Adrenal Hormone Report; saliva

Order: Sample Report
Client #: 12345
Doctor: Sample Doctor
Doctor's Data, Inc.
3755 Illinois Ave.
St. Charles, IL 60174 USA

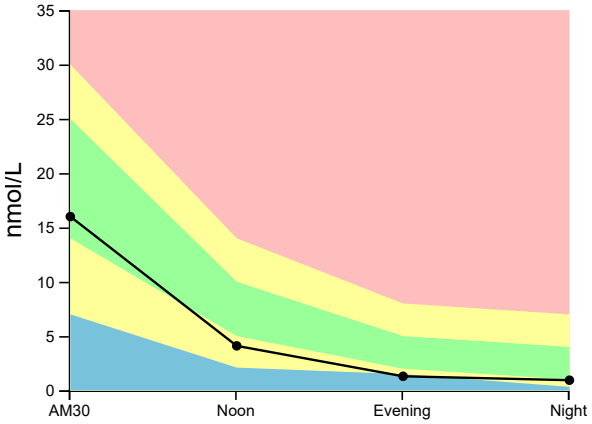
Patient: Sample Patient
Id: P9999999999
Age: 50 **DOB:** 01/01/1969
Sex: Female
Body Mass Index (BMI): 22.8

Menopausal Status: Post-menopausal

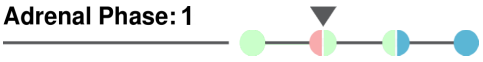
Sample Collection	Date/Time
Date Collected	10/20/2019
AM30	10/20/2019 06:50
Noon	10/20/2019 12:50
Evening	10/20/2019 18:00
Night	10/20/2019 21:50
Date Received	10/23/2019
Date Reported	10/28/2019

Analyte	Result	Unit	L	WRI	H	Optimal Range	Reference Interval
Cortisol AM30	16	nmol/L		◆		14.0 – 25.0	7.0 – 30.0
Cortisol Noon	4.1	nmol/L		◆		5.0 – 10.0	2.1 – 14.0
Cortisol Evening	1.3	nmol/L	↓			2.0 – 5.0	1.5 – 8.0
Cortisol Night	0.94	nmol/L		◆		1.0 – 4.0	0.33 – 7.0
DHEA*	53	pg/mL	↓				106 – 300

Cortisol Graph



Adrenal Phase: 1



Hormone Comments:

- AM cortisol level appears adequate, although the suboptimal diurnal cortisol pattern is suggestive of early (Phase 1) HPA axis (adrenal gland) dysfunction.
- DHEA levels typically decline with age and the level measured here is below the reference range. Note: Supplementation with DHEA may increase testosterone and/or estradiol levels.

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

LABRIX By DOCTOR'S DATA

Order: Sample Report
Client #: 12345
Doctor: Sample Doctor
Doctor's Data, Inc.
3755 Illinois Ave.
St. Charles, IL 60174 USA

Patient: Sample Patient
Id: P9999999999
Age: 50 **DOB:** 01/01/1969
Sex: Female
Body Mass Index (BMI): 22.8

Menopausal Status: Post-menopausal

Sample Collection	Date/Time
Date Collected	10/20/2019
AM30	10/20/2019 06:50
Noon	10/20/2019 12:50
Evening	10/20/2019 18:00
Night	10/20/2019 21:50
Date Received	10/23/2019
Date Reported	10/28/2019

Analyte	Result	Unit	L	WRI	H	Reference Interval	Supplementation Range**
Estradiol (E2)	2.2	pg/mL		◆		0.5 – 3.2	1.0 – 6.0
Progesterone (Pg)	1630	pg/mL			↑	18 – 130	400 – 4000
Pg/E2 Ratio†	741						≥ 200
Testosterone	13	pg/mL		◆		6 – 49	25 – 60
DHEA*	53	pg/mL	↓			106 – 300	

Hormone Comments:

- Progesterone level is most consistent with supplementation (not reported) or exogenous exposure. Query household use of BHRT and incidental exposure. A lack of ovulation in menopause results in a state of progesterone insufficiency. An in-range Pg/E2 ratio in this stage is only attainable with progesterone supplementation.
- DHEA levels typically decline with age and the level measured here is below the reference range. Note: Supplementation with DHEA may increase testosterone and/or estradiol levels.

Notes:
The Progesterone result was confirmed via repeat analysis.
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. Reference intervals for Pg/E2 ratio have not been established in males and post-menopausal women who are not supplementing with progesterone and/or estrogens.

