Phone (403) 278-1405

CPSA Accreditation #L0154200

Progesterone & Estradiol

Legend ■ Estradiol ■ Progesterone



Sample #	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
Date	Dec 24 2013	Dec 27 2013	Dec 30 2013	Jan 2 2014	Jan 5 2014	Jan 8 2014	Jan 10 2014	Jan 13 2014	Jan 16 2014	Jan 19 2014	Jan 22 2014
Progesterone pg/mL	54	50	34	29	111	136	107	94	43	< 10	< 10
Estradiol pg/mL	< 0.8	1.6	3.4	5.5	3.0	3.8	3.5	2.5	1.0	< 0.8	< 0.8
Pg/E2 Ratio	> 67.5	31.2	10.1	5.3	37.6	35.8	30.4	38.1	44.7	undefine	ndefine

Reference Ranges

	Follicular	**Mid luteal**
E2	1 - 5 pg/mL	1 - 9 pg/mL
Pg	<50 pg/ml	50 - 250 pg/ml
Pg/E2	3 - 14	23 - 57

Cortisol, DHEAS, Testosterone - average

Hormone	**Status**	**Result**	**Range**	**Units**	**Range Applied**
Pooled DHEAS	Within range	4.4	1.2 - 8.0	ng/mL	Female DHEAS 25-50 years
Pooled Testosterone	Below range	14	15 - 45	pg/mL	Testosterone > 30 yrs
Pooled First AM Cortisol	Low end of range	2.9	2.0 - 11	ng/mL	Sampled within 1 hour of waking

* Indicates symptom left blank.

TWO SAMPLES MISSING
The interpretation software needs 11 estradiol and progesterone data pairs to function, as clearly outlined in collection instructions. Accordingly, a 10th and 11th set of results with zeroes for those analytes was inserted, to enable reporting of the results. Please disregard the last two data points on the graphs.

DHEAS RANGE CHANGE
The ranges for DHEAS have been changed effective November 20, 2013. This was necessitated by adoption of new assay methodology which will allow for improved turnaround time. We apologize for any inconvenience this may cause.

Since the symptom inventory was left blank, the symptom bar graph page was not displayed. In some cases, it may still be possible to comment on the test results; in other cases, interpretation is limited, or is not possible.

The progesterone profile peaks earlier than average (between the 15th and 18th days), indicative of a short follicular phase.

The profiles are consistent with a biphasic cycle. A textbook biphasic cycle consists of a follicular phase culminating in an estradiol peak, followed by a luteal phase featuring both an estradiol and progesterone peak. In some cases the second estradiol peak is less prominent, or flattened. In general though, an estradiol peak followed by a progesterone peak (plus or minus a second estradiol peak) is supportive of, but by no means definitive proof of an ovulatory cycle.

Low or low normal bioavailable testosterone may be associated with decreased sex drive, fatigue, depressed mood, decreased enjoyment of life and vaginal dryness, as well as bone loss. It may accompany anovulatory cycles and/or irregular bleeding in premenopausal women. It may be accompanied by low DHEAS in women of any age. It may be worthwhile considering supplementation with testosterone, depending on clinical details such as age, menstrual status or gynecological surgical history, but as always, this decision is between the patient and her health care providers. Since testosterone is an important hormone for maintaining bone density, it may be worthwhile to monitor bone density in the face of low/low normal testosterone.*

RMA database analysis (February 2008) indicates that a low first morning cortisol result has fairly good ability to predict cortisol levels throughout the rest of the day, and correlates fairly well to certain symptoms. If morning cortisol is low, this tends to be "as good as it gets"; subsequent levels may often (but not always!) also be low. Symptoms which correlate reasonably well to low morning cortisol include anxiety, increased tendency to allergies, morning sluggishness, feeling tired but wired, headaches, irritability, muscle aches and problems with memory. These symptoms will not necessarily all be present in every individual with low morning cortisol. Note that some individuals using inhaled or topical glucocorticoids can exhibit low morning cortisol and these people are often asymptomatic.

George Gillson MD, PhD
Medical Director

Note: The College of Physicians and Surgeons of Alberta considers saliva hormone testing and some forms of bio-identical hormone replacement to be complementary medicine. The interpretation comments have not been evaluated or approved by any regulatory body. Commentary is provided to clinicians for educational purposes and should not be interpreted as diagnostic or treatment recommendations. *General treatment suggestions can be found in the Rocky Mountain Analytical Resource Binder.