This Assessment features three reporting options:

- Rhythm
- Adrenocortex Stress Profile
- Comprehensive Melatonin Profile
Patient: SAMPLE
Sex: F
MRN:

Order Number:
Completed: August 14, 2006
Received: August 03, 2006
Collected: August 03, 2006

SAMPLE REPORT

Salivary Estradiol & Progesterone Activity plus Testosterone Level

<table>
<thead>
<tr>
<th>Day of Cycle</th>
<th>Estradiol</th>
<th>Progesterone</th>
<th>P/E2 Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>45</td>
<td>200</td>
<td>44</td>
</tr>
<tr>
<td>5</td>
<td>48</td>
<td>280</td>
<td>68</td>
</tr>
<tr>
<td>8</td>
<td>8.2</td>
<td>300</td>
<td>37</td>
</tr>
<tr>
<td>11</td>
<td>6.5</td>
<td>380</td>
<td>58</td>
</tr>
<tr>
<td>12</td>
<td>6.5</td>
<td>550</td>
<td>85</td>
</tr>
<tr>
<td>14</td>
<td>6.3</td>
<td>398</td>
<td>63</td>
</tr>
<tr>
<td>16</td>
<td>5.2</td>
<td>412</td>
<td>79</td>
</tr>
<tr>
<td>18</td>
<td>5.5</td>
<td>450</td>
<td>82</td>
</tr>
<tr>
<td>20</td>
<td>4.3</td>
<td>350</td>
<td>81</td>
</tr>
<tr>
<td>23</td>
<td>3.8</td>
<td>300</td>
<td>79</td>
</tr>
<tr>
<td>28</td>
<td>3.2</td>
<td>180</td>
<td>55</td>
</tr>
<tr>
<td>Avg.</td>
<td>5</td>
<td>345</td>
<td>66</td>
</tr>
</tbody>
</table>

Estradiol:
- Follicular: 2.8 - 8.8 pmol/L
- Peak*: 4.5 - 19.1 pmol/L
- Luteal: 2.8 - 8.2 pmol/L
- Menopausal: 3.7 - 9.4 pmol/L
- Male: 3.1 - 7.4 pmol/L
  * Peak = Days 11 and 12

Progesterone:
- Follicular: 120 - 593 pmol/L
- Peak*: 328 - 1385 pmol/L
- Luteal: 145 - 797 pmol/L
- Menopausal: 163 - 669 pmol/L
- Male: 141 - 529 pmol/L
  * Peak = Days 18 and 20

P/E2 Ratio:
- Follicular: 23 - 159
- Luteal: 25 - 141
- Menopausal: 33 - 116

Testosterone:
- Premenopausal: 34 - 148 pmol/L
- Menopausal: 34 - 148 pmol/L
- Male: 110 - 513 pmol/L

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Lab Comments

Estradiol Reference Ranges:
- Follicular: 2.00 - 8.00 pmol/L
- Midcycle: 6.00 - 17.10 pmol/L
- Luteal: 5.50 - 13.20 pmol/L
- Nonovulating: 3.00 - 12.00 pmol/L
- Male: 2.80 - 8.80 pmol/L

Progesterone Reference Ranges:
- Follicular: 53 - 193 pmol/L
- Luteal: 142 - 522 pmol/L
- Luteal Peak: 259 - 979 pmol/L
- Non-Ovulating: 50 - 325 pmol/L
- Male: 24 - 104 pmol/L

Normal Ovulation: This profile indicates an adequate estradiol peak followed by a rise of progesterone into the peak range. This is consistent with a normal ovulatory pattern.

Excess follicular progesterone: One or more elevated progesterone levels is/are noted in the follicular phase. This is not an uncommon finding and may represent adrenal activity or persistent corpus lutea. This finding is not necessarily associated with symptoms, but may accompany prolonged bleeding or poly cystic ovary syndrome.

Low progesterone:estradiol ratio / follicular phase: The hormone pattern shows a low level of progesterone relative to estradiol in the follicular phase of the cycle. This situation is relatively uncommon and may be associated with high estradiol levels or a pattern consistent with menopause.

