Ordered Items: **Anemia Profile B; TSH+Free T4; Comp. Metabolic Panel (14); Urinalysis, Routine; Lipid Panel With LDL/HDL Ratio; ADMA/SDMA; Amenorrhea Profile; Testosterone, F Eqlib+T LC/MS; Apo A1 + B + Ratio; Pregnenolone, MS; Hemoglobin A1c; DHEA-Sulfate; Cortisol; Prostate-Specific Ag; IGF-1; Reverse T3, Serum; Vitamin D, 25-Hydroxy; Lipoprotein (a); C-Reactive Protein, Cardiac; TMAO (Trimethylamine N-oxide); Estradiol, Sensitive; Homocyst(e)ine; Uric Acid; GGT; Thyroglobulin Antibody; Fibrinogen Activity; Progesterone; Insulin; Thyroid Peroxidase (TPO) Ab; Triiodothyronine (T3), Free; Magnesium, RBC; Sex Horm Binding Glob, Serum; Venipuncture; Request Problem**

Date Collected: **03/18/2024**

Anemia Profile B

	Test	Current Result and Flag		Previous Result and Date	Units	Reference Interval
	Iron Bind.Cap.(TIBC)	261			ug/dL	250-450
	UIBC [01]	170			ug/dL	111-343
	Iron [01]	91			ug/dL	38-169
	Iron Saturation	35			%	15-55
	Ferritin [01]	83			ng/mL	30-400
▲	**Vitamin B12** [01]	**1480**	**High**		pg/mL	232-1245
	Folate (Folic Acid), Serum [01]	12.9			ng/mL	>3.0
	Note: [01]	A serum folate concentration of less than 3.1 ng/mL is considered to represent clinical deficiency.				
	. [01]					
	CBC, Platelet Ct, and Diff [01]					
	WBC [01]	4.9			x10E3/uL	3.4-10.8
	RBC [01]	5.78			x10E6/uL	4.14-5.80
	Hemoglobin [01]	17.3			g/dL	13.0-17.7
▲	**Hematocrit** [01]	**53.4**	**High**		%	37.5-51.0
	MCV [01]	92			fL	79-97
	MCH [01]	29.9			pg	26.6-33.0
	MCHC [01]	32.4			g/dL	31.5-35.7
	RDW [01]	12.7			%	11.6-15.4
	Platelets [01]	232			x10E3/uL	150-450
	Neutrophils [01]	50			%	Not Estab.
	Lymphs [01]	35			%	Not Estab.
	Monocytes [01]	10			%	Not Estab.
	Eos [01]	4			%	Not Estab.
	Basos [01]	1			%	Not Estab.
	Neutrophils (Absolute) [01]	2.4			x10E3/uL	1.4-7.0
	Lymphs (Absolute) [01]	1.7			x10E3/uL	0.7-3.1
	Monocytes(Absolute) [01]	0.5			x10E3/uL	0.1-0.9
	Eos (Absolute) [01]	0.2			x10E3/uL	0.0-0.4
	Baso (Absolute) [01]	0.1			x10E3/uL	0.0-0.2
	Immature Granulocytes [01]	0			%	Not Estab.
	Immature Grans (Abs) [01]	0.0			x10E3/uL	0.0-0.1
	Reticulocyte Count [01]	2.3			%	0.6-2.6

Date Collected: **03/18/2024**

TSH+Free T4

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
TSH [01]	2.120		uIU/mL	0.450-4.500
T4,Free(Direct) [01]	1.16		ng/dL	0.82-1.77

Comp. Metabolic Panel (14)

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Glucose [01]	94		mg/dL	70-99
BUN [01]	15		mg/dL	6-20
Creatinine [01]	1.12		mg/dL	0.76-1.27
eGFR	92		mL/min/1.73	>59
BUN/Creatinine Ratio	13			9-20
Sodium [01]	142		mmol/L	134-144
Potassium [01]	4.3		mmol/L	3.5-5.2
Chloride [01]	103		mmol/L	96-106
Carbon Dioxide, Total [01]	23		mmol/L	20-29
Calcium [01]	9.0		mg/dL	8.7-10.2
Protein, Total [01]	6.5		g/dL	6.0-8.5
▼ **Albumin** [01]	**4.2** **Low**		g/dL	4.3-5.2
Globulin, Total	2.3		g/dL	1.5-4.5
A/G Ratio	1.8			1.2-2.2
Bilirubin, Total [01]	0.4		mg/dL	0.0-1.2
Alkaline Phosphatase [01]	62		IU/L	44-121
AST (SGOT) [01]	25		IU/L	0-40
ALT (SGPT) [01]	34		IU/L	0-44

