

Patient Details

DOB: 10/10/1956
 Age(y/m/d): 061/05/04
 Gender: M SSN:
 Patient ID:

Specimen Details

Date collected: 03/14/2018 1126 Local
 Date received: 03/14/2018
 Date entered: 03/14/2018
 Date reported: 03/19/2018 1210 ET

Physician Details

Ordering: R THOMAS
 Referring:
 ID:
 NPI: 1831299809

General Comments & Additional Information

Total Volume: Not Provided

Fasting: Yes

Ordered Items

NMR LipoProf+Graph; TSH+T4F+T3Free; Comp. Metabolic Panel (14); CBC, Platelet, No Differential; Iron and TIBC; Testosterone, Free+Total LC/MS; Dihydrotestosterone; Hemoglobin A1c; Cortisol; DHEA, Serum; Luteinizing Hormone(LH), S; Prolactin; Prostate-Specific Ag, Serum; Reverse T3, Serum; Vitamin D, 25-Hydroxy; C-Reactive Protein, Cardiac; Estradiol, Sensitive; Homocyst(e)ine, Plasma; Uric Acid, Serum; Phosphorus, Serum; GGT; Vitamin B12; Magnesium, Serum; Progesterone; Ferritin, Serum; Venipuncture

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
NMR LipoProf+Graph					
LDL Particle Number					01
LDL-P	1942	High	nmol/L	<1000	01
		Low		< 1000	
		Moderate		1000 - 1299	
		Borderline-High		1300 - 1599	
		High		1600 - 2000	
		Very High		> 2000	
Lipids					01
LDL-C	180	High	mg/dL	0 - 99	
		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	43		mg/dL	>39	01
Triglycerides	94		mg/dL	0 - 149	01
Cholesterol, Total	242	High	mg/dL	100 - 199	01
LDL and HDL Particles					01
HDL-P (Total)	29.4	Low	umol/L	>=30.5	01
Small LDL-P	895	High	nmol/L	<=527	01
LDL Size	21.4		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



Patient Report

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Specimen ID: 073-535-1708-0
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TESTS	RESULT	FLAG	UNITS	REFERENCE	INTERVAL	LAB
Small LDL-P	Low	25th	50th	75th	High	
	<117	117	527	839	>839	
LDL Size	<-Large (Pattern A)->		<-Small (Pattern B)->			
	23.0	20.6	20.5	19.0		

Comment:

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.

01

Insulin Resistance Score

LP-IR Score	30					<=45	
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		

01

01

Comment:

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.

01

NMR PDF Image

01

TSH+T4F+T3Free

TSH	4.010		uIU/mL	0.450 - 4.500		02
Triiodothyronine, Free, Serum	3.6		pg/mL	2.0 - 4.4		02
T4, Free (Direct)	1.30		ng/dL	0.82 - 1.77		02

Comp. Metabolic Panel (14)

Glucose, Serum	85		mg/dL	65 - 99		02
BUN	21		mg/dL	8 - 27		02
Creatinine, Serum	1.08		mg/dL	0.76 - 1.27		02
eGFR If NonAfricn Am	74		mL/min/1.73	>59		
eGFR If Africn Am	85		mL/min/1.73	>59		
BUN/Creatinine Ratio	19			10 - 24		
Sodium, Serum	139		mmol/L	134 - 144		02
Potassium, Serum	4.2		mmol/L	3.5 - 5.2		02
Chloride, Serum	101		mmol/L	96 - 106		02
Carbon Dioxide, Total	22		mmol/L	18 - 29		02
Calcium, Serum	9.1		mg/dL	8.6 - 10.2		02
Protein, Total, Serum	6.5		g/dL	6.0 - 8.5		02



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TESTS	RESULT	FLAG	UNITS	REFERENCE	INTERVAL	LAB
Albumin, Serum	4.3		g/dL	3.6 - 4.8		02
Globulin, Total	2.2		g/dL	1.5 - 4.5		
A/G Ratio	2.0			1.2 - 2.2		
Bilirubin, Total	0.7		mg/dL	0.0 - 1.2		02
Alkaline Phosphatase, S	74		IU/L	39 - 117		02
AST (SGOT)	15		IU/L	0 - 40		02
ALT (SGPT)	19		IU/L	0 - 44		02

CBC, Platelet, No Differential

WBC	4.5		x10E3/uL	3.4 - 10.8		02
RBC	5.48		x10E6/uL	4.14 - 5.80		02
Hemoglobin	16.3		g/dL	13.0 - 17.7		02
Hematocrit	47.7		%	37.5 - 51.0		02
MCV	87		fL	79 - 97		02
MCH	29.7		pg	26.6 - 33.0		02
MCHC	34.2		g/dL	31.5 - 35.7		02
RDW	13.7		%	12.3 - 15.4		02
Platelets	223		x10E3/uL	150 - 379		02

Iron and TIBC

Iron Bind.Cap. (TIBC)	315		ug/dL	250 - 450		
UIBC	244		ug/dL	111 - 343		02
Iron, Serum	71		ug/dL	38 - 169		02
Iron Saturation	23		%	15 - 55		

Testosterone, Free+Total LC/MS

Testosterone, Total, LC/MS	895.5		ng/dL	264.0 - 916.0		01
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This LabCorp LC/MS-MS method is currently certified by the CDC Hormone Standardization Program (HoSt). Adult male reference interval is based on a population of healthy nonobese males (BMI <30) between 19 and 39 years old. Travison, et.al. JCEM 2017,102;1161-1173. PMID: 28324103.

