



Lab ID Patient ID PAT-100009 **Ext ID** 25342-0303

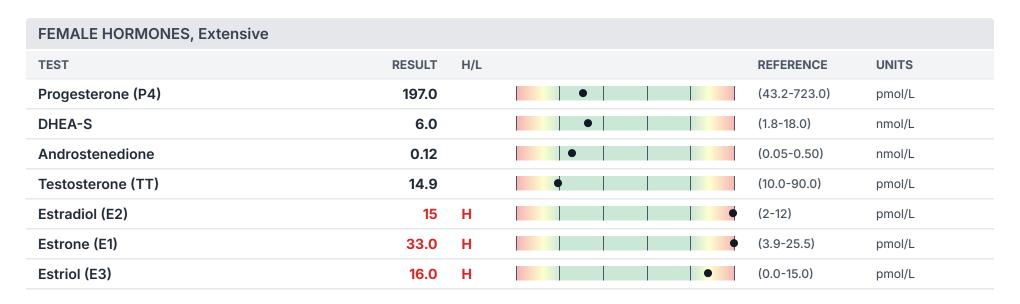
Test Patient

Sex: Female • 45yrs • 01-Jan-80 123 Home Street, Test Suburb Vic 3125 RECEIVED 08-Dec-25

FEMALE HORMONES, EXTENSIVE

Specimen type - Saliva

Collected 05-Dec-25



Hormone Ratios					
TEST	RESULT	H/L		REFERENCE	UNITS
Estrogen Quotient - E3/[E2+E1]	0.33	L		(>0.40)	ratio
P4/E2 Ratio	13.1		•	(4.0-300.0)	ratio
Androstenedione/E1 Ratio	0.004	L	•	(0.005-1.100)	ratio

Table 1: SALIVA HORMONE REFERENCE RANGES (Not on HRT - Baseline)

FEMALE	Progesterone	DHEAS	Androstenedione	Testosterone	Estradiol (E2)	Estrone (E1)	Estriol (E3)
Pre/menarcheal	13 - 163	1.8 - 18	0.05 - 0.50	10 - 90	1.6 - 8.9	3.9 - 25.0	0.0 - 15.0
Follicular Phase	13 - 201	1.8 - 18	0.05 - 0.50	10 - 90	1.6 - 12.0	3.9 - 25.0	0.0 - 15.0
Mid-Cycle	13 - 247	1.8 - 18	0.05 - 0.50	10 - 90	2.6 - 14.7	3.9 - 25.0	0.0 - 15.0
Luteal Phase	43.2 - 723	1.8 - 18	0.05 - 0.50	10 - 90	1.9 - 12.0	3.9 - 25.0	0.0 - 15.0
Post Menopausal	14 - 241	1.0 - 16.0	0.05 - 0.40	10 - 85	1.2 - 3.5	1.9 - 19.4	0.0 - 11.8
Pre Menopausal, with OC's	13 - 216	1.4 - 5.3	-	-	1. 0 - 6.0	-	-

Table 2: TARGET REFERENCE RANGES (On HRT, 24 - 48 hour post last dose)

Type of HRT	Progesterone	Testosterone	Estradiol (E2)	Estrone (E1)	Estriol (E3)
ORAL	104 - 619	-	2.7 - 55.4	2.1 - 34.5	50.0 - 400.0
PATCH	-	-	1.9 - 12.0	-	-
CREAM/GEL	F: 1089 - 8349	F: 199 - 1879	19.0 - 120.0	-	50.0 - 1000.0
	M: 225 - 2263	M: 249 - 3759	-	-	-
SYNTHETIC HRT	43.2 - 216	-	1.0 - 6.0	-	-

