

Ordered Items: **TSH+T4F+T3Free; CBC With Differential/Platelet; Comp. Metabolic Panel (14); Lipid Panel With LDL/HDL Ratio; E1 + E2 + E3; Hemoglobin A1c; DHEA-Sulfate; Testosterone, Total, LC/MS; Reverse T3, Serum; Vitamin D, 25-Hydroxy; Sedimentation Rate-Westergren; Thyroid Antibodies; Progesterone; Ferritin; C-Reactive Protein, Quant; Venipuncture; Cardiovascular Report**

Date Collected: 01/07/2022

Date Received: 01/07/2022

Date Reported: 01/12/2022

Fasting: Yes

TSH+T4F+T3Free

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
TSH ⁰¹	1.890	1.71 07/15/2021	uIU/mL	0.450-4.500
Triiodothyronine (T3), Free ⁰¹	3.1	2.6 07/15/2021	pg/mL	2.0-4.4
T4,Free(Direct) ⁰¹	1.53	1.35 07/15/2021	ng/dL	0.82-1.77

CBC With Differential/Platelet

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
WBC ⁰¹	8.3	9.6 07/15/2021	x10E3/uL	3.4-10.8
▼ RBC ⁰¹	3.74 Low	5.58 07/15/2021	x10E6/uL	3.77-5.28
▼ Hemoglobin ⁰¹	8.4 Low	14.1 07/15/2021	g/dL	11.1-15.9
▼ Hematocrit ⁰¹	27.8 Low	44.3 07/15/2021	%	34.0-46.6
▼ MCV ⁰¹	74 Low	79 07/15/2021	fL	79-97
▼ MCH ⁰¹	22.5 Low	25.3 07/15/2021	pg	26.6-33.0
▼ MCHC ⁰¹	30.2 Low	31.8 07/15/2021	g/dL	31.5-35.7
▲ RDW ⁰¹	16.4 High	13.6 07/15/2021	%	11.7-15.4
Platelets ⁰¹	426	274 07/15/2021	x10E3/uL	150-450
Neutrophils ⁰¹	57	62 07/15/2021	%	Not Estab.
Lymphs ⁰¹	32	28 07/15/2021	%	Not Estab.
Monocytes ⁰¹	8	7 07/15/2021	%	Not Estab.
Eos ⁰¹	2	2 07/15/2021	%	Not Estab.
Basos ⁰¹	1	1 07/15/2021	%	Not Estab.
Neutrophils (Absolute) ⁰¹	4.7	6.0 07/15/2021	x10E3/uL	1.4-7.0
Lymphs (Absolute) ⁰¹	2.7	2.7 07/15/2021	x10E3/uL	0.7-3.1
Monocytes(Absolute) ⁰¹	0.6	0.7 07/15/2021	x10E3/uL	0.1-0.9
Eos (Absolute) ⁰¹	0.2	0.2 07/15/2021	x10E3/uL	0.0-0.4
Baso (Absolute) ⁰¹	0.1	0.1 07/15/2021	x10E3/uL	0.0-0.2
Immature Granulocytes ⁰¹	0	0 07/15/2021	%	Not Estab.
Immature Grans (Abs) ⁰¹	0.0	0.0 07/15/2021	x10E3/uL	0.0-0.1

Comp. Metabolic Panel (14)

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▲ Glucose ⁰¹	102 High	95 07/15/2021	mg/dL	65-99
BUN ⁰¹	9	15 07/15/2021	mg/dL	6-24
Creatinine ⁰¹	0.59	0.66 07/15/2021	mg/dL	0.57-1.00
eGFR If NonAfrican Am	107	104 07/15/2021	mL/min/1.73	>59
eGFR If African Am	124	120 07/15/2021	mL/min/1.73	>59

In accordance with recommendations from the NKF-ASN Task force,
Labcorp is in the process of updating its eGFR calculation to the

Comp. Metabolic Panel (14) (Cont.)

