Accession: 23-eFHP
Phone: 1-800-878-3787
Fax: 1-425-251-0637

Received: **3/23/2023**
Completed: **3/23/2023**
Reported: **3/23/2023**

DIAGNOSTECHS, INC
840 S 333rd St
Federal Way, WA 98003

Results For: SAMPLE REPORT, FEMALE PATIENT
Age: **43**   DOB: **1/1/1980**   Sex: **F**
Patient's Tel:
Ref. ID:
Specimen Collected: **3/21/2023**

eFHP   Expanded Cycling Female Hormone Panel - Saliva

Day of Cycle	Day	2	5	8	11	13	15	18	21	24	27	29
Estradiol	pg/ml	3	4	5	8	18	4	6	9	9	6	3
Progesterone	pg/ml	38	46	40	49	56	94	226	356	342	212	68

Cycle Information				Ranges	Phase	Estradiol	Progesterone
	Start	2/21/2023			Follicular	3-10 pg/ml	20 - 100 pg/ml
	End	3/21/2023			**Preovulatory**	**5-25 pg/ml**	
	Length	28			Luteal	3-15 pg/ml	65 - 500 pg/ml

Female Hormone Profile
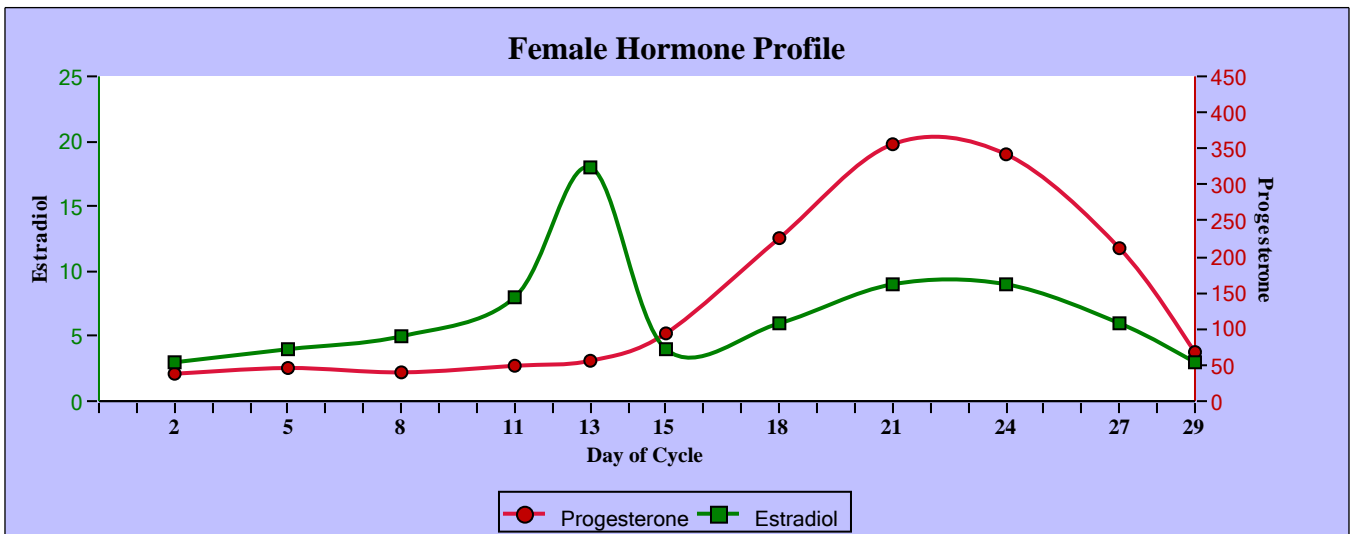
| Test	Description		Result		Ref Values
DHEA	**Dehydroepiandrosterone [DHEA + DHEA-S] (saliva)**	Cycle Average	5	Normal	Adults: 3-10 ng/ml
TTF	**Testosterone (saliva)**	Cycle Average	32	Normal	Adults Normal: 13-39 pg/ml Borderline: 40-44 pg/ml

I. Progesterone (P) Interpretation

Luteal Surge of Progesterone Occurred Around Day 14
Luteal Phase Length is Normal, Expected Range 12-18 days

Luteal Phase Progesterone Analysis:

Net Output: 1022 pg
Total Output: 1298 pg
Relative Net: 79%   Expected Minimum is 55%

Luteal P Output Distribution:

Patient approached 90% of Progesterone Output by Day 26 of Period
or by Day 12 of Luteal Phase.
Optimal Progesterone Output Distribution
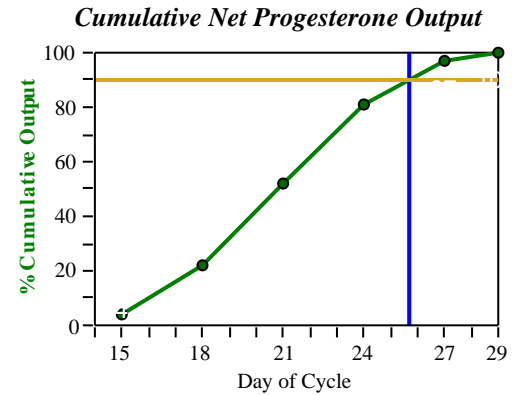
II. Estradiol Interpretation

