



P: 1300 688 522

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A: PO Box 442 Ashburton VIC 3142

Date of Birth : 27-Oct-1969

Sex : F

Collected : 11-Feb-2016

24/25A MARKS STREET

NAREMBURN NSW 2065

Lab id: **3416204** UR#: 586242847

SUITE 2, 23-27 WELLINGTON

STREET

ST KILDA VIC 3182

ENDOCRINOLOGY SALIVA

SALIVA	Result	Range	Units	
Cortisol Morning	25.60	6.00 - 42.00	nmol/L	
Progesterone (P4)	1379.0	318.0 - 1590.0	pmol/L	
Testosterone.	341.0 *H	25.0 - 190.0	pmol/L	
Salivary Estrogens				
Estradiol (E2)	60.0 *H	2.0 - 18.0	pmol/L	
Estrone (E1)	32.0 *H	9.6 - 20.0	pg/mL	
Estriol (E3)	87.0 *H	0.0 - 29.0	pg/mL	
E3/[E2+E1]	0.95 *L	> 1.00	RATIO	
P4/E2 Ratio (Saliva)	23.0	4.0 - 108.0	RATIO	

(*) Result outside normal reference range

(H) Result is above upper limit of reference range (L) Result is below lower limit of reference range



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ST KILDA VIC 3182**Saliva Hormone Comments****SALIVARY HORMONE REFERENCE RANGES: (NOT ON HRT - BASELINE)**

	E2	E1	E3	Progesterone	DHEAS
FEMALE					
Follicular	<18	9.6-20	15-29	<318	
Mid-Cycle	11-29	9.6-20	15-29	-	
Luteal	<18	9.6-20	15-29	318-1590	
Post Men.	<6	9.6-20	1-41	<159	<6.5
Premenopausal, no oral contraceptives					2.5-25.0
Premenopausal, with oral contraceptives					2.0-8.0
MALE	<6	9.6-20	16-25	<159	5.0-30.0

TARGET REFERENCE RANGES: (ON HRT - 24hr post last dose)

	E2	E1	E3	Progesterone	Testosterone
					Age Dpndt
Oral	7-73	-	69-139	318-1590	
Patch	4-18	-	-	-	
Cream/Gel	37-184	-	1040-1734	3180-31797	F: 277-867 M: 347-1734

SALIVA ESTRONE (E1) is produced primarily from androstenedione originating from the gonads or the adrenal cortex. In premenopausal women, more than 50% of the E1 is secreted by the ovaries. In prepubertal children, men and non-supplemented postmenopausal women, the major portion of E1 is derived from peripheral tissue conversion of androstenedione. Interconversion of E1 and E2 also occurs in peripheral tissue. Bioassay data indicate that the estrogenic action is much less than E2. E1 is a primary estrogenic component of several pharmaceutical preparations, including those containing conjugated and esterified estrogens. In premenopausal women E1 levels generally parallel those of E2. After menopause E1 levels increase, possibly due to increased conversion of androstenedione to E1.

ELEVATED ESTRONE (E1) LEVEL:

Saliva E1 is elevated above reference range. This level is suggestive of supplementation or abnormal estrogen metabolism. Assess the Estrogen quotient ($E3/[E2+E1]$). If this is <1 then suggest the use of indole-3-carbinol and check serum TSH levels. Also suggest checking morning void urine for 16OH, 4OH and 2OH E1 metabolites.

SALIVA E2 levels for a non-menopausal female should be assessed relative to the day of cycle that the specimen was collected.

ELEVATED E2 LEVEL:

Saliva E2 levels are elevated and suggestive of current supplementation.

ELEVATED ESTRIOIOL (E3) LEVEL:

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Saliva E3 levels are elevated and suggestive of current supplementation, estrogen metabolism or xenoestrogens.

The Estrogen Quotient is low and suggestive of an abnormal estrogen metabolism. Suggest checking morning void urine for E1 metabolites 16OH, 4OH and 2OH metabolites and their ratios. Also check serum TSH and LFT. Use of Indole-3-Carbinol/DIM has been shown to improve estrogen metabolism to correct ratios.

SALIVA The Progesterone level is within range and suggestive of luteal phase. Aim for a ratio of E2:Prog of 1:200 (200 parts Progesterone to 1 part Estradiol) during this phase of cycle.

MORNING SALIVA LEVEL WITHIN RANGE:

Saliva morning cortisol level is adequate and within range.

SALIVA FREE TESTOSTERONE level is suggestive of current supplementation. If not supplemented, then suggestive of Polycystic Ovarian Syndrome, insulin resistance or fibroids.