2021 CKD-EPI creatinine equation that estimates kidney function without a race variable.

BUN/Creatinine Ratio	15	23	07/15/2021		9-23
Sodium ⁰¹	140	138	07/15/2021	mmol/L	134-144
Potassium ⁰¹	5.2	4.7	07/15/2021	mmol/L	3.5-5.2
Chloride ⁰¹	104	103	07/15/2021	mmol/L	96-106
Carbon Dioxide, Total ⁰¹	24	23	07/15/2021	mmol/L	20-29
Calcium ⁰¹	9.3	9.3	07/15/2021	mg/dL	8.7-10.2
Protein, Total ⁰¹	7.0	7.3	07/15/2021	g/dL	6.0-8.5
Albumin ⁰¹	4.4	4.5	07/15/2021	g/dL	3.8-4.8
Globulin, Total	2.6	2.8	07/15/2021	g/dL	1.5-4.5
A/G Ratio	1.7	1.6	07/15/2021		1.2-2.2
Bilirubin, Total ⁰¹	0.3	0.3	07/15/2021	mg/dL	0.0-1.2
Alkaline Phosphatase ⁰¹	119	117*	07/15/2021	IU/L	44-121
Please note reference interval change					
AST (SGOT) ⁰¹	23	18	07/15/2021	IU/L	0-40
ALT (SGPT) ⁰¹	22	16	07/15/2021	IU/L	0-32

* Previous Reference Interval: (Alkaline Phosphatase: 48-121 IU/L)

Lipid Panel With LDL/HDL Ratio

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Cholesterol, Total ⁰¹	190	208 07/15/2021	mg/dL	100-199
Triglycerides ⁰¹	65	94 07/15/2021	mg/dL	0-149
HDL Cholesterol ⁰¹	45	39 07/15/2021	mg/dL	>39
VLDL Cholesterol Cal	12	17 07/15/2021	mg/dL	5-40
▲ LDL Chol Calc (NIH)	133 High	152 07/15/2021	mg/dL	0-99
LDL/HDL Ratio	3.0	3.9 07/15/2021	ratio	0.0-3.2

Please Note:⁰¹

	LDL/HDL Ratio	
	Men	Women
1/2 Avg. Risk	1.0	1.5
Avg. Risk	3.6	3.2
2X Avg. Risk	6.2	5.0
3X Avg. Risk	8.0	6.1

E1 + E2 + E3

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Estrone, Serum ⁰²	74	113 07/15/2021	pg/mL	
Adult:				
Follicular phase			39 - 132	
Periovulatory			58 - 256	
Luteal phase			54 - 179	
Pregnancy:				
1st trimester			247 - 2774	
2nd trimester			569 - 5781	
Postmenopausal:				

E1 + E2 + E3 (Cont.)

		with ERT	51 - 488
		without ERT	31 - 100
Estradiol ⁰¹	36.4	64.3	07/15/2021
			pg/mL
		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
	Roche ECLIA methodology		

Estradiol, Serum ⁰²	<0.1	<0.1	07/15/2021	ng/mL
		Gestational	Median	Central 95% Range
		Week		
		27	4.6	2.6 - 7.1
		28	4.7	2.6 - 7.8
		29	5.0	2.6 - 8.6
		30	5.5	2.7 - 9.6
		31	6.1	2.9 - 11.0
		32	6.9	3.2 - 12.7
		33	8.0	3.4 - >13.3
		34	9.3	3.7 - >13.3
		35	11.3	4.3 - >13.3
		36	>13.3	5.3 - >13.3
		37	>13.3	6.2 - >13.3
		38	>13.3	7.4 - >13.3
		39	>13.3	8.1 - >13.3
		40	>13.3	8.5 - >13.3

Note: Due to patient-to-patient variability and the overlap of reference ranges, the pattern generated by serial determinations is generally of greater clinical significance than isolated measurements.

