MyQuest™

Sex: M Fasting: Y

Specimen: xxx
Requisition: xxx
Report Status: FINAL / SEE REPORT

FASTING:YES ; MULTIPLE TESTING PRIORITIES; ROUTINE TESTING TO FOLLOW.

COMPREHENSIVE METABOLIC PANEL

Analyte	Value	
GLUCOSE	103 H	Reference Range: 65-99 mg/dL
Fasting reference interval For someone without known diabetes, a glucose value between 100 and 125 mg/dL is consistent with prediabetes and should be confirmed with a follow-up test.		
UREA NITROGEN (BUN)	20	Reference Range: 7-25 mg/dL
CREATININE	1.05	Reference Range: 0.60-1.35 mg/dL
eGFR NON-AFR. AMERICAN	84	Reference Range: > OR = 60 mL/min/1.73m2
eGFR AFRICAN AMERICAN	97	Reference Range: > OR = 60 mL/min/1.73m2
BUN/CREATININE RATIO	NOT APPLICABLE	Reference Range: 6-22 (calc)
SODIUM	138	Reference Range: 135-146 mmol/L
POTASSIUM	4.4	Reference Range: 3.5-5.3 mmol/L
CHLORIDE	103	Reference Range: 98-110 mmol/L
CARBON DIOXIDE	28	Reference Range: 20-32 mmol/L
CALCIUM	10.8 H	Reference Range: 8.6-10.3 mg/dL
PROTEIN, TOTAL	7.2	Reference Range: 6.1-8.1 g/dL
ALBUMIN	4.5	Reference Range: 3.6-5.1 g/dL
GLOBULIN	2.7	Reference Range: 1.9-3.7 g/dL (calc)
ALBUMIN/GLOBULIN RATIO	1.7	Reference Range: 1.0-2.5 (calc)
BILIRUBIN, TOTAL	0.5	Reference Range: 0.2-1.2 mg/dL
ALKALINE PHOSPHATASE	71	Reference Range: 36-130 U/L
AST	28	Reference Range: 10-40 U/L
ALT	50 H	Reference Range: 9-46 U/L

IGF BINDING PROTEIN 1 (IGFBP 1)

Analyte	Value

Analyte	Value	
⚠ IGF BINDING PROTEIN 1 (IGFBP 1)	<5 L	Reference Range: 5-34 ng/mL

The limit of detection of this assay is 5 ng/mL. A proportion of normal patients will have results less than 5 ng/mL.

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.

MAGNESIUM, RBC

Analyte	Value	
MAGNESIUM, RBC	5.5	Reference Range: 4.0-6.4 mg/dL

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute Chantilly, VA. 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.

TESTOSTERONE, TOTAL, MS

Analyte	Value	
TESTOSTERONE, TOTAL, MS	455	Reference Range: 250-1100 ng/dL

For additional information, please refer to http://education.questdiagnostics.com/faq/TotalTestosteroneLCMSMSFAQ165
(This link is being provided for informational/educational purposes only.)

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute Chantilly, VA. 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.

TESTOSTERONE, FREE

Analyte	Value	
TESTOSTERONE, FREE	54.1	Reference Range: 46.0-224.0 pg/mL

The concentration of free testosterone is derived from a mathematical model using total testosterone by LCMSMS, sex hormone binding globulin and albumin.

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute Chantilly, VA. 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.

DIHYDROTESTOSTERONE

Analyte	Value

DIHYDROTESTOSTERONE, LC/MS/MS	**39**	Reference Range: 12-65 ng/dL

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.

ESTRONE

Analyte	Value	
ESTRONE	**66**	Reference Range: < OR = 68 pg/mL See Note 1

PREGNENOLONE, LC/MS

Analyte	Value	
PREGNENOLONE, LC/MS	**42**	Reference Range: 22-237 ng/dL See Note 1

TSH

Analyte	Value	
TSH	**2.15**	Reference Range: 0.40-4.50 mIU/L

T4, FREE

Analyte	Value	
T4, FREE	**1.0**	Reference Range: 0.8-1.8 ng/dL

T3, FREE

Analyte	Value	
T3, FREE	**3.4**	Reference Range: 2.3-4.2 pg/mL

CBC (INCLUDES DIFF/PLT)

