

Specimen Details

Date collected: 10/18/2018 0928 Local
Date received: 10/18/2018
Date entered: 10/18/2018
Date reported: 10/25/2018 1611 ET

General Comments & Additional Information

Total Volume: Not Provided

Fasting: Yes

Ordered Items

NMR LipoProfile; CBC With Differential/Platelet; Comp. Metabolic Panel (14); Lipid Panel; Thyroid Panel; Vitamin B12 and Folate; Insulin and C-Peptide, Serum; Hemoglobin A1c; TSH; Estradiol; IGF-1; Reverse T3, Serum; Fructosamine; Lipoprotein (a); C-Reactive Protein, Cardiac; Lp-PLA2 Activity; Tumor Necrosis Factor-Alpha; Interleukin-6, Serum; Homocyst(e)ine, Plasma; Uric Acid; GGT; Growth Hormone, Serum; Ferritin, Serum; Glucagon, Plasma; Triiodothyronine (T3), Free; Fatty Acids, Free (Nonester); Venipuncture

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
NMR LipoProfile					
LDL Particle Number					01
LDL-P	634		nmol/L	<1000	01
			Low	< 1000	
			Moderate	1000 - 1299	
			Borderline-High	1300 - 1599	
			High	1600 - 2000	
			Very High	> 2000	
Lipids					01
LDL-C	61		mg/dL	0 - 109	
			Optimal	< 100	
			Above optimal	100 - 129	
			Borderline	130 - 159	
			High	160 - 189	
			Very high	> 189	
Comment:					01
	LDL-C is inaccurate if patient is non-fasting.				
HDL-C	53		mg/dL	>39	01
Triglycerides	38		mg/dL	0 - 89	01
Cholesterol, Total	122		mg/dL	100 - 169	01
LDL and HDL Particles					01
HDL-P (Total)	25.9	Low	umol/L	>=30.5	01
Small LDL-P	140		nmol/L	<=527	01
LDL Size	21.0		nm	>20.5	01

**** INTERPRETATIVE INFORMATION****

PARTICLE CONCENTRATION AND SIZE

<--Lower CVD Risk Higher CVD Risk-->

LDL AND HDL PARTICLES	Percentile	in Reference Population
HDL-P (total)	High	75th 50th 25th Low
	>34.9	34.9 30.5 26.7 <26.7
Small LDL-P	Low	25th 50th 75th High

Patient ID:

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
	<117	117	527	839	>839
LDL Size	<-Large (Pattern A)->		<-Small (Pattern B)->		
	23.0	20.6	20.5	19.0	

Comment: 01

Small LDL-P and LDL Size are associated with CVD risk, but not after LDL-P is taken into account.

These assays were developed and their performance characteristics determined by LipoScience. These assays have not been cleared by the US Food and Drug Administration. The clinical utility of these laboratory values have not been fully established.

Insulin Resistance Score 01

LP-IR Score <25 <=45 01

INSULIN RESISTANCE MARKER

<--Insulin Sensitive Insulin Resistant-->
Percentile in Reference Population

Insulin Resistance Score

LP-IR Score	Low	25th	50th	75th	High
	<27	27	45	63	>63

Comment: 01

LP-IR Score is inaccurate if patient is non-fasting.

The LP-IR score is a laboratory developed index that has been associated with insulin resistance and diabetes risk and should be used as one component of a physician's clinical assessment. The LP-IR score listed above has not been cleared by the US Food and Drug Administration.

