Test Name	In Range	Out Of Range	Reference Range	
LIPID PANEL WITH REFLEX TO DIRECT LDL				
CHOLESTEROL, TOTAL	173		<200 mg/dL	RGA
HDL CHOLESTEROL	51		>40 mg/dL	RGA
TRIGLYCERIDES	136		<150 mg/dL	RGA
LDL-CHOLESTEROL	99		mg/dL (calc)	RGA
Reference range: <100				
Desirable range <100 mg/dL for primary prevention; <70 mg/dL for patients with CHD or diabetic patients with > or = 2 CHD risk factors.				
LDL-C is now calculated using the Martin-Hopkins calculation, which is a validated novel method providing better accuracy than the Friedewald equation in the estimation of LDL-C. Martin SS et al. JAMA. 2013;310(19): 2061-2068 (http://education.QuestDiagnostics.com/faq/FAQ164)				
CHOL/HDLC RATIO	3.4		<5.0 (calc)	RGA
NON HDL CHOLESTEROL	122		<130 mg/dL (calc)	RGA
For patients with diabetes plus 1 major ASCVD risk factor, treating to a non-HDL-C goal of <100 mg/dL (LDL-C of <70 mg/dL) is considered a therapeutic option.				
COMPREHENSIVE METABOLIC PANEL				RGA
GLUCOSE	92		65-99 mg/dL	
			Fasting reference interval	
UREA NITROGEN (BUN)	18		7-25 mg/dL	
CREATININE	1.15		0.60-1.35 mg/dL	
eGFR NON-AFR. AMERICAN	77		> OR = 60 mL/min/1.73m2	
eGFR AFRICAN AMERICAN	89		> OR = 60 mL/min/1.73m2	
BUN/CREATININE RATIO	NOT APPLICABLE		6-22 (calc)	
SODIUM	139		135-146 mmol/L	
POTASSIUM	4.1		3.5-5.3 mmol/L	
CHLORIDE	101		98-110 mmol/L	
CARBON DIOXIDE		**33 H**	20-31 mmol/L	
CALCIUM	9.2		8.6-10.3 mg/dL	
PROTEIN, TOTAL	7.1		6.1-8.1 g/dL	
ALBUMIN	4.8		3.6-5.1 g/dL	
GLOBULIN	2.3		1.9-3.7 g/dL (calc)	
ALBUMIN/GLOBULIN RATIO	2.1		1.0-2.5 (calc)	
BILIRUBIN, TOTAL	0.5		0.2-1.2 mg/dL	
ALKALINE PHOSPHATASE		**38 L**	40-115 U/L	
AST	15		10-40 U/L	
ALT	22		9-46 U/L	
HEMOGLOBIN A1c	5.0		<5.7 % of total Hgb	RGA
For the purpose of screening for the presence of diabetes:				

Test Name	In Range	Out Of Range	Reference Range	Lab
<5.7%	Consistent with the absence of diabetes			
5.7-6.4%	Consistent with increased risk for diabetes (prediabetes)			
> or =6.5%	Consistent with diabetes			

This assay result is consistent with a decreased risk of diabetes.

Currently, no consensus exists regarding use of hemoglobin A1c for diagnosis of diabetes in children.

According to American Diabetes Association (ADA) guidelines, hemoglobin A1c <7.0% represents optimal control in non-pregnant diabetic patients. Different metrics may apply to specific patient populations. Standards of Medical Care in Diabetes(ADA).

MAGNESIUM	2.0		1.5-2.5 mg/dL	
URIC ACID		**3.6 L**	4.0-8.0 mg/dL	RGA
Therapeutic target for gout patients: <6.0 mg/dL				RGA
CREATINE KINASE, TOTAL	75		44-196 U/L	
TSH	2.15		0.40-4.50 mIU/L	RGA
T4, FREE	1.3		0.8-1.8 ng/dL	RGA
T3, FREE	3.2		2.3-4.2 pg/mL	RGA
IGF 1, LC/MS	245		52-328 ng/mL	RGA
Z SCORE (MALE)	1.2		-2.0 - +2.0 SD	EZ

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute San Juan Capistrano. It has not been cleared or approved by FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

CBC (INCLUDES DIFF/PLT)				
WHITE BLOOD CELL COUNT	5.5		3.8-10.8 Thousand/uL	RGA
RED BLOOD CELL COUNT	5.80		4.20-5.80 Million/uL	
HEMOGLOBIN		**17.2 H**	13.2-17.1 g/dL	
HEMATOCRIT		**51.6 H**	38.5-50.0 %	
MCV	89.0		80.0-100.0 fL	
MCH	29.7		27.0-33.0 pg	
MCHC	33.3		32.0-36.0 g/dL	
RDW	11.8		11.0-15.0 %	
PLATELET COUNT	186		140-400 Thousand/uL	
MPV	9.6		7.5-12.5 fL	
ABSOLUTE NEUTROPHILS	2893		1500-7800 cells/uL	
ABSOLUTE LYMPHOCYTES	1975		850-3900 cells/uL	
ABSOLUTE MONOCYTES	528		200-950 cells/uL	
ABSOLUTE EOSINOPHILS	77		15-500 cells/uL	
ABSOLUTE BASOPHILS	28		0-200 cells/uL	
NEUTROPHILS	52.6		%	
LYMPHOCYTES	35.9		%	
MONOCYTES	9.6		%	
EOSINOPHILS	1.4		%	
BASOPHILS	0.5		%	