Analyte	Value	
WHITE BLOOD CELL COUNT	**5.6**	Reference Range: 3.8-10.8 Thousand/uL
RED BLOOD CELL COUNT	**4.92**	Reference Range: 4.20-5.80 Million/uL
HEMOGLOBIN	**14.7**	Reference Range: 13.2-17.1 g/dL
HEMATOCRIT	**44.2**	Reference Range: 38.5-50.0 %
MCV	**89.8**	Reference Range: 80.0-100.0 fL
MCH	**29.9**	Reference Range: 27.0-33.0 pg
MCHC	**33.3**	Reference Range: 32.0-36.0 g/dL
RDW	**12.4**	Reference Range: 11.0-15.0 %
PLATELET COUNT	**264**	Reference Range: 140-400 Thousand/uL
MPV	**9.2**	Reference Range: 7.5-12.5 fL
ABSOLUTE NEUTROPHILS	**3136**	Reference Range: 1500-7800 cells/uL
ABSOLUTE LYMPHOCYTES	**1842**	Reference Range: 850-3900 cells/uL

ABSOLUTE MONOCYTES	420	Reference Range: 200-950 cells/uL
ABSOLUTE EOSINOPHILS	174	Reference Range: 15-500 cells/uL
ABSOLUTE BASOPHILS	28	Reference Range: 0-200 cells/uL
NEUTROPHILS	56	%
LYMPHOCYTES	32.9	%
MONOCYTES	7.5	%
EOSINOPHILS	3.1	%
BASOPHILS	0.5	%

FERRITIN

Analyte	Value	
FERRITIN	303	Reference Range: 38-380 ng/mL

DHEA SULFATE

Analyte	Value	
DHEA SULFATE	100	Reference Range: 70-495 mcg/dL

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

SEX HORMONE BINDING GLOBULIN

Analyte	Value	
SEX HORMONE BINDING GLOBULIN	37	Reference Range: 10-50 nmol/L

ESTRADIOL

Analyte	Value	
ESTRADIOL	30	Reference Range: < OR = 39 pg/mL

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.

Analyte	Value

CORTISOL, A.M.	**12.3**	mcg/dL

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

PSA, TOTAL

Analyte	Value	
PSA, TOTAL	**0.9**	Reference Range: < OR = 4.0 ng/mL

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

This test was performed using the Siemens chemiluminescent 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.

Your request to have a duplicate copy faxed has been acknowledged.
Queued to: 18508075059

Note 1 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.

Performing Sites

AMD Quest Diagnostics/Nichols Chantilly-Chantilly VA, 14225 Newbrook Dr, Chantilly, VA 20151-2228 Laboratory Director: Patrick W Mason M.D.,PhD

EZ Quest Diagnostics/Nichols SJC-San Juan Capistrano,, 33608 Ortega Hwy, San Juan Capistrano, CA 92675-2042 Laboratory Director: Irina Maramica MD,PhD,MBA

QTE Quest Diagnostics-Teterboro, One Malcolm Ave, Teterboro, NJ 07608-1011 Laboratory Director: Lawrence Tsao MD

Key

Priority Out of Range Out of Range

Sex: M Fasting: Y

Specimen: xxx
Requisition: xxx
Report Status: FINAL / SEE REPORT

FASTING:YES ; MULTIPLE TESTING PRIORITIES; ROUTINE TESTING TO FOLLOW.

⚠ TESTOSTERONE, FREE, BIOAVAILABLE AND TOTAL, MS

Analyte	Value	
⚠ TESTOSTERONE, TOTAL, MS For additional information, please refer to http://education.questdiagnostics.com/faq/TotalTestosteroneLCMSMSFAQ165 (This link is being provided for informational/ educational purposes only.) This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Nichols Institute Chantilly, VA. 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.	1131 H	Reference Range: 250-1100 ng/dL
SEX HORMONE BINDING GLOBULIN	45	Reference Range: 10-50 nmol/L
ALBUMIN	4.6	Reference Range: 3.6-5.1 g/dL

TESTOSTERONE, FREE AND BIOAVAILABLE

Analyte	Value	
TESTOSTERONE, FREE	138.2	Reference Range: 46.0-224.0 pg/mL
TESTOSTERONE,BIOAVAILABLE	290.2	Reference Range: 110.0-575.0 ng/dL

