Specimen Details
Date collected: 10/20/2017 1028 Local
Date received: 10/20/2017
Date entered: 10/20/2017
Date reported: 10/25/2017 0715 ET

General Comments & Additional Information

Total Volume: Not Provided **Fasting:** Yes

Ordered Items

NMR LipoProfile; Vitamin A and E; CBC With Differential/Platelet; Comp. Metabolic Panel (14); Lipid Panel; Iron and TIBC; Heavy Metals Profile I, Blood; Lp-PLA2 Activity; Hemoglobin A1c; Cortisol; IGF-1; Zinc, RBC; Reverse T3, Serum; Vitamin D, 25-Hydroxy; C-Reactive Protein, Cardiac; Thyroid Cascade Profile; Homocyst(e)ine, Plasma; Uric Acid, Serum; GGT; Insulin; Ferritin, Serum; Triiodothyronine,Free,Serum; Apolipoprotein A-1; Fatty Acids, Free (Nonester); Apolipoprotein B; Venipuncture

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
NMR LipoProfile					
LDL Particle Number					01
LDL-P	**1279**	**High**	nmol/L	<1000	01
			Low	**< 1000**	
			Moderate	**1000 - 1299**	
			Borderline-High	**1300 - 1599**	
			High	**1600 - 2000**	
			Very High	**> 2000**	
Lipids					01
LDL-C	**107**	**High**	mg/dL	0 - 99	
			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	54		mg/dL	>39	01
Triglycerides	95		mg/dL	0 - 149	01
Cholesterol, Total	180		mg/dL	100 - 199	01
LDL and HDL Particles					01
HDL-P (Total)	35.0		umol/L	>=30.5	01
Small LDL-P	**581**	**High**	nmol/L	<=527	01
LDL Size	21.2		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

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	**55**	**High**		<=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.					
Vitamin A and E					
Vitamin A, Serum	61		ug/dL	24 - 85	01
Vitamin E(Alpha Tocopherol)	13.2		mg/L	5.3 - 17.5	01
CBC With Differential/Platelet					
WBC	5.6		x10E3/uL	3.4 - 10.8	02
RBC	5.47		x10E6/uL	4.14 - 5.80	02
Hemoglobin	16.5		g/dL	12.6 - 17.7	02
Hematocrit	47.5		%	37.5 - 51.0	02
MCV	87		fL	79 - 97	02
MCH	30.2		pg	26.6 - 33.0	02
MCHC	34.7		g/dL	31.5 - 35.7	02
RDW	14.2		%	12.3 - 15.4	02
Platelets	239		x10E3/uL	150 - 379	02
Neutrophils	49		%	Not Estab.	02
Lymphs	40		%	Not Estab.	02
Monocytes	6		%	Not Estab.	02
Eos	4		%	Not Estab.	02
Basos	1		%	Not Estab.	02
Neutrophils (Absolute)	2.7		x10E3/uL	1.4 - 7.0	02

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
Lymphs (Absolute)	2.2		x10E3/uL	0.7 - 3.1	02
Monocytes(Absolute)	0.4		x10E3/uL	0.1 - 0.9	02
Eos (Absolute)	0.2		x10E3/uL	0.0 - 0.4	02
Baso (Absolute)	0.0		x10E3/uL	0.0 - 0.2	02
Immature Granulocytes	0		%	Not Estab.	02
Immature Grans (Abs)	0.0		x10E3/uL	0.0 - 0.1	02
Comp. Metabolic Panel (14)					
Glucose, Serum	87		mg/dL	65 - 99	02
BUN	17		mg/dL	6 - 24	02
Creatinine, Serum	0.92		mg/dL	0.76 - 1.27	02
eGFR If NonAfricn Am	104		mL/min/1.73	>59	
eGFR If Africn Am	120		mL/min/1.73	>59	
BUN/Creatinine Ratio	18			9 - 20	
Sodium, Serum	139		mmol/L	134 - 144	02
Potassium, Serum	4.4		mmol/L	3.5 - 5.2	02
Chloride, Serum	100		mmol/L	96 - 106	02
Carbon Dioxide, Total	25		mmol/L	18 - 29	02
Calcium, Serum	9.2		mg/dL	8.7 - 10.2	02
Protein, Total, Serum	6.7		g/dL	6.0 - 8.5	02
Albumin, Serum	4.1		g/dL	3.5 - 5.5	02
Globulin, Total	2.6		g/dL	1.5 - 4.5	
A/G Ratio	1.6			1.2 - 2.2	
Bilirubin, Total	0.6		mg/dL	0.0 - 1.2	02
Alkaline Phosphatase, S	48		IU/L	39 - 117	02
AST (SGOT)	26		IU/L	0 - 40	02
ALT (SGPT)	36		IU/L	0 - 44	02
Lipid Panel					
Cholesterol, Total	179		mg/dL	100 - 199	02
Triglycerides	88		mg/dL	0 - 149	02
HDL Cholesterol	53		mg/dL	>39	02
VLDL Cholesterol Cal	18		mg/dL	5 - 40	
LDL Cholesterol Calc	**108**	**High**	mg/dL	0 - 99	
Iron and TIBC					
Iron Bind.Cap.(TIBC)	358		ug/dL	250 - 450	
UIBC	259		ug/dL	111 - 343	02
Iron, Serum	99		ug/dL	38 - 169	02
Iron Saturation	28		%	15 - 55	
Heavy Metals Profile I, Blood					
Lead, Blood	None Detected		ug/dL	0 - 19	01
			Environmental Exposure:		