Hemoglobin A1c

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Hemoglobin A1c ⁰¹	5.5	5.6 07/15/2021	%	4.8-5.6
Please Note: ⁰¹	Prediabetes: 5.7 - 6.4 Diabetes: >6.4 Glycemic control for adults with diabetes: <7.0			

DHEA-Sulfate

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
DHEA-Sulfate ⁰¹	87.0	80.8 07/15/2021	ug/dL	41.2-243.7

Testosterone, Total, LC/MS

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Testosterone, Total, LC/MS ⁰²	15.9	20.1 07/15/2021	ng/dL	
		Female:		
		Premenopausal	10.0 - 55.0	
		Postmenopausal	7.0 - 40.0	

Disclaimer:⁰²

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

Reverse T3, Serum

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Reverse T3, Serum ^{A,02}	23.6	26.0 07/15/2021	ng/dL	9.2-24.1

Vitamin D, 25-Hydroxy

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Vitamin D, 25-Hydroxy ⁰¹	53.6	42.6 07/15/2021	ng/mL	30.0-100.0

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.

Sedimentation Rate-Westergren

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Sedimentation				
▲ Rate-Westergren ⁰¹	87 High	47* 07/15/2021	mm/hr	0-40

* Previous Reference Interval: (Sedimentation Rate-Westergren: 0-32 mm/hr)

Thyroid Antibodies

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Thyroid Peroxidase (TPO) Ab ⁰¹	<8	<8* 07/15/2021	IU/mL	0-34
Thyroglobulin Antibody ⁰¹	<1.0	<1.0* 07/15/2021	IU/mL	0.0-0.9
Thyroglobulin Antibody measured by Beckman Coulter Methodology				

* Previous Reference Intervals: (Thyroid Peroxidase (TPO) Ab: 0-34), (Thyroglobulin Antibody: 0.0-0.9)

Progesterone

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Progesterone ⁰¹	0.3	<0.1 12/04/2020	ng/mL	
		Follicular phase	0.1 - 0.9	
		Luteal phase	1.8 - 23.9	
		Ovulation phase	0.1 - 12.0	
		Pregnant		
		First trimester	11.0 - 44.3	
		Second trimester	25.4 - 83.3	
		Third trimester	58.7 - 214.0	
		Postmenopausal	0.0 - 0.1	

Ferritin

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▼ Ferritin ⁰¹	7 Low	26 07/15/2021	ng/mL	15-150

C-Reactive Protein, Quant

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▲ C-Reactive Protein, Quant ⁰¹	12 High	12 07/15/2021	mg/L	0-10

Cardiovascular Report

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Interpretation ⁰³	Note Supplemental report is available.	Note 07/15/2021		
PDF ⁰³	.	. 07/15/2021		

Disclaimer

The Previous Result is listed for the most recent test performed by Labcorp in the past 5 years where there is sufficient patient demographic data to match the result to the patient. Results from certain tests are excluded from the Previous Result display.

Icon Legend

▲ Out of Reference Range ■ Critical or Alert

Comments

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

Performing Labs

01: RN - Labcorp Raritan 69 First Avenue, Raritan, NJ, 08869-1800 Dir: Araceli B Reyes, MD
 02: BN - Labcorp Burlington 1447 York Court, Burlington, NC, 27215-3361 Dir: Sanjai Nagendra, MD
 03: LITIL - Litholink Corporation 150 Spring Lake Dr Ste A, Itasca, IL, 60143-2091 Dir: John Asplin, MD
 For Inquiries, the physician can contact Branch: 800-762-4344 Lab: 800-631-5250

Michalman, MarneePatient ID: **142384**Specimen ID: **007-436-1842-0**DOB: **09/03/1971**Age: **50**Sex: **Female****Patient Report**Account Number: **09013070**Ordering Physician: **C CHOJNOWSK**

PatientDetails

Michalman, Marnee**26 E DERRY RD, DERRY, NH, 03038**Phone: **603-490-0546**Date of Birth: **09/03/1971**Age: **50**Sex: **Female**Patient ID: **142384**Alternate Patient ID: **142384**

Physician Details

C CHOJNOWSK**PROFESSIONAL CO-OP SERVICES****2700 North 29th Ave, Suite 308, Hollywood,
FL, 33020**Phone: **866-999-4041**Account Number: **09013070**Physician ID: **NHND0090**