Urinalysis, Routine

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Urinalysis Gross Exam [01]				
Specific Gravity [01]	1.009			1.005-1.030
pH [01]	7.0			5.0-7.5
Urine-Color [01]	Yellow			Yellow
Appearance [01]	Clear			Clear
WBC Esterase [01]	Negative			Negative
Protein [01]	Negative			Negative/Trace
Glucose [01]	Negative			Negative
Ketones [01]	Negative			Negative
Occult Blood [01]	Negative			Negative
Bilirubin [01]	Negative			Negative
Urobilinogen,Semi-Qn [01]	0.2		mg/dL	0.2-1.0
Nitrite, Urine [01]	Negative			Negative
Microscopic Examination [01]				

Microscopic not indicated and not performed.

Date Collected: **03/18/2024**

Lipid Panel With LDL/HDL Ratio

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Cholesterol, Total [01]	165		mg/dL	100-199
Triglycerides [01]	87		mg/dL	0-149
HDL Cholesterol [01]	51		mg/dL	>39
VLDL Cholesterol Cal	16		mg/dL	5-40
LDL Chol Calc (NIH)	98		mg/dL	0-99
LDL/HDL Ratio	1.9		ratio	0.0-3.6

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

ADMA/SDMA

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
ADMA [02]	88		ng/mL	<100

Elevated ADMA levels are associated with significant subclinical atherosclerosis while elevated SDMA levels are associated with kidney function and strongly correlate with reduced eGFR. Available prospective studies suggest an increased risk of cardiovascular disease with higher ADMA concentrations (1). Based on an internal reference range study using 180 'apparently healthy,' non-smoking donors, CHL has defined the following cut-offs for ADMA: A cut-off of <100 ng/mL defines an 'apparently healthy' population at optimal relative risk for a cardiovascular event, 100-123 ng/mL defines a population at moderate relative risk for a cardiovascular event, and >123 ng/mL defines a high relative risk population. (Reference: 1-Willeit P. et al. J Am Heart Assoc. 2015; 4: e001833).This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Cardiometabolic Center of Excellence at Cleveland HeartLab. It has not been cleared or approved by the U.S. Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

SDMA [02]	78		ng/mL	73-135

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 [02]	.			

Date Collected: **03/18/2024**

Amenorrhea Profile

	Test	Current Result and Flag		Previous Result and Date	Units	Reference Interval
▼	**LH** [01]	**0.3**	**Low**		mIU/mL	1.7-8.6
▼	**FSH** [01]	**<0.3**	**Low**		mIU/mL	1.5-12.4
	Prolactin [01]	16.9			ng/mL	3.6-31.5

Testosterone, F Eqlib+T LC/MS

	Test	Current Result and Flag		Previous Result and Date	Units	Reference Interval
▲	**Testosterone, Total, LC/MS** [A, 03]	**1399.6**	**High**		ng/dL	264.0-916.0

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.

	Testosterone, Free					5.00-21.00

Unable to calculate result since non-numeric result obtained for component test.

	% Free Testosterone [03]					1.50-4.20

LabCorp was unable to collect sufficient specimen to perform the following test(s), and is providing the patient with re-collection instructions.

Apo A1 + B + Ratio

	Test	Current Result and Flag		Previous Result and Date	Units	Reference Interval
	Apolipoprotein A-1 [04]					101-178

LabCorp was unable to collect sufficient specimen to perform the following test(s), and is providing the patient with re-collection instructions.

	Apolipoprotein B [04]					<90

LabCorp was unable to collect sufficient specimen to perform the following test(s), and is providing the patient with re-collection instructions.

	Desirable	< 90
	Borderline High	90 - 99
	High	100 - 130
	Very High	>130

ASCVD RISK CATEGORY	THERAPEUTIC TARGET APO B (mg/dL)
Very High Risk	<80 (if extreme risk <70)
High Risk	<90
Moderate Risk	<90

	Apolipo. B/A-1 Ratio					0.0-0.7

Unable to calculate result since non-numeric result obtained for component test.

