Specimen Details
Date collected: 03/22/2019 0842 Local
Date received: 03/22/2019
Date entered: 03/22/2019
Date reported: 03/25/2019 0405 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; Hemoglobin A1c; Cortisol; C-Reactive Protein, Cardiac; Insulin; Venipuncture

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
NMR LipoProfile					
LDL Particle Number					01
LDL-P	**1017**	**High**	nmol/L	<1000	01
			Low	**< 1000**	
			Moderate	**1000 - 1299**	
			Borderline-High	**1300 - 1599**	
			High	**1600 - 2000**	
			Very High	**> 2000**	
Lipids					01
LDL-C	70		mg/dL	0 - 99	01
			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	**26**	**Low**	mg/dL	>39	01
Triglycerides	**207**	**High**	mg/dL	0 - 149	01
Cholesterol, Total	137		mg/dL	100 - 199	01
LDL and HDL Particles					01
HDL-P (Total)	**20.5**	**Low**	umol/L	>=30.5	01
Small LDL-P	**826**	**High**	nmol/L	<=527	01
LDL Size	**19.8**	**Low**	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**
	<117	**117**	**527**	**839**	**>839**
LDL Size	**<-Large (Pattern A)->**		**<-Small (Pattern B)->**		

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
	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 93 **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.

CBC With Differential/Platelet

WBC	3.9	K/uL	3.2 - 10.6	02
RBC	5.63	M/uL	3.98 - 5.98	02
Hemoglobin	16.6	g/dL	12.5 - 18.0	02
Hematocrit	49.5	%	36.9 - 52.1	02
MCV	87.9	fL	80.6 - 97.6	02
MCH	29.5	pg	27.3 - 33.7	02
MCHC	33.5	g/dL	33.4 - 35.3	02
RDW	13.9	%	12.5 - 15.3	02
Platelets	266	K/uL	140 - 440	02
Neutrophils	50.0	%	41.0 - 81.0	02
Lymphs	39.2	%	11.0 - 44.0	02
Monocytes	8.2	%	4.0 - 11.0	02
Eos	1.5	%	0.0 - 6.0	02
Basos	0.8	%	0.0 - 1.0	02
Neutrophils (Absolute)	2.0	K/uL	1.8 - 6.8	02
Lymphs (Absolute)	1.5	K/uL	1.0 - 3.0	02
Monocytes(Absolute)	0.3	K/uL	0.2 - 1.0	02
Eos (Absolute)	0.1	K/uL	0.0 - 0.4	02
Baso (Absolute)	0.0	K/uL	0.0 - 0.1	02
Immature Granulocytes	0.3	%	0.0 - 8.0	02

Patient ID:

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
Immature Grans (Abs)	0.0		K/uL	0.0 - 1.9	02
NRBC	0		/100WBC		02
Hematology Comments:					02
RDW SD	44.9		fL	N	
MEAN PLATELET VOLUME	10.6		fL	6.2-9.8 H	
Comp. Metabolic Panel (14)					
Glucose	79		mg/dL	70 - 110	02
BUN	13		mg/dL	7 - 18	02
Creatinine	0.86		mg/dL	0.60 - 1.30	02
eGFR If NonAfricn Am	98.00		mL/min		02
GFR calculation is only for patients with chronic renal insufficiency. Units of measure are ml/min/1.73 m2.					
Average GFR for healthy adults is >60 ml/min/1.73 m2					
Chronic kidney disease if GFR is 15-60 ml/min/1.73 m2					
Kidney failure if GFR is <15 ml/min/1.73 m2					
MDRD calculation used. Refer to http://www.nkdep.nih.gov/healthprofessionals/index.htm					
eGFR If Africn Am	126.04		mL/min		02
GFR calculation is only for patients with chronic renal insufficiency. Units of measure are ml/min/1.73 m2.					
Average GFR for healthy adults is >60 ml/min/1.73 m2					
Chronic kidney disease if GFR is 15-60 ml/min/1.73 m2					
Kidney failure if GFR is <15 ml/min/1.73 m2					
MDRD calculation used. Refer to http://www.nkdep.nih.gov/healthprofessionals/index.htm					
BUN/Creatinine Ratio	15.1		Ratio	7.0 - 24.0	02
Sodium	141		mmol/L	136 - 145	02
Potassium	4.7		mmol/L	3.5 - 5.1	02
Chloride	101		mmol/L	98 - 107	02
Carbon Dioxide, Total	31		mmol/L	23 - 32	02
Calcium	9.1		mg/dL	8.5 - 10.1	02
Protein, Total	6.9		g/dL	6.4 - 8.2	02
Albumin	4.1		g/dL	3.4 - 5.0	02
Globulin, Total	2.8		g/dL	1.8 - 3.5	02
A/G Ratio	1.5				02
Bilirubin, Total	0.7		mg/dL	0.1 - 1.2	02
Alkaline Phosphatase	58		U/L	50 - 136	02
AST (SGOT)	23		U/L	5 - 41	02
ALT (SGPT)	18		U/L	10 - 56	02
Lipid Panel					
Cholesterol, Total	132		mg/dL	0 - 200	02

Patient ID:

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
Triglycerides	**191**	**High**	mg/dL	0 - 150	02
HDL Cholesterol	**31**	**Low**	mg/dL	40 - 60	02

Male patients:
No risk >55 mg/dL
Moderate risk = 40-55 mg/dL
High risk <40 mg/dL

Female patients:
No risk >65 mg/dL
Moderate risk = 45-65 mg/dL
High risk <45 mg/dL

National Cholesterol Education Program (NCEP Guidelines:
<40mg/dL = low HDL cholesterol (major risk of CHD)
>60 mg/dL = high HDL cholesterol (negative risk factor for CHD)

VLDL Cholesterol Cal	**38.2**	**High**	mg/dL	2 - 30	02
LDL Cholesterol Calc	63		mg/dL	0 - 130	02

Adults:
Desirable LDL <130 mg/dl
Borderline LDL = 130-160 mg/dl
High Risk LDL >160 mg/dl

Children <19 Years of Age:
Desirable LDL <110 mg/dl
Borderline LDL = 110-130 mg/dl
High Risk LDL >130 mg/dl

Hemoglobin A1c	4.6		%	4.2 - 6.3	02

For management of known diabetes, Hgb A1c level goals must be individualized for each patient. Age, type of diabetes, presence of comorbid diseases, and brittleness of the disease must be considered. In general, a level of 7% is a reasonable goal.

Performance characteristics for this method have not been established or approved by the FDA for the diagnosis of diabetes.

Cortisol	10.0		ug/dL		03
			Cortisol AM	6.2 - 19.4	
			Cortisol PM	2.3 - 11.9	
C-Reactive Protein, Cardiac	**3.88**	**High**	mg/L	0.00 - 3.00	03
	Relative Risk for Future Cardiovascular Event				
			Low	**<1.00**	

Patient ID:

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
			Average	1.00 - 3.00	
			High	>3.00	
Insulin	5.8		uIU/mL	2.6 - 24.9	03

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