Excess luteal estradiol: Higher than usual levels of estradiol show on one or more occasions in the luteal phase of the cycle. This may be due to ovarian or adrenal dysfunction, or use of exogenous estradiols. This may have implications in patients with PMS, certain types of seizure activity and dysfunctional uterine bleeding.

Deficient luteal estradiol: Low levels of estradiol appear on one or more days of the luteal phase may relate to certain types of PMS, depressive symptoms, oligoamenorrhea and fatigue. Additionally, this may reflect a degree of ovarian dysfunction and the normal aging process.

Normal progesterone:estradiol ratio / luteal phase: The P:E ratio is within the expected limits in the luteal phase. This implies a relatively balanced ovarian and adrenal hormone function.

Testosterone is within the expected range for this patient's age. Normal levels of this hormone are important for libido, maintaining lean body mass and bone density.
**Adrenocortex Stress Profile (Saliva)**

**SAMPLE REPORT**

**Salivary Cortisol and DHEA**

<table>
<thead>
<tr>
<th>Time</th>
<th>Reference Range</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>7AM - 9AM</td>
<td>0.27-2.06 mcg/dL</td>
<td>mcg/dL</td>
</tr>
<tr>
<td>11AM - 1PM</td>
<td>0.03-0.77 mcg/dL</td>
<td>mcg/dL</td>
</tr>
<tr>
<td>3PM - 5PM</td>
<td>0.03-0.56 mcg/dL</td>
<td>mcg/dL</td>
</tr>
<tr>
<td>10PM - 12AM</td>
<td>0.03-0.50 mcg/dL</td>
<td>mcg/dL</td>
</tr>
</tbody>
</table>

**DHEA 7AM - 9AM**

Ref Range: 14 - 277 pg/mL

**DHEA : Cortisol Ratio / 10,000**

Ref Range: 35 - 435

The test for DHEA has been developed and its performance characteristics determined by GSDL, Inc. It has not been cleared or approved by the U.S. Food and Drug Administration.

**Commentary**

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pharmacological doses of glucocorticosteroids. Low DHEA levels are indicative of a lowered capacity to endure physiological or psychological stress/trauma/injury, and may present with abnormal immune response, with increased incidence of autoimmune disease.

A pattern showing cortisol levels within reference range with a low DHEA is clinically significant. Low DHEA suggests adrenal hypofunction of zona reticularis. In such a shift, there is increased probability of dysglycemia. This pattern represents a component of adrenal hypofunction, which has been noted in fatigue disorders, post-traumatic stress disorders, and chronic physiological or psychological stress.
Patient: SAMPLE PATIENT
Age: 51
Sex: F
MRN:

Order Number:
Completed:
Received:
Collected:

SAMPLE REPORT

Salivary Melatonin

Reference Range
7AM - 9AM: <=10.50 pg/mL
3PM - 5PM: <=0.88 pg/mL
2:30AM - 3:30AM: 2.53-30.67 pg/mL

This test has been developed and its performance characteristics determined by GSDL, Inc. It has not been cleared or approved by the U.S. Food and Drug Administration.
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: pg/mL x 4.3 = pmol/L

The 7-9 AM melatonin level is elevated, but the 2:30-3:30 AM level is low.

High morning melatonin levels are often present in individuals with Seasonal Affective Disorder. This may be due to prolonged nocturnal production of melatonin, and/or late onset of its production. High melatonin levels may bring about inhibition of ovulation in women as well as decreased body temperature. High melatonin has been noted in the manic phase of bipolar mood disorder. Many antidepressant drugs may stimulate melatonin production, including fluvoxamine (Luvox), desipramine, and most MAO inhibitors.

Drugs that deplete melatonin include beta blockers, NSAIDS, steroids, nicotine, alcohol, caffeine, sleep aids and anti-anxiety medications. Fluoxetine (Prozac) may lower melatonin levels. Low melatonin may contribute to insomnia, sleep-wake disorders, or PMS. Some forms of depression are associated with low melatonin levels. Low levels have also been implicated in increased risk for coronary heart disease.

This profile reveals a disturbance in the circadian rhythm of melatonin. This may influence other hormones such as thyroid, testosterone, and estrogen. 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.