Disclaimer:

This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.

Free Testosterone(Direct)	13.7		pg/mL	6.6 - 18.1		01
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Dihydrotestosterone

Dihydrotestosterone	80		ng/dL			03
Reference Range:						
Adult Male:	30 - 85					

Hemoglobin A1c

Hemoglobin A1c	5.3		%	4.8 - 5.6		02
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Please Note: 02

Pre-diabetes: 5.7 - 6.4



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TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
Diabetes: >6.4					
Glycemic control for adults with diabetes: <7.0					
Cortisol	12.0		ug/dL		02
			Cortisol AM	6.2 - 19.4	
			Cortisol PM	2.3 - 11.9	
DHEA, Serum					
Dehydroepiandrosterone (DHEA)					
	84		ng/dL	31 - 701	01
			Age		
			1 - 5 years	0 - 67	
			6 - 7 years	0 - 110	
			8 - 10 years	0 - 185	
			11 - 12 years	0 - 201	
			13 - 14 years	0 - 318	
			15 - 16 years	39 - 481	
			17 - 19 years	40 - 491	
			>19 years	31 - 701	
Luteinizing Hormone (LH), S					
LH	<0.2	Low	mIU/mL	1.7 - 8.6	02
Prolactin	10.7		ng/mL	4.0 - 15.2	02
Prostate-Specific Ag, Serum					
Prostate Specific Ag, Serum	1.0		ng/mL	0.0 - 4.0	02
Roche ECLIA methodology.					
According to the American Urological Association, Serum PSA should decrease and remain at undetectable levels after radical prostatectomy. The AUA defines biochemical recurrence as an initial PSA value 0.2 ng/mL or greater followed by a subsequent confirmatory PSA value 0.2 ng/mL or greater.					
Values obtained with different assay methods or kits cannot be used interchangeably. Results cannot be interpreted as absolute evidence of the presence or absence of malignant disease.					
Reverse T3, Serum	14.6		ng/dL	9.2 - 24.1	01
Vitamin D, 25-Hydroxy	41.6		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					



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guideline. JCEM. 2011 Jul; 96(7):1911-30.					
C-Reactive Protein, Cardiac	0.82		mg/L	0.00 - 3.00	02
Relative Risk for Future Cardiovascular Event					
			Low	<1.00	
			Average	1.00 - 3.00	
			High	>3.00	
Estradiol, Sensitive	Will Follow		High	8.0 - 35.0	01
Homocyst(e)ine, Plasma	11.0		umol/L	0.0 - 15.0	02
Uric Acid, Serum	5.4		mg/dL	3.7 - 8.6	02
Uric Acid, Serum					02
Please Note:	Therapeutic target for gout patients: <6.0				
Phosphorus, Serum	2.4	Low	mg/dL	2.5 - 4.5	02
GGT	19		IU/L	0 - 65	02
Vitamin B12	1101		pg/mL	232 - 1245	02
Magnesium, Serum	2.2		mg/dL	1.6 - 2.3	02
Progesterone	0.1		ng/mL	0.0 - 0.5	02
Ferritin, Serum	75		ng/mL	30 - 400	02

44.9!!

01	BN	LabCorp Burlington 1447 York Court, Burlington, NC 27215-3361	Dir: William F Hancock, MD
02	SE	LabCorp Seattle 550 17th Avenue Ste 300, Seattle, WA 98122-5789	Dir: Daniel Toweill, MD
03	ES	Esoterix Endocrinology 4301 Lost Hills Road, Calabasas Hills, CA 91301-5358	Dir: Samuel Pepkowitz, MD

For inquiries, the physician may contact Branch: 800-598-3345 Lab: 206-861-7000



1447 York Court
 Burlington, NC 27215
 800-788-9223

Medical Director: William F Hancock, MD

Specimen Number 073-535-1708-0		Patient ID		Account Number 50000460	Account Phone (907) 868-2961	Account Fax (907) 868-2961
Patient Last Name BROWN		Patient First Name JACK		Account Address ATP Medicine Bldg B B4 2000 W Int'l Airport Rd Anchorage, AK 99502		
Age 61	Date of Birth 10/10/1956	Sex M	Fasting YES			
Control Number 62005012177		RFI 1831299809				
Date Collected 03/14/2018	Date Entered 03/14/2018	Date and Time Reported 03/17/2018 05:58 AM ET		Physician ID & Name THOMAS, R		Page Number 1 of 2

NMR LipoProfile® test

Reference Range¹

	Percentile ¹	20th	50th	80th	95th	
	Low	Moderate	Borderline High	High	Very High	
LDL-P (LDL Particle Number)	1942	< 1000	1000 - 1299	1300 - 1599	1600 - 2000	> 2000

1. Reference population (5,362 men and women) not on lipid medication enrolled in the Multi-Ethnic Study of Atherosclerosis (MESA). Mora, et al. Atherosclerosis 2007.

