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Review Article

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Case Study: One-Month Clinical Outcome in 19 Years Long-Standing Rheumatoid Arthritis Following Dr. Raju's Neo-Ayurveda Protocol

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ABSTRACT

Rheumatoid Arthritis is a chronic, systemic autoimmune disease characterized by persistent synovial inflammation, progressive joint damage, and functional impairment. Despite advances in disease-modifying therapies, many patients experience incomplete remission and prolonged dependence on pharmacological treatment.

A 53-year-old female with a 19-year history of Rheumatoid Arthritis presented with chronic joint pain, swelling, stiffness, and deformity despite long-term use of Methotrexate, Folic Acid, and Hydroxychloroquine. The patient initiated an integrative Neo Ayurveda protocol on 09-02-2026 and discontinued all conventional medications from Day 1.

The intervention included prebiotic-rich dietary modification, plant-based formulations, metabolic and immune support, and lifestyle regulation based on the principle of "food as medicine." After one-month, Rheumatoid Factor decreased from 36.9 to 31.8 IU/mL, and Thyroid Stimulating Hormone (TSH) reduced from 3.38 to 1.61 µIU/mL. The patient reported approximately 90% improvement in symptoms, with reduced joint swelling, improved mobility, partial correction of deformity, and a weight loss of approximately 4.5 kg.

This case demonstrates significant short-term clinical improvement following an integrative therapeutic approach. The findings are hypothesis-generating and warrant further validation through controlled clinical trials and mechanistic studies.

Introduction

Rheumatoid Arthritis is a chronic, systemic autoimmune disease characterized by persistent synovial inflammation, progressive cartilage degradation, bone erosion, and functional disability. Current therapeutic strategies include disease-modifying anti-rheumatic drugs (DMARDs), biologic agents, and corticosteroids. While these interventions have improved disease management, long-term use is often associated with adverse effects, variable patient response, and incomplete remission.

Recent advances in biomedical research emphasize the importance of **systems-level interactions** in the pathogenesis of autoimmune diseases, particularly involving:

- The **gut–immune axis,** influencing systemic inflammation and immune regulation
- **Chronic inflammatory signaling pathways,** contributing to sustained tissue damage
- **Metabolic and mitochondrial dysfunction,** affecting cellular energy homeostasis and repair mechanisms

In this context, emerging integrative approaches aim to address disease processes at multiple biological levels rather than focusing solely on symptom suppression.

The Neo Ayurveda framework, developed through long-term observational research, proposes a **multi-system, integrative therapeutic model** combining dietary modulation, plant-based formulations, and metabolic regulation. Within this framework, it is hypothesized that specific bioactive compounds present in these formulations may influence **cellular stress-response pathways,** including the activation of molecular chaperones such as **heat shock proteins (HSPs).** Heat shock proteins play a

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critical role in maintaining **protein homeostasis (proteostasis)** by facilitating proper protein folding, preventing aggregation, and assisting in the refolding or degradation of misfolded proteins. Dysregulation of protein folding has been implicated in chronic inflammation, cellular stress, and mitochondrial dysfunction. Modulation of chaperone activity may therefore contribute to the restoration of **three-dimensional protein conformation,** improved cellular function, and enhanced mitochondrial activity.

From a mechanistic standpoint, such effects could potentially support:

- Restoration of **cellular metabolic efficiency**
- Improvement in **mitochondrial bioenergetics**
- Reduction in **oxidative and inflammatory stress**
- Enhancement of **systemic physiological regulation**

However, these mechanisms remain **hypothesis-driven** and require validation through controlled experimental and clinical studies.

Overall, the Neo Ayurveda model represents an integrative, systems-oriented approach aimed at addressing the complex, multi-factorial nature of chronic autoimmune diseases through coordinated modulation of immune, metabolic, and cellular repair pathways.

Case Presentation

- **Patient:** Female, 53 years
- **Disease Duration:** ~19 years (since 2007)
- **Symptoms:**
  - Chronic joint pain and swelling
  - Finger deformities
  - Functional limitation

Medication History

- Methotrexate (weekly)
- Folic Acid (weekly)
- Hydroxychloroquine (daily)

Baseline Clinical Parameters

Parameter	Value (Pre-Treatment)	Date
Rheumatoid Factor (RF)	36.9 IU/mL	25-01-2026
TSH	3.38 µIU/mL	On thyroid medication

Intervention

Discontinuation Phase

At the initiation of the intervention, all previously prescribed conventional medications were **discontinued from Day 1,** based on the patient's informed decision. The patient was advised regarding potential risks and monitored for clinical response during the transition period.

Dietary Intervention

A structured dietary protocol was implemented based on the principles of **metabolic regulation, inflammation control, and gut microbiome modulation.**

Dietary Restrictions

The patient was advised to avoid or restrict the following:

- Sodium intake exceeding 5 g/day
- Refined oils and processed fats
- Milk and milk-derived products (except low-fat curd/yogurt)
- Processed and packaged foods, including bakery items
- Alcohol and sugar-rich foods and beverages

Therapeutic Dietary Components

The prescribed diet emphasized plant-based, nutrient-dense, and prebiotic-rich foods, including:

- **Prebiotic intake:** Fresh garlic, ginger, and soaked or sprouted fenugreek seeds, consumed on an empty stomach to support gut microbial activity
- **Banana stem juice:** Administered twice daily (150–200 mL per serving)
- **Flaxseed or chia-based preparations:** Consumed twice daily as a source of omega-3 fatty acids and lignans
- **Fresh vegetable juices:** Taken twice daily to provide micronutrients and support metabolic balance
- **Coconut-based nutrition:** Coconut milk and controlled intake of cold-pressed coconut oil
- **Raw plant-based diet:** Inclusion of salads, fruit-based preparations, and blended plant-based smoothies

This dietary approach was designed to support g**ut–immune interactions, reduce systemic inflammation, and enhance cellular metabolic function.**

Herbal and Supportive Protocol

The patient received a combination of proprietary herbal formulations and supportive supplements as part of the Neo Ayurveda protocol, including:

- **Orthocare formulation:** Targeted toward musculoskeletal support
- **Cardiovascular support formulation:** Intended to assist vascular and circulatory function
- **Immune support formulation:** Aimed at modulating immune response
- **Gaviola (Annona muricata) capsules (500 mg):** Administered as an adjunct botanical supplement

These interventions were administered in a structured regimen alongside the dietary protocol, with the objective of supporting **systemic regulation, inflammation modulation, and overall physiological balance.**

Intervention Summary

The overall therapeutic approach represents a **multi-component, integrative intervention,** combining:

- Nutritional modulation
- Prebiotic and plant-based dietary strategies
- Herbal and supportive formulations

This combined strategy is intended to act at multiple biological levels, including immune regulation, metabolic balance, and cellular function, within a systems-oriented framework.

