

# REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793

Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune, 411**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

| <u>Complete Blood Count</u>              | <u>Result</u>  | <u>Biological Reference Interval</u>    |
|--|----------------|---|
| (EDTA Whole Blood)                       |                |   |
| <b>Hemoglobin (Hb), EDTA whole blood</b> | <b>14.90</b>   | 14.0 - 17.50 g/dL                       |
| Method: Photometry                       |                |   |
| <b>Total Leucocytes (WBC) count</b>      | <b>10,400</b>  | 4000-10000/ $\mu$ L                     |
| Method : Coulter Principle / Microscopy  |                |   |
| <b>Platelet count</b>                    | <b>416,000</b> | 150000 - 450000 / $\mu$ L               |
| Method : Coulter Principle / Microscopy  |                |   |
| <b>Red blood cell (RBC) count</b>        | <b>6.00</b>    | 4.52 - 5.90 x 10 <sup>6</sup> / $\mu$ L |
| Method: Coulter Principle                |                |   |
| <b>PCV (Packed Cell Volume)</b>          | <b>46.40</b>   | 41.5 - 50.4 %                           |
| Method: Calculated                       |                |   |
| <b>MCV (Mean Corpuscular Volume)</b>     | <b>77.30</b>   | 80.0 - 96.0 fL                          |
| Method: Derived from RBC histogram       |                |   |
| <b>MCH (Mean Corpuscular Hb)</b>         | <b>24.90</b>   | 27.5 - 33.2 pgms                        |
| Method: Calculated                       |                |   |
| <b>MCHC (Mean Corpuscular Hb Conc.)</b>  | <b>32.20</b>   | 33.4 - 35.5 g/dL                        |
| Method: Calculated                       |                |   |
| <b>RDW (RBC distribution width)</b>      | <b>16.20</b>   | 11.6 - 14.6 %                           |
| Method: Derived from RBC Histogram       |                |   |
| <u><b>WBC Differential Count</b></u>     |                |   |
| Method: VCSn / Microscopy / Calculated   |                |   |
| <b>Neutrophils</b>                       | <b>39</b>      | 40 - 80 %                               |
| <b>Absolute Neutrophils</b>              | <b>4,056</b>   | 2000 - 7000 / $\mu$ L                   |
| <b>Eosinophils</b>                       | <b>4</b>       | 1 - 6 %                                 |
| <b>Absolute Eosinophils</b>              | <b>416</b>     | 20 - 500 / $\mu$ L                      |
| <b>Basophils</b>                         | <b>0</b>       | 0 - 2 %                                 |
| <b>Absolute Basophils</b>                | <b>0</b>       | 0 - 100 / $\mu$ L                       |
| <b>Lymphocytes</b>                       | <b>52</b>      | 20 - 40 %                               |
| <b>Absolute Lymphocytes</b>              | <b>5,408</b>   | 1000 - 3000 / $\mu$ L                   |
| <b>Monocytes</b>                         | <b>5</b>       | 2 - 10 %                                |
| <b>Absolute Monocytes</b>                | <b>520</b>     | 200 - 1000 / $\mu$ L                    |
| -  | @ @#           |   |



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

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

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793  
Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune,**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

### Complete Blood Count Findings

R.B.C. : Mild hypochromia, mild anisocytosis.

W.B.C. : Occasional reactive lymphocyte seen

Platelets : Adequate

Remark : ON FOLLOW UP

. SUGGESTED CLINICAL CORRELATION, IRON SUPPLEMENT & FOLLOW UP.

.  
.  
.



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

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

# REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793

Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune,**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

## Test Description

## Observed Value

## Biological Reference Interval

### Lipid Profile Maxi :

Serum Appearance

**Clear**

Cholesterol (Total), serum by Enzymatic method

**270**

Desirable : < 200 mg/dL

Borderline high : 200 - 239 mg/dL

High : >= 240 mg/dL

Triglycerides, serum by Enzymatic method

**217**

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

**43**

Men : > 40 mg/dL

Women : > 50 mg/dL

VLDL Cholesterol, serum by calculation

**43**

< 30 mg/dL

LDL Cholesterol, serum by calculation

**184**

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

**6.28**

Males : Acceptable ratio <= 5.00

Females : Acceptable ratio <= 4.50

LDL Cholesterol/HDL Cholesterol Ratio

**4.27**

Males : Acceptable ratio <= 3.60

Females : Acceptable ratio <= 3.20

Apolipoprotein A1, serum by Nephelometry

**144**

Male : 110 to 205 mg/dL

Apolipoprotein B, serum by Nephelometry

**152**

55 to 140 mg/dL

**On follow up. , Suggested follow up.**

### 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.



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

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

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793

Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune,**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

