Meridian Valley LAB
6839 Fort Dent Way, Ste 206
Tukwila, WA 98188
tel 206.209.4200 • 855.405.TEST (8378)
fax 206.209.4211

Accession #: Test: Doctor ID:
Patient Name:
Date of Birth:
Age: Sex: Tech:
Collected:
Received:
Reported: Phone: Fax:

24-Hour Sex Profile

Comments:

Creatinine: 0.5 gm/24hr

Total Urine Volume: 500 ml

Estrogens

Reference Ranges

Refer to the luteal reference range for cycling women collecting during the luteal phase and for postmenopausal women currently using estrogen and/or progesterone.

Refer to the post-menopausal reference range for post-menopausal women not currently using hormones.

	µg/24hr		Luteal	Post-Menopausal
Estrone (E1)	**0.5**	**L**	4.7 – 27.6	0.9 – 6.5
Estradiol (E2)	**0.1**		2 – 7.8	0 – 3.5
Estriol (E3)	**2.8**		7 – 29.7	0 – 7
Total (E1 + E2 + E3)	**3.4**		14.7 – 61.9	1 – 17

Phase I Metabolites

2-OH Estrone (2OHE1)	**1.347**		3.2 – 30.1	0.2 – 5.2
16α-OH Estrone (16αOHE1)	**0.118**	**L**	1.8 – 7.8	0.2 – 3
4-OH Estrone (4OHE1)	**0.09**		0.35 – 2.63	0.05 – 1
2/16 Ratio	**11.4**	**H**	1.6 – 7.7	1.6 – 7.7

Phase II Metabolites

2-Methoxyestrone	**0.2**	**L**	1 – 9	0.3 – 3.6
2-Methoxyestradiol	**0.06**		0.12 – 0.7	0.03 – 0.3

Other Reference Ranges	Estrone	Estradiol	Estriol	Estrogen Total	Pregnanediol
Follicular	2.0-39	1.0-23	3.0-48	7.0-110	0-2500
Mid-Cycle	11.0-46	4.0-45	20-130	38-221	N/A

24-Hour Sex Profile

Accession #: Test Code: Sex:

Patient Name:

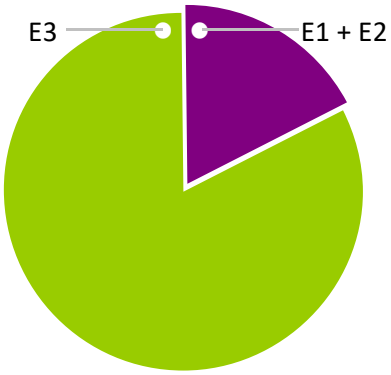
Estrogen Ratios

Estrogen Ratios

Estrogen Quotient: 4.8

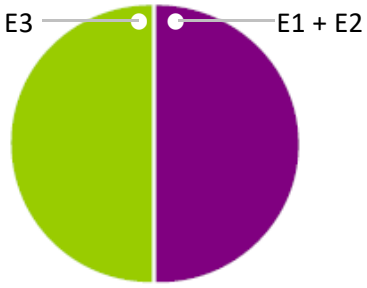
E3/(E1+E2)

Patient Result



Reference Range

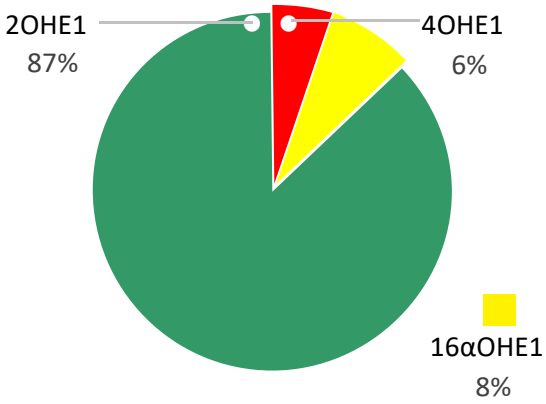
>1



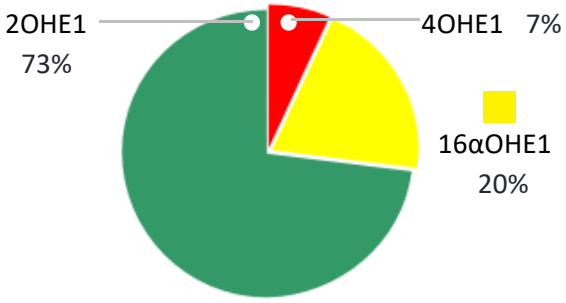
Patients with an EQ>1 have a higher survival rate after breast cancer and may be at decreased risk for developing breast cancer. EQ often declines as women enter menopause. Estriol is a less potent estrogen and is considered protective. Estradiol and Estrone are more potent for managing symptoms but have potentially carcinogenic metabolites. A healthy balance is desirable.

Estrogen Hydroxylation

Patient Result



Reference Range



This graph looks at the relative proportions of the hydroxylated (Phase I) estrogens. A high proportion does not necessarily equate to a high value, nor a low proportion to a low value.
2OHE1 is considered protective, and a larger proportion of the whole is both normal and healthy.
16αOHE1 has a strong affinity to estrogen receptors and plays an important role in maintaining bone density. Neither very high nor very low values are desirable. As a proportion of hydroxylated estrogens, up to about 20% is normal.
4OHE1 is a highly carcinogenic metabolite, and low values are desirable. As a proportion of hydroxylated estrogens, 7% or less is normal.

Methylation Ratio: 0.17

2-Methoxyestrone/2OHE1

Patient Result

Reference Range

0.2 - 0.65

The methylation ratio allows some insight into methylation pathways and Phase I to Phase II metabolism. If the methylation ratio is on the low end of the reference range, supplements that provide methyl donors and increase methylation may be helpful. Genetic testing can give additional information about methylation pathways that may allow for more targeted supplementation.

Progesterone

	µg/24hr		Reference Ranges
5β-Pregnanediol (progesterone metabolite)	**3023**		Luteal: 1450 – 6140; Post-Menopausal: 200 – 1000
Pregnanetriol	**39**	**L**	100 – 1500

24-Hour Sex Profile

Accession #: Test Code: Sex:

Patient Name:

Androgens

	µg/24hr		Reference Range
DHEA	**4.5**	**L**	100 – 2000
Androsterone	**59**	**L**	500 – 3200
Etiocholanolone	**88**	**L**	500 – 5000
Testosterone	**0.1**	**L**	5 – 35
5α-Androstanediol	**1.3**	**L**	5 – 45
5β-Androstanediol	**1.8**	**L**	15 – 220

Enzyme Activity Phenotype Assessment

5α-Reductase

		Reference Range
Andro/Etio Ratio	**0.68**	0.4 – 1.3

Elevated 5α-reductase activity is associated with Polycystic Ovarian Syndrome (PCOS) and hirsutism in women, Benign Prostatic Hyperplasia (BPH) and premature baldness in men, and obesity and insulin resistance in both genders. Low 5α-reductase activity may result in reduced conversion of testosterone to DHT and undervirilization in males.[1-4]

For Further Information and Interpretations

Clinicians are encouraged to schedule a free consultation with one our staff physicians.
This service is available with every test. Consultations are usually available within 1-2 business days.
Short technical questions can be usually be answered the same day.
To schedule a consult, call **855.405.TEST(8378).**