Results

Laboratory Outcomes

At baseline and after one month of intervention, the following laboratory parameters were recorded:

Parameter	Pre-Treatment	Post-Treatment (1 Month)
Rheumatoid Factor (RF)	36.9 IU/mL	31.8 IU/mL
Thyroid Stimulating Hormone (TSH)	3.38 µIU/mL	1.61 µIU/mL

A measurable reduction in Rheumatoid Factor was observed, indicating a potential decrease in autoimmune activity. Additionally, normalization trends in thyroid function (TSH) suggest possible systemic metabolic or endocrine modulation.

Clinical Outcomes

Clinically, the patient demonstrated substantial improvement over the one-month intervention period, including:

- Approximately **90% reduction in subjective symptoms,** particularly pain and stiffness
- Noticeable **reduction in joint swelling and inflammation**
- **Improvement in finger alignment,** with partial reversal of deformity
- **Body weight reduction of approximately 4.5 kg**
- Enhanced **functional capacity and daily activity performance**

These findings indicate a significant improvement in both **symptom burden and physical function** within a relatively short duration.

Patient Perspective

At baseline, the patient expressed **skepticism regarding the potential effectiveness** of the intervention, given the long-standing nature of the disease (19 years) and prior inadequate response to conventional therapies.

However, during the course of treatment, the patient reported:

- **Early onset of clinical improvement** within the initial weeks
- Progressive **increase in confidence** toward the intervention protocol
- A marked **psychological transition from hopelessness to optimism**

The patient's experience was documented through a **voice-recorded testimony,** and objective findings were supported by **pre- and post-treatment laboratory reports.**

Scientific Note

The combination of **objective laboratory changes, clinical improvements,** and **patient-reported outcomes** provides a **multi-dimensional assessment of therapeutic response,** consistent with real-world evidence (RWE) approaches in clinical research.

Discussion

This case report describes a clinically significant improvement in a patient with long-standing Rheumatoid Arthritis following a structured integrative intervention under the Neo Ayurveda framework. While the therapeutic protocol represents an original development, its conceptual basis is consistent with established principles in immunology, inflammation biology, and gut–microbiome interactions.

From a mechanistic perspective, several interrelated pathways may be considered. The observed clinical response may be partially explained by **modulation of systemic inflammation,** which is central to the pathophysiology of autoimmune disorders. Dietary components rich in prebiotics and bioactive plant compounds may contribute to **alterations in gut microbiota composition and function,** thereby influencing the gut–immune axis and downstream inflammatory signaling.

Additionally, the protocol emphasizes nutrient-dense, plant-based interventions that may support **cellular metabolic regulation and mitochondrial function.** Emerging evidence suggests that cellular stress-response pathways, including **heat shock proteins (HSPs),** play a role in maintaining protein homeostasis, cellular repair, and mitochondrial integrity. Modulation of such pathways may hypothetically contribute to improved cellular resilience and functional recovery; however, this mechanism remains speculative and requires direct experimental validation.

The concurrent normalization trend observed in thyroid function (TSH reduction) may indicate a broader **systemic regulatory effect,** potentially involving neuroendocrine–immune interactions. Such cross-talk between metabolic, endocrine, and immune systems is increasingly recognized in systems biology frameworks, though causal relationships cannot be established from a single observational case.

Overall, the findings of this case are conceptually aligned with evolving paradigms in:

- **Systems Medicine,** emphasizing multi-organ and network-level regulation
- **Integrative Medicine,** combining nutritional, lifestyle, and biologically active interventions
- **Real-World Evidence (RWE) frameworks,** which utilize observational clinical data to generate hypotheses in complex, chronic conditions

Limitations

The interpretation of this case is subject to several important limitations:

- This is a **single-patient observation,** limiting generalizability
- Absence of a **control group or comparator intervention**
- **Short duration of follow-up** (one month), restricting assessment of long-term outcomes
- Lack of advanced biomarker analysis to validate proposed mechanisms

Conclusion of Discussion

While the clinical improvements observed are noteworthy, they should be interpreted as hypothesis-generating findings within a practice-based evidence framework. Further investigation through controlled clinical trials, longitudinal studies, and mechanistic research is required to establish efficacy, safety, and underlying biological pathways.

Conclusion

This observational case report demonstrates substantial short-term clinical improvement (~90%) in a patient with long-standing Rheumatoid Arthritis following an integrative intervention based on the Neo Ayurveda framework. The observed outcomes, including improvements in clinical symptoms, functional status, and laboratory parameters, suggest potential multi-system effects involving inflammatory, metabolic, and immune regulatory pathways.

While these findings are encouraging, they should be interpreted as **hypothesis-generating evidence** derived from a single-case observation. Robust validation through **controlled clinical trials, larger cohort studies, and mechanistic investigations** is essential to establish efficacy, safety, and underlying biological mechanisms.