NPI:

Specimen Details

Specimen ID: **007-436-1842-0**Control ID: **00371011**Alternate Control Number: **00371011**Date Collected: **01/07/2022 0821 Local**Date Received: **01/07/2022 0000 ET**Date Entered: **01/07/2022 1212 ET**Date Reported: **01/12/2022 1407 ET**Rte: **00**

Accessions: 00743618420

DISCLAIMER: These assessments and treatment suggestions are provided as a convenience in support of the physician-patient relationship and are not intended to replace the physician's clinical judgment. They are derived from national guidelines in addition to other evidence and expert opinion. The clinician should consider this information within the context of clinical opinion and the individual patient.

SEE GUIDANCE FOR CARDIOVASCULAR REPORT: Stone NJ et al. 2013 ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation* 2014; 129 (suppl 2): S1-S45; Contois et al. *Clin Chem* 2009; 55(3):407-419; Brunzell et al. *Diabetes Care* 2008; 31(4):811-82.

Note: Please refer to your LabCorp Report for all results as well as any test-specific and specimen-specific comments.

Cardiovascular Report

Patient Assessment

Current available clinical information suggests the patient's risk is at least LOW. If the patient has two or more major risk factors, the risk category is intermediate. If the patient has CHD or a CHD risk equivalent, the risk category is high. If patient does not have CHD or a CHD risk equivalent, consider use of the Pooled Cohort Equations to estimate 10-year CVD risk, as individuals with greater than 7.5% risk may warrant more intensive therapy. The calculator can be found at: <http://tools.cardiosource.org/ASCVD-Risk-Estimator/>

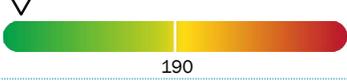
Insulin resistance, obesity, excessive alcohol use, smoking, nephrotic syndrome, liver disease, and certain medications can cause secondary dyslipidemia. Consider evaluation if clinically indicated.

Therapeutic lifestyle changes are always valuable to achieve optimal blood lipid status (diet, exercise, weight management).

Lipid Management

Select one patient risk category based upon medical history and clinical judgment. Additional risk factors such as personal or family history of premature CHD, smoking, and hypertension modify a patient's goals of therapy. In CVD prevention, the intensity of therapy should be adjusted to the level of patient risk. MODERATE intensity statin therapy generally results in an average LDL-C reduction of 30% to less than 50% from the untreated baseline. Examples include (daily doses): atorvastatin 10-20 mg, rosuvastatin 5-10 mg, simvastatin 20-40 mg, pravastatin 40-80 mg, lovastatin 40 mg. HIGH intensity statin therapy generally results in an average LDL-C reduction of 50% or more from the untreated baseline. Examples include (daily doses): atorvastatin 40-80 mg and rosuvastatin 20 mg.

▽ = PATIENT'S RESULT

	Patient Risk Category (select one)		
ANALYTE / RESULT	LOW	INTERMEDIATE	HIGH
LDL-C 133 mg/dL			
non-HDL 145 mg/dL			
Lipid Assessment	LDL-C is acceptable, was 152 and now is 133 mg/dL. Non-HDL Cholesterol is acceptable, was 169 and now is 145 mg/dL.	LDL-C is borderline high, was 152 and now is 133 mg/dL. Non-HDL Cholesterol is acceptable, was 169 and now is 145 mg/dL.	LDL-C is high, was 152 and now is 133 mg/dL. Non-HDL Cholesterol is borderline high, was 169 and now is 145 mg/dL.
Treatment Suggestions	Considerations for use of statin therapy include family history of premature atherosclerotic disease, elevated coronary artery calcium score, ankle-brachial index < 0.9, elevated CRP, or elevated 10-year or lifetime CVD risk.	Consider beginning or increasing statin. Factors that may influence statin use include family history of premature atherosclerotic disease, elevated coronary artery calcium score, ankle-brachial index < 0.9, elevated CRP, or elevated 10-year or lifetime CVD risk. If statin cannot be tolerated or increased, alternatives include use of an intestinal agent (ezetimibe or bile acid sequestrant) or niacin.	Begin statin. If statin already in use, consider increasing dose to achieve at least a 50% LDL reduction from baseline. Moderate or high intensity statin is preferred. If statin cannot be tolerated or increased, alternatives include use of an intestinal agent (ezetimibe or bile acid sequestrant) or niacin.

