

Sample type: **SALIVA**

**Rhythm** is a comprehensive salivary assessment of estradiol, progesterone and testosterone spanning a full 28 day period. Imbalances revealed in this profile can help illuminate root causes of disorders such as premenstrual syndrome (PMS), infertility, and menstrual irregularities.



estradiol  
progesterone  
testosterone

**Balance is the key.** Research has long shown that fluctuating levels of estradiol, progesterone and testosterone play a major role in a woman's overall health, effecting:

- Menstrual Cycle • Appetite Level
- Mood Swings • Sex Drive
- Sleep Patterns



estradiol  
progesterone  
testosterone  
cortisol  
DHEA  
melatonin

**Chronic imbalances** of these hormones are implicated in disorders such as:

- PMS • Breast Cancer
- Anovulation • Endometriosis
- Infertility • Polycystic Ovary Disease
- Amenorrhea • Osteoporosis

#### *Interpretation:*

Saliva testing provides a thorough analysis of estradiol and progesterone over a full 28 day cycle. Testosterone is measured once from the 28th day specimen. By utilizing 11 saliva samples for analysis, the relationship and balance of these essential hormones are analyzed more precisely through time. The levels of estradiol and progesterone, as well as the ratio between the two, are clearly graphed for easy reference and patient education.

Unlike serum measurements that typically reflect both bound and unbound fractions of hormones, salivary samples represent only the free (unbound) bioavailable fraction of hormone. Factors that effect binding globulin such as obesity and thyroid function do not influence test results with false high or low test levels.

#### *Indications:*

**Rhythm** is indicated for both premenopausal and perimenopausal women not currently supplementing with hormones. An analysis of estrogen, progesterone and testosterone can reveal ovulatory function and trends in hormone production. Imbalances such as unopposed estrogen, high follicular progesterone, anovulation and luteal phase defects are easily identified. This test is especially useful in treatment of patients with chronic gynaecologic disorders.

The comprehensive version, **Rhythm Plus**, includes a circadian analysis of cortisol, melatonin, and an assay of DHEA.

#### **•Specimen Requirement:**

##### **Essence: Rhythm–**

11 (3ml) saliva samples collected over a 28-day cycle;

##### **Essence: Rhythm Plus–**

15 (3ml) saliva samples collected over a 28-day cycle

#### **•Before Patient Takes this Test:**

- Inform practitioner about all medication, oral contraceptive, and hormone supplement use
- Avoid caffeine, alcohol, and nicotine (on day of test)
- Do not eat, brush or floss teeth, use mouthwash, or chew gum (1 hour before)
- Wash hands before collection
- See instructions inside test kit for details



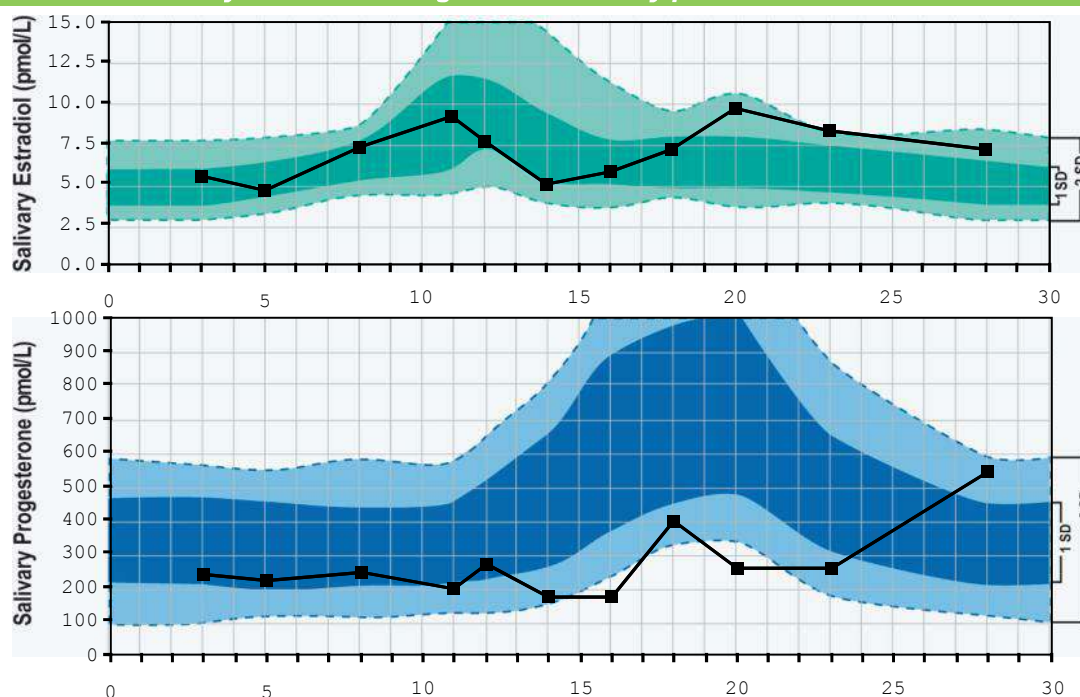
**This Test reveals important Information about:**

- **Bioavailable estradiol, progesterone, and testosterone,** imbalances of which are linked to reproductive disorders and menstrual cycle irregularities, as well as osteoporosis, cardiovascular disease, and cancers of the breast and endometrium

**Hormone balance through the complete menstrual cycle** with evaluation of eleven easily gathered saliva samples over 28 days

- **Levels of cortisol, DHEA, and melatonin** (in the Essence: Rhythm Plus) for information relevant to the interrelationship of these hormones with female hormones

**Salivary Estradiol & Progesterone Activity plus Testosterone Level**

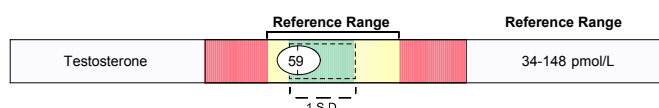


Day of Cycle	3	5	8	11	12	14	16	18	20	23	28	Avg.
<b>Estradiol</b>	5.4	4.5	7.2	9.1	7.6	4.9	5.6	7.1	9.6	8.2	7.1	6.9
<b>Progesterone</b>	236	214	239	190	265	166	168	395	256	251	540	265
<b>P/E2 Ratio</b>	44	48	33	21	35	34	30	56	27	31	76	40

<b>Estradiol</b>	<b>Ref Range</b>	<b>Progesterone</b>	<b>Ref Range</b>	<b>P/E2 Ratio</b>	<b>Ref Range</b>
Follicular:	2.8 - 8.8 pmol/L	Follicular:	120 - 593 pmol/L	Follicular:	23 - 159
Peak*:	4.5 - 19.1 pmol/L	Peak*:	328 - 1385 pmol/L	Luteal:	25 - 141
Luteal:	2.8 - 8.2 pmol/L	Luteal:	145 - 797 pmol/L	Menopausal:	33 - 116
Menopausal:	3.7 - 9.4 pmol/L	Menopausal:	163 - 669 pmol/L		
Male:	3.1 - 7.4 pmol/L	Male:	141 - 529 pmol/L		

\* Peak = Days 11 and 12

\* Peak = Days 18 and 20



<b>Testosterone</b>	<b>Ref Range</b>
Premenopausal:	34 - 148 pmol/L
Menopausal:	34 - 148 pmol/L
Male:	110 - 513 pmol/L