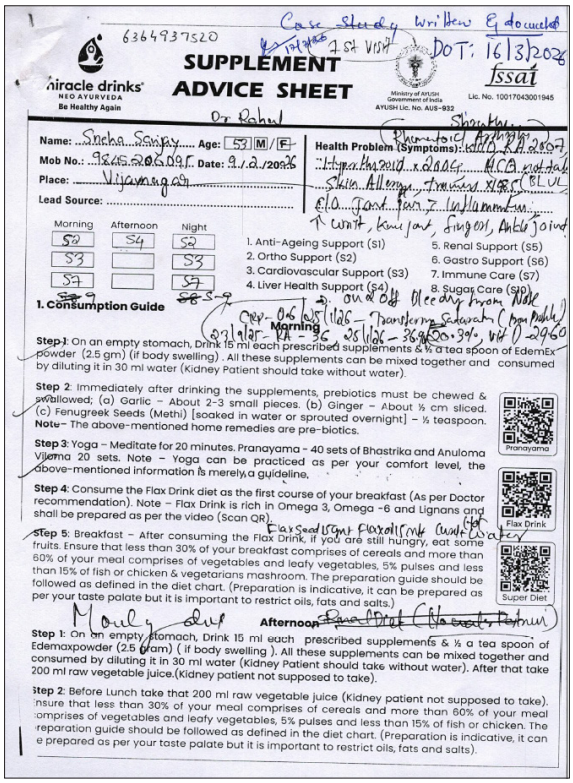
This case contributes to the growing body of real-world evidence supporting integrative, systems-oriented approaches in the management of chronic autoimmune diseases and highlights the need for further interdisciplinary research in this domain.

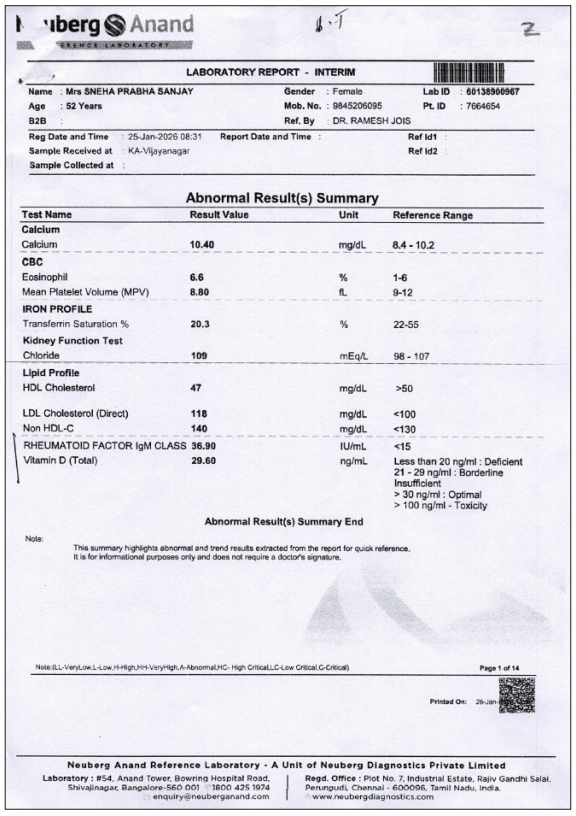
Ethical Considerations

- Patient consent obtained (voice-recorded)
- Data anonymized for publication
- Observational findings; not a replacement for standard medical care

Future Directions

- Controlled clinical trials
- Biomarker-based studies
- Mechanistic research on gut–immune interactions
- Pharmacological analysis of herbal formulations


Case Study Written & documented
6364937520
SUPPLEMENT ADVICE SHEET
Miracle drinks NEO AYURVEDA Be Healthy Again
Ministry of AYUSH Government of India AYUSH Lic. No. AUS-932
Lic. No. 10017043001945
Dr Rahul
DOT: 16/3/2026
Name: Sneha Sanjay ..... Age: 53 M/F
Mob No.: 9845206095 Date: 9/2/2026
Place: Vijayanagar
Lead Source:
Health Problem (Symptoms):
Morning Afternoon Night
S2 S4 S2
S3 S3
S7 S7
1. Anti-Ageing Support (S1)
2. Ortho Support (S2)
3. Cardiovascular Support (S3)
4. Liver Health Support (S4)
5. Renal Support (S5)
6. Gastro Support (S6)
7. Immune Care (S7)
8. Sugar Care (S8)
1. Consumption Guide
Step 1: On an empty stomach, Drink 15 ml each prescribed supplements & ½ a tea spoon of EdemEX powder (2.5 gm) (if body swelling). All these supplements can be mixed together and consumed by diluting it in 30 ml water (Kidney Patient should take without water).
Step 2: Immediately after drinking the supplements, prebiotics must be chewed & swallowed; (a) Garlic – About 2-3 small pieces. (b) Ginger – About ½ cm sliced. (c) Fenugreek Seeds (Methi) [soaked in water or sprouted overnight] – ½ teaspoon.
Note– The above-mentioned home remedies are pre-biotics.
Step 3: Yoga – Meditate for 20 minutes. Pranayama - 40 sets of Bhastrika and Anuloma Viloma 20 sets. Note – Yoga can be practiced as per your comfort level, the above-mentioned information is merely a guideline.
Step 4: Consume the Flax Drink diet as the first course of your breakfast (As per Doctor recommendation). Note – Flax Drink is rich in Omega 3, Omega -6 and Lignans and shall be prepared as per the video (Scan QR).
Step 5: Breakfast – After consuming the Flax Drink, if you are still hungry, eat some fruits. Ensure that less than 30% of your breakfast comprises of cereals and more than 60% of your meal comprises of vegetables and leafy vegetables, 5% pulses and less than 15% of fish or chicken & vegetarians mashroom. The preparation guide should be followed as defined in the diet chart. (Preparation is indicative, it can be prepared as per your taste palate but it is important to restrict oils, fats and salts.)
Pranayama
Flax Drink
Super Diet
Afternoon
Step 1: On an empty stomach, Drink 15 ml each prescribed supplements & ½ a tea spoon of Edemaxpowder (2.5 gram) (if body swelling). All these supplements can be mixed together and consumed by diluting it in 30 ml water (Kidney Patient should take without water). After that take 200 ml raw vegetable juice.(Kidney patient not supposed to take).
Step 2: Before Lunch take that 200 ml raw vegetable juice (Kidney patient not supposed to take). Ensure that less than 30% of your meal comprises of cereals and more than 60% of your meal comprises of vegetables and leafy vegetables, 5% pulses and less than 15% of fish or chicken. The preparation guide should be followed as defined in the diet chart. (Preparation is indicative, it can be prepared as per your taste palate but it is important to restrict oils, fats and salts).


