Adrenal Hormone Report; saliva

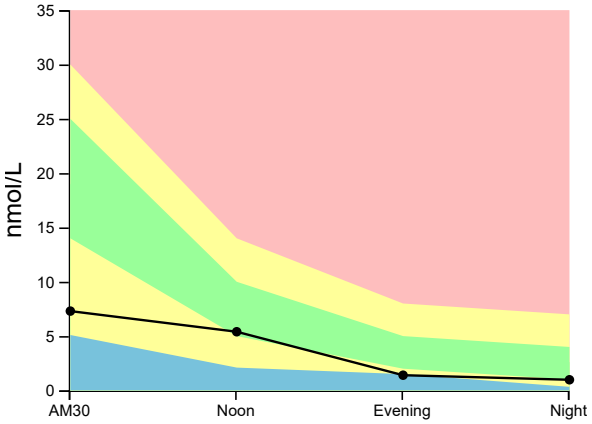
Order: SAMPLE REPORT
Client #: 12345
Doctor: Sample Doctor, MD
Doctors Data Inc.
3755 Illinois Ave.
St. Charles, IL 60174

Patient: Sample Report
Age: 65
Sex: Male
Body Mass Index (BMI): N/A

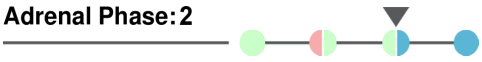
Sample Collection	Date/Time
Date Collected	10/01/2018
AM30	10/01/2018 0800
Noon	10/01/2018 1200
Evening	10/01/2018 1700
Night	10/01/2018 2100
Date Received	10/03/2018
Date Reported	10/05/2018

Analyte	Result	Unit	L	WRI	H	Optimal Range	Reference Interval
Cortisol AM30	7.3	nmol/L		◇		14.0 - 25.0	5.1 - 30.0
Cortisol Noon	5.4	nmol/L		◇		5.0 - 10.0	2.1 - 14.0
Cortisol Evening	1.4	nmol/L	↓			2.0 - 5.0	1.5 - 8.0
Cortisol Night	0.98	nmol/L		◇		1.0 - 4.0	0.33 - 7.0
DHEA*	138	pg/mL		◇			137 - 336

Cortisol Graph



Adrenal Phase: 2



Hormone Comments:

- Diurnal cortisol pattern and reported symptoms are consistent with evolving (Phase 2) HPA axis (adrenal gland) dysfunction, although concomitant thyroid and/or iodine insufficiency cannot be ruled out.

Notes:
RI= Reference Interval, L (blue)= Low (below RI), WRI (green)= Within RI (optimal), WRI (yellow)= Within RI (not optimal), H (red)= High (above RI)
The current samples are routinely held three weeks from receipt for additional testing.

*This test was developed and its performance characteristics determined by Doctor's Data, Inc. The FDA has not approved or cleared this test; however, FDA clearance or approval is not currently required for clinical use. The results are not intended to be used as the sole means for clinical diagnosis or patient management decisions.

Methodology: Enzyme Immunoassay

Hormone Report; saliva

Order: SAMPLE REPORT
Client #: 12345
Doctor: Sample Doctor, MD
Doctors Data Inc.
3755 Illinois Ave.
St. Charles, IL 60174

Patient: Sample Report
Age: 65
Sex: Male
Body Mass Index (BMI): N/A

Sample Collection	Date/Time
Date Collected	10/01/2018
AM30	10/01/2018 0800
Noon	10/01/2018 1200
Evening	10/01/2018 1700
Night	10/01/2018 2100
Date Received	10/03/2018
Date Reported	10/05/2018

Analyte	Result	Unit	L	WRI	H	Reference Interval	Supplementation Range**
Estradiol (E2)	0.50	pg/mL		◆		< 2.5	
Progesterone (Pg)	33	pg/mL		◆		< 94	500 - 3000
Pg/E2 Ratio	66.0		↓			200 - 300	
Testosterone	65	pg/mL		◆		30 - 143	110 - 500
DHEA*	138	pg/mL		◆		137 - 336	

Hormone Comments:

- The low Pg/E2 ratio is consistent with progesterone insufficiency (estrogen dominance), which may increase the risk of prostate gland enlargement and cancer. Supplementation with topical progesterone to correct this relative deficiency is a consideration.
- Suboptimal testosterone is consistent with reported deficiency symptoms and may be associated with metabolic syndrome (insulin resistance). Serum vitamin D, hemoglobin A1c and insulin levels may be warranted. Boosting the testosterone level is a consideration.

Notes:
RI= Reference Interval, L (blue)= Low (below RI), WRI (green)= Within RI (optimal), WRI (yellow)= Within RI (not optimal), H (red)= High (above RI)
The current samples are routinely held three weeks from receipt for additional testing.

The Pg/E2 ratio is an optimal range established based on clinical observation. Progesterone supplementation is generally required to achieve this level in men and postmenopausal women.

