

**Accession: 21-39562**

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**Amended Report**

 Received: **11/10/2021**

 Completed: **12/20/2021**

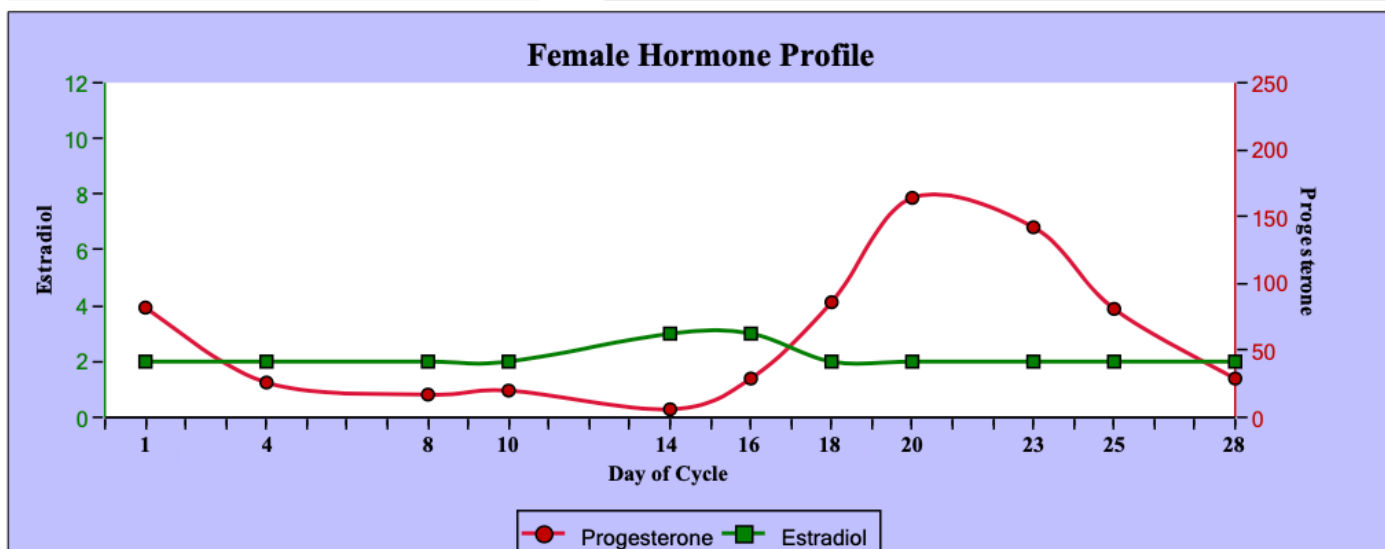
Reported:

**eFHP Expanded Cycling Female Hormone Panel - Saliva**

Day of Cycle	Day	1	4	8	10	14	16	18	20	23	25	28
<b>Estradiol</b>	pg/ml	2	2	2	2	3	3	2	2	2	2	2
<b>Progesterone</b>	pg/ml	82	26	17	20	6	29	86	164	142	81	29

Cycle Information	Start	10/11/2021
	End	11/6/2021
	Length	26

Ranges	Phase	Estradiol	Progesterone
	Follicular	3-10 pg/ml	20 - 100 pg/ml
	Preovulatory	<b>5-25 pg/ml</b>	
	Luteal	3-15 pg/ml	65 - 500 pg/ml



Test	Description	Result	Ref Values
DHEA	Dehydroepiandrosterone [DHEA + DHEA-S] (saliva)	Cycle Average 6 Normal	Adults: 3-10 ng/ml
TTF	Testosterone (saliva)	Cycle Average 29 Normal	Adults Normal: 13-39 pg/ml Borderline: 40-44 pg/ml

**I. Progesterone (P) Interpretation**

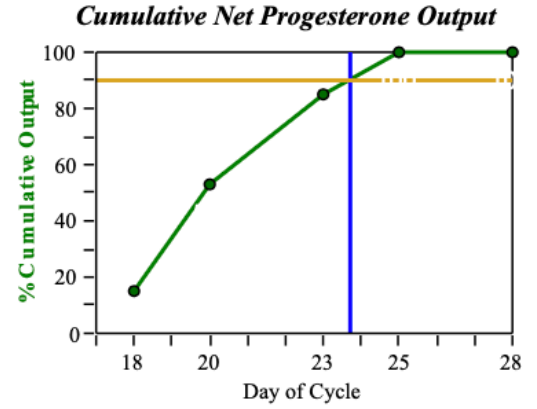
Luteal Surge of Progesterone Occurred Around Day 17  
 Luteal Phase Deficit Type I, Shortened Phase, Less than 12 days