LABORATORY REPORT - INTERIM
Name : Mrs SNEHA PRABHA SANJAY
Age : 52 Years
B2B :
Gender : Female
Mob. No. : 9845206095
Ref. By : DR. RAMESH JOIS
Lab ID : 60138900967
Pt. ID : 7664654
Reg Date and Time : 25-Jan-2026 08:31
Report Date and Time :
Sample Received at : KA-Vijayanagar
Sample Collected at :
Ref Id1 :
Ref Id2 :
Abnormal Result(s) Summary
Test Name | Result Value | Unit | Reference Range
Calcium
Calcium | 10.40 | mg/dL | 8.4 - 10.2
CBC
Eosinophil | 6.6 | % | 1-6
Mean Platelet Volume (MPV) | 8.80 | fL | 9-12
IRON PROFILE
Transferrin Saturation % | 20.3 | % | 22-55
Kidney Function Test
Chloride | 109 | mEq/L | 98 - 107
Lipid Profile
HDL Cholesterol | 47 | mg/dL | >50
LDL Cholesterol (Direct) | 118 | mg/dL | <100
Non HDL-C | 140 | mg/dL | <130
RHEUMATOID FACTOR IgM CLASS | 36.90 | IU/mL | <15
Vitamin D (Total) | 29.60 | ng/mL | Less than 20 ng/ml : Deficient; 21 - 29 ng/ml : Borderline Insufficient; > 30 ng/ml : Optimal; > 100 ng/ml - Toxicity
Abnormal Result(s) Summary End
Note:
This summary highlights abnormal and trend results extracted from the report for quick reference.
It is for informational purposes only and does not require a doctor's signature.
Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical)
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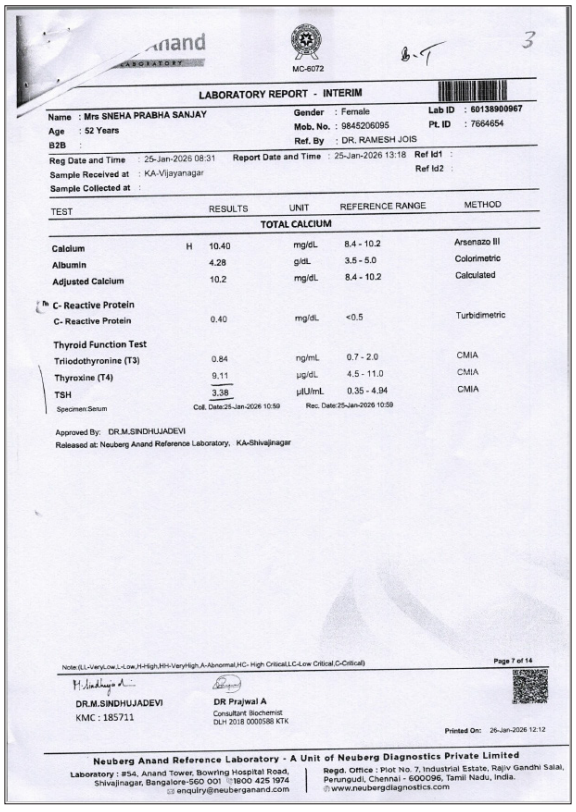
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Name : Mrs SNEHA PRABHA SANJAY
Age : 52 Years
B2B :
Gender : Female
Mob. No. : 9845206095
Ref. By : DR. RAMESH JOIS
Lab ID : 60138900967
Pt. ID : 7664654
Reg Date and Time : 25-Jan-2026 08:31
Report Date and Time : 25-Jan-2026 13:18
Sample Received at : KA-Vijayanagar
Sample Collected at :
Ref Id1 :
Ref Id2 :
TEST | RESULTS | UNIT | REFERENCE RANGE | METHOD
TOTAL CALCIUM
Calcium | H 10.40 | mg/dL | 8.4 - 10.2 | Arsenazo III
Albumin | 4.28 | g/dL | 3.5 - 5.0 | Colorimetric
Adjusted Calcium | 10.2 | mg/dL | 8.4 - 10.2 | Calculated
C- Reactive Protein
C- Reactive Protein | 0.40 | mg/dL | <0.5 | Turbidimetric
Thyroid Function Test
Triiodothyronine (T3) | 0.84 | ng/mL | 0.7 - 2.0 | CMIA
Thyroxine (T4) | 9.11 | µg/dL | 4.5 - 11.0 | CMIA
TSH | 3.38 | µIU/mL | 0.35 - 4.94 | CMIA
Specimen:Serum
Coll. Date:25-Jan-2026 10:59
Rec. Date:25-Jan-2026 10:59
Approved By: DR.M.SINDHUJADEVI
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar
Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical)
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DR.M.SINDHUJADEVI
KMC : 185711
DR Prajwal A
Consultant Biochemist
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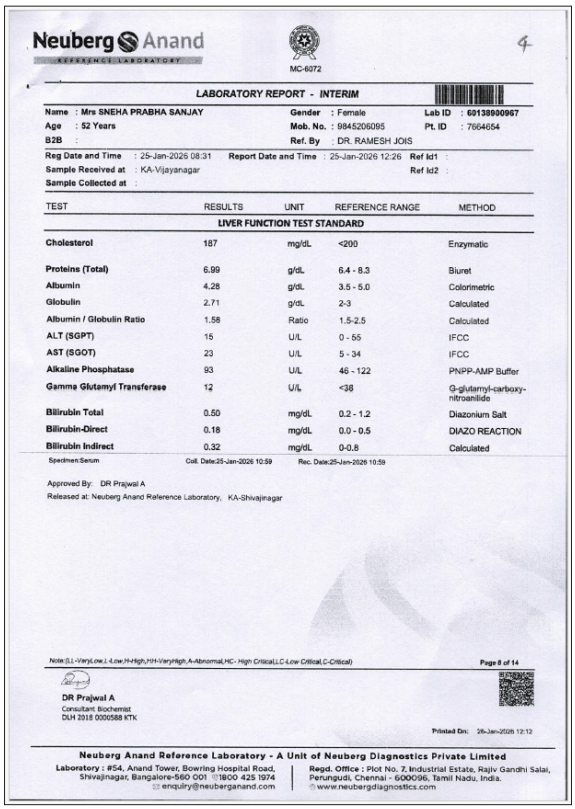