	In Range	Out Of Range	Reference Range	Lab
URINALYSIS, COMPLETE				RGA
COLOR	YELLOW		YELLOW	
APPEARANCE	CLEAR		CLEAR	
SPECIFIC GRAVITY	1.011		1.001-1.035	
PH	7.5		5.0-8.0	
GLUCOSE	NEGATIVE		NEGATIVE	
BILIRUBIN	NEGATIVE		NEGATIVE	
KETONES	NEGATIVE		NEGATIVE	
OCCULT BLOOD	NEGATIVE		NEGATIVE	
PROTEIN	NEGATIVE		NEGATIVE	
NITRITE	NEGATIVE		NEGATIVE	
LEUKOCYTE ESTERASE	NEGATIVE		NEGATIVE	
WBC	NONE SEEN		< OR = 5 /HPF	
RBC	NONE SEEN		< OR = 2 /HPF	
SQUAMOUS EPITHELIAL CELLS	NONE SEEN		< OR = 5 /HPF	
BACTERIA	NONE SEEN		NONE SEEN /HPF	
HYALINE CAST	NONE SEEN		NONE SEEN /LPF	
FERRITIN	142		20-380 ng/mL	RGA
DHEA SULFATE	268		70-495 mcg/dL	IG

DHEA-S values fall with advancing age.
For reference, the reference intervals for 31-40 year old patients are:

Male: 106-464 mcg/dL
Female: 23-266 mcg/dL

INSULIN	6.2		2.0-19.6 uIU/mL	IG

This insulin assay shows strong cross-reactivity for some insulin analogs (lispro, aspart, and glargine) and much lower cross-reactivity with others (detemir, glulisine).

ESTRADIOL		**41 H**	< OR = 39 pg/mL	RGA

Reference range established on post-pubertal patient population. No pre-pubertal reference range established using this assay. For any patients for whom low Estradiol levels are anticipated (e.g. males, pre-pubertal children and hypogonadal/post-menopausal females), the Quest Diagnostics Nichols Institute Estradiol, Ultrasensitive, LCMSMS assay is recommended (order code 30289).

Please note: patients being treated with the drug fulvestrant (Faslodex(R)) have demonstrated significant interference in immunoassay methods for estradiol measurement. The cross reactivity could lead to falsely elevated estradiol test results leading to an inappropriate clinical assessment of estrogen status. Quest Diagnostics order code 30289-Estradiol, Ultrasensitive LC/MS/MS demonstrates negligible cross reactivity with fulvestrant.

CORTISOL, A.M.	17.2		mcg/dL	RGA

Reference Range
8 a.m. (7-9 a.m.) Specimen: 4.0-22.0

Test Name	In Range	Out Of Range	Reference Range	Lab
PSA (FREE AND TOTAL)				
PSA, TOTAL	1.2		< OR = 4.0 ng/mL	IG
PSA, FREE	0.3		ng/mL	
PSA, % FREE		25 L N|C	>25 % (calc)	

PSA(ng/mL)	Free PSA(%)	Estimated(x) Probability of Cancer(as%) Approx. 1
0-2.5	(*)	24(3)
2.6-4.0(1)	0-27(2)	56
4.1-10(4)	0-10	28
	11-15	20
	16-20	16
	21-25	8
	>or =26	>50
>10(+)	N/A	

References: (1) Catalona et al.:Urology 60: 469-474 (2002)
(2) Catalona et al.:J.Urol 168: 922-925 (2002)

Free PSA(%)	Sensitivity(%)	Specificity(%)
< or = 25	85	19
< or = 30	93	9

(3) Catalona et al.:JAMA 277: 1452-1455 (1997)
(4) Catalona et al.:JAMA 279: 1542-1547 (1998)

(x) These estimates vary with age, ethnicity, family history and DRE results.
(*) The diagnostic usefulness of % Free PSA has not been established in patients with total PSA below 2.6 ng/mL
(+) In men with PSA above 10 ng/mL, prostate cancer risk is determined by total PSA alone.

The Total PSA value from this assay system is standardized against the equimolar PSA standard. The test result will be approximately 20% higher when compared to the WHO-standardized Total PSA (Siemens assay). Comparison of serial PSA results should be interpreted with this fact in mind.

PSA was performed using the Beckman Coulter Immunoassay method. Values obtained from different assay methods cannot be used interchangeably. PSA levels, regardless of value, should not be interpreted as absolute evidence of the presence or absence of disease.

SEX HORMONE BINDING GLOBULIN	47		10-50 nmol/L	RGA
TESTOSTERONE,FR(DIALYSIS) AND TOTAL(LC/MS/MS)				SLI
TESTOSTERONE, TOTAL, LC/MS/MS		**1627 H**	250-1100 ng/dL	
FREE TESTOSTERONE		**303.3 H**	35.0-155.0 pg/mL	

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute Valencia. It has not been cleared or approved by the US