Optimal Preovulatory Timing of Estradiol Peak with Respect to Ovulation

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: 3.6   Acceptable values: > 1.8

Estradiol Analysis:

Total Cycle Estradiol Output:	75 pg	Range: 33 - 110 pg
		Borderline Low: 33 - 41 pg
Preovulatory Phase Estradiol Output:	38 pg	
Luteal Phase Estradiol Output:	37 pg	
Relative Luteal Phase Estradiol	49%	
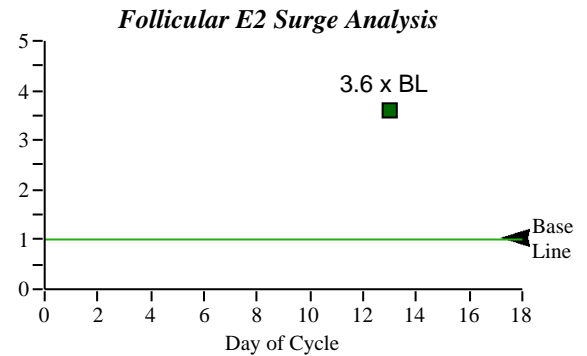
Follicular Estrogen Priming Index (Eπ)

(a) The $E\pi$ 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 $E\pi$ 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 cummulative 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
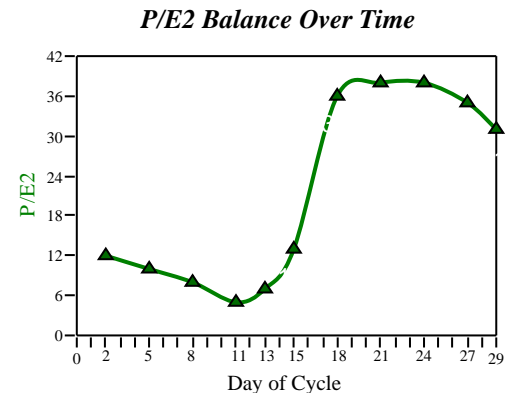for long periods of time to reverse osteoporosis.

$E\pi$ Patient value: 851   Reference: 290 - 1450
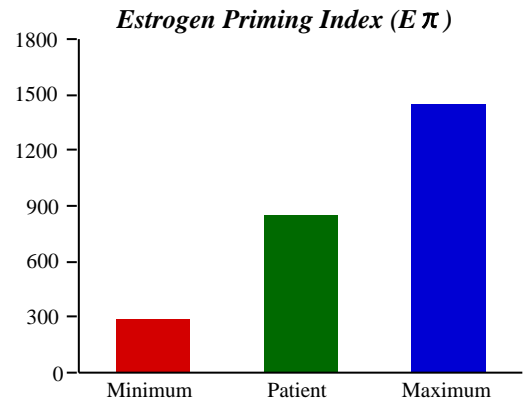
III. Progesterone: Estradiol Balance (P/E2)

Luteal P/E2 target range: 30 - 40

The Average Ratio of Luteal Phase Output of Progesterone to Estradiol = 35

Cumulative Net Progesterone Output

Follicular E2 Surge Analysis

3.6 x BL

Estrogen Priming Index (E π)

P/E2 Balance Over Time

Day of cycle	8	11	13	15	18	21	24
Estradiol	5	8	18	4	6	9	9
FSH	48	44	78	32	21	21	21

Day of cycle	8	11	13	15	18	21	24
Progesterone	40	49	56	94	226	356	342
LH	15	32	112	37	16	15	18