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Reg Date and Time : 25-Jan-2026 08:31 | Report Date and Time : 25-Jan-2026 12:26 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
LIVER FUNCTION TEST STANDARD				
Cholesterol	187	mg/dL	<200	Enzymatic
Proteins (Total)	6.99	g/dL	6.4 - 8.3	Biuret
Albumin	4.28	g/dL	3.5 - 5.0	Colorimetric
Globulin	2.71	g/dL	2-3	Calculated
Albumin / Globulin Ratio	1.58	Ratio	1.5-2.5	Calculated
ALT (SGPT)	15	U/L	0 - 55	IFCC
AST (SGOT)	23	U/L	5 - 34	IFCC
Alkaline Phosphatase	93	U/L	46 - 122	PNPP-AMP Buffer
Gamma Glutamyl Transferase	12	U/L	<38	G-glutamyl-carboxy-nitroanilide
Bilirubin Total	0.50	mg/dL	0.2 - 1.2	Diazonium Salt
Bilirubin-Direct	0.18	mg/dL	0.0 - 0.5	DIAZO REACTION
Bilirubin Indirect	0.32	mg/dL	0-0.8	Calculated

Specimen:Serum | Coll. Date:25-Jan-2026 10:59 | Rec. Date:25-Jan-2026 10:59

Approved By: DR Prajwal A
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 8 of 14

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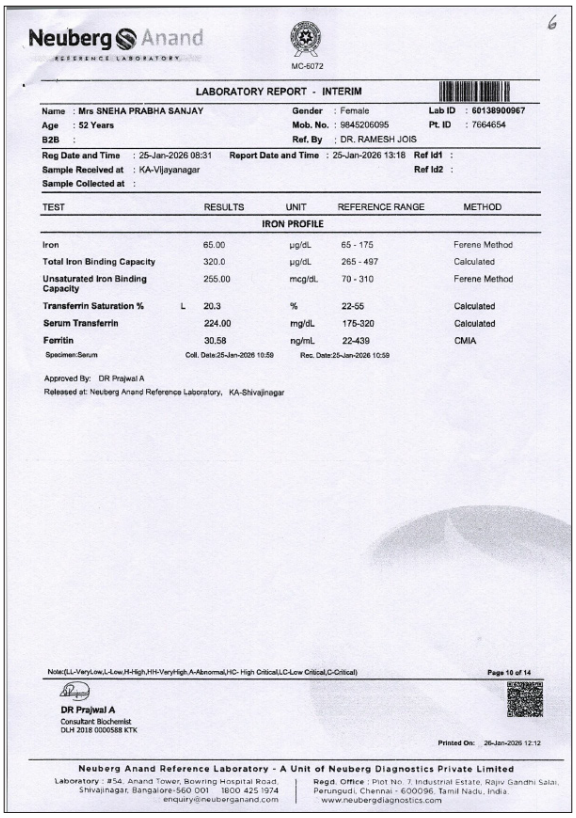

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Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST		RESULTS	UNIT	REFERENCE RANGE	METHOD
IRON PROFILE					
Iron		65.00	µg/dL	65 - 175	Ferene Method
Total Iron Binding Capacity		320.0	µg/dL	265 - 497	Calculated
Unsaturated Iron Binding Capacity		255.00	mcg/dL	70 - 310	Ferene Method
Transferrin Saturation %	L	20.3	%	22-55	Calculated
Serum Transferrin		224.00	mg/dL	175-320	Calculated
Ferritin		30.58	ng/mL	22-439	CMIA

Specimen:Serum | Coll. Date:25-Jan-2026 10:59 | Rec. Date:25-Jan-2026 10:59

Approved By: DR Prajwal A
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

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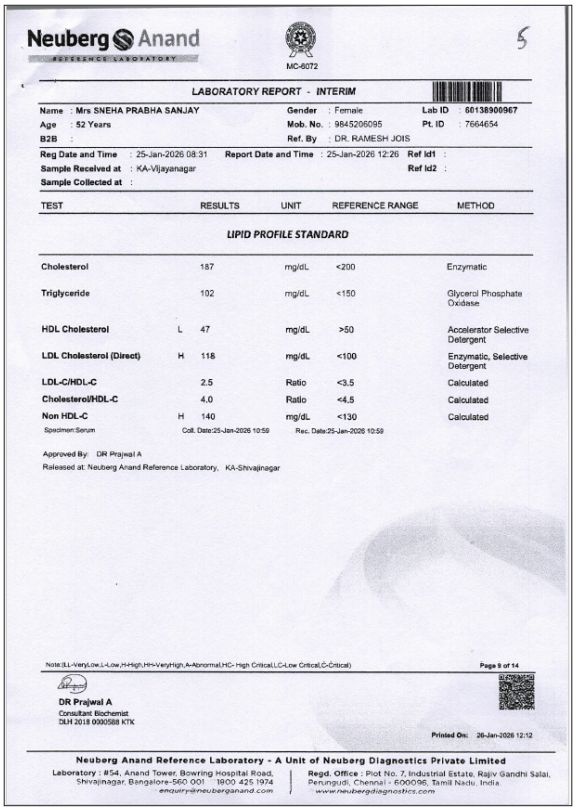

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Sample Collected at :

