

# Diagnos-Techs, Inc.

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Accession # 15-eFHP

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 Completed: 07/30/2015  
 Reported : 08/18/2015

DIAGNOS-TECHS, INC  
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 6620 S 192ND PL #J-104

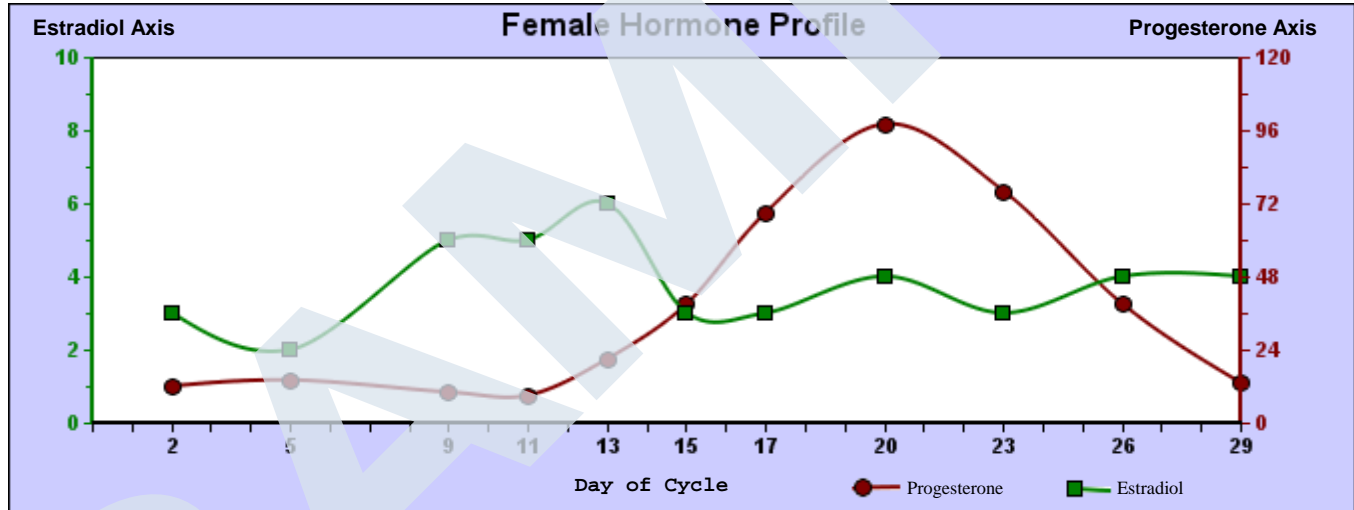
KENT WA 98032  
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Results For:  
 FEMALE PATIENT - SAMPLE REPORT  
 Age/DOB: 35 / 01/01/1980 Sex: Female  
 Patient's Tel:  
 Specimen Collected: 07/11/2015

## eFHP Expanded Female Hormone Panel - Saliva

Day of Cycle	Day	2	5	9	11	13	15	17	20	23	26	29
<b>Estradiol</b>	<b>pg/ml</b>	3	2	5	5	6	3	3	4	3	4	4
<b>Progesterone</b>	<b>pg/ml</b>	12	14	10	9	21	39	69	98	76	39	13

<b>Cycle Information</b>	Start	06/14/2015	<b>Ranges</b>	<b>Phase</b>	<b>Estradiol</b>	<b>Progesterone</b>
	End	07/11/2015		Follicular	2 - 10 pg/ml	20 - 100 pg/ml
	Length	27		Preovulatory	7 - 25 pg/ml	
			Luteal	3 - 16 pg/ml	65 - 500 pg/ml	



Test	Description	Result	Ref Values
DHEA	Dehydroepiandrosterone Free [DHEA + DHEA-S]	Pooled Value 6 Normal	Adults (M/F): 3-10 ng/ml
TTF	Free Testosterone	Cycle Average 37 Normal	Borderline: 6-9 pg/ml Normal: 10-38 pg/ml

**I. Progesterone (P) Interpretation**

Luteal Surge of Progesterone Occurred Around Day 19  
 Luteal Phase Deficit Type I, Shortened Phase, Less than 12 days

**Luteal Phase Progesterone Analysis:**

Net Output: 138 pg  
 Total Output: 226 pg  
 Relative Net: 61 %. Expected Minimum is 55%

**Luteal P Output Distribution:**

Patient approached 90% of Progesterone Output by Day 23 of Period or by Day 4 of Luteal Phase.  
 Luteal Phase Deficit Type III: Suboptimal Distribution of Progesterone Output over Luteal Phase.

