



Rhythm Plus- Comprehensive Female Hormone Profile



46-50 Coombe Road
New Malden
Surrey KT3 4QF

63 Zillicoa Street
Asheville, NC 28801 USA

Patient: **SAMPLE REPORT**

Order Number: **K00000**

SAMPLE REPORT

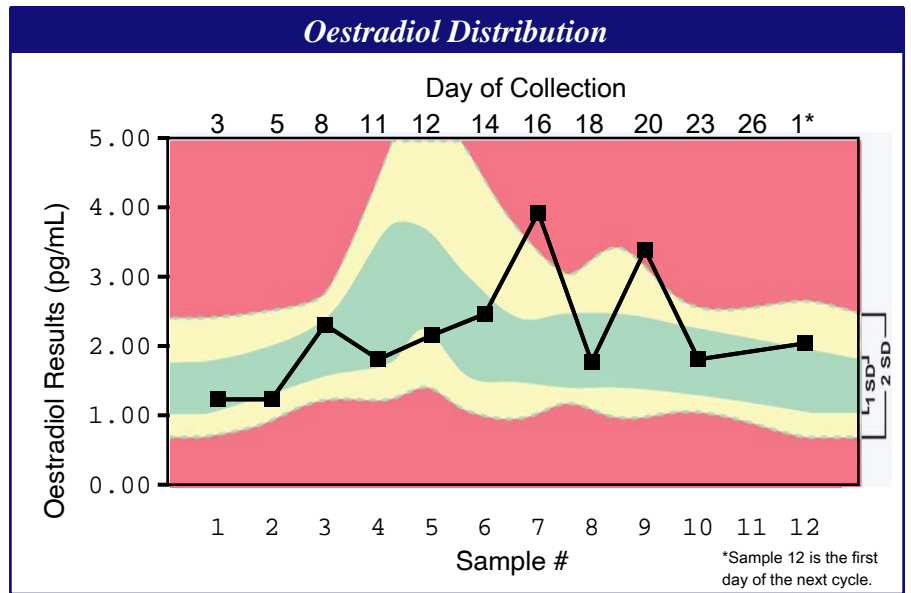
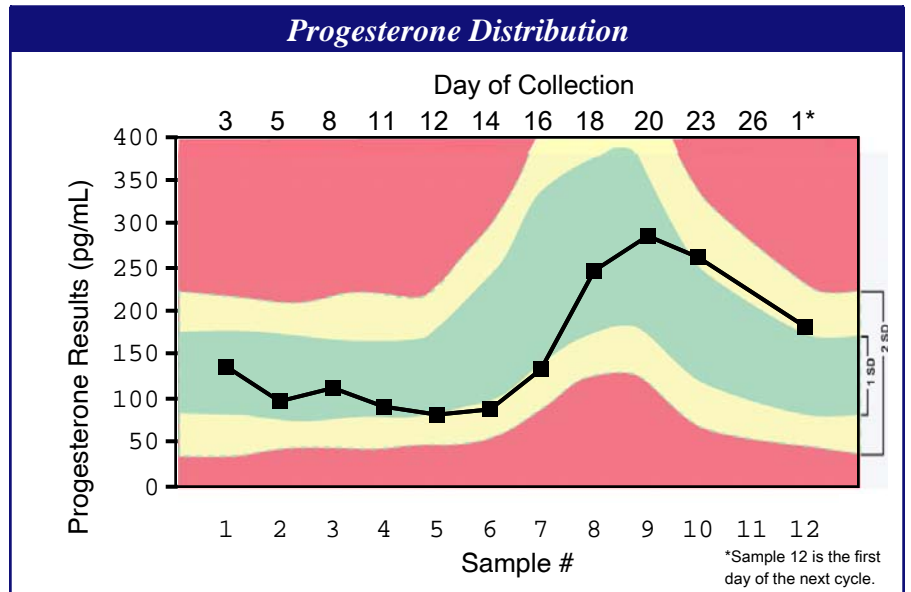
DOB: Sex: F

Completed:

Received:

Collected:

<i>Hormone Results</i>			
Sample #	Progesterone (pg/mL)	Oestradiol (pg/mL)	P / O Ratio
1	137	1.20	114
2	97	1.23	79
3	111	2.29	48
4	90	1.77	51
5	80	2.13	38
6	86	2.43	35
7	132	3.90	34
8	245	1.74	141
9	286	3.38	85
10	261	1.80	145
11			
12	181	2.02	90