TEST		RESULTS	UNIT	REFERENCE RANGE	METHOD
LIPID PROFILE STANDARD					
Cholesterol		187	mg/dL	<200	Enzymatic
Triglyceride		102	mg/dL	<150	Glycerol Phosphate Oxidase
HDL Cholesterol	L	47	mg/dL	>50	Accelerator Selective Detergent
LDL Cholesterol (Direct)	H	118	mg/dL	<100	Enzymatic, Selective Detergent
LDL-C/HDL-C		2.5	Ratio	<3.5	Calculated
Cholesterol/HDL-C		4.0	Ratio	<4.5	Calculated
Non HDL-C	H	140	mg/dL	<130	Calculated

Specimen:Serum | Coll. Date:25-Jan-2026 10:59 | Rec. Date:25-Jan-2026 10:59

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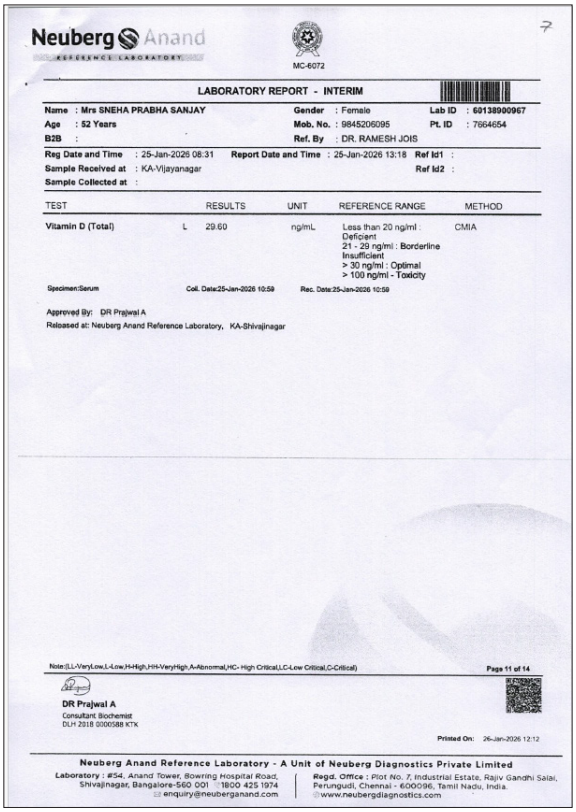

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B2B : | Ref. By : DR. RAMESH JOIS
Reg Date and Time : 25-Jan-2026 08:31 | Report Date and Time : 25-Jan-2026 13:18 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST		RESULTS	UNIT	REFERENCE RANGE	METHOD
Vitamin D (Total)	L	29.60	ng/mL	Less than 20 ng/ml : Deficient 21 - 29 ng/ml : Borderline Insufficient > 30 ng/ml : Optimal > 100 ng/ml - Toxicity	CMIA

Specimen:Serum | Coll. Date:25-Jan-2026 10:59 | Rec. Date:25-Jan-2026 10:59

Approved By: DR Prajwal A
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 11 of 14

DR Prajwal A
Consultant Biochemist
DLH 2018 0000588 KTK

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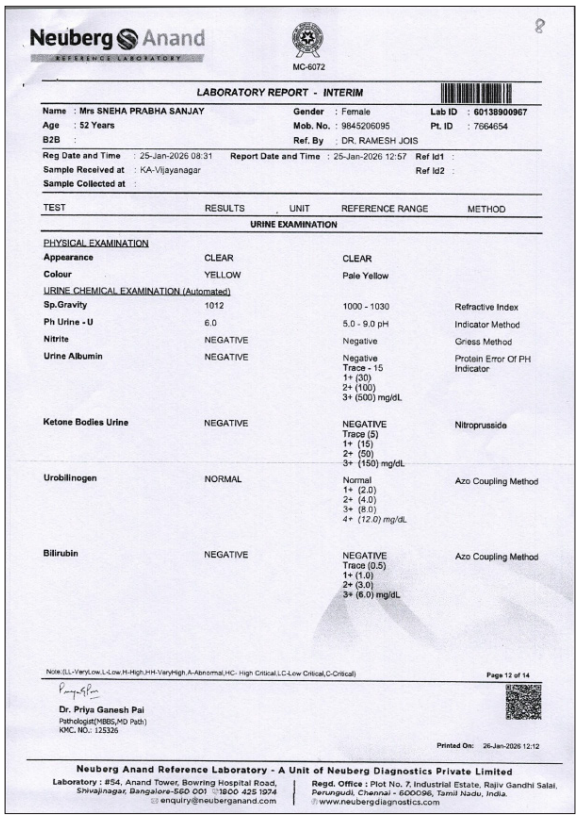

Neuberg Anand
REFERENCE LABORATORY
MC-6072

8

LABORATORY REPORT - INTERIM

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60138900967
Age : 52 Years | Mob. No. : 9845206095 | Pt. ID : 7664654
B2B : | Ref. By : DR. RAMESH JOIS
Reg Date and Time : 25-Jan-2026 08:31 | Report Date and Time : 25-Jan-2026 12:57 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
URINE EXAMINATION				
PHYSICAL EXAMINATION				
Appearance	CLEAR		CLEAR	
Colour	YELLOW		Pale Yellow	
URINE CHEMICAL EXAMINATION (Automated)				
Sp.Gravity	1012		1000 - 1030	Refractive Index
Ph Urine - U	6.0		5.0 - 9.0 pH	Indicator Method
Nitrite	NEGATIVE		Negative	Griess Method
Urine Albumin	NEGATIVE		Negative Trace - 15 1+ (30) 2+ (100) 3+ (500) mg/dL	Protein Error Of PH Indicator
Ketone Bodies Urine	NEGATIVE		NEGATIVE Trace (5) 1+ (15) 2+ (50) 3+ (150) mg/dL	Nitroprusside
Urobilinogen	NORMAL		Normal 1+ (2.0) 2+ (4.0) 3+ (8.0) 4+ (12.0) mg/dL	Azo Coupling Method
Bilirubin	NEGATIVE		NEGATIVE Trace (0.5) 1+ (1.0) 2+ (3.0) 3+ (6.0) mg/dL	Azo Coupling Method

