

Test Name	In Range	Out of Range	Reference Range	Lab
LIPID PANEL				JI
CHOLESTEROL, TOTAL		204 H	MG/DL	
Normal Range	125-200 MG/DL			
Desirable	<200 MG/DL			
Borderline	200-239 MG/DL			
Undesirable	>=240 MG/DL			
TRIGLYCERIDES	83		15-150 MG/DL	
Normal	<150 MG/DL			
Borderline-High	150-199 MG/DL			
High	200-499 MG/DL			
Very High	>500 MG/DL			
HDL-CHOLESTEROL	45		>40 MG/DL	
LDL-CHOLESTEROL		142 H	<130 MG/DL	
1 YEAR: No Reference Range Established				>>
2-18 YEARS				
Desirable:	<100 MG/DL			
Borderline:	100-129 MG/DL			
Undesirable:	>=130 MG/DL			
>18 YEARS				
Desirable:	<130 MG/DL			
Borderline:	130-159 MG/DL			
Undesirable:	>=160 MG/DL			
Desirable Range <100 MG/DL for patients with Diabetes or CHD <70 MG/DL for Diabetic patients with known heart disease.				
CHOL/HDLRATIO	4.53		<4.98 (CALC)	
COMPREHENSIVE METABOLIC PANEL				JI

Test Name	In Range	Out of Range	Reference Range	Lab
SODIUM	140		136-145 MMOL/L	
POTASSIUM	4.6		3.5-5.5 MMOL/L	
CHLORIDE	106		98-110 MMOL/L	
CARBON DIOXIDE	23		20-29 MMOL/L	
GLUCOSE, SERUM	92		65-99 MG/DL	
UREA NITROGEN (BUN)	17		8-26 MG/DL	
CREATININE	1.26		0.80-1.50 MG/DL	
GFR NON AFRICAN AMERICAN	72		>60 ML/MIN/1.73 M2	

Either of the following must be present for ≥ 3 months to be Chronic Kidney Disease:

- GFR less than 60 for ≥ 3 months
- Albumin to Creatinine ratio ≥ 30 mg/g or other markers of kidney damage

An estimated GFR chronically in the range of 60-89 is categorized as mildly decreased, which corresponds to Stage G2 CKD.

CKD-EPI equation used to estimate GFR.

GFR AFRICAN AMERICAN	84		>60 ML/MIN/1.73 M2	
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CALCIUM	9.5		8.4-10.5 MG/DL	
BILIRUBIN, TOTAL	0.8		0.1-1.2 MG/DL	
PROTEIN, TOTAL	7.5		6.0-8.3 g/dL	
ALBUMIN	4.3		3.5-5.0 GM/DL	
ALKALINE PHOSPHATASE	53		38-126 U/L	
ALANINE TRANSAMINASE	21		11-58 U/L	
ASPARTATE TRANSAMINASE	24		17-59 U/L	

* Endnote 1

Test Name	In Range	Out of Range	Reference Range	Lab
CBC (INCLUDES DIFF/PLT)				JI
WHITE BLOOD CELLS	5.7		3.3-10.5 K/CUMM	
RED BLOOD CELLS	5.20		4.15-5.75 M/CUMM	
HEMOGLOBIN	15.4		12.8-16.9 G/DL	
HEMATOCRIT	46.6		38.8-50.2 %	
MCV	89.6		80.0-105.0 FL	
MCH	29.6		27.0-34.0 PG	
MCHC	33.0		30.5-34.5 G/DL	
RDW	12.5		11.5-15.0 %	
PLATELET COUNT	247		150-450 K/CUMM	
MPV	10.0		7.7-12.2 FL	
NEUTROPHILS	54		%	
LYMPHOCYTES	31		%	
MONOCYTES	9		%	
EOSINOPHILS	4		%	
BASOPHILS	1		%	
ABSOLUTE NEUTROPHILS	3.03		1.30-6.00 K/CUMM	
ABSOLUTE LYMPHOCYTES	1.76		1.00-3.50 K/CUMM	
ABSOLUTE MONOCYTES	0.53		0.00-1.00 K/CUMM	
ABSOLUTE EOSINOPHILS	0.25		0.00-0.70 K/CUMM	
ABSOLUTE BASOPHILS	0.06		0.00-0.10 K/CUMM	
VITAMIN D, 25-OH, TOTAL IA				JI
VITAMIN D, 25OH, TOTAL IA	45		30-100 ng/mL	
	* Endnote 2			
T4 (THYROXINE), FREE				JI
T-4 (THYROXINE), FREE	1.1		0.7-1.5 ng/dL	JI
TESTOSTERONE, TOTAL	320		241-827 NG/DL	JI
THYROID STIMULATING HORMONE TSH	2.52		0.35-4.94 uIU/mL	JI
VITAMIN B12/FOLIC ACID PANEL				
FOLIC ACID	>24.0		ng/mL	