Normal Ranges: (pg/mL)

	Progesterone	Oestradiol
Follicular:	38 - 186	0.76-2.40
Peak*:	103 - 436	1.23 - 5.20
Luteal:	46 - 251	0.76 - 2.23
Menopausal:	51 - 210	1.01 - 2.56

* Peak Progesterone = Days 18 and 20

* Peak Oestradiol = Days 11 and 12

Progesterone/Oestradiol Normal Ranges:

Follicular:	27 - 184
Luteal:	29 - 163
Menopausal:	38 - 134

<i>Testosterone</i>		
Analyte	Result	Normal Range
Testosterone	10.4	9.8-42.7 pg/mL

Testing performed by Genova Diagnostics, Inc. 63 Zillicoa St., Asheville, NC 28801-0174

Information

Start of Test Cycle:	26/03/2017	Entering Menopause:	No
Last Sample Date:	19/04/2017	Suffer from PMS:	No
Test Cycle Length:	25	Fertility Studies:	No
Regular Cycle:	Yes	Current Hormone Therapies:	
Average Cycle Time:	26/03/2017	See Comments	

Interpretation Guidelines

Commentary

Please note the cortisol reference ranges have been updated due to a change in the assay manufacturer.

Commentary is provided to the practitioner for educational purposes, and should not be interpreted as diagnostic or treatment recommendations. Diagnosis and treatment decisions are the responsibility of the practitioner.

Cortisol reference ranges are based on samples collected over one day during the following time periods (+/- 2hrs):

#1: 7AM - 9AM

#2: 11AM - 1PM

#3: 3PM - 5PM

#4: 10PM - 12PM

Results for samples collected outside the recommended time period should be interpreted with caution as the stated reference range may not apply.

For the patient:

This profile measures the levels of cortisol and DHEA and provides an evaluation of how cortisol levels differ throughout the day. Cortisol levels typically peak shortly after rising and are at their lowest after the onset of sleep. Cortisol is involved in many important functions in your body, including the metabolism and utilization of proteins, carbohydrates and fats, your body's response to physiological or psychological stress, and the control of inflammation and proper blood sugar levels. Cortisol also helps maintain proper blood pressure, normal nerve and brain activity and normal heart and immune function. DHEA also plays a role in the metabolism of protein, carbohydrates and fats, and works with cortisol to help maintain proper blood sugar levels. DHEA helps regulate body weight, blood pressure and immune function, and is used by the body to make the hormones, testosterone and estradiol. Too much or too little of cortisol or DHEA can lead to illness, and it is important that these two hormones be in balance with each other.

For the Physician:

In this profile, Sample 1 (Post awakening) cortisol level is significantly elevated. Because cortisol levels are typically at their peak shortly after awakening, morning cortisol may be a good indicator of peak adrenal gland function. High morning cortisol levels suggest a degree of adrenal hyperfunction in regard to peak circadian activity, stress being the most common inducer. High cortisol levels cannot be sustained and are often a precursor to adrenal fatigue. Other possible causes of high salivary cortisol include heavy exercise, pregnancy, hypoglycaemia, smoking, obesity, depression, alcoholism, and if significantly elevated, adrenal hyperplasia or Cushing's syndrome.

Sample 2 cortisol level is within the reference range. Mid-day cortisol levels may be a good indication of adaptive adrenal gland function since they represent the adrenal glands' response to the demands of the first few hours of the day. Mid-day cortisol levels within reference range suggest a component of normal adrenal function in regard to adaptive response.

Sample 3 cortisol level is above the reference range. Afternoon cortisol levels may be a good indication of glycaemic control exerted by the adrenal gland since they represent a postprandial sample. High afternoon levels suggest a degree of adrenal hyperfunction with increased adrenal assistance in glycaemic control. Other possible causes of high salivary cortisol include stress, heavy exercise, pregnancy, smoking, obesity, depression, alcoholism, or if significantly elevated, adrenal hyperplasia and Cushing's syndrome.