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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

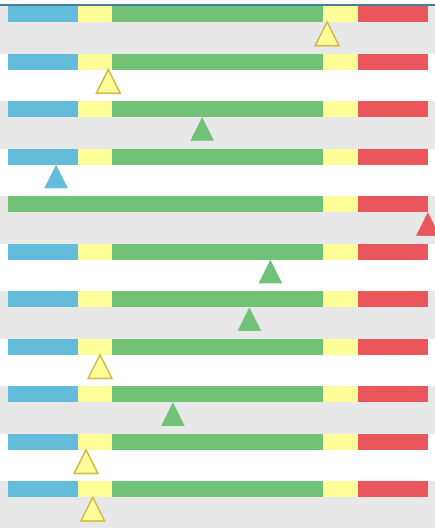
Neuro Basic Profile; urine

Order: Sample Report
Client #: 12345
Doctor: Sample Doctor
Doctor's Data, Inc.
3755 Illinois Ave.
St. Charles, IL 60174 USA

Patient: Sample Report
Id: P9999999999
Age: 50 **DOB:** 01/01/1969
Sex: Female
Body Mass Index (BMI): 23

Sample Collection	Date/Time
Date Collected	10/20/2019
Wake Up Time	06:20
Collection Period	1st morning void
Date Received	10/23/2019
Date Reported	10/28/2019

Analyte	Result	Unit per Creatinine	L WRI H	Reference Interval
Serotonin	103	µg/g		60 – 125
Dopamine	151	µg/g		125 – 250
Norepinephrine	29.1	µg/g		22 – 50
Epinephrine	1.1	µg/g		1.6 – 8.3
Norepinephrine / Epinephrine ratio	26.5			< 13
Glutamate	25	µmol/g		12.0 – 45.0
Gamma-aminobutyrate (GABA)	3.3	µmol/g		2.0 – 5.6
Glycine	570	µmol/g		450 – 2200
Histamine	20	µg/g		14 – 44
Phenethylamine (PEA)	35	nmol/g		32 – 84
Creatinine	51.2	mg/dL		30 – 225