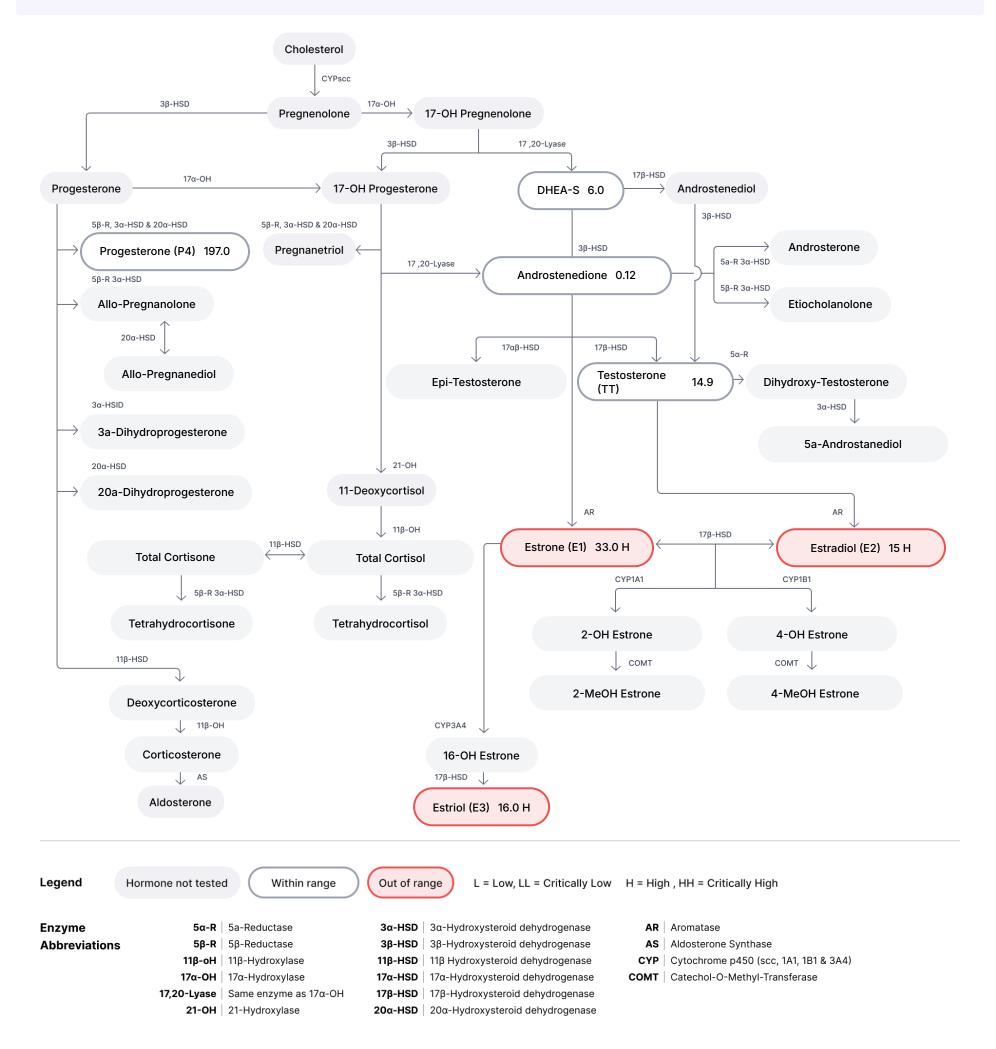




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Saliva Hormone Comments

PROGESTERONE (P4) NORMAL:

Saliva Progesterone is within range, IF the specimen was collected through the follicular phase; otherwise it is low.

Aim for a ratio of E2:Prog of 1:50 - 1:80 (50 to 80 parts Progesterone to 1 part estradiol) during this phase (Luteal) of the cycle. If confirmed that the specimen was collected during the Luteal phase, then the level is relatively low, suggest 200 mg Oral Progesterone supplementation at night or 2% transdermal cream 1g daily.

DHEA-S NORMAL:

Saliva DHEA-S levels are normal.

TESTOSTERONE (TT) LOW NORMAL:

Salivary testosterone is low normal for a premenopausal woman. Testosterone, produced by the ovaries and adrenal glands, supports libido, energy, muscle mass, bone density, mood, and cognitive function.

Low normal testosterone may present with decreased libido, fatigue, reduced muscle mass, low mood, poor concentration, and decreased bone strength.

Treatment Considerations:

Hormonal: Bioidentical testosterone therapy may be considered (typically transdermal 0.5–1% gel, 300–500 mcg/day); 0.5 % preferred, adjusted according to symptoms and saliva monitoring alongside.

ESTRADIOL (E2) ELEVATED:

Salivary estradiol is above the expected reference range for a premenopausal woman. Estradiol is the most potent estrogen in reproductive years, regulating menstrual cycles, bone and cardiovascular health, and cognitive function.

High estradiol may manifest as heavy or irregular periods, breast tenderness, fluid retention, mood changes, and increased risk of estrogen-sensitive disorders. Causes may include exogenous estrogen therapy, ovarian cysts, or impaired estrogen clearance.

Management Considerations:

Hormonal: Evaluate current hormone therapy or oral contraceptives; dose adjustment may be indicated.

Lifestyle/Natural: Maintain healthy weight, increase dietary fiber, support liver function (adequate hydration, cruciferous vegetables), and limit alcohol.

ESTRONE (E1) ELEVATED:

Salivary estrone is above the expected reference range for a premenopausal woman. Estrone is an estrogen primarily produced by the ovaries and peripheral tissues, acting as a precursor to estradiol and contributing to menstrual regulation, bone health, and reproductive function.

High estrone may be associated with heavy menstrual bleeding, breast tenderness, bloating, mood swings, and increased risk of estrogensensitive conditions. Potential causes include exogenous estrogen therapy, ovarian hyperactivity, or impaired metabolism of estrogens.

Management Considerations:

Hormonal: Review and adjust exogenous estrogen therapy if applicable.

Lifestyle/Natural: Weight management, increased fiber intake to support estrogen metabolism, regular exercise, and avoidance of xenoestrogens (e.g., plastics, certain personal care products).

ESTRIOL (E3) ELEVATED:

Salivary estriol is above the expected reference range for a premenopausal woman. Estriol is a weaker estrogen metabolite, primarily formed peripherally from estradiol and estrone, and contributes to urogenital health and mild estrogenic activity.

High estriol may be associated with mild estrogen excess symptoms, such as breast tenderness, bloating, or mild mood changes. Causes may include supplementation, enhanced peripheral conversion, or altered liver metabolism.





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Treatment Considerations:

Hormonal: Reassess estrogen-containing therapies.

Lifestyle/Natural: Support estrogen metabolism with fiber-rich diet, weight management, and regular exercise.

E3/(E1 + E2) RATIO LOW

The ratio of estriol (E3) to total estrogens (E1 + E2) is below the expected range. This ratio reflects the balance of weaker versus more potent estrogens in circulation, with lower ratios potentially indicating reduced peripheral metabolism of estradiol/estrone to estriol. Consider further investigations with serum TFT's and serum LFT's.

Methodology

Liquid Chromatography-Mass Spectrometry (LC-MS/MS/MS)