**Luteal Phase Progesterone Analysis:**

Net Output: 353 pg  
 Total Output: 502 pg  
 Relative Net: 70%      Expected Minimum is 55%

**Luteal P Output Distribution:**

Patient approached 90% of Progesterone Output by Day 24 of Period  
 or by Day 7 of Luteal Phase.  
 Marginal Distribution of Progesterone Output



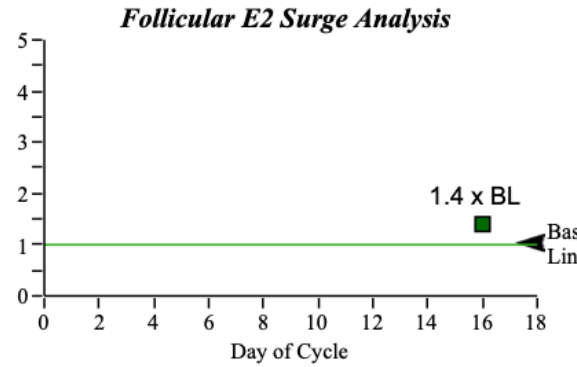
**II. Estradiol Interpretation**

No Significant and Distinct Preovulatory Estradiol Peak is Observed.  
 Estradiol Peak Delayed with Respect to Cycle Duration

**Follicular E2 Surge Analysis**

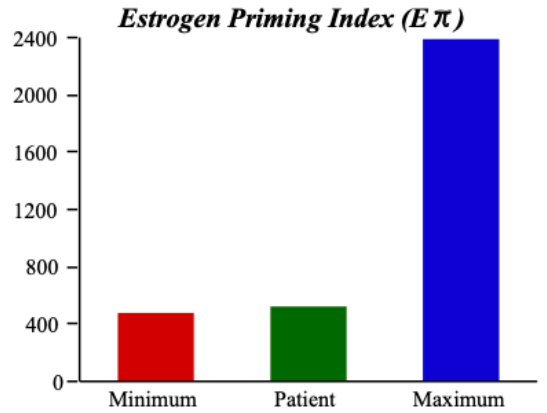
This ratio is an index of ovarian capacity to respond to FSH stimulation.  
 A low ratio indicates a weak FSH Surge or low ovarian capacity and response.

Patient value: 1.4      Acceptable values: > 1.8



**Estradiol Analysis:**

Total Cycle Estradiol Output: 24 pg      Range: 33 - 110 pg  
 Borderline Low: 33 - 41 pg  
 Preovulatory Phase Estradiol Output: 14 pg  
 Luteal Phase Estradiol Output: 10 pg  
 Relative Luteal Phase Estradiol: 42%



**Follicular Estrogen Priming Index (En)**

(a) The **En** is a quantitation of Estrogen Exposure in target tissues (uterus, breast brain, bone, skin, etc.) during the follicular phase. A sufficient Estrogen exposure is required for optimal tissue response. Low **En** values favor reduced functional impact of Progesterone on E2 sub-primed tissue.

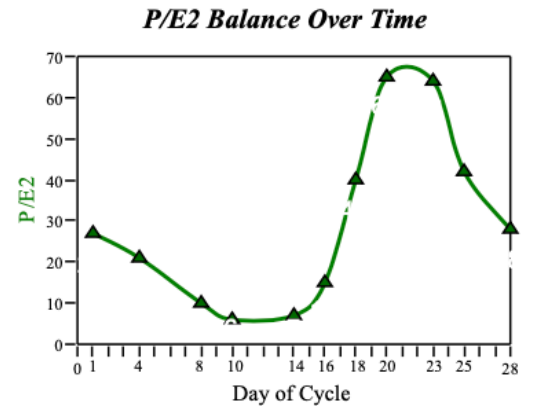
(b) The index is a function of concentration and duration of Estrogen exposure. Upper and lower reference values are individualized for each patient based on the period length.

(c) Significance: The genomic influence of Estrogen on target tissue structure and organization is cumulative and prolonged:

*Example 1* - Breast, fat cell, and fibroid tissue proliferation under increased Estrogen influence is rather lasting; because once formed, the maintenance of the proliferated tissue requires minimal amounts of Estrogen.

*Example 2* - Degenerative effects of suboptimal Estrogen (E2) and Progesterone (P1) on bone tissue are also prolonged. Bones require optimal E2 and P1 balance for long periods of time to reverse osteoporosis.