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**If supplementation is reported then the supplementation ranges will be graphed. The supplementation ranges depicted are for informational purposes only and were derived from a cohort of adult men and women utilizing physiologic transdermal bioidentical hormone therapy.

Methodology: Enzyme Immunoassay

Neuro Basic Profile; urine

Order: 999999-9999
Client #: 12345
Doctor: Sample Doctor, MD
Doctor's Data, Inc.
3755 Illinois Ave.
St. Charles, IL 60174

Patient: Sample Report
Age: 65
Sex: Male
Body Mass Index (BMI): N/A

Sample Collection	Date/Time
Date Collected	10/01/2018
Wake Up Time	0700
Collection Time	0800
Collection Period	Second Morning
Date Received	10/03/2018
Date Reported	10/05/2018

Analyte	Result	Unit per Creatinine	L	WRI	H	Reference Interval
Serotonin	106	µg/g				50 - 98
Dopamine	162	µg/g				110 - 200
Norepinephrine	12	µg/g				18 - 42
Epinephrine	10	µg/g				1.3 - 7.3
Norepinephrine / Epinephrine ratio	1.2					< 12
Glutamate	8.5	nmol/g				9.0 - 40.0
Gamma-aminobutyrate (GABA)	1.2	nmol/g				1.6 - 3.5
Glycine	550	nmol/g				350 - 1500
Histamine	48	µg/g				12 - 30
Phenethylamine (PEA)	57	nmol/g				26 - 70
Creatinine	125	mg/dL				35 - 240

Neurotransmitter Comments:

- Urinary neurotransmitter levels provide an overall assessment of the body's ability to make and break down neurotransmitters and are representative of whole body levels. They are required for neurotransmission throughout the body. Direct assessment of neurotransmitter levels and metabolism in the central nervous system is not clinically feasible and approximately twenty percent of the total urinary levels are derived from the brain. The enzymes, cofactors and precursors in neurotransmitter metabolism in general are the same in the periphery and in the central nervous system. Therefore, alterations in urinary neurotransmitter levels assessed in urine provide important clinical information, and may be associated with many symptoms including cognitive and mood concerns, diminished drive, fatigue and sleep difficulties, cravings, addictions and pain.
- Elevated serotonin may be associated with symptoms of, increased anxiety, agitation and diarrhea (IBS-like symptoms). Serotonin levels may be increased by low protein or high-carbohydrate meals, insulin, and tryptophan or 5-HTP supplementation. Many mood altering medications, including SSRIs and SNRIs, may influence serotonin levels. L-theanine may affect serotonin function.
- Low norepinephrine may be associated with depression and mood changes as well as fatigue, difficulty concentrating, decreased ability to stay focused on tasks and diminished sense of personal/professional drive. Norepinephrine is converted from dopamine requiring vitamin C, copper and B3, and L-tyrosine is an amino acid precursor. L-theanine and Mucuna pruriens may modulate norepinephrine effects.
- Elevated epinephrine may be associated with stress response and contributory to anxiety, agitation, irritability, insomnia and hypertension. Epinephrine levels may be elevated in patients in association with exercise prior to the urine collection. Metabolism of epinephrine requires vitamins B2, B3, SAMe, magnesium, and iron. L-theanine may modulate epinephrine effects.
- Low glutamate may be associated with depression, increased addictive tendencies including food seeking behaviors, and can contribute to mental fatigue and diminished mental stimulation. L-glutamine is a precursor amino acid.
- Low GABA may be associated with anxiety, poor impulse control, major depression, pain, and decreased sleep quality. Low GABA may be seen in individuals deficient in vitamin B6. L-theanine, GABA, and glutamine may positively affect functional GABA activity, and phenibut exerts GABA-like effects (experimental models).
- Elevated histamine may be associated with allergy-like symptoms, gastro-intestinal concerns, skin itch/inflammation (pruritis), increased wakefulness and insomnia, and has been demonstrated in gastrointestinal blastocystis infections. Levels may be elevated due to use of histamine-releasing medications, consumption of allergenic and sulfite-rich foods and/or histamine-rich foods, dysbiotic bacterial production in the intestine and zinc deficiency. High urine (and blood) histamine levels have been associated with cluster and cyclic headaches. Break down of histamine requires SAMe and copper.
- Considerations to address the demonstrated imbalances beyond the identified co-factors and amino acid precursors may include dosage adjustments if indicated, as well as nervine and adaptogenic herbs, methylation support, vitamin D, and gastrointestinal health optimization.

Notes:
Results are creatinine corrected to account for urine dilution variations. Creatinine is not meant to be used as an indicator of renal function.
RI= Reference Interval, L (blue)= Low (below RI), WRI (green)= Within RI (optimal), WRI (yellow)= Within RI (not optimal), H (red)= High (above RI)
Methodology: LCMS QQQ,Creatinine by Jaffe Reaction

Analyzed by DOCTOR'S DATA, INC. • 3755 Illinois Avenue, St. Charles, IL 60174-2420 USA • LAB DIR: Erlo Roth, MD • CLIA ID: 14D0646470