### Test Description

#### Liver Function Test :

### Observed

### Biological Reference Interval

Bilirubin-Total, serum by Diazo method

**0.35**

0.10 - 1.20 mg/dL  
Neonates : Upto 15.0 mg/dL

Bilirubin-Conjugated, serum by Diazo method

**0.15**

Upto 0.5 mg/dL

Bilirubin-Unconjugated, serum by calculation

**0.20**

0.1 to 1.0 mg/dL

SGOT (AST), serum by Enzymatic method

**20**

>or= 14 years : 8 - 48 U/Lt

SGPT (ALT), serum by Enzymatic Method

**37**

7 to 55 U/Lt

Alkaline Phosphatase,serum by pNPP-kinetic

**127**

Adult Male : (Unit : U/Lt.)  
15 - < 17 years : 82 - 331  
17 - < 19 years : 55 - 149  
> or = 19 years : 40 - 129

Protein (total), serum by Biuret method

**7.70**

6.4 to 8.2 g/dL

Albumin, serum by Bromocresol purple method

**4.49**

3.4 to 5.0 g/dL

Globulin, serum by calculation

**3.21**

2.3 - 3.5 g/dL

--XX--



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

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793

Age: 38.20 Years Sex: MALE

Reference: Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune, 411004**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

| Test Description | Observed Value | Biological Reference Interval |
|------------------|----------------|-------------------------------|
|------------------|----------------|-------------------------------|

### TEST NAME

|                                      |                    |              |
|--------------------------------------|--------------------|--------------|
| Glycated Hemoglobin (HbA1C), by HPLC | <b><u>6.10</u></b> | 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 ( $\geq 18$ yrs of age) :

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

$\geq 6.5$  % : 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 5 of 15



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

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

Carrying forward  
Dr. Ajit Golwilkar's  
legacy of Over  
Four Decades

**DIAGNOSTICS**

BE SURE  
BE WELL

ए.जी. डायग्नॉस्टिक्स प्रा. लि. A.G Diagnostics Pvt. Ltd.

**Dr. Awanti Golwilkar**  
MD (Pathology)

**Dr. Vinanti Golwilkar**  
MD (Pathology)

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793

Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune,**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

| Test Description | Observed Value | Biological Reference Interval |
|------------------|----------------|-------------------------------|
|------------------|----------------|-------------------------------|

**Gamma Glutamyl Transferase (GGT)**

Gamma GT(GGT),Serum by Carboxy substrate-kinetic

**70.00**

Male : (Unit : U/Lt.)

13 - 17 years : < 43

>or= 18 years : 8 - 61

### Interpretation

- \* GGT is used to diagnose and monitor hepatobiliary diseases.
- \* Increased GGT and Alkaline Phosphatase indicate hepatobiliary diseases.
- \* Normal GGT activity and increased Alkaline Phosphatase is consistent with skeletal disease.
- \* May be used a screening test for occult alcoholism.
- \* Elevated GGT is seen in :
  - 1) Intra or post hepatic biliary obstruction (5 to 30 times normal)
  - 2) *Infectious hepatitis (2 to 5 times normal)*
  - 3) *Alcoholism*
  - 4) *Sclerosing cholangitis*
  - 5) *Primary or secondary neoplasm*
  - 6) Medications such as phenytoin and phenobarbitone

Reference : Mayo Medical Laboratories, 2018 Interpretive Handbook.

--<--



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

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793  
Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune, 411004**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

### Test Description

#### Plasma Glucose :

Plasma glucose fasting, by Hexokinase method

### Observed Value

**114**

### Biological Reference Interval

< 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 2020

### Clinical Chemistry

Urea, serum by GLDH-urease

**20**

17 to 49 mg/dL

BUN-Blood Urea Nitrogen,serum by calculation

**9.35**

8 to 23 mg/dL

Creatinine, serum by Jaffe w/o deproteinization

**0.98**

0.6 to 1.2 mg/dL

Uric Acid, serum by Uricase method

**6.40**

Male : 3.50 to 7.20 mg/dL

*\* 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 therapies like 6-mercaptopurine, etc).*

Page 7 of 15



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

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

Carrying forward  
Dr. Ajit Golwilkar's  
legacy of Over  
Four Decades

**DIAGNOSTICS**

BE SURE  
BE WELL

ए.जी. डायग्नॉस्टिक्स प्रा. लि. A.G Diagnostics Pvt. Ltd.

