



Patient:

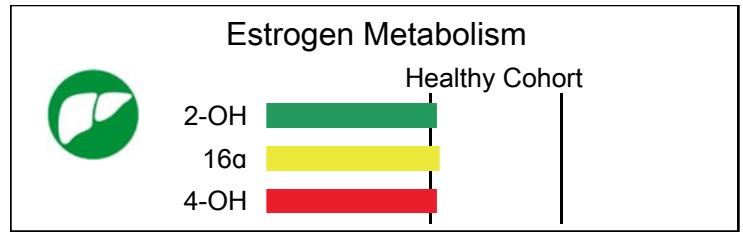
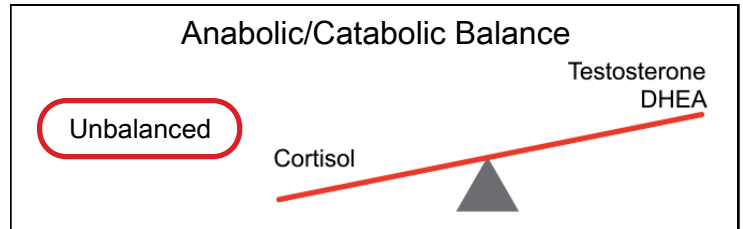
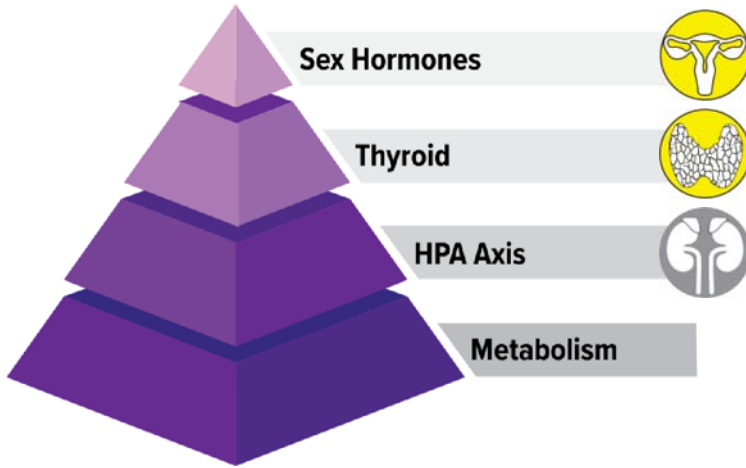
DOB:

Sex:

MRN:

4008 Endo+ - Serum, Saliva, Urine

Results Overview



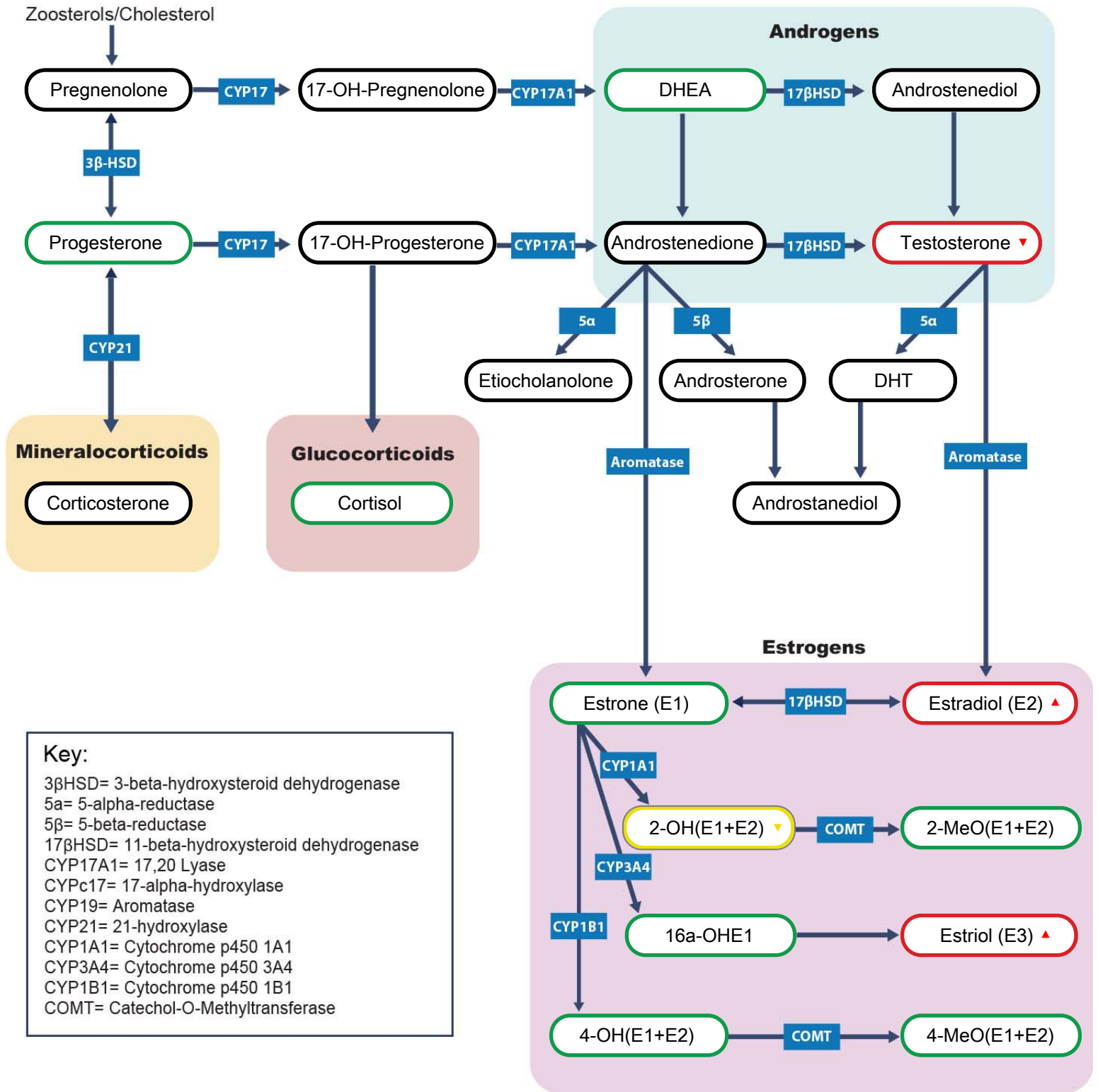
Functional Imbalance Scores

Key < 2 : Low Need for Support 2-3 : Optional Need for Support 4-6 : Moderate Need for Support 7-10 : High Need for Support

	Need For HPA Axis Support	Need For Thyroid Support	Need For Sex Hormone Support	Need For Detoxification Support
	ADRENOCORTEX	THYROID	SEX HORMONES	ESTROGEN METABOLISM
	2	4	4	1
Biomarkers	Cortisol Curve ▼ Morning Cortisol ● DHEA ● DHEA:Cortisol ●	TSH ▲ rT3 ▲ FT3 ● Thyroid Antibodies ●	Estradiol ▲ Testosterone ▼ Progesterone ● Estrone ●	2-OH-E1/E2 ▼ Methylation Activity ▼ 4-OH-E1/E2 ● 2/16 Ratio ●
Therapeutic Support Options	<ul style="list-style-type: none"> Stress Reduction Mindfulness Training HRV Biofeedback Breathwork Training Exercise/Yoga/Tai Chi Herbal Adaptogens Lower Blood Sugar B-Vitamins Phosphoserine Glandulars 	<ul style="list-style-type: none"> Minerals: Se, Zn, Iron Tyrosine Adequate Iodine Stress Reduction Reduce Environmental Exposures Antioxidant Support Assess Medications Smoking Cessation Consider Thyroid HRT 	<ul style="list-style-type: none"> Address Thyroid Imbalance Address HPA Axis Phytoestrogens (for estrogen support) Phytoandrogens (for testosterone support) Consider Glandulars Consider Hormone Precursors Consider BHRT 	<ul style="list-style-type: none"> Methylation Support: B-Vitamins, Mg, Betaine Cruciferous vegetables, berries, rosemary Soy isoflavones, DIM, I3C Bioflavonoids, Glutathione Reduce sugar, stress, environmental toxicity Reduce adiposity Physical activity



Steroidogenic Pathway



Key:
 3βHSD= 3-beta-hydroxysteroid dehydrogenase
 5α= 5-alpha-reductase
 5β= 5-beta-reductase
 17βHSD= 11-beta-hydroxysteroid dehydrogenase
 CYP17A1= 17,20 Lyase
 CYPc17= 17-alpha-hydroxylase
 CYP19= Aromatase
 CYP21= 21-hydroxylase
 CYP1A1= Cytochrome p450 1A1
 CYP3A4= Cytochrome p450 3A4
 CYP1B1= Cytochrome p450 1B1
 COMT= Catechol-O-Methyltransferase