Apolipoprotein B/A-1 Ratio	Male	Female
Avg.Risk	0.7	0.6
2X Avg.Risk	0.9	0.9
3X Avg.Risk	1.0	1.0

Date Collected: **03/18/2024**

Pregnenolone, MS

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Pregnenolone, MS [05]	43		ng/dL	

This test was developed and its performance characteristics determined by Labcorp. It has not been cleared or approved by the Food and Drug Administration.
Reference Range:
Adults: <151

Hemoglobin A1c

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Hemoglobin A1c [01]	5.0		%	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]	320.0		ug/dL	138.5-475.2

Cortisol

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Cortisol [01]	12.4		ug/dL	6.2-19.4

Please Note: The reference interval and flagging for this test is for an AM collection. If this is a PM collection please use: Cortisol PM: 2.3-11.9

Prostate-Specific Ag

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Prostate Specific Ag [01]	0.5		ng/mL	0.0-4.0

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.

IGF-1

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▲ **Insulin-Like Growth Factor I** [03]	**347 High**		ng/mL	101-307

Reverse T3, Serum

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Reverse T3, Serum [05]	14.5		ng/dL	

Reverse T3, Serum (Cont.)

This test was developed and its performance characteristics determined by Labcorp. It has not been cleared or approved by the Food and Drug Administration.
Reference Range:
>15y: 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]	77.9		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.

Lipoprotein (a)

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Lipoprotein (a) [03]	28.2		nmol/L	<75.0

Note: Values greater than or equal to 75.0 nmol/L may indicate an independent risk factor for CHD, but must be evaluated with caution when applied to non-Caucasian populations due to the influence of genetic factors on Lp(a) across ethnicities.

C-Reactive Protein, Cardiac

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
C-Reactive Protein, Cardiac [01]	0.40		mg/L	0.00-3.00

Relative Risk for Future Cardiovascular Event
Low <1.00
Average 1.00 - 3.00
High >3.00

TMAO (Trimethylamine N-oxide)

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
▲ **TMAO (Trimethylamine N-oxide)** [A, 03]	**6.9** **High**		uM	<6.2

TMAO Medical Decision Limits
Low <6.2
Moderate 6.2 - 9.9
High >9.9

Date Collected: **03/18/2024**

Estradiol, Sensitive

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Estradiol, Sensitive [A, 03]				8.0-35.0
	LabCorp was unable to collect sufficient specimen to perform the following test(s), and is providing the patient with re-collection instructions. Methodology: Liquid chromatography tandem mass spectrometry(LC/MS/MS)			

Homocyst(e)ine

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Homocyst(e)ine [01]	5.7		umol/L	0.0-14.5

Uric Acid

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Uric Acid [01]	4.8		mg/dL	3.8-8.4
		Therapeutic target for gout patients: <6.0		

GGT

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
GGT [01]	24		IU/L	0-65

Thyroglobulin Antibody

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Thyroglobulin Antibody [01]	<1.0		IU/mL	0.0-0.9
	Thyroglobulin Antibody measured by Beckman Coulter Methodology It should be noted that the presence of thyroglobulin antibodies may not be pathogenic nor diagnostic, especially at very low levels. The assay manufacturer has found that four percent of individuals without evidence of thyroid disease or autoimmunity will have positive TgAb levels up to 4 IU/mL.			

Fibrinogen Activity

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Fibrinogen Activity [01]	260		mg/dL	193-507

Progesterone

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Progesterone [01]	0.3		ng/mL	0.0-0.5

Insulin

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Insulin [01]	8.6		uIU/mL	2.6-24.9

Thyroid Peroxidase (TPO) Ab

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Thyroid Peroxidase (TPO) Ab [01]	<9		IU/mL	0-34

Date Collected: **03/18/2024**

Triiodothyronine (T3), Free

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Triiodothyronine (T3), Free [01]	3.5		pg/mL	2.0-4.4

Magnesium, RBC

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Magnesium, RBC [B, 03]	5.5		mg/dL	3.7-7.0

Sex Horm Binding Glob, Serum

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Sex Horm Binding Glob, Serum [01]	34.8		nmol/L	16.5-55.9

Request Problem

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
Request Problem [01]				

```
LabCorp was unable to collect sufficient specimen to perform the
following test(s), and is providing the patient with re-collection
instructions.
      TEST:  080770  % Free Testosterone           Panel: 070038
             016873  Apolipoprotein A-1            Panel: 216010
             167015  Apolipoprotein B              Panel: 216010
             070380  Estradiol, Sensitive          Panel: 140244
```