FOLATE REFERENCE RANGES

NORMAL: > 5.4 ng/mL
 BORDERLINE: 3.4 - 5.4 ng/mL
 LOW: < 3.4 ng/mL

Test Name	In Range	Out of Range	Reference Range	Lab
VITAMIN B12		1072 H	211-911 PG/ML	
* TESTOSTERONE, FREE, LC/MS/MS	72.0		46.0-224.0 pg/mL	SLI

Endnote 1

If result of random glucose is > or = 200
or if result of fasting glucose is > 125
confirm Diabetes Mellitus diagnosis with
second glucose on a different day.

Endnote 2

Vitamin D Status	25-OH Vitamin D
Deficiency	<20 ng/mL
Insufficiency	20-29 ng/mL
Optimal	> or = 30 ng/mL

For 25-OH Vitamin D testing on patients on D2-supplementation and patients for whom quantitation of D2 and D3 fractions is required, the Vitamin D, 25-OH (D2, D3), LC/MS/MS is recommended: order code 51567 (patients >2 years).

Effective March 31, the test order code 17306, used prior to March 31, for LC/MS/MS, will be transitioned to a carefully-selected immunoassay methodology. The new immunoassay has passed CDC standardization certification and provides high quality quantitative results that are tied back to standards from the National Institute of Standards and Technology.

For those patients for whom LC/MS/MS testing is appropriate, please utilize test code 51567. When LC/MS/MS is the chosen assay, utilize test code 51567 for patients >or=3 years of age, patients who are on D2 supplementation, and patients for whom a separate D2 and D3 measurement is required. For patients <3 years of age, test code 91935 should be used.

PERFORMING LABORATORY INFORMATION

JI MID AMERICA CLINICAL LABORATORIES, 2560 NORTH SHADELAND AVENUE, INDIANAPOLIS, IN 46219
Laboratory Director: TERENCE J. CUDAHY, MD, CLIA: 15D0665318

SLI QUEST DIAGNOSTICS NICHOLS VALENCIA, 27027 TOURNEY ROAD, VALENCIA, CA 91355-5386
Laboratory Director: BASEL KASHLAN, MD, FCAP, CLIA: 05D0550302

Ordered Items

Testosterone, Free and Total; DHEA-Sulfate; Luteinizing Hormone(LH), S; Prostate-Specific Ag, Serum; Estradiol, Sensitive; Sex Horm Binding Glob, Serum; Drawing Fee

TESTS	RESULT	FLAG	UNITS	REFERENCE INTERVAL	LAB
Testosterone, Free and Total					
Testosterone, Serum	407		ng/dL	264 - 916	01
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.					
Free Testosterone(Direct)	9.4		pg/mL	8.7 - 25.1	02
DHEA-Sulfate	180.4		ug/dL	102.6 - 416.3	01
Luteinizing Hormone (LH), S					
LH	2.2		mIU/mL	1.7 - 8.6	01
Prostate-Specific Ag, Serum					
Prostate Specific Ag, Serum	0.6		ng/mL	0.0 - 4.0	01
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.					
Estradiol, Sensitive	19.8		pg/mL	8.0 - 35.0	02
This test was developed and its performance characteristics determined by LabCorp. It has not been cleared by the Food and Drug Administration. Methodology: Liquid chromatography tandem mass spectrometry(LC/MS/MS)					
Sex Horm Binding Glob, Serum	36.9		nmol/L	16.5 - 55.9	01