FSH and E2 Surge Analysis

LH and P1 Surge Analysis
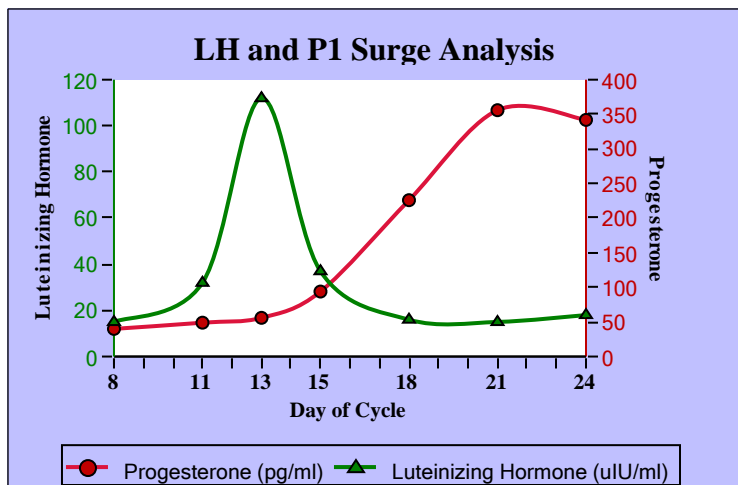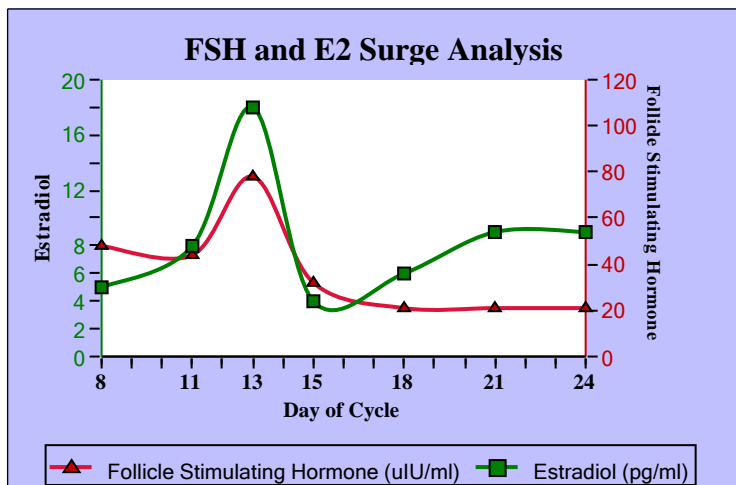
The FSH Surge must attain a certain level (amplitude) to mediate maturity and selection of the dominant follicle, and promote optimal conversion of androgen to estrogen.

Patient Value: **2.81**   Range: 2.3 - 4.7

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: **5.83**   Range: 3.3 - 6.6

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: **265**   Range: Variable

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: **245**   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: **1.28**   Range: 0.5 - 2.3

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: **13.54**   Range: 8 - 27

Comments:

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

Remarks:
SAMPLE REPORT

Diagnosis Code(s): Not Provided To The Lab

Results and comments above are intended for informational purposes and should not be construed as medical advice. Use this report in context of the clinical picture and patient history before initiating any treatment.

For additional resources, including testing guidelines, result interpretation, and treatment protocols, please login to our website at www.diagnostechs.com and select Resources -> Provider Tools.

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

DiagnosTechs

Accession: 23-eFHP

Cycling Female Hormone Panel
Qualitative Patient Report For: FEMALE PATIENT -

This Report is not Applicable in Cases of Deviation off Recommended Collection Schedule, or Hormone Overdosing.

Description:

This hormone panel maps the changes in estrogen and progesterone through out your cycle. It also provides your cycle average for both DHEA and Testosterone hormones. The expanded version of the panel, when ordered, will provide you with additional information on how well your brain hormones, FSH and LH, are regulating your ovaries.

What do my results tell me?   Your results provide information about 3 important aspects of your hormone cycle.

I. Time Elements

* Your cycle length was reported as 28 days.

* The first part of the cycle before egg release was 14 days.

In this phase (Follicular) the egg matures and the various tissues are primed with estrogen from the ovary to prepare for progesterone exposure in the second half of the cycle.

* Your estrogen priming is normal.

* Ovulation: Your cycle showed an ovulation between days 13 and 15. Ovulation is the release of an egg.

Your Luteal Phase, 2nd half of cycle, starts with ovulation
The luteal phase of your cycle was Normal with a duration of 14 days.

Notes: In the 2nd half of your cycle several things happen:
- The ovaries are prompted by the brain to produce progesterone.
- The uterus lining changes under the influence of progesterone.
- The recruitment of underdeveloped eggs for the next cycle takes place.
- The balance of progesterone to estrogen plays an important role in cognitive, mood, sleep and other functions.

II. Your Individual Hormones

Your Progesterone State

Following ovulation the amount of progesterone released in the second half of your cycle seems sufficient.

Your Estrogen State

The estrogen production by your ovaries is normal. The tissue exposure to estrogen in the first half of the cycle (Estrogen priming) appears normal thus allowing a more optimal progesterone effect to follow in the second half of your cycle.

Your DHEA Level

The DHEA value on your report is derived from several samples you submitted, and can be considered a cycle average.
Your average DHEA value is 5 ng/ml. Reference Range: 3-10 ng/ml

Your Testosterone Level

The testosterone value reported reflects the average concentration of several specimens submitted.
Your average testosterone value is 32 pg/ml. The normal range is 13-39 pg/ml, borderline high is 40-44 pg/ml.

III. Progesterone To Estrogen Balance

The balance of hormones in the luteal phase is acceptable.

Course of Action

Your health care provider may use the Data in the quantitative report section to construct your treatment plan.
Please note most hormone treatments have gradual and cumulative effects. Synchronizing the treatment plan with your hormone patterns as shown in this report helps insure a logical, gentle and body-harmonized approach.