294, Sindh Housing Society Aundh

REPORT

Tel No: 919370707001 PID: 112395 Ref: --

Age:68.00 Years Sex:MALE

Reference: Dr.--

SID: 120062357 Collection Date: 17-08-2020 10:03 AM Sample Date: 17-08-2020 10:03 am Report Date: 17-08-2020 04:02 PM

Observed Value E	Biological	Reference	Interval
------------------	------------	-----------	----------

Test Description
Lipid Profile Mini:

Cholesterol (Total), serum by Enzymatic 165 Desirable : < 200 mg/dL

method Borderline high: 200 - 239 mg/dL

High: >/= 240 mg/dL

Triglycerides, serum by Enzymatic method 181 Normal : < 150 mg/dL

Borderline high: 150-199 mg/dL

High: 200-499 mg/dL Very high: >/= 500 mg/dL

HDL Cholesterol, serum by Enzymatic method 35 Men : > 40 mg/dL

Women: > 50 mg/dL

VLDL Cholestrol, serum by calculation 36 < 30 mg/dL

LDL Cholesterol, serum by calculation 94 Optimal: <100 mg/dL

Near optimal/above optimal: 100-129 mg/dL

Borderline high: 130-159 mg/dL

High: 160-189 mg/dL Very high: >/= 190 mg/dL

Cholesterol(Total)/HDL Cholesterol Ratio 4.71 Males: Acceptable ratio </= 5.00

Females : Acceptable ratio </ = 4.50

LDL Cholesterol/HDL Cholesterol Ratio 2.68 Males: Acceptable ratio <= 3.60

Females : Acceptable ratio </= 3.20

## Reference: ATP III, NCEP Guidelines and National Lipid Association (NLA) 2014 Recommendations

As per most international and national guidelines including Lipid Association of India 2016:

- 1. Lipoprotein and lipid levels should be considered in conjunction with other atherosclerotic cardiovascular disease (ASCVD) risk determinants to assess treatment goals and strategies.
- 2. Non-fasting lipid levels can be used in screening and in general risk estimation.



Page 1 of 9

Dr.(Mrs.) Awanti Golwilkar Mehendale MD(Path) Regn.No.: 2000/02/1052 MAG Diagnostics Pvt. Ltd.

rehendale

"Laboratory is accredited as per ISO 15189:2012, Certificate Number MC-3143. Scope available on request / @ wv





**Carrying forward** 

294, Sindh Housing Society Aundh

**REPORT** 

Tel No: 919370707001 PID: 112395 Ref: --

Age:68.00 Years Sex:MALE

Reference:Dr.--

Collection Date: 17-08-2020 10:03 AM Sample Date: 17-08-2020 10:03 am Report Date:

SID: 120062357

17-08-2020 04:02 PM

Test Description	Observed	Biological Reference Interval
Liver Function Test :		
Bilirubin-Total, serum by Diazo method	0.79	0.10 - 1.20 mg/dL Neonates : Upto 15.0 mg/dL
Bilirubin-Conjugated, serum by Diazo method	0.28	Upto 0.5 mg/dL
Bilirubin-Unconjugated, serum by calculation	0.51	0.1 to 1.0 mg/dL
SGOT (AST), serum by Enzymatic method	16	15 - 37 U/Lt
SGPT (ALT), serum by Enzymatic Method	21	16 to 63 U/Lt
Alkaline Phosphatase, serum by pNPP-kinetic	68	Adult Male : 46 - 116 U/Lt
Protein (total), serum by Biuret method	7.09	6.4 to 8.2 g/dL
Albumin, serum by Bromocresol purple method	4.45	3.4 to 5.0 g/dL
Globulin, serum by calculation	2.64	2.3 - 3.5 g/dL

--XX--



Page 2 of 9

"Laboratory is accredited as per ISO 15189:2012, Certificate Number MC-3143. Scope available on request / @ wv

rehendale Dr.(Mrs.) Awanti Golwilkar Mehendale MD(Path) Regn.No.: 2000/02/1052 A.G Diagnostics Pvt. Ltd.