CBC With Differential/Platelet

WBC	5.8	x10E3/uL	3.4 - 10.8	02
RBC	4.53	x10E6/uL	3.77 - 5.28	02
Hemoglobin	13.3	g/dL	11.1 - 15.9	02
Hematocrit	40.4	%	34.0 - 46.6	02
MCV	89	fL	79 - 97	02
MCH	29.4	pg	26.6 - 33.0	02
MCHC	32.9	g/dL	31.5 - 35.7	02
RDW	13.8	%	12.3 - 15.4	02
Platelets	237	x10E3/uL	150 - 379	02
Neutrophils	59	%	Not Estab.	02
Lymphs	32	%	Not Estab.	02
Monocytes	7	%	Not Estab.	02
Eos	1	%	Not Estab.	02
Basos	1	%	Not Estab.	02
Neutrophils (Absolute)	3.4	x10E3/uL	1.4 - 7.0	02
Lymphs (Absolute)	1.9	x10E3/uL	0.7 - 3.1	02
Monocytes (Absolute)	0.4	x10E3/uL	0.1 - 0.9	02
Eos (Absolute)	0.1	x10E3/uL	0.0 - 0.4	02
Baso (Absolute)	0.0	x10E3/uL	0.0 - 0.3	02

Patient ID:

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
Immature Granulocytes	0		%	Not Estab.	02
Immature Grans (Abs)	0.0		x10E3/uL	0.0 - 0.1	02
Comp. Metabolic Panel (14)					
Glucose	87		mg/dL	65 - 99	02
BUN	15		mg/dL	5 - 18	02
Creatinine	0.78		mg/dL	0.57 - 1.00	02
eGFR If NonAfricn Am				>59	
Unable to calculate GFR. Age and/or sex not provided or age <18 years old.					
eGFR If Africn Am				>59	
Unable to calculate GFR. Age and/or sex not provided or age <18 years old.					
BUN/Creatinine Ratio	19			10 - 22	
Sodium	139		mmol/L	134 - 144	02
Potassium	4.2		mmol/L	3.5 - 5.2	02
Chloride	109	High	mmol/L	96 - 106	02
Carbon Dioxide, Total	18	Low	mmol/L	20 - 29	02
Calcium	9.1		mg/dL	8.9 - 10.4	02
Protein, Total	6.4		g/dL	6.0 - 8.5	02
Albumin	4.2		g/dL	3.5 - 5.5	02
Globulin, Total	2.2		g/dL	1.5 - 4.5	
A/G Ratio	1.9			1.2 - 2.2	
Bilirubin, Total	0.5		mg/dL	0.0 - 1.2	02
Alkaline Phosphatase	69		IU/L	49 - 108	02
AST (SGOT)	14		IU/L	0 - 40	02
ALT (SGPT)	15		IU/L	0 - 24	02
Lipid Panel					
Cholesterol, Total	125		mg/dL	100 - 169	02
Triglycerides	37		mg/dL	0 - 89	02
HDL Cholesterol	57		mg/dL	>39	02
VLDL Cholesterol Cal	7		mg/dL	5 - 40	
LDL Cholesterol Calc	61		mg/dL	0 - 109	
Thyroid Panel					
Thyroxine (T4)	6.6		ug/dL	4.5 - 12.0	02
T3 Uptake	28		%	23 - 35	02
Free Thyroxine Index	1.8			1.2 - 4.9	
Vitamin B12 and Folate					
Vitamin B12	716		pg/mL	232 - 1245	02
Folate (Folic Acid), Serum	8.7		ng/mL	>3.0	02
Note:					02
A serum folate concentration of less than 3.1 ng/mL is					

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
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considered to represent clinical deficiency.

Insulin and C-Peptide, Serum

Insulin	13.4		uIU/mL	2.6 - 24.9	02
C-Peptide, Serum	2.6		ng/mL	1.1 - 4.4	02

C-Peptide reference interval is for fasting patients.