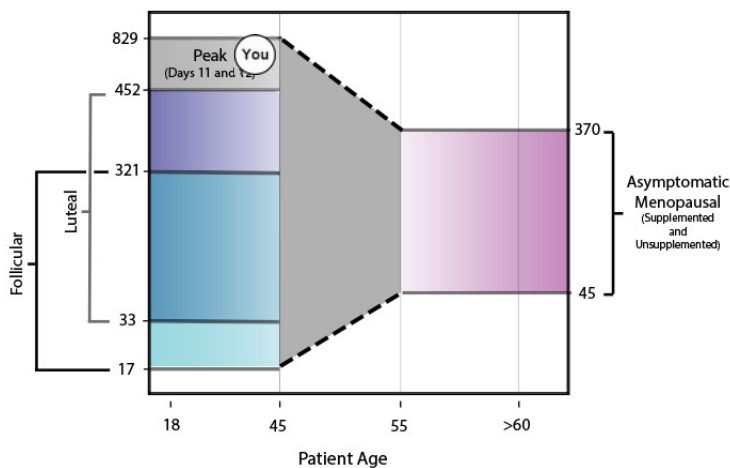


Methodology: EIA, LIA

Salivary Sex Hormones

Progesterone

Progesterone



Reference Range

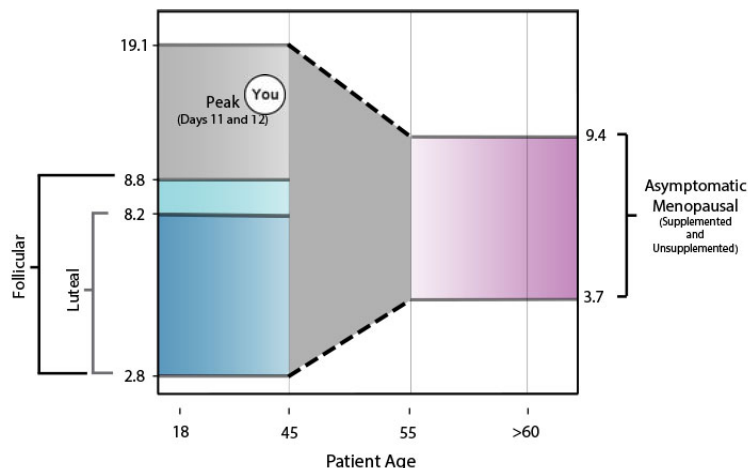
Progesterone

705

See Chart Below

Estrogens

Estradiol (E2)



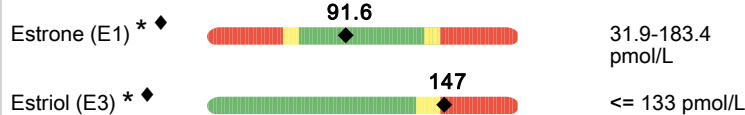
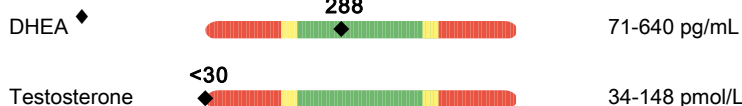
Reference Range

Estradiol (E2)

14.0

See Chart Below

Androgens



*Reference ranges for Estrone and Estriol are based on menopausal patients.

Reference Range Information

Saliva Analyte	Luteal	Follicular	Menopausal	Male	Patient Result
Estrone (pmol/L)	N/A	N/A	31.9 - 183.4	N/A	91.6
Estradiol (pmol/L)	2.8 - 8.2	2.8 - 8.8	3.7 - 9.4	3.1 - 7.4	14.0
Estriol (pmol/L)	N/A	N/A	<=133	N/A	147
Progesterone (pmol/L)	33 - 452	17 - 321	45 - 370	31 - 280	705
Testosterone (pmol/L)	34 - 148	34 - 148	34 - 148	110 - 513	<30
DHEA (pg/mL)	71 - 640	71 - 640	71 - 640	71 - 640	288