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
			WHO Recommendation	<20	
			Occupational Exposure:		
			OSHA Lead Std	40	
			BEI	30	
			Detection Limit =	1	
Arsenic, Blood	10		ug/L	2 - 23	01
			Detection Limit =	1	
Mercury, Blood	None Detected		ug/L	0.0 - 14.9	01
			Environmental Exposure:	<15.0	
			Occupational Exposure:		
			BEI - Inorganic Mercury:	15.0	
			Detection Limit =	1.0	

Lp-PLA2 Activity

Lp-PLA2 Activity	63		nmol/min/mL	<75	03

Relative Risk: LOW
Based on the documented clinical utility of Lp-PLA2 Activity to assess risk of CHD (1), the following cut-off has been defined for Lp-PLA2 Activity: A cut-off of >=75 nmoL/min/mL defines a population with increased relative risk of developing CHD. (Reference: 1-The Lp-PLA2 Studies Collaboration. Lancet. 2010; 375: 1536-1544).
This test is performed by a Liquid Chromatography-Tandem Mass Spectrometry (LC/MS/MS) method. This test was developed and its performance characteristics determined by the Cleveland HeartLab, Inc. It has not been cleared or approved by the U.S. FDA. The Cleveland HeartLab is regulated under Clinical Laboratory Improvement Amendments (CLIA) as qualified to perform high-complexity testing. This test is used for clinical purposes. It should not be regarded as investigational or for research.

PDF Image	.				03

Hemoglobin A1c

Hemoglobin A1c	5.1		%	4.8 - 5.6	02
Please Note:					02

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

Cortisol	8.2		ug/dL		02
			Cortisol AM	6.2 - 19.4	
			Cortisol PM	2.3 - 11.9	

IGF-1

Insulin-Like Growth Factor I	172		ng/mL	83 - 233	01

Zinc, RBC	1326		ug/dL	878 - 1660	01
	Please note reference interval change				

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
Reverse T3, Serum	15.6		ng/dL	9.2 - 24.1	01
Vitamin D, 25-Hydroxy	42.7		ng/mL	30.0 - 100.0	02

Vitamin D deficiency has been defined by the Institute of Medicine and an Endocrine Society practice guideline as a level of serum 25-OH vitamin D less than 20 ng/mL (1,2). The Endocrine Society went on to further define vitamin D insufficiency as a level between 21 and 29 ng/mL (2).

1. IOM (Institute of Medicine). 2010. Dietary reference intakes for calcium and D. Washington DC: The National Academies Press.
2. Holick MF, Binkley NC, Bischoff-Ferrari HA, et al. Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. JCEM. 2011 Jul; 96(7):1911-30.

C-Reactive Protein, Cardiac	1.24		mg/L	0.00 - 3.00	02
Relative Risk for Future Cardiovascular Event					
Low				<1.00	
Average				1.00 - 3.00	
High				>3.00	
Thyroid Cascade Profile					
TSH	2.430		uIU/mL	0.450 - 4.500	02
Homocyst(e)ine, Plasma	8.2		umol/L	0.0 - 15.0	02
Uric Acid, Serum					
Uric Acid, Serum	4.7		mg/dL	3.7 - 8.6	02
Please Note:					02
Therapeutic target for gout patients: <6.0					
GGT	17		IU/L	0 - 65	02
Insulin	6.7		uIU/mL	2.6 - 24.9	02
Ferritin, Serum	159		ng/mL	30 - 400	02
Triiodothyronine,Free,Serum	3.1		pg/mL	2.0 - 4.4	02
Apolipoprotein A-1	158		mg/dL	101 - 178	01
Fatty Acids, Free (Nonester)	0.4		mEq/L	0.1 - 0.6	01
Apolipoprotein B	85		mg/dL	52 - 135	01

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For inquiries, the physician may contact **Branch: 888-522-2677 Lab: 800-762-4344**

PATIENT INFORMATION		SPECIMEN INFORMATION	PRACTITIONER INFORMATION
	Age	Order ID	Name **LABCORP LABCORP**
Patient ID	Gender **Male**	Collection Date/Time **10/20/2017, 10:28 AM**	
Fasting Status **Fasting**	DOB	Received Date/Time **10/24/2017, 12:02 PM**	Address **5005 SOUTH 40TH STREET** **SUITE 1200** **PHOENIX, AZ 85040**
Ethnicity	BMI	Report Date/Time **10/25/2017, 06:42 AM**	

INFLAMMATION

	In Range	Out of Range	Flag**	Relative Risk	Reference Range	Units	Previous Result	Date
Lp-PLA$_2$ Activity(1)	63			LOW	<75	nmol/ min/mL		

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Comments

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**Flags: H = Out of Range High; L = Out of Range Low; CH = Critical High; CL = Critical Low