Sample 4 cortisol level is above the reference range. Late-night cortisol levels may be a good indication of baseline

Commentary

adrenal gland function since they typically represent the lowest level during the day. High late-night cortisol levels suggest a degree of adrenal hyperfunction with regard to baseline circadian activity. Possible causes of elevated late-night cortisol include stress, heavy exercise, pregnancy, hypoglycaemia, smoking, obesity, depression, alcoholism, and the use of glucocorticoids. Significantly elevated late-night cortisol levels are considered a reliable indicator of Cushing's syndrome, especially if coupled with a reduced circadian rhythm.

DHEA is within the reference range. Proper levels contribute to the ideal metabolism of proteins, carbohydrates and fats, including efficient glycaemic control.

The ratio of DHEA to cortisol is normal. This ratio indicates a relative balance of the adrenal output of androgens and cortisol. Both of the hormones are released in response to ACTH from the pituitary and a normal ratio indicates a balanced function of the hypothalamic-pituitary-adrenal axis.



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Patient: **SAMPLE**
REPORT

DOB:

Sex: F

Order Number: **K000000**

Completed:

Received:

Collected:

Salivary Melatonin*

Melatonin Samples

Reference
Range (pg/mL)

Sample 1
Time: 07:00 AM - 09:00 AM

<0.50

<=10.50

Sample 2
Time: 3:00 PM - 5:00 PM

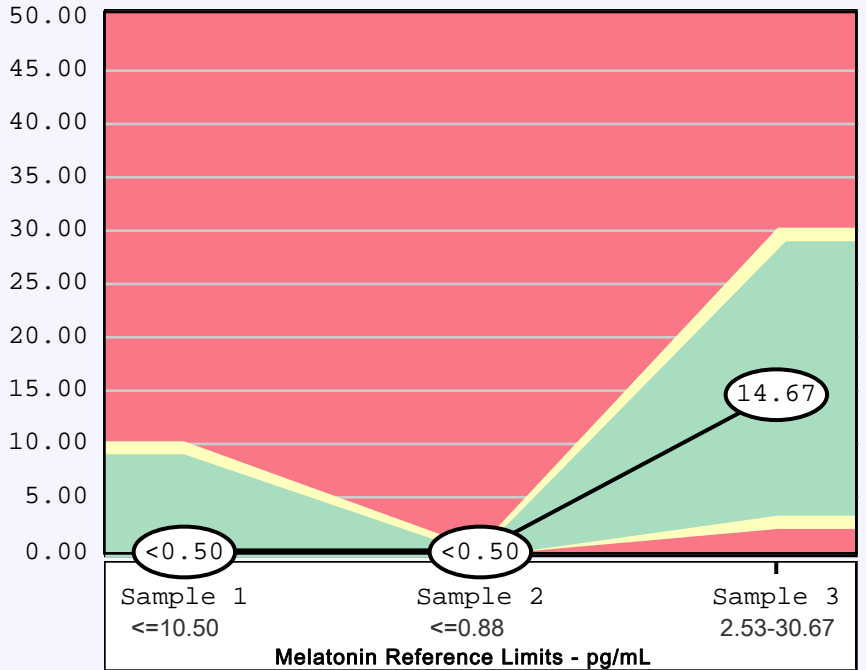
<0.50

<=0.88

Sample 3
Time: 2:30 AM - 3:30 AM

14.67

2.53-30.67



Indicates testing performed by Genova Diagnostics, Inc. 63 Zillicoa St., Asheville, NC 28801-0174

Commentary - General

Melatonin is the major hormone secreted by the pineal gland and is a key modulator of seasonal and circadian biorhythms. The synthesis and secretion of melatonin is controlled by a circadian clock in the hypothalamus and is synchronised by the light/dark cycle. The production of melatonin is inhibited by daylight and occurs during darkness. Melatonin is therefore inherently involved in the timing of functions such as sleep, mood, reproduction and immune system activity. Melatonin also not only acts as a hormone, but also as a potent antioxidant and is one of the most powerful scavengers of free radicals.

Commentary - Specific

Commentary

Commentary is provided to the practitioner for educational purposes, and should not be interpreted as diagnostic or treatment recommendations. Diagnosis and treatment decisions are the responsibility of the practitioner.

Melatonin activity is normal throughout the sample period revealing a normal melatonin circadian rhythm. As well as playing a crucial role in sleep-wake cycles, melatonin influences other vital functions, including cardiovascular and antioxidant protection, endocrine function, immune regulation and body temperature.