Lipids

LDL-C
(calculated)

mg/dL

180

Optimal

Near or Above Optimal

Borderline High

High

Very High

< 100

100 - 129

130 - 159

160 - 189

≥ 190

180

HDL-C

mg/dL

43

Desirable ≥ 40

Triglycerides

mg/dL

94

Desirable < 150

Total Cholesterol

mg/dL

242

Desirable < 200

Historical Reporting

LDL-P



1942 (03/14/2018)

LDL-C



180 (03/14/2018)

Issued or Pending Patents

The NMR LipoProfile® test may be covered by one or more issued or pending patents, including U.S. Patent Nos. 6,518,069; 6,576,471; 6,653,140; and 7,243,030

CLIA Number

34D0655059

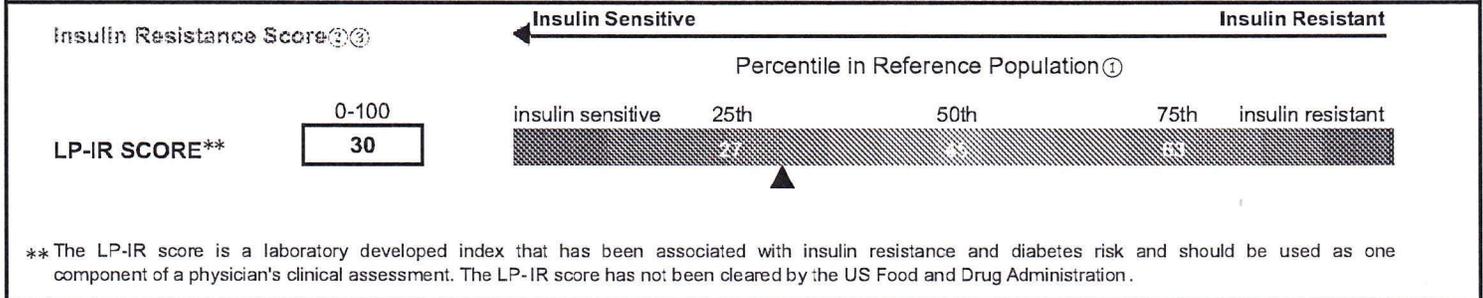
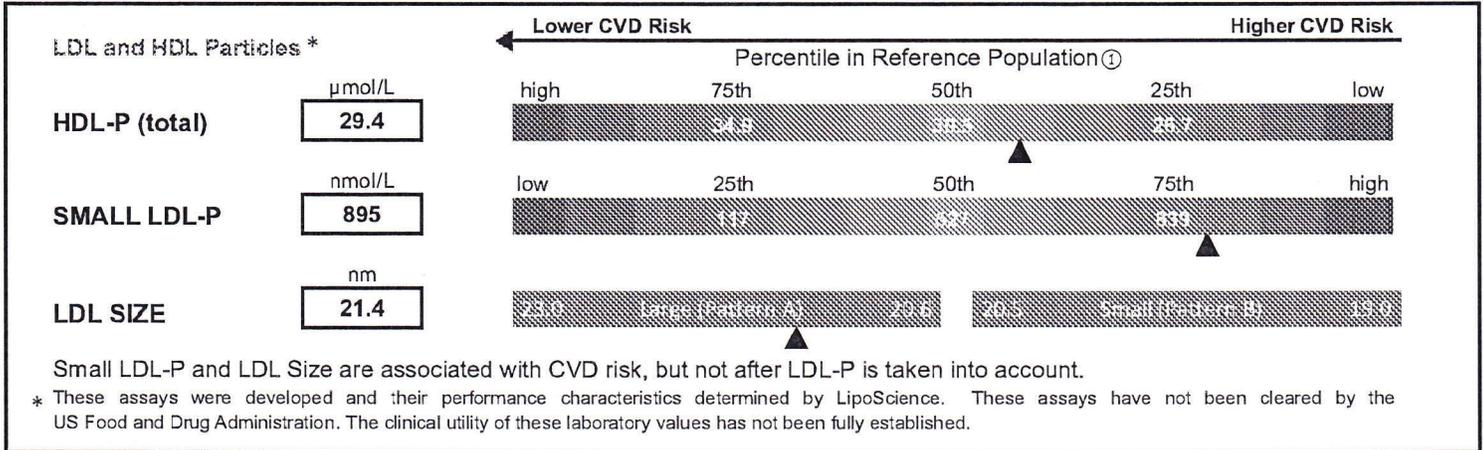
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PARTICLE CONCENTRATION AND SIZE



Clinician Notes

① LipoScience reference population comprises 4,588 men and women without known CVD or diabetes and not on lipid medication.
 ② Shalaurova I et al., Metab Syndr Relat Disord 2014; 12:422-9.
 ③ Mackey RH et al., Diab Care 2015; 38:628-36.