**II. Estradiol Interpretation**

Normal Timing of Preovulatory Estradiol Peak with Respect to Cycle Duration, but Blunted Estradiol Peak Output  
 Normal Luteal Phase Estradiol Output  
 Estradiol Peak Dys-Synchronized with Luteal Surge; Suboptimal Hypothalamic Pituitary Ovarian Pacing

**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: 1.70      Acceptable values: > 1.8

**Estradiol Analysis:**

Total Cycle Estradiol Output: 42 pg    Range: 22 - 110 pg    Borderline Low: 22 - 31 pg  
 Preovulatory Phase Estradiol Output: 27 pg  
 Luteal Phase Estradiol Output: 15 pg  
 Relative Luteal Phase Estradiol Output: 36 %

**Follicular Estrogen Priming Index (ETI)**

(a) The ETI 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 ETI 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.

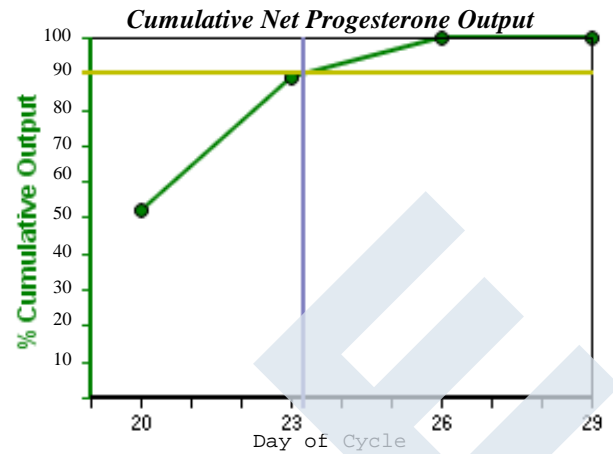
*Example 2* - Degenerative effects of suboptimal Estrogen (E2) and Progesterone (P1) on bone tissue are also prolonged. Bones require optimal E2 and P1 balance for long periods of time to reverse osteoporosis.

ETI    Patient value: 1378      Reference: 714 - 3570

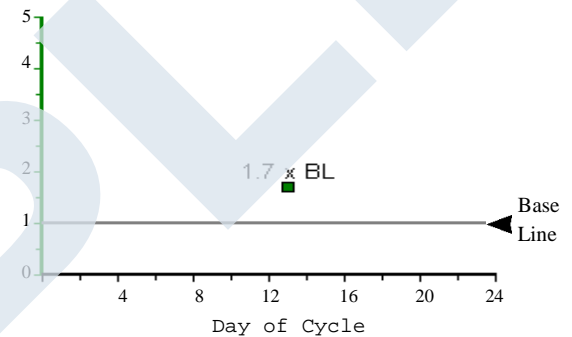
**III. Progesterone: Estradiol Balance (P/E2)**

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

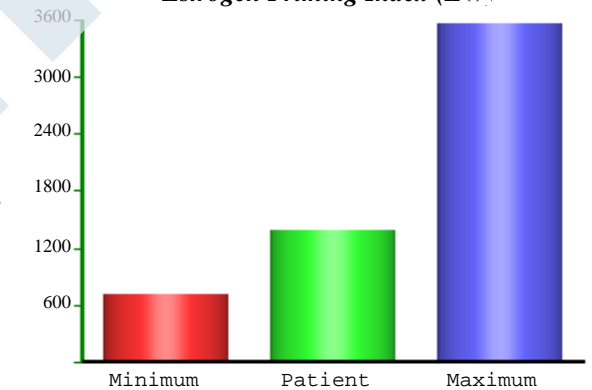
The Average Ratio of Luteal Phase Output of Progesterone to Estradiol = 15  
 P/E2 Ratio Favors a State of Estrogen Dominance.