294, Sindh Housing Society Aundh

REPORT

Tel No: 919370707001 PID: 112395 Ref: --

Age:68.00 Years Sex:MALE

Reference: Dr.--

Collection Date: 17-08-2020 10:03 AM Sample Date: 17-08-2020 10:03 am Report Date:

SID: 120062357

Observed Value Biological Reference Interval

Test Description TEST NAME

Glycated Hemoglobin (HbA1C), by HPLC

8.50

4.0 to 5.6 %

### Interpretation:

HbA1C level reflects the mean glucose concentration over previous 8-12 weeks and provides better indication of long term glycemic control.

### For diagnosis of Diabetes Mellitus (>/= 18 yrs of age) :

5.7 % - 6.4 %: Increased risk for developing diabetes.

>/= 6.5 % : Diabetes

# Therapeutic goals for glycemic control:

Adults: < 7%

Toddlers and Preschoolers: < 8.5% (but > 7.5%)

School age (6-12 yrs): < 8%

Adolescents and young adults (13 - 19 yrs): < 7.5 %

Levels of HbA1C may be low as result of shortened RBC life span in case of hemolytic anemia. Increased HbA1C values may be found in patients with polycythemia or post splenectomy patients. Patients with Homozygous forms of rare variant Hb(CC,SS,EE,SC) HbA1c can not be quantitated as there is no HbA. In such circumstances glycemic control can be monitored using plasma glucose levels or serum Fructosamine.

The A1c target should be individualized based on numerous factors, such as age, life expectancy, comorbid conditions, duration of diabetes, risk of hypoglycemia or adverse consequences from hypoglycemia, patient motivation and adherence.

Ref: ADA (Standards of Medical Care in Diabetes - 2017)



Page 3 of 9

Dr.(Mrs.) Awanti Golwilkar Mehendale MD(Path) Regn.No.: 2000/02/1052 A.G Diagnostics Pvt. Ltd.

ehendale

"Laboratory is accredited as per ISO 15189:2012, Certificate Number MC-3143. Scope available on request / @ wv





294, Sindh Housing Society Aundh

Reference: Dr .--

REPORT

Tel No: 919370707001

Age:68.00 Years Sex: MALE

PID: 112395 Ref: --

**Observed Value** 

Biological Reference Interval

See clinical information below

**Test Description** 

CRP(hs) by Nephelometry

6.74

**Clinical Information:** 

1. C-reactive protein (CRP) is a biomarker of inflammation. Plasma CRP concentrations increase rapidly and dramatically (100-fold or more) in response to tissue injury or inflammation.

2. High-sensitivity CRP (hs-CRP) is more precise than standard CRP when measuring baseline (i.e. normal) concentrations and enables a measure of chronic inflammation. It is recommended for cardiovascular risk assessment. Atherosclerosis is an inflammatory disease and hs-CRP has been endorsed by multiple guidelines as a biomarker of atherosclerotic cardiovascular disease risk.

Low cardiovascular risk : < 2.0 mg/L High cardiovascular risk : >/= 2.0 mg/L Acute inflammation : > 10.0 mg/L

3. A single test for high-sensitivity CRP (hs-CRP) may not reflect an individual patient's basal hs-CRP Repeat measurement may be required to firmly establish an individual's basal hs-CRP concentration. The lowest of the measurements should be used as the predictive value.

Reference: Mayo Medical Laboratories, 2018 Interpretive Handbook.



Page 4 of 9

Dr.(Mrs.) Awanti Golwilkar Mehendale MD(Path) Regn.No.: 2000/02/1052 A.G Diagnostics Pvt. Ltd.

ehendale







SID: 120062357

Collection Date:

Sample Date:

Report Date:

17-08-2020 10:03 AM

17-08-2020 10:03 am

17-08-2020 04:02 PM

294, Sindh Housing Society Aundh

REPORT

Tel No: 919370707001 PID: 112395 Ref: --

Age:68.00 Years Sex:MALE

Reference: Dr.--

SID: 120062357 Collection Date: 17-08-2020 10:03 AM Sample Date: 17-08-2020 10:03 am