**Dr. Awanti Golwilkar**  
MD (Pathology)

**Dr. Vinanti Golwilkar**  
MD (Pathology)

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793  
Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune,**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

### Test Description Clinical Chemistry :

### Observed Value

### Biological Reference Interval

Calcium, serum by OCPC method

**11.30**

Adult : 8.4 to 10.2 mg/dL

On follow-up

*Method : Colorimetric (o-cresolphthalein substrate) .*

*1. Calcium is useful for diagnosis and monitoring of a wide range of disorders including diseases of bone, kidney, parathyroid gland, or gastrointestinal tract .*

*2. Calcium ions play an important role in blood clotting, bone mineralization, musculature contractility and CNS functioning. .*

*3. Hypocalcemia is due to the absence or impaired function of the parathyroid glands or impaired vitamin-D synthesis. Chronic renal failure is also frequently associated with hypocalcemia due to decreased vitamin-D synthesis as well as hyperphosphatemia and skeletal resistance to the action of parathyroid hormone (PTH).*

*4. Hypercalcemia is mainly due to primary hyperparathyroidism (pHPT), and bone metastasis of carcinoma of the breast, thyroid gland, or lung. Severe hypercalcemia may result in cardiac arrhythmia.*



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



## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793  
Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune, 411004**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

### Test Description Clinical Chemistry :

### Observed Value

### Biological Reference Interval

Sodium, serum by IMT Indirect

**141.00**

136 to 145 mmol/Lt

Potassium, serum by IMT Indirect

**5.00**

3.50 to 5.10 mmol/Lt

Chloride, serum by IMT Indirect

**102.00**

98 to 107 mmol/Lt

### Hormones

Free T3, serum by CMIA

**2.74**

1.71 to 3.71 pg/mL

Free T4, serum by CMIA

**1.10**

0.71 to 1.85 ng/dL

TSH(Ultrassensitive), serum by CMIA

**0.76**

0.40 - 4.00  $\mu$ IU/mL

Testosterone (Total),serum by CMIA

**398.13**

Male :

15 to 16 yrs : 100 - 1200 ng/dL

17 to 18 yrs : 300 - 1200 ng/dL

> or = 19 yrs : 240 - 950 ng/dL

Tanner stages

I (prepubertal) : < 7 - 20

II : 8 - 66

III : 26 - 800

IV : 85 - 1200

V (young adult) : 300 - 950

*Testosterone is a major androgenic hormone. Decreased levels-Males:Partial or complete hypogonadism due to primary/secondary or tertiary testicular failure. Females :Primary or secondary ovarian failure, post- oophorectomy. Increased levels- Pre-pubertal boys/girls:Precocious puberty Males :Testicular/adrenal tumors, androgen abuse. Females:Polycystic ovarian syndrome, congenital adrenal hyperplasia and ovarian/adrenal tumors.*

*Note: Early-morning testosterone levels in young males are around 50% higher than p.m. levels. Testosterone levels can fluctuate substantially between different days, hence androgen status assessment should be based on more than a single measurement.*



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

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793  
Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,  
Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune,**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

### Test Description

#### Hormones :

### Observed Value

### Biological Reference Interval



Page 10 of 15

MC-3143

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

Carrying forward  
Dr. Ajit Golwilkar's  
legacy of Over  
Four Decades

**DIAGNOSTICS**

BE SURE  
BE WELL

ए.जी. डायग्नोस्टिक्स प्रा. लि. A.G. Diagnostics Pvt. Ltd.

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

**ilkar**  
MD (Pathology)

**Dr. Vinanti Golwilkar**  
MD (Pathology)

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793

Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune,**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

| Test Description | Observed Value | Biological Reference Interval |
|------------------|----------------|-------------------------------|
|------------------|----------------|-------------------------------|

### TEST NAME

|                            |       |                 |
|----------------------------|-------|-----------------|
| Vitamin B12, serum by CMIA | 425.0 | 187 - 883 pg/mL |
|----------------------------|-------|-----------------|

Interpretation :

1. Vitamin B12 (cobalamin) is necessary for hematopoiesis and normal neuronal function.

2. Vitamin B12 is decreased in

| Decreased Serum B12    |
|------------------------|
| Pregnancy              |
| Contraceptive hormones |
| Malabsorption          |
| Ethanol ingestion      |
| Smoking                |
| Strict vegan diet      |
| Pernicious anemia      |

3. Serum methylmalonic acid and homocysteine levels are also elevated in vitamin B12 deficiency states.

Active B12 ( Holotranscobalamin) is low in Vitamin B12 deficiency.

4. Please correlate in case of patients taking vitamin B12 supplementation.

Page 11 of 15



MC-3143

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

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

Carrying forward  
Dr. Ajit Golwilkar's  
legacy of Over  
Four Decades

**DIAGNOSTICS**

BE SURE  
BE WELL

ए.जी. डायग्नॉस्टिक्स प्रा. लि. A.G Diagnostics Pvt. Ltd.