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 12 of 14

Dr. Priya Ganesh Pai
Pathologist(MBBS,MD Path)
KMC. NO.: 125326

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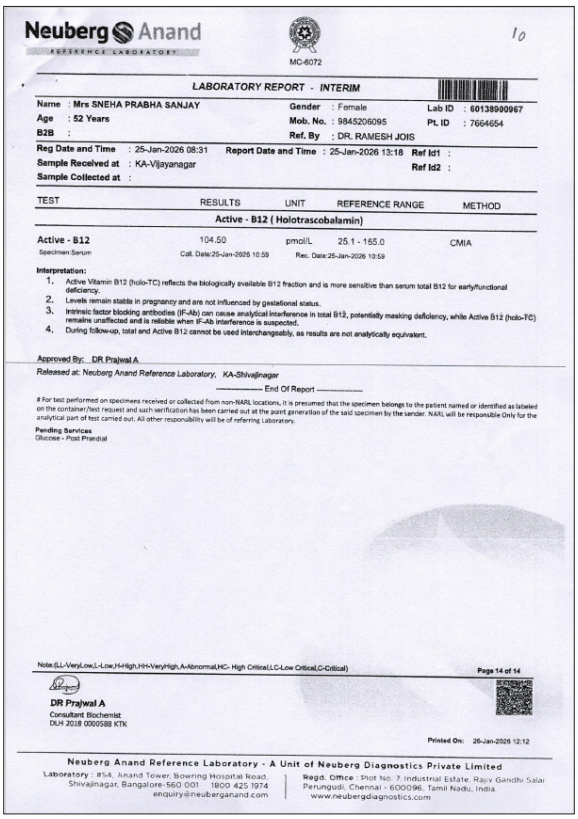

Neuberg Anand
REFERENCE LABORATORY
MC-6072

10

LABORATORY REPORT - INTERIM

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60138900967
Age : 52 Years | Mob. No. : 9845206095 | Pt. ID : 7664654
B2B : | Ref. By : DR. RAMESH JOIS
Reg Date and Time : 25-Jan-2026 08:31 | Report Date and Time : 25-Jan-2026 13:18 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
Active - B12 (Holotrascobalamin)				
Active - B12	104.50	pmol/L	25.1 - 165.0	CMIA
Specimen:Serum	Coll. Date:25-Jan-2026 10:59		Rec. Date:25-Jan-2026 10:59	

Interpretation:
1. Active Vitamin B12 (holo-TC) reflects the biologically available B12 fraction and is more sensitive than serum total B12 for early/functional deficiency.
2. Levels remain stable in pregnancy and are not influenced by gestational status.
3. Intrinsic factor blocking antibodies (IF-Ab) can cause analytical interference in total B12, potentially masking deficiency, while Active B12 (holo-TC) remains unaffected and is reliable when IF-Ab interference is suspected.
4. During follow-up, total and Active B12 cannot be used interchangeably, as results are not analytically equivalent.

Approved By: DR Prajwal A
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

End Of Report

For test performed on specimens received or collected from non-NABL locations, it is presumed that the specimen belongs to the patient named or identified as labeled on the container/test request and such verification has been carried out at the point generation of the said specimen by the sender. NABL will be responsible Only for the analytical part of test carried out. All other responsibility will be of referring Laboratory.

Pending Services
Glucose - Post Prandial

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 14 of 14

DR Prajwal A
Consultant Biochemist
DLH 2018 0000588 KTK

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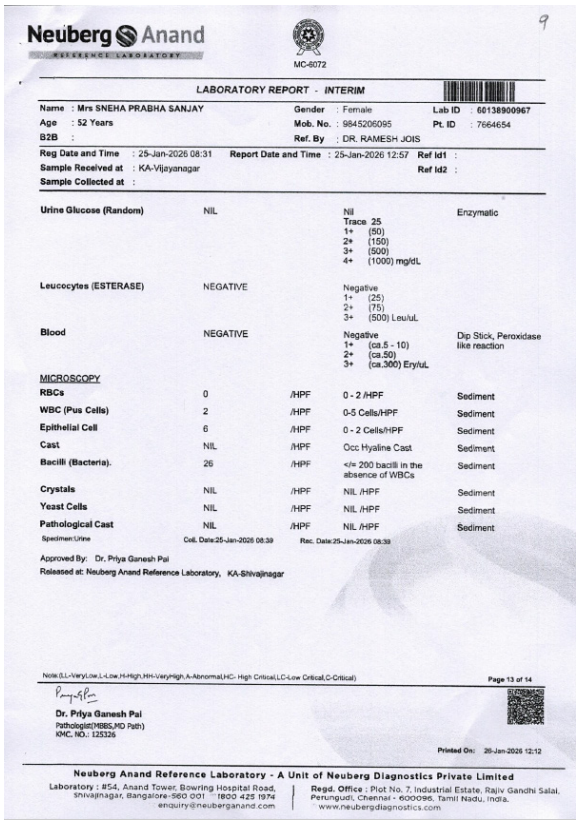

Neuberg Anand
REFERENCE LABORATORY
MC-6072

9

LABORATORY REPORT - INTERIM

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60138900967
Age : 52 Years | Mob. No. : 9845206095 | Pt. ID : 7664654
B2B : | Ref. By : DR. RAMESH JOIS
Reg Date and Time : 25-Jan-2026 08:31 | Report Date and Time : 25-Jan-2026 12:57 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