Patient Results Summary

Cholesterol comes in different forms and has varying effects on your heart health. Some cholesterol is “good” and not known to cause disease, this is HDL. The rest of cholesterol causes disease by clogging your arteries, this is non-HDL. LDL cholesterol is the largest component of the non-HDL cholesterol. Lowering your levels of “bad” cholesterol will lower your risk for disease.

- **LDL cholesterol (LDL-C)** is the largest component of the non-HDL cholesterol (“bad” cholesterol).
- **non-HDL** is composed of many different types of cholesterol (not just LDL-C) and high levels cause disease.

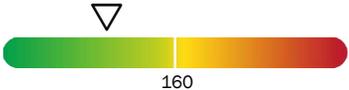
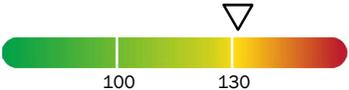
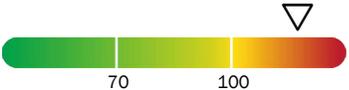
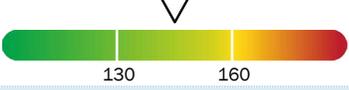
The level to which your LDL must be lowered depends on the risk for developing heart disease or having a heart attack. The higher your risk for heart disease, the lower your LDL goal.

Contributing Risk Factors For Heart Disease

<input type="checkbox"/> Heart and/or vascular disease	<input type="checkbox"/> Cigarette (tobacco) smoking
<input type="checkbox"/> High blood pressure	<input type="checkbox"/> Low HDL (men less than 40 mg/dL, women less than 50 mg/dL)
<input type="checkbox"/> Diabetes	<input type="checkbox"/> Family history of early onset heart disease
<input type="checkbox"/> Chronic kidney disease	<input type="checkbox"/> Man over 45 years or woman over 55 years
<input type="checkbox"/> Obesity	<input type="checkbox"/> Familial Hypercholesterolemia

Your Heart Disease Risk Category

Selected by your physician based upon your risk factors and clinical judgement.

Test / Your Results	<input type="checkbox"/> Low	<input type="checkbox"/> Intermediate	<input type="checkbox"/> High
LDL-C 133 mg/dL			
non-HDL 145 mg/dL			

▽ = Your Result: Left (Green) = Optimal, Center = Acceptable, Right (Red) = High Risk

Your Care Plan (as selected by your physician)

<input type="checkbox"/> Eat less trans fats and saturated fats, red meat, and sugary foods/drinks	<input type="checkbox"/> Control any other medical conditions: such as diabetes, high blood pressure
<input type="checkbox"/> Eat more vegetables, fruits, whole grains, low-fat dairy products, poultry, fish, and nuts	<input type="checkbox"/> Visit your doctor as scheduled and obtain all follow-up tests/treatments recommended
<input type="checkbox"/> Exercise	<input type="checkbox"/> Take all of your medications your doctor(s) have prescribed
<input type="checkbox"/> Lose weight	<input type="checkbox"/>

DISCLAIMER: You should discuss this information with your physician. Litholink does not have a doctor-patient relationship with you, nor does it have access to a complete medical history or a physical examination that would be necessary for a complete diagnosis and comprehensive treatment plan. Neither you nor your physician should rely solely on this guidance. REFERENCES: National Heart, Lung, and Blood Institute’s Third Report of the NCEP Expert Panel on Detection, Evaluation and Treatment of High Blood Cholesterol in Adults (ATP III) (2002. NIH publication 02-5215); National Heart, Lung, and Blood Institute’s Your Guide to Lowering Your Cholesterol with TLC (2005. NIH publication 06-5235); Stone NJ et al. 2013 ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. Circulation. 2013; 00:000-000.