Hemoglobin A1c

Hemoglobin A1c	4.9		%	4.8 - 5.6	02
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Please Note: 02

Prediabetes: 5.7 - 6.4
 Diabetes: >6.4
 Glycemic control for adults with diabetes: <7.0

TSH	1.650		uIU/mL	0.450 - 4.500	02
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Estradiol	26.9		pg/mL		02
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Adult Female:
 Follicular phase 12.5 - 166.0
 Ovulation phase 85.8 - 498.0
 Luteal phase 43.8 - 211.0
 Postmenopausal <6.0 - 54.7
 Pregnancy
 1st trimester 215.0 - >4300.0
 Girls (1-10 years) 6.0 - 27.0

Roche ECLIA methodology

IGF-1

Insulin-Like Growth Factor I	389		ng/mL		01
AGE	FEMALE		AGE	FEMALE	
<1 year	18 - 126		11 years	93 - 453	
1 year	20 - 132		12 years	105 - 499	
2 years	22 - 145		13 years	116 - 533	
3 years	26 - 164		14 years	123 - 552	
4 years	31 - 188		15 years	127 - 554	
5 years	36 - 214		16 years	128 - 542	
6 years	42 - 240		17 years	125 - 517	
7 years	49 - 267		18 years	121 - 486	
8 years	57 - 305		19 years	114 - 451	
9 years	67 - 349		20 years	108 - 416	
10 years	80 - 400				

Reverse T3, Serum	15.3		ng/dL	9.2 - 24.1	01
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Fructosamine	230		umol/L	0 - 285	01
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Published reference interval for apparently healthy subjects between age 20 and 60 is 205 - 285 umol/L and in a poorly controlled diabetic population is 228 - 563 umol/L with a mean of 396 umol/L.

Patient ID:

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
Lipoprotein (a)	3		nmol/L	<75	01
	Note: Values greater than or equal to 75 nmol/L may indicate an independent risk factor for CHD, but must be evaluated with caution when applied to non-Caucasian populations due to the influence of genetic factors on Lp(a) across ethnicities.				
C-Reactive Protein, Cardiac	0.25		mg/L	0.00 - 3.00	02
	Relative Risk for Future Cardiovascular Event				
			Low	<1.00	
			Average	1.00 - 3.00	
			High	>3.00	
Lp-PLA2 Activity	151		nmol/min/mL	0 - 224	01
			Reduced Risk	<225	
			Increased Risk	>224	
Tumor Necrosis Factor-Alpha					
Tumor Necrosis Factor-Alpha	0.8		pg/mL	0.0 - 2.2	01
Comment:					01
	Results of this test are labeled for research purposes only by the assay's manufacturer. The performance characteristics of this assay have not been established by the manufacturer. The result should not be used for treatment or for diagnostic purposes without confirmation of the diagnosis by another medically established diagnostic product or procedure. The performance characteristics were determined by LabCorp.				
Interleukin-6, Serum	<0.7		pg/mL	0.0 - 15.5	01
	Results for this test are for research purposes only by the assay's manufacturer. The performance characteristics of this product have not been established. Results should not be used as a diagnostic procedure without confirmation of the diagnosis by another medically established diagnostic product or procedure.				
Homocyst(e)ine, Plasma	6.0		umol/L	0.0 - 15.0	02
Uric Acid					
Uric Acid	3.6		mg/dL	2.4 - 6.3	02
Please Note:					02
	Therapeutic target for gout patients: <6.0				
GGT	8		IU/L	0 - 60	02
Growth Hormone, Serum	5.8		ng/mL	0.0 - 10.0	01
Ferritin, Serum	26		ng/mL	15 - 77	02
Glucagon, Plasma					

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Glucagon, Plasma	32	Low	pg/mL	50 - 150	01
Comment: Results of this test are labeled for research purposes only by the assay's manufacturer. The performance characteristics of this assay have not been established by the manufacturer. The result should not be used for treatment or for diagnostic purposes without confirmation of the diagnosis by another medically established diagnostic product or procedure. The performance characteristics were determined by LabCorp.					01
Triiodothyronine (T3), Free	3.6		pg/mL	2.3 - 5.0	02
Fatty Acids, Free (Nonester)	0.5		mEq/L	0.1 - 0.6	01

01	BN	LabCorp Burlington 1447 York Court, Burlington, NC 27215-3361	Dir: William F Hancock, MD
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For inquiries, the physician may contact **Branch: 888-522-2677 Lab: 800-762-4344**