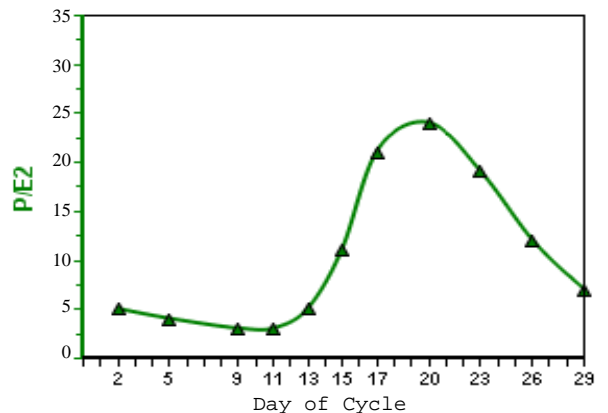
**Follicular E2 Surge Analysis**



**Estrogen Priming Index (ETI)**

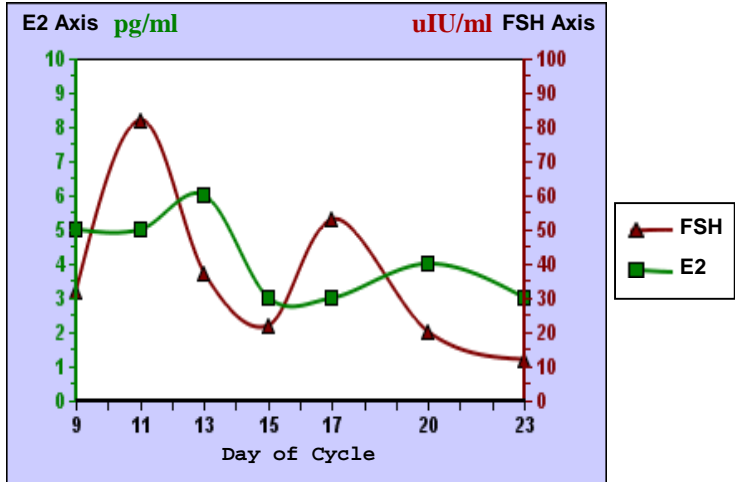


**P/E2 Balance Over Time**



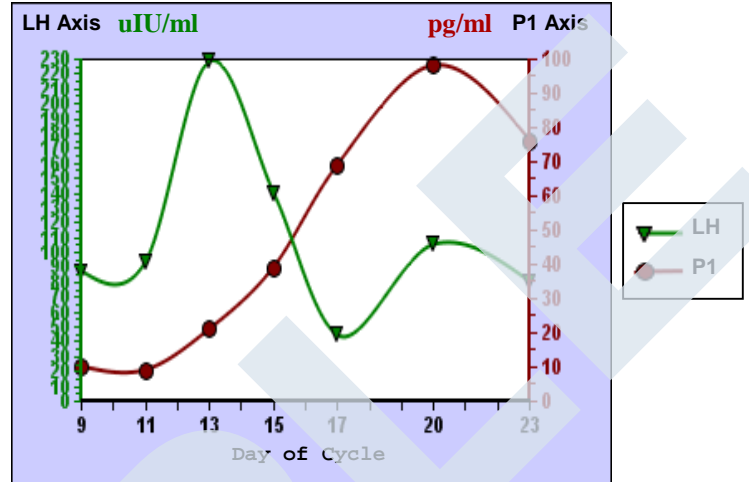
**FSH and E2 Surge Analysis**

Cycle Day	9	11	13	15	17	20	23
Estradiol	5	5	6	3	3	4	3
FSH	32	82	37	22	53	20	<12



**LH and P1 Surge Analysis**

Day of cycle	9	11	13	15	17	20	23
Progesterone	10	9	21	39	69	98	76
LH	87	93	228	139	44	105	80



**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: **3.33** 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: **258.00** 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: **0.51** 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: **2.78** 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: **776.00** 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: **21.88** Range: 8 - 27

**Comments:**

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

Diagnosis Code: Not Provided To The Lab.

Please Note: All examples of patient treatment or therapy are for illustrative and/or educational purpose. Use this report in context of the clinical picture and patient history before initiating hormone or other therapies or recommendations.

COURTESY INTERPRETATION of test and technical support are available upon request, to Physician Only