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.
B: 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: HD - LabCorp Houston, 7207 North Gessner, Houston, TX 77040-3143 Dir: Kyle Eskue, MD
02: CLHRT - Cleveland Heartlab Inc, 6701 Carnegie Avenue Ste 500, Cleveland, OH 44103-4623 Dir: Bill Richendollar, MD
03: BN - Labcorp Burlington, 1447 York Court, Burlington, NC 27215-3361 Dir: Sanjai Nagendra, MD
04: DA - Labcorp Dallas, 7777 Forest Ln Bldg C350, Dallas, TX 75230-2544 Dir: CN Etufugh, MD
05: ES - Esoterix Inc, 4301 Lost Hills Road, Calabasas Hills, CA 91301-5358 Dir: Brian Poirier, MD
For Inquiries, the physician may contact Branch: 800-762-4344 Lab: 713-856-8288

Patient Details
Anderton, Tyler

Phone:
Date of Birth: **05/26/1995**
Age: **28**
Sex: **Male**
Patient ID: **MH59255**
Alternate Patient ID:

Physician Details
D FINK
Marek Health
35 W Huron St Ste 1000, Pontiac, MI, 48342

Phone: **877-572-2582**
Account Number: **21025370**
Physician ID:
NPI: **1891814521**

Specimen Details
Specimen ID: **078-363-3613-0**
Control ID: **L2401922313**
Alternate Control Number: **L2401922313**
Date Collected: **03/18/2024 0945 Local**
Date Received: **03/18/2024 0000 ET**
Date Entered: **03/18/2024 1321 ET**
Date Reported: **03/27/2024 0935 ET**

Quest Diagnostics™

ClevelandHeartLab®
Know your risk.

Report Status: Final

ANDERTON, TYLER

Patient Information	Specimen Information	Client Information
ANDERTON, TYLER **DOB: 05/26/1995** **AGE: 28** Gender: Male Fasting: Fasting Phone: Patient ID: 2407836336130	Order ID: 2407902198 Requisition: 2407902198 Collected: 03/18/2024, 09:45 AM Received: 03/23/2024, 02:49 AM Reported: 03/27/2024, 00:16 AM	PROVIDER LABCORP 11449 LABCORP HOUSTON 7207 NORTH GESSNER DRIVE HOUSTON, TX 77040

Cardiometabolic Report

Test Name	Current Result & Relative Risk		Reference Range/Relative Risk Categories				Historical Result & Relative Risk	
	Optimal	Non-Optimal	Optimal	Moderate	High	Units	/ /	/ /
INFLAMMATION								
ADMA (Asymmetric dimethylarginine)(1)	88		<100	100-123	>123	ng/mL		
SDMA (Symmetric dimethylarginine)	78			73-135		ng/mL		

UND = UNDETECTABLE **INC = INCOMPUTABLE**

Medical Information For Healthcare Providers: If you have any questions about any of the tests in our Cardiometabolic Report, please call Cleveland HeartLab Client Services at 866.358.9828, option 1 to arrange a consult with our clinical education team.

Cardiometabolic Comment Report

INFLAMMATION

ADMA (Asymmetric dimethylarginine)(1) Lab: Z4M

Elevated ADMA levels are associated with significant subclinical atherosclerosis while elevated SDMA levels are associated with kidney function and strongly correlate with reduced eGFR. Available prospective studies suggest an increased risk of cardiovascular disease with higher ADMA concentrations (1). Based on an internal reference range study using 180 'apparently healthy,' non-smoking donors, CHL has defined the following cut-offs for ADMA: A cut-off of <100 ng/mL defines an 'apparently healthy' population at optimal relative risk for a cardiovascular event, 100-123 ng/mL defines a population at moderate relative risk for a cardiovascular event, and >123 ng/mL defines a high relative risk population. (Reference: 1-Willeit P. et al. J Am Heart Assoc. 2015; 4: e001833).

SDMA (Symmetric dimethylarginine) Lab: Z4M

Footnotes

(1) This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Cardiometabolic Center of Excellence at Cleveland HeartLab. It has not been cleared or approved by the U.S. Food and Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

PERFORMING SITE:

Z4M CLEVELAND HEARTLAB INC, 6701 CARNEGIE AVENUE SUITE 500, CLEVELAND, OH 44103-4623 Medical Director: Sami Albeiroti, PhD, D(ABCC) CLIA:36D1032987