**Dr. Awanti Golwilkar**  
MD (Pathology)

**Dr. Vinanti Golwilkar**  
MD (Pathology)

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793

Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune,**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

| Test Description | Observed Value | Reference range & Units |
|------------------|----------------|-------------------------|
|------------------|----------------|-------------------------|

### TEST NAME

|                             |             |                              |
|-----------------------------|-------------|------------------------------|
| Homocysteine,plasma by CMIA | <b>9.73</b> | 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 µmol/L are considered abnormal in patients evaluated for suspected nutritional deficiencies (B12, folate) and inborn errors of metabolism. Homocysteine concentrations < or =10 µmol/L are desirable when utilized for cardiovascular risk.

Page 12 of 15



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

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

Carrying forward  
Dr. Ajit Golwilkar's  
legacy of Over  
Four Decades

**DIAGNOSTICS**

BE SURE  
BE WELL

ए.जी. डायग्नॉस्टिक्स प्रा. लि. A.G Diagnostics Pvt. Ltd.

**Dr. Awanti Golwilkar**  
MD (Pathology)

**Dr. Vinanti Golwilkar**  
MD (Pathology)

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793

Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune, 411004**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

| Test Description                 | Observed Value | Biological Reference Interval  |
|----------------------------------|----------------|--|
| <b>TEST NAME</b>                 |                |  |
| 25 - OH Vitamin D, serum by CMLA | <b>22.50</b>   | Severe deficiency : < 10 ng/mL<br>Mild to moderate deficiency : 10 to 19 ng/mL<br>Optimum levels : 20 to 50 ng/mL<br>Increased risk of hypercalciuria: 51 to 80 ng/mL<br>Toxicity possible : > 80 ng/mL<br>Ref. : Mayo Medical Laboratories<br>These reference ranges represent clinical decision values, based on the 2011 Institute of Medicine report |

### Interpretation :

Vitamin D is vital for strong bones. It also has important, emerging roles in immune function and cancer prevention.

Vitamin D compounds in the body are exogenously derived by dietary means; from plants as 25-hydroxyvitamin D2 (ergocalciferol or calciferol) or from animal products as 25-hydroxyvitamin D3 (cholecalciferol or calcidiol).

Vitamin D may also be endogenously derived by conversion of 7-dihydrocholesterol to 25-hydroxyvitamin D3 in the skin upon ultraviolet exposure.

The total 25-hydroxyvitamin D (25-OH-VitD) level (the sum of 25-OH-vitamin D2 and 25-OH-vitamin D3) is the appropriate indicator of vitamin D body stores.

Patients with renal failure can have very high 25-OH-VitD levels without any signs of toxicity, as renal conversion to the active hormone 1,25-OH-VitD is impaired or absent.

Kindly correlate clinically, with supplementation history & repeat with fresh sample if necessary.



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

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

# REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793

Age:38.20 Years Sex:MALE

**Reference:Dr.--**

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune, 411004**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

## Urine Routine Examination

(Sample : Urine, Automated / Semiautomated)

### Physical

#### Quantity Examined

Method : Visual

#### Appearance

Method : Visual / Automated

#### Colour

Method : Visual / Automated

### Chemical (Dipstick)

#### pH

Method : Indicator Principle

#### Protein

Method : Sulphosalicylic Acid/ pH Indicator

#### Glucose

Method : GOD-POD / Benedict's

#### Acetone

Method : Sodium Nitroprusside reaction

#### Bile Pigments

Method : Diazo Reaction / Fouchet's test

#### Urobilinogen

Method : Modified Ehrlich / Watson Schwartz

### Microscopy / Flow cytometry

#### R.B.Cs

#### Pus cells

#### Epithelial cells

#### Casts

#### Crystals

-

## Result

Not received

-

-

-

=

=

=

=

=

-

-

-

=

=

-

## Biological Reference Interval

ml

-

-

4.6 - 8.0

Absent

Absent

Absent

Absent

Not Significant

0 - 2 per hpf

0 - 5 per hpf

0 - 5 per hpf

-

-



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

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

## REPORT

**SOMNATH P PATIL**  
107 Bhagyashree Bungalow  
Lane No-04 Koregaon Park  
Pune  
Tel No: 919890581599  
PID: 13793

Age:38.20 Years Sex:MALE

Reference:Dr.--

Sample Collected At:

**DPU-CCL**

Dr. D. Y. Patil Medical College,

Hospital & Research Centre,

**Sant Tukaram Nagar, Pimpri Colony, Pune,**

**SID: 120133250**

Collection Date:

18-11-2020 07:30 AM

Sample Date:

18-11-2020 11:08 am

Report Date:

18-11-2020 03:39 PM

| Test Description                               | Observed Value | Biological Reference Interval  |
|--|----------------|--|
| CRP(hs) - C- Reactive Protein high sensitivity | <b>2.02</b>    | See clinical information below<br>Method : Nephelometry / Immunoturbidimetry |

### 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 :  $\geq$  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 level. 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

End of Report