**En** Patient value: 524      Reference: 478 - 2390



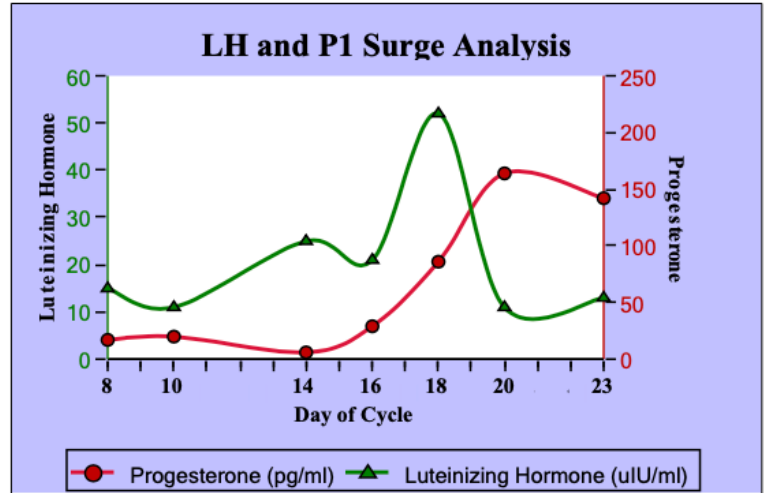
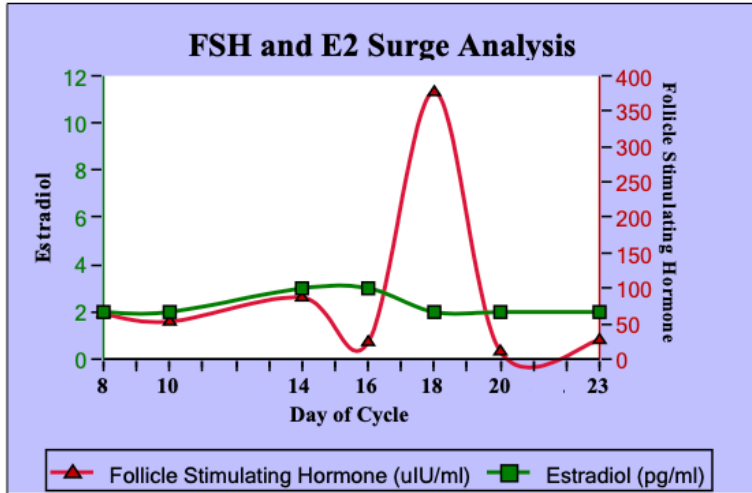
**III. Progesterone: Estradiol Balance (P/E2)**

**Luteal P/E2 target range: 30 - 40**

The Average Ratio of Luteal Phase Output of Progesterone to Estradiol = 50

Day of cycle	8	10	14	16	18	20	23
<b>Estradiol</b>	2	2	3	3	2	2	2
<b>FSH</b>	64	53	87	24	377	< 12	27

Day of cycle	8	10	14	16	18	20	23
<b>Progesterone</b>	17	20	6	29	86	164	142
<b>LH</b>	15	11	25	21	52	11	13



**The FSH Surge** must attain a certain level (amplitude) to mediate maturity and selection of the dominant follicle, and promote optimal conversion of androgen to estrogen.

Patient Value: **10.53** Range: 2.3 - 4.7

**The FSH Output** reflects the pituitary capacity to release FSH in the periovulatory time window. This biomarker is an index for the NET effect of all higher centers and other hormones combined on FSH production. The FSH output tends to increase with age and also varies with diet, stress level, hormone and medication use...

Patient Value: **643** Range: Variable

**The Follicle Response Index** is a biomarker of the quality of follicular response to FSH stimulation. Lower values reflect reduced ovarian sensitivity to FSH. The lowest sensitivity occurs at menopause and on.

Patient Value: **0.13** Range: 0.5 - 2.3

**The LH Surge** must attain a certain threshold to induce, and trigger ovulation to stimulate the formation of a viable corpus luteum for progesterone production.

Patient Value: **3.66** Range: 3.3 - 6.6

**The LH Output** reflects the pituitary capacity to release LH at ovulation time and in the early luteal phase. The timing and output of LH reflects the net effect of all influences (diet, stress, hormones, age... etc) on this gonadotropin.

Patient Value: **148** Range: Variable

**The Corpus Luteum Response Index** reflects the degree of corpus luteum responsiveness to LH measured as luteal progesterone output. Corpus size, differentiation + sensitivity determine the response. LH increases with age as ovarian response blunts.

Patient Value: **19.12** Range: 8 - 27

**Comments:**

If you have questions regarding interpretation of results, please call the medical support department for more information.