Urine Glucose (Random)	NIL		Nil Trace 25 1+ (50) 2+ (150) 3+ (500) 4+ (1000) mg/dL	Enzymatic
Leucocytes (ESTERASE)	NEGATIVE		Negative 1+ (25) 2+ (75) 3+ (500) Leu/uL	
Blood	NEGATIVE		Negative 1+ (ca.5 - 10) 2+ (ca.50) 3+ (ca.300) Ery/uL	Dip Stick, Peroxidase like reaction
MICROSCOPY				
RBCs	0	/HPF	0 - 2 /HPF	Sediment
WBC (Pus Cells)	2	/HPF	0-5 Cells/HPF	Sediment
Epithelial Cell	6	/HPF	0 - 2 Cells/HPF	Sediment
Cast	NIL	/HPF	Occ Hyaline Cast	Sediment
Bacilli (Bacteria).	26	/HPF	</= 200 bacilli in the absence of WBCs	Sediment
Crystals	NIL	/HPF	NIL /HPF	Sediment
Yeast Cells	NIL	/HPF	NIL /HPF	Sediment
Pathological Cast	NIL	/HPF	NIL /HPF	Sediment
Specimen:Urine	Coll. Date:25-Jan-2026 08:39		Rec. Date:25-Jan-2026 08:39	

Approved By: Dr. Priya Ganesh Pai
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 13 of 14

Dr. Priya Ganesh Pai
Pathologist(MBBS,MD Path)
KMC. NO.: 125326

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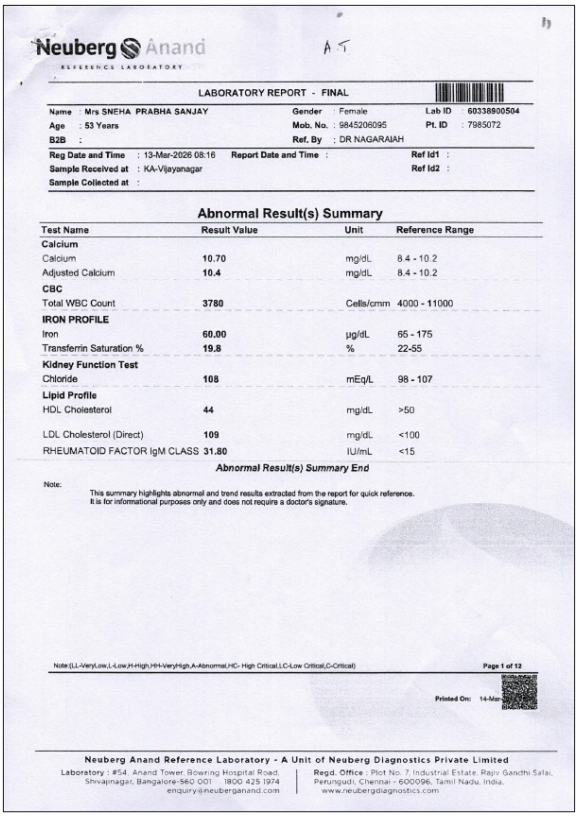

Neuberg Anand
REFERENCE LABORATORY

11

LABORATORY REPORT - FINAL

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60338900504
Age : 53 Years | Mob. No. : 9845206095 | Pt. ID : 7985072
B2B : | Ref. By : DR NAGARAIAH
Reg Date and Time : 13-Mar-2026 08:16 | Report Date and Time : | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

Abnormal Result(s) Summary

Test Name	Result Value	Unit	Reference Range
Calcium			
Calcium	**10.70**	mg/dL	8.4 - 10.2
Adjusted Calcium	**10.4**	mg/dL	8.4 - 10.2
CBC			
Total WBC Count	**3780**	Cells/cmm	4000 - 11000
IRON PROFILE			
Iron	**60.00**	µg/dL	65 - 175
Transferrin Saturation %	**19.8**	%	22-55
Kidney Function Test			
Chloride	**108**	mEq/L	98 - 107
Lipid Profile			
HDL Cholesterol	**44**	mg/dL	>50
LDL Cholesterol (Direct)	**109**	mg/dL	<100
RHEUMATOID FACTOR IgM CLASS	**31.80**	IU/mL	<15

Abnormal Result(s) Summary End

Note:
This summary highlights abnormal and trend results extracted from the report for quick reference.
It is for informational purposes only and does not require a doctor's signature.

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 1 of 12

Printed On: 14-Mar

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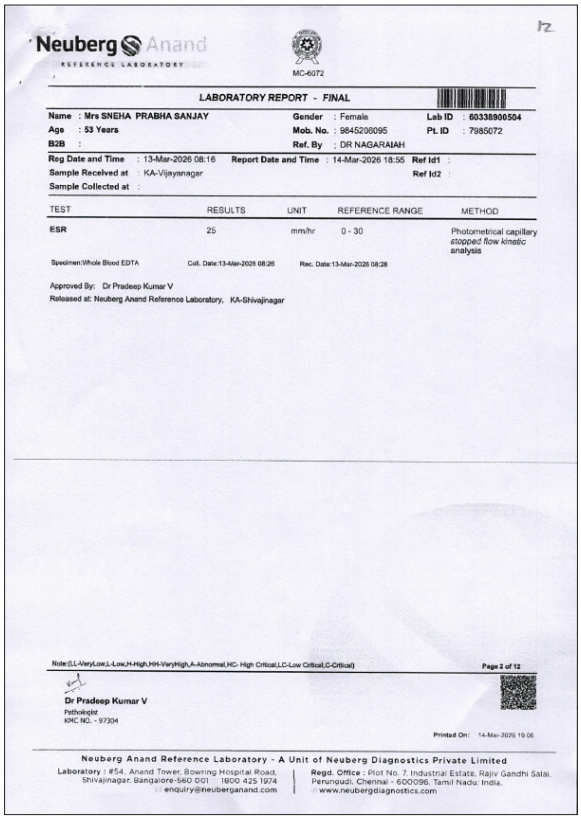

Neuberg Anand REFERENCE LABORATORY — MC-6072

12

LABORATORY REPORT - FINAL

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60338900504
Age : 53 Years | Mob. No. : 9845206095 | Pt. ID : 7985072
B2B : | Ref. By : DR NAGARAIAH
Reg Date and Time : 13-Mar-2026 08:16 | Report Date and Time : 14-Mar-2026 18:55 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
ESR	25	mm/hr	0 - 30	Photometrical capillary stopped flow kinetic analysis

Specimen:Whole Blood EDTA | Coll. Date:13-