LabCorp
Laboratory Corporation of America

Patient Report

Specimen ID: 167-059-4918-0
Control ID: B0042928272

Acct #: 09357925 **Phone:** (813) 445-7342 **Rte:** 00

COOK, DANIEL
100 FOXGATE AVE APT 29H
HATTIESBURG MS 39402
(601) 433-5391

Defy Medical, LLC
4809 N. Armenia Ave. Ste 220
Tampa FL 33603

Patient Details
DOB: 02/09/1986
Age(y/m/d): 030/04/06
Gender: M **SSN:**
Patient ID:

Specimen Details
Date collected: 06/15/2016 1310 Local
Date entered: 06/15/2016
Date reported: 06/17/2016 0825 Local

Physician Details
Ordering: J SAYA
Referring:
ID: 12040542
NPI: 1093940041

General Comments & Additional Information

Alternate Control Number: B0042928272
Total Volume: Not Provided
Alternate Patient ID: Not Provided
Fasting: No

Ordered Items

Lipid Panel w/ Chol/HDL Ratio; Testosterone,Free and Total; Vitamin D, 25-Hydroxy; Blood Drawing; Cardiovascular Report

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
Lipid Panel w/ Chol/HDL Ratio					
Cholesterol, Total	132		mg/dL	100 - 199	01
Triglycerides	146		mg/dL	0 - 149	01
HDL Cholesterol	**22**	**Low**	mg/dL	>39	01
Comment					01
According to ATP-III Guidelines, HDL-C >59 mg/dL is considered a negative risk factor for CHD.					
VLDL Cholesterol Cal	29		mg/dL	5 - 40	
LDL Cholesterol Calc	81		mg/dL	0 - 99	
T. Chol/HDL Ratio	**6.0**	**High**	ratio units	0.0 - 5.0	
Please Note:					01

T. Chol/HDL Ratio

	Men	Women
1/2 Avg.Risk	3.4	3.3
Avg.Risk	5.0	4.4
2X Avg.Risk	9.6	7.1
3X Avg.Risk	23.4	11.0

Testosterone,Free and Total					
Testosterone, Serum	535		ng/dL	348 - 1197	01
Comment:					
Adult male reference interval is based on a population of lean males up to 40 years old.					
Free Testosterone(Direct)	24.9		pg/mL	8.7 - 25.1	02
Vitamin D, 25-Hydroxy	49.5		ng/mL	30.0 - 100.0	01

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.

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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.

Cardiovascular Report

Interpretation	Note		03
Supplement report is available.			
PDF Image	.		03

01	MB	LabCorp Birmingham 1801 First Avenue South, Birmingham, AL 35233-1935	Dir: Brian Ragland, MD
02	BN	LabCorp Burlington 1447 York Court, Burlington, NC 27215-3361	Dir: William F Hancock, MD
03	LITIL	Litholink Corporation 2250 West Campbell Park Drive, Chicago, IL 60612-3502	Dir: Mitchell Laks, PhD

For inquiries, the physician may contact **Branch: 800-877-5227 Lab: 205-581-3500**

Accessions: 16705949180

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 the 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: 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); Brunzell et al. Diabetes Care 2008; 31(4):811-82; Contois et al. Clin Chem 2009; 55(3):407-419; 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.

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

Laboratory Director's Notes

Laboratory test values flagged with an asterisk (*) within this report refer to the following commentary from our physicians and quality assurance staff.

COLLECTION DATE	ITEM	RELATED NOTES
06/15/2016	**25-Hydroxy Vitamin D**	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.
06/15/2016	**Total Chol:HDL Ratio**	T. Chol/HDL Ratio Men Women 1/2 Avg.Risk 3.4 3.3 Avg.Risk 5.0 4.4 2X Avg.Risk 9.6 7.1 3X Avg.Risk 23.4 11.0

Mitchell S. Laks, PhD - Laboratory Director

Current Laboratory Results

Blood Draw Date: **06/15/2016** **Date Received:** **06/15/2016** **Date Completed:** **06/16/2016** **Fasting:** **NO**

Lipid Panel with Chol/HDL Ratio

ANALYTE	REF. INTERVAL	LOW ● HIGH	RESULT
Total Cholesterol mg/dL	100-199	●	132
Triglyceride mg/dL	0-149	●	146
HDL-C mg/dL	>39	●●●	**22 L**
VLDL mg/dL	5-40	●	29
LDL(calc) mg/dL	0-99	●	81
non-HDL cholesterol mg/dL	0 - 129	●	110
Total Chol:HDL Ratio ratio units	0.0-5.0	●●●●●	*** 6.0 H**

25-Hydroxy Vitamin D

ANALYTE	REF. INTERVAL	LOW ● HIGH	RESULT
25-Hydroxy Vitamin D ng/mL	30.0-100.0	●	* 49.5

Vitamin D testing performed using the 25 OH Vitamin D Total Assay on the DiaSorin Liaison®.

Legend for Abnormal Flags:

L - Below Low Normal	LL - Alert Low	< - Panic Low	A - Abnormal (applies to non-numeric results)
H - Above High Normal	HH - Alert High	> - Panic High	AA - Critical Abnormal (applies to non-numeric results)

Cardiovascular Report

Patient Assessment

Current available clinical information suggests the patient's risk is at least LOW. One major CHD risk factor is present (HDL-C less than 40). 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, thyroid disease, nephrotic syndrome, liver disease, and certain medications are all causes of secondary dyslipidemia. Consider evaluation if clinically indicated.

Patient was not fasting, interpret assessment and treatment suggestions with caution. 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 **81 mg/dL**	<160	100 – 130	70 – 100
non-HDL **110 mg/dL**	<190	130 – 160	100 – 130
Lipid Assessment	LDL-C is optimal, 81 mg/dL. Non-HDL Cholesterol is optimal, 110 mg/dL.	LDL-C is optimal, 81 mg/dL. Non-HDL Cholesterol is optimal, 110 mg/dL.	LDL-C is normal, 81 mg/dL. Non-HDL Cholesterol is normal, 110 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 lifetime CVD risk.	Consider measurement of LDL particle number or Apo B to adjudicate need for further LDL lowering therapy. 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 lifetime CVD risk. If statin cannot be tolerated or increased, alternatives include use of an intestinal agent (ezetimibe or bile acid sequestrant) or niacin.	If at least a 50% LDL reduction from baseline has not been achieved, begin or increase statin. Consider measurement of LDL particle number or Apo B to adjudicate need for further LDL lowering therapy. 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

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

Your Heart Disease Risk Category

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

Test / Your Results	☐ Low	☐ Intermediate	☐ High
LDL-C **81 mg/dL**	▽ 160	▽ 100 130	▽ 70 100
non-HDL **110 mg/dL**	▽ 190	▽ 130 160	▽ 100 130

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

Your Care Plan (as selected by your physician)

☐ Change your diet: limit saturated / trans fats and cholesterol, increase fiber	☐ Control any other medical conditions: such as diabetes, high blood pressure
☐ Exercise	☐ Visit your doctor as scheduled and obtain all follow-up tests/treatments recommended
☐ Lose weight	☐ Take all of your medications your doctor(s) have prescribed
☐	☐

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.