⚠ COMPREHENSIVE METABOLIC PANEL

Analyte	Value	
⚠ GLUCOSE Fasting reference interval For someone without known diabetes, a glucose value between 100 and 125 mg/dL is consistent with prediabetes and should be confirmed with a follow-up test.	100 H	Reference Range: 65-99 mg/dL
UREA NITROGEN (BUN)	17	Reference Range: 7-25 mg/dL
CREATININE	1.13	Reference Range: 0.60-1.35 mg/dL
eGFR NON-AFR. AMERICAN	76	Reference Range: > OR = 60 mL/min/1.73m2
eGFR AFRICAN AMERICAN	88	Reference Range: > OR = 60 mL/min/1.73m2
BUN/CREATININE RATIO	NOT APPLICABLE	Reference Range: 6-22 (calc)
SODIUM	139	Reference Range: 135-146 mmol/L
POTASSIUM	4.7	Reference Range: 3.5-5.3 mmol/L
CHLORIDE	104	Reference Range: 98-110 mmol/L
CARBON DIOXIDE	28	Reference Range: 20-32 mmol/L

CALCIUM	9.7	Reference Range: 8.6-10.3 mg/dL
PROTEIN, TOTAL	7.3	Reference Range: 6.1-8.1 g/dL
ALBUMIN	4.6	Reference Range: 3.6-5.1 g/dL
GLOBULIN	2.7	Reference Range: 1.9-3.7 g/dL (calc)
ALBUMIN/GLOBULIN RATIO	1.7	Reference Range: 1.0-2.5 (calc)
BILIRUBIN, TOTAL	0.5	Reference Range: 0.2-1.2 mg/dL
ALKALINE PHOSPHATASE	56	Reference Range: 36-130 U/L
AST	24	Reference Range: 10-40 U/L
ALT	35	Reference Range: 9-46 U/L

⚠ IGF BINDING PROTEIN 1 (IGFBP 1)

Analyte	Value	
⚠ **IGF BINDING PROTEIN 1 (IGFBP 1)**	<5 L	Reference Range: 5-34 ng/mL

The limit of detection of this assay is 5 ng/mL. A proportion of normal patients will have results less than 5 ng/mL.

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⚠ ESTRADIOL

Analyte	Value	
⚠ **ESTRADIOL**	42 H	Reference Range: < OR = 39 pg/mL

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.

LIPID PANEL, CARDIO IQ®

CARDIO IQ® CHOLESTEROL, TOTAL

Analyte	Value	
CHOLESTEROL, TOTAL	200	mg/dL

CARDIO IQ® HDL CHOLESTEROL

Analyte	Value	
HDL CHOLESTEROL	**42**	mg/dL

CARDIO IQ® TRIGLYCERIDES

Analyte	Value	
TRIGLYCERIDES	**289**	mg/dL
If a non-fasting specimen was collected, consider repeat triglyceride testing on a fasting specimen if clinically indicated. Jacobson et al. J of Clin. Lipidol. 2015;9:129-169.		

CARDIO IQ® NON-HDL AND CALCULATED COMPONENTS

Analyte	Value	
LDL-CHOLESTEROL	**117**	mg/dL (calc)
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 For additional information, please refer to http://education.QuestDiagnostics.com/faq/FAQ164 (This link is being provided for informational/educational purposes only.)		
CHOL/HDLC RATIO	**4.8**	calc
NON HDL CHOLESTEROL	**158**	mg/dL (calc)
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.		

DIHYDROTESTOSTERONE

Analyte	Value	
DIHYDROTESTOSTERONE, LC/MS/MS	**65**	Reference Range: 12-65 ng/dL
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.		

ESTRONE

Analyte	Value	
ESTRONE	**29**	Reference Range: < OR = 68 pg/mL See Note A

PREGNENOLONE, LC/MS

Analyte	Value	
PREGNENOLONE, LC/MS	**54**	Reference Range: 22-237 ng/dL See Note A

PTH, INTACT AND CALCIUM

Analyte	Value	
CALCIUM	9.7	Reference Range: 8.6-10.3 mg/dL

PTH, INTACT

Analyte	Value	
PARATHYROID HORMONE, INTACT	42	Reference Range: 14-64 pg/mL

Interpretive Guide	Intact PTH	Calcium
Normal Parathyroid	Normal	Normal
Hypoparathyroidism	Low or Low Normal	Low
Hyperparathyroidism		
Primary	Normal or High	High
Secondary	High	Normal or Low
Tertiary	High	High
Non-Parathyroid		
Hypercalcemia	Low or Low Normal	High

DHEA SULFATE

Analyte	Value	
DHEA SULFATE	197	Reference Range: 70-495 mcg/dL

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

Note A 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.

Key

Priority Out of Range Out of Range