Specimen Details
Date collected: 10/18/2018 0929 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	**1096**	**High**	nmol/L	<1000	01
			Low	**< 1000**	
			Moderate	**1000 - 1299**	
			Borderline-High	**1300 - 1599**	
			High	**1600 - 2000**	
			Very High	**> 2000**	
Lipids					01
LDL-C	98		mg/dL	0 - 109	
			Optimal	< 100	
			Above optimal	100 - 129	
			Borderline	130 - 159	
			High	160 - 189	
			Very high	> 189	
Comment: LDL-C is inaccurate if patient is non-fasting.					01
HDL-C	57		mg/dL	>39	01
Triglycerides	42		mg/dL	0 - 89	01
Cholesterol, Total	163		mg/dL	100 - 169	01
LDL and HDL Particles					01
HDL-P (Total)	**29.3**	**Low**	umol/L	>=30.5	01
Small LDL-P	274		nmol/L	<=527	01
LDL Size	21.1		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	4.6	x10E3/uL	3.4 - 10.8	02
RBC	4.63	x10E6/uL	3.77 - 5.28	02
Hemoglobin	13.9	g/dL	11.1 - 15.9	02
Hematocrit	41.7	%	34.0 - 46.6	02
MCV	90	fL	79 - 97	02
MCH	30.0	pg	26.6 - 33.0	02
MCHC	33.3	g/dL	31.5 - 35.7	02
RDW	14.1	%	12.3 - 15.4	02
Platelets	227	x10E3/uL	150 - 379	02
Neutrophils	61	%	Not Estab.	02
Lymphs	30	%	Not Estab.	02
Monocytes	7	%	Not Estab.	02
Eos	2	%	Not Estab.	02
Basos	0	%	Not Estab.	02
Neutrophils (Absolute)	2.7	x10E3/uL	1.4 - 7.0	02
Lymphs (Absolute)	1.4	x10E3/uL	0.7 - 3.1	02
Monocytes(Absolute)	0.3	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

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Immature Granulocytes	0		%	Not Estab.	02
Immature Grans (Abs)	0.0		x10E3/uL	0.0 - 0.1	02
Comp. Metabolic Panel (14)					
Glucose	88		mg/dL	65 - 99	02
BUN	**20**	**High**	mg/dL	5 - 18	02
Creatinine	0.83		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	**24**	**High**		10 - 22	
Sodium	138		mmol/L	134 - 144	02
Potassium	3.9		mmol/L	3.5 - 5.2	02
Chloride	103		mmol/L	96 - 106	02
Carbon Dioxide, Total	20		mmol/L	20 - 29	02
Calcium	9.3		mg/dL	8.9 - 10.4	02
Protein, Total	7.1		g/dL	6.0 - 8.5	02
Albumin	4.8		g/dL	3.5 - 5.5	02
Globulin, Total	2.3		g/dL	1.5 - 4.5	
A/G Ratio	2.1			1.2 - 2.2	
Bilirubin, Total	0.8		mg/dL	0.0 - 1.2	02
Alkaline Phosphatase	77		IU/L	49 - 108	02
AST (SGOT)	19		IU/L	0 - 40	02
ALT (SGPT)	22		IU/L	0 - 24	02
Lipid Panel					
Cholesterol, Total	165		mg/dL	100 - 169	02
Triglycerides	42		mg/dL	0 - 89	02
HDL Cholesterol	62		mg/dL	>39	02
VLDL Cholesterol Cal	8		mg/dL	5 - 40	
LDL Cholesterol Calc	95		mg/dL	0 - 109	
Thyroid Panel					
Thyroxine (T4)	7.4		ug/dL	4.5 - 12.0	02
T3 Uptake	34		%	23 - 35	02
Free Thyroxine Index	2.5			1.2 - 4.9	
Vitamin B12 and Folate					
Vitamin B12	1176		pg/mL	232 - 1245	02
Folate (Folic Acid), Serum	9.4		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
considered to represent clinical deficiency.					
Insulin and C-Peptide, Serum					
Insulin	4.5		uIU/mL	2.6 - 24.9	02
C-Peptide, Serum	1.3		ng/mL	1.1 - 4.4	02
C-Peptide reference interval is for fasting patients.					
Hemoglobin A1c					
Hemoglobin A1c	4.8		%	4.8 - 5.6	02
Please Note:					02
Prediabetes: 5.7 - 6.4					
Diabetes: >6.4					
Glycemic control for adults with diabetes: <7.0					
TSH	1.550		uIU/mL	0.450 - 4.500	02
Estradiol	38.5		pg/mL		02
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: 321 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	18.4		ng/dL	9.2 - 24.1	01
Fructosamine	225		umol/L	0 - 285	01
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.					

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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	0.17		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	197		nmol/min/mL	0 - 224	01
Reduced Risk				<225	
Increased Risk				>224	
Tumor Necrosis Factor-Alpha					
Tumor Necrosis Factor-Alpha	0.9		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	6.5		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	11		IU/L	0 - 60	02
Growth Hormone, Serum	4.2		ng/mL	0.0 - 10.0	01
Ferritin, Serum	34		ng/mL	15 - 77	02
Glucagon, Plasma					

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Glucagon, Plasma	**37**	**Low**	pg/mL	50 - 150	01
Comment:					01
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Triiodothyronine (T3), Free	3.0		pg/mL	2.3 - 5.0	02
Fatty Acids, Free (Nonester)	**0.7**	**High**	mEq/L	0.1 - 0.6	01

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