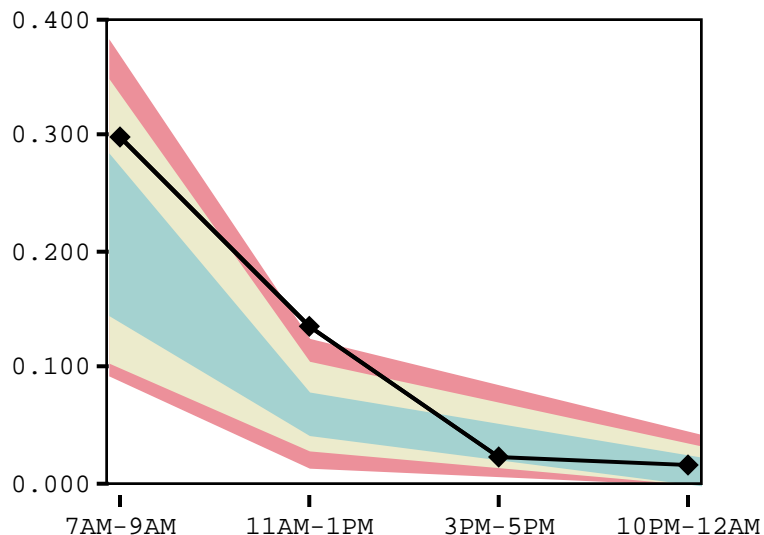
**These reference ranges are based on luteal premenopausal samples. If patient is menopausal, refer to the chart above to determine the appropriate clinical ranges. Each individual is unique and evaluation of hormone status should be within the context of the patient's clinical picture.



Methodology: EIA

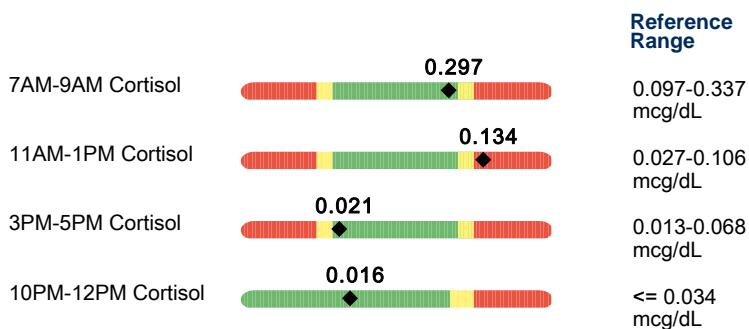
Adrenocortex

Diurnal Cortisol Curve

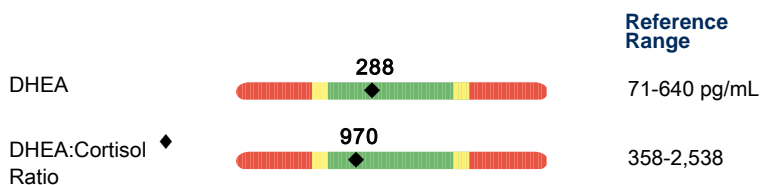


Cortisol Awakening Response

Cortisol, Free (Salivary)