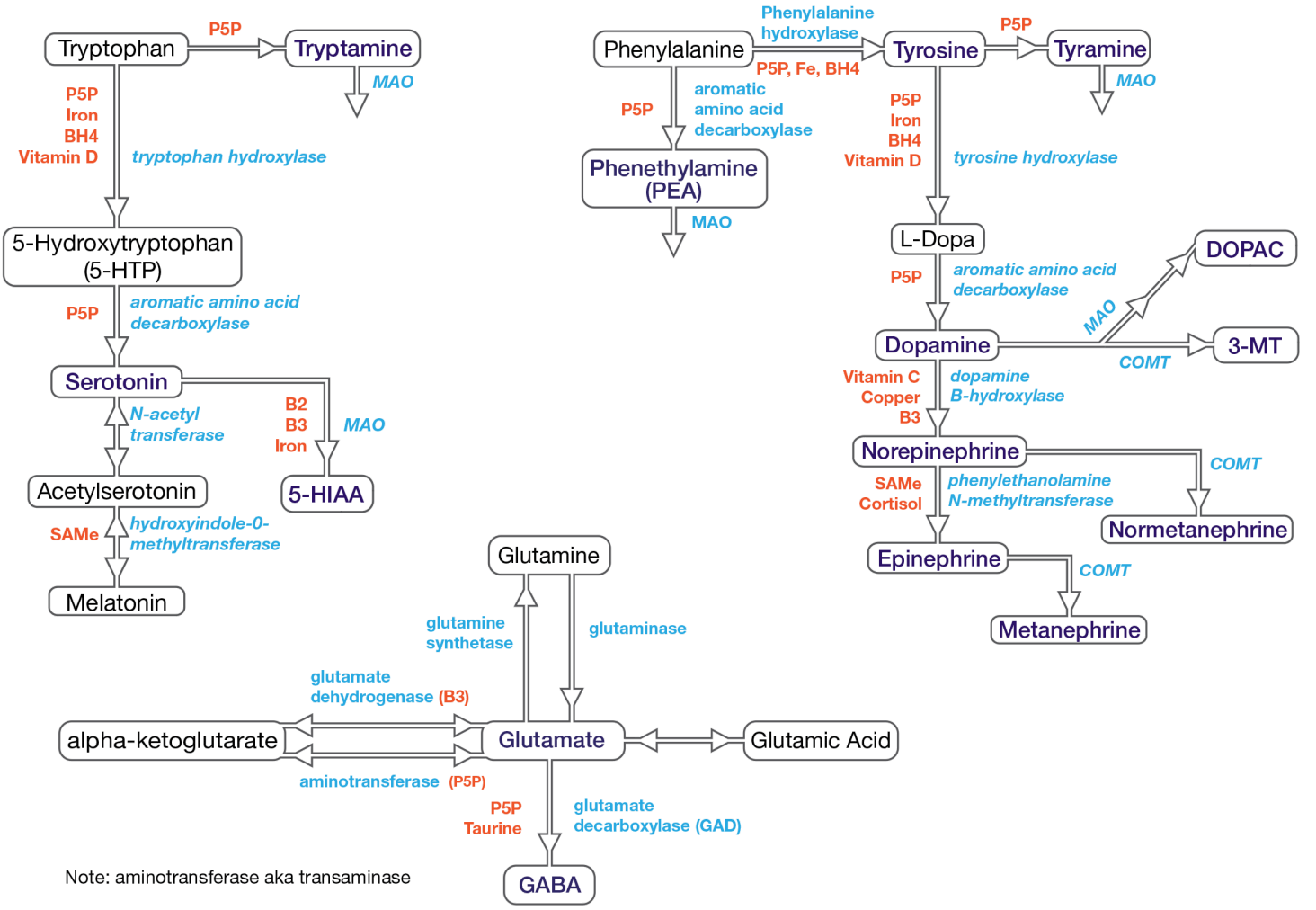


Neurotransmitter Comments:

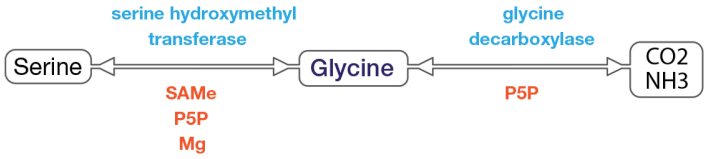
- Urinary neurotransmitter levels provide an overall assessment of the body's ability to make and break down neurotransmitters and are representative of whole body levels. Neurotransmitters are secreted all through the body, in neurons of both the central and peripheral nervous systems. The enzymes, 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.
- Upper range 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 range dopamine may be associated with anxiety/depression, difficulty concentrating, decreased libido and obesity, and may be associated with increased addiction and other stimulation seeking activities. Failure to regenerate tetrahydrobiopterin [BH4], an essential cofactor for dopamine synthesis, may decrease dopamine levels, and could be reflected in urine. BH4 regeneration may be supported by folates, vitamin B3, C, molybdenum and zinc. Additionally, production of dopamine requires vitamin D, iron and vitamin B6. L-tyrosine, L-theanine and Mucuna pruriens may influence dopamine signaling.
- Low epinephrine 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. Conversion of epinephrine from norepinephrine requires SAMe and adequate cortisol., L-tyrosine is an amino acid precursor. L-theanine and Mucuna pruriens may influence epinephrine signaling.
- Elevated N/E ratio is consistent with poor conversion of norepinephrine to epinephrine. This conversion is driven by the phenylethanolamine N-methyltransferase (PNMT) enzyme that requires SAMe, magnesium and cortisol (adequate HPA axis function) as cofactors. Suggest interpretation in context of cortisol levels/HPA axis function, with subsequent optimization of HPA axis function when clinically warranted.
- 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.

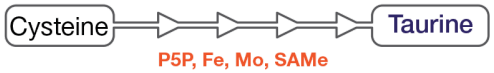
Notes:
Results are creatinine corrected to account for urine dilution variations. Creatinine is not meant to be used as an indicator of renal function.
RI= Reference Interval, L (blue)= Low (below RI), WRI (green)= Within RI (optimal), WRI (yellow)= Within RI (not optimal), H (red)= High (above RI)
Methodology: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

Neurotransmitter Pathways



"glycine cleavage system"





KEY

MAO = monoamine oxidase
Cofactors for *MAO*: **B2, B3, P5P, Fe, Mg**
COMT = catechol-o-methyl-transferase
Cofactors for *COMT*: **SAMe, Mg**
P5P = (pyridoxal-5-phosphate) activated form of vitamin B6
BH4 = (tetrahydrobiopterin)
Endogenous levels can be supported with SAMe, vitamin B3, C, Mo, Zn
MTHF = (methyltetrahydrofolate) active form of folate.
SAMe = endogenous levels can be supported with Mg, MTHF, and methylcobalamin supplementation.

Cofactors = Enzymes =