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Accession #: Patient Name:

Date of Birth:

Age: Gender:

Collected: Received:

Phone: Reported: Tech: Fax:

Test: 4992

DU Essential Hormone Profile

good clearance = good results

Results are suspect. Creatinine: 140 mg/dL

Kidney clearance of hormones

Low < poor clearance = Used to determne clearance of hormones.

Estrogens

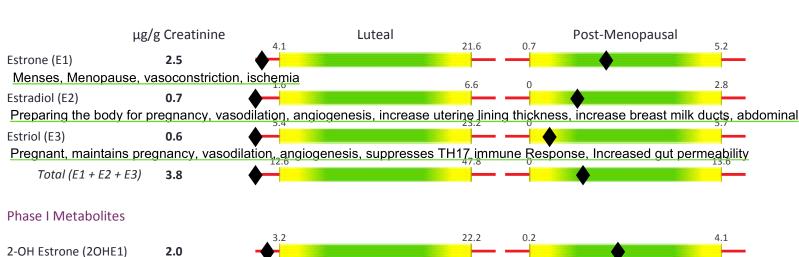
Reference Ranges

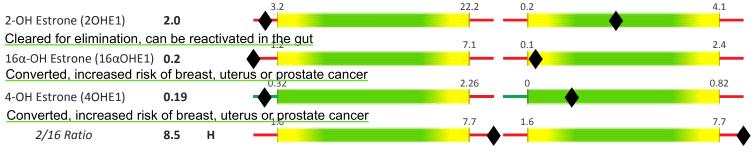
Comments:

Doctor ID:

Postmenopausal women on hormones, or cycling women collecting during the luteal phase, refer to the luteal reference range.

Postmenopausal women not taking hormones, refer to the postmenopausal reference range





Phase II Metabolites



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

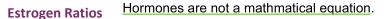


DU Essential Hormone Profile

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Patient Name:

Estrogen Ratios



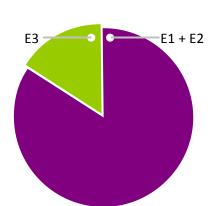
Estrogen Quotient: 0.2

E3/(E1+E2)

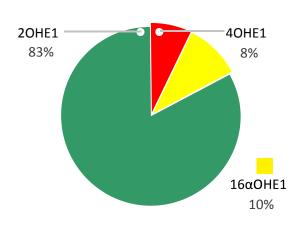
Estrogen Hydroxylation

Methylation Ratio: 0.18 2-Methoxyestrone/20HE1

Patient Result



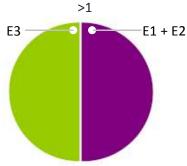
Patient Result



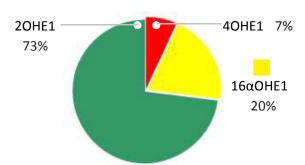
Patient Result



Reference Range



Reference Range



Reference Range

0.2 - 0.65



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.

2-OHE1, a Phase I liver metabolite of estrone, is considered protective. $16\alpha\text{-}OHE1$ is a Phase I metabolite of estrone that has some duality: it is potentially carcinogenic and it is important for building bone. Therefore, very high levels and very low levels are both undesireable. High levels suggest a need for measures to improve estrogen detoxification. Low levels may increase risk of osteopenia.

 $\mbox{4-OHE1}$ is a highly carcinogenic Phase I metabolite. Low levels are desireable.

A comparison of 2-Methoxyestrone with 20HE1 allows insight into methylation pathways. If the methylation ratio is on the low end of the reference range, consider adding supplements to improve methylation. If needed, consider further testing for methylation defects.

Progesterone



Testosterone metabolite, marker for ovulation, PCOS



DU Essential Hormone Profile Accession #: Test Code: 4992 Patient Name: **Androgens** Reference Range μg/g Creatinine 100 1333 DHEA Androgen precursor, half-life of 7 minutes before downstream conversion 636 2327 Androsterone 261 Low leves indicate overconvertion to DHT 3006 630 Etiocholanolone 774 made from DHEA; Immune response stimulator 12.2 Testosterone 1.7 L Immune suppressor, DHT < 0.3 male pattern baldness, facial hair, PCOS 33 5α-Androstanediol 6.4 PCOS, male pattern baldness, facial hair 5β-Androstanediol 32.7 Metabolic issues, insulin resistance, PCOS, male pattern baldness, facial hair Glucocorticoids μg/g Creatinine Reference Range 1293 Pregnanetriol 177 Progesterone: vasodilation, angiogenesis, Preparing for pregnancy, increased uterus lining and breast glands growth Cortisone (E) Inactive or "storage" form of adrenal glucocorticoid, acts as a reserve for when your body needs it. Immune Suppression Cortisol (F) 70 Active increases blood glucose levels; Immune response stimulator 3475 Tetrahydrocortisone (THE) 2310 High stress, hyperthyroidism, insulin resistance 443 1651 Allo-Tetrahydrocortisol (5α-THF) L High stress, hyperthyroidism, insulin resistance 585 1631 Tetrahydrocortisol (THF) 1142 High stress, hyperthyroidism, insulin resistance 2908 5535 Adrenal Reserve (THE+5α-THF+THF) 3696 251 1013 11_B-Hydroxyandrosterone 344 increased breakdown of hormones, aberrant immune response, metabolic/blood sugar imbalance 481 11B-Hvdroxvetiocholanolone increased breakdown of hormones, aberrant immune response, metabolic/blood sugar imbalance **Mineralocorticoids** ug/g Creatinine Reference Range 105 412 Allo-Tetrahydrocorticosterone (5α-THB) increased breakdown of hormones, aberrant immune response, metabolic/blood sugar imbalance 166 Tetrahydrocorticosterone (THB) insulin resistance, diabetes, immune suppression

11-Dehydrotetrahydrocorticosterone (THA) 80

insulin resistance, diabetes, immune suppression



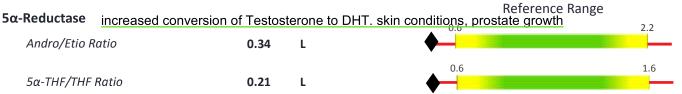
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Enzyme Activity Phenotype Assessment



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.

11β-HSD II (11β-hydroxysteroid dehydrogenase II) stress response, dehydration, blood sugar imbalanbe

Cortisol/Cortisone Ratio (118-HSD II) 0.79

 11β -HSD II is predominantly a renal enzyme. It inactivates cortisol in order to prevent competitive binding to mineralocorticoid receptors. Its activity can be measured by the ratio of cortisol/cortisone. An elevated ratio (toward right on the graph) indicates suppressed enzyme activity, and may be clinically related to stress, hypertension, high dose licorice, cortisol administration, or insulin resistance.

Other Analytes Melatonin μg/g Creatinine Reference Range 84.4 6-Sulfatoxymelatonin (1st Morning) 17.0 Sleep, gut health, ovary health, PCOS **Thyroid** μg/g Creatinine Reference Range 266 938 Free T3 570 Heart rate, weight loss issues, body temperature, anxiety, sleep 341 1524 Heart rate, weight loss issues, heat/cold intolerance, anxiety, sleep mg/g Creatinine Reference Range 0.6 Kynurenic 0.74 Altered immune response, inflammation, brain health Xanthurenic 0.36 inflammation, immune response, diabetes, kidney function



1.2