Androgens

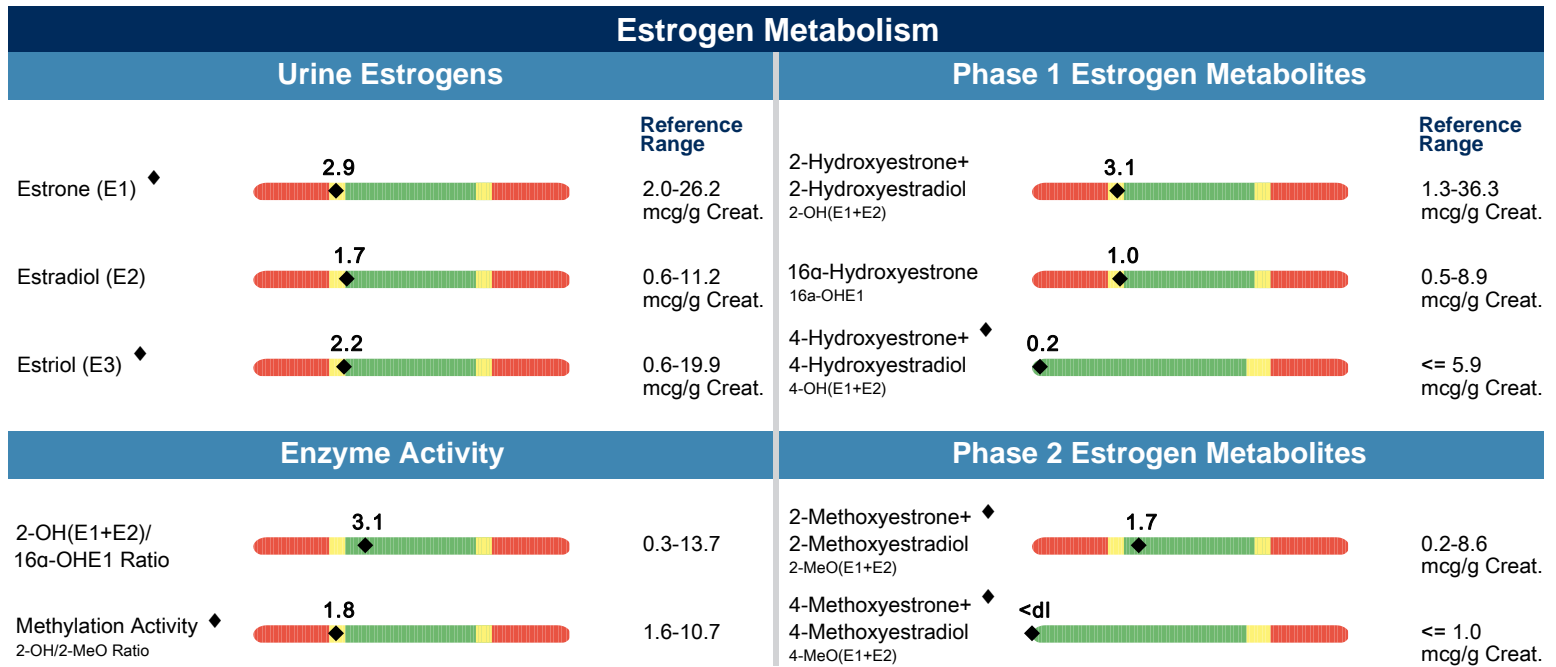


Results

Cortisol, Free (Salivary)	Morning Cortisol 7AM-9AM**	Midday Cortisol 11AM-1PM**	Afternoon Cortisol 3PM-5PM**	Evening Cortisol 10PM-12AM**
Patient Result (mcg/dL) >>	0.297	0.134	0.021	0.016
Reference Range (mcg/dL) **Based on Collection Times	0.097-0.337	0.027-0.106	0.013-0.068	<=0.034
Actual Collection Time	NG*	NG*	NG*	NG*

*NG = Not Given

Methodology: LC/MS/MS



Reference Range Information

Urine Analyte	Premenopause Luteal	Unsupplemented Menopause	Unsupplemented Male	Patient Result
Estrone (mcg/g Creat.)	2 - 26.2	1.1 - 26.2	1.6 - 8.6	2.9
Estradiol (mcg/g Creat.)	0.6 - 11.2	0.6 - 15.4	0.8 - 4.3	1.7
Estriol (mcg/g Creat.)	0.6 - 19.9	0.7 - 30.8	0.3 - 5.1	2.2
2-OH(E1+E2) (mcg/g Creat.)	1.3 - 36.3	0.9 - 43.8	0.7 - 12.5	3.1
16 α -OHE1 (mcg/g Creat.)	0.5 - 8.9	0.4 - 7.7	<=2.0	1.0
4-OH(E1+E2) (mcg/g Creat.)	<=5.9	<=8.8	<=1.6	0.2
2-MeO(E1+E2) (mcg/g Creat.)	0.2 - 8.6	0.3 - 5.9	0.2 - 2.5	1.7
4-MeO(E1+E2) (mcg/g Creat.)	<=1.0	<=1.0	<=1.0	<dl
2-OH(E1+E2)/16 α -OHE1 Ratio	0.3 - 13.7	0.3 - 15.1	0.8 - 12.9	3.1
2-OH/2-MeO Ratio	1.6 - 10.7	0.4 - 11.6	1.0 - 8.8	1.8

**These reference ranges are based on luteal premenopausal samples. If patient is menopausal, refer to the chart above to determine the appropriate clinical ranges. Each individual is unique and evaluation of hormone status should be within the context of the patient's clinical picture.



Methodology: Chemiluminescent, RIA

Comprehensive Thyroid Assessment

Central Regulation

Thyroid Stimulating Hormone (TSH)		Reference Range 0.40-2.50 microIU/mL	Free Thyroxine (FT4)		Reference Range 0.61-1.12 ng/dL
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Peripheral Regulation

Free Triiodothyronine (FT3)		Reference Range 2.5-3.9 pg/mL	Reverse T3 (rT3)		Reference Range 9.0-35.0 ng/dL
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Thyroid Antibodies

Anti-Thyroglobulin Antibody (Anti-TG)		Reference Range <4.0 IU/mL	Anti-Thyroid Peroxidase (Anti-TPO)		Reference Range <9 IU/mL
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Thyroid Metabolism-At-A-Glance