Report Date: 17-08-2020 04:02 PM

**Test Description Observed Value Biological Reference Interval** Plasma Glucose:

Plasma glucose fasting, by Hexokinase method 147 < 100 mg/dL

100 to 125 mg/dL: Impaired fasting glucose tolerance / Prediabetes >/= 126 mg/dL : Suggestive of

diabetes mellitus

(On more than one occasion) American Diabetes Association

Guidelines 2019

### Clinical Chemistry

Urea, serum by GLDH-urease	29	17 to 49 mg/dL
BUN-Blood Urea Nitrogen,serum by calculation	13.55	8 to 23 mg/dL
Creatinine, serum by Jaffe w/o deproteinization	1.06	0.6 to 1.2 mg/dL
Uric Acid, serum by Uricase method	5.90	Male: 3.50 to 7.20 mg/dL

<sup>\*</sup> Uric acid is useful for 1. Diagnosis and follow up of renal failure. 2. Monitoring patients receiving cytotoxic drugs and a variety of other disorders, including gout, leukemia, psoriasis, starvation and other wasting conditions . \* Increased uric acid is seen in following conditions :

- 1. Increased purine synthesis 2. Inherited metabolic disorders 3. Excess dietary purine intake
- 4. Increased nucleic acid turnover 5. Malignancy, cytotoxic drugs 6. Decreased urinary excretion (due to CRF) 7. Increased renal reabsorption .
- \* Uric acid is decreased in : 1. Hepatocellular disease with reduced purine synthesis
- 2. Defective renal reabsorption 3. Overtreatment of uricemia (allopurinol or cancer therpies like 6-mercaptopurine, etc).



Page 5 of 9

Dr.(Mrs.) Awanti Golwilkar Mehendale MD(Path) Regn.No.: 2000/02/1052 A.G Diagnostics Pvt. Ltd.

rehendale

"Laboratory is accredited as per ISO 15189:2012, Certificate Number MC-3143. Scope available on request / @ wv



**Carrying forward** 

294, Sindh Housing Society Aundh

**REPORT** 

Tel No: 919370707001 PID: 112395 Ref: --

Age:68.00 Years Sex: MALE

Reference:Dr.--

SID: 120062357 Collection Date: 17-08-2020 10:03 AM Sample Date: 17-08-2020 10:03 am Report Date: 17-08-2020 04:02 PM

**Observed Value Biological Reference Interval** 

**Test Description** 

**Clinical Chemistry:** 



Page 6 of 9

"Laboratory is accredited as per ISO 15189:2012, Certificate Number MC-3143. Scope available on request / @ wv

ए.जी डायग्नॉस्टिक्स प्रा. लि.\_\_\_\_\_\_A.G Diagnostics Pvt. Ltd.

Dr.(Mrs.) Awanti Golwilkar Mehendale MD(Path) Regn.No.: 2000/02/1052 A.G Diagnostics Pvt. Ltd.

frehendale

Dr. Vinanti Golwilkar MD (Pathology)

ilkar

MD (Pathology)

294, Sindh Housing Society Aundh

REPORT

**Test Description** 

Tel No: 919370707001 PID: 112395 Ref: --

Reference: Dr .--

Collection Date: 17-08-2020 10:03 AM Sample Date:

SID: 120062357

17-08-2020 10:03 am Report Date:

17-08-2020 04:02 PM

Age:68.00 Years Sex: MALE

Observed value **Biological Reference Interval** 

**HOMA Index Insulin Resistance Test** 

Plasma glucose fasting, by Hexokinase method < 100 mg/dL 147

> 100 to 125 mg/dL: Impaired fasting glucose tolerance / Prediabetes >/= 126 mg/dL : Suggestive of

diabetes mellitus

(On more than one occasion) American Diabetes Association

Guidelines 2019

Insulin Fasting, Serum by CMIA 3.60 Fasting: 2.5 to 25 µU/mL

Peak upto 150 µU/mL

HOMA IR Index > 2.5 indicates insulin resistance 1.31

#### Interpretation

- 1. As, the direct measurement of the insulin effect on the blood sugar concentration is not possible other indices are used for determining an insulin resistance.
- 2. One of the most common indices is the HOMA index (Homeostasis Model Assessment), which is calculated according to the following formula:

HOMA index = fasting insulin (µU/ml) X fasting blood sugar (mg/dl) /405

- 3. Indications:
  - \* Adiposis (BMI > 28 kg/m²)
  - \* Suspected insulin resistance (metabolic syndrome, diabetes mellitus type 2)
  - \* Suspected polycystic ovary syndrome (PCO-S)
  - \* Cycle disturbances (e. g. amenorrhea)
  - \* Infertility
- 4. Reference ranges:
  - > 2.0 indication for insulin resistance
  - > 2.5 insulin resistance probable
  - > 5.0 average value in patients with diabetes mellitus type 2

Reference: https://www.bioscientia.de/en/files/2011/10/Marker



Page 7 of 9

"Laboratory is accredited as per ISO 15189:2012, Certificate Number MC-3143. Scope available on request / @ wv

rehendale Dr.(Mrs.) Awanti Golwilkar Mehendale MD(Path) Regn.No.: 2000/02/1052 A.G Diagnostics Pvt. Ltd.



294, Sindh Housing Society Aundh

REPORT

Tel No: 919370707001 PID: 112395 Ref: --

Age:68.00 Years Sex: MALE

Reference: Dr .--

SID: 120062357 Collection Date: '-08-2020 10:03 AM

17-08-2020 10:03 AM Sample Date:

17-08-2020 10:03 am Report Date: 17-08-2020 04:02 PM

Reference range & Units

Test Description TEST NAME

Homocysteine, plasma by CMIA 17.70

Male: 5.08 to 15.39 µmol/Lt

Homocysteine concentration is an indicator of acquired folate or cobalamin deficiency, and is a contributing factor in the pathogenesis of neural tube defects. Currently, the use of homocysteine for assessment of cardiovascular risk is uncertain and controversial. Based on several meta-analyses, at present, homocysteine may be regarded as a weak risk factor for coronary heart disease, and there is a lack of direct causal relationship between hyperhomocysteinemia and cardiovascular disease. It is most likely an indicator of poor lifestyle and diet. Homocysteine concentrations >13 mcmol/L are considered abnormal in patients evaluated for suspected nutritional deficiencies (B12, folate) and inborn errors of metabolism. Homocysteine concentrations < or =10 mcmol/L are desirable when utilized for cardiovascular risk.

**Observed Value** 



Page 8 of 9

Dr.(Mrs.) Awanti Golwilkar Mehendale MD(Path) Regn.No.: 2000/02/1052 Vi A.G Diagnostics Pvt. Ltd.

ehendale

"Laboratory is accredited as per ISO 15189:2012, Certificate Number MC-3143. Scope available on request / @ wv





294, Sindh Housing Society Aundh

REPORT

Tel No: 919370707001 PID: 112395 Ref: --

Age:68.00 Years Sex: MALE

Reference: Dr .--

SID: 120062357 Collection Date: 17-08-2020 10:03 AM Sample Date: 17-08-2020 10:03 am Report Date:

17-08-2020 04:02 PM

<u>Urine Routine Examination</u>	Result	Biological Reference Interval
(Sample : Urine, Automated / Semiautomated)		

**Physical** 

**Quantity Examined** 5.0 ml

Method: Visual

Clear **Appearance** 

Method: Visual / Automated

Colour Pale yellow

Method: Visual / Automated

**Chemical (Dipstick)** 

рΗ 6.5 4.6 - 8.0

Method: Indicator Principle

**Absent Protein** Absent

Method: Sulphosalycylic Acid/ pH Indicator

Glucose **Absent** Absent

Method: GOD-POD/Benedict's

Acetone Absent Absent

Method : Sodium Nitroprusside reaction

**Absent Bile Pigments** Absent

Method: Diazo Reaction / Fouchet's test

Urobilinogen Not significant Not Significant

Method: Modified Ehrlich / Watson Schwartz

Microscopy / Flow cytometry

R.B.Cs **Absent** 0 - 2 per hpf

Pus cells 1-2 0 - 5 per hpf

**Epithelial cells Occasional** 0 - 5 per hpf

**Casts** Not detected

Not detected **Crystals** 

**End of Report** 



Page 9 of 9

"Laboratory is accredited as per ISO 15189:2012, Certificate Number MC-3143. Scope available on request / @ wv

rehendale Dr.(Mrs.) Awanti Golwilkar Mehendale MD(Path) Regn.No.: 2000/02/1052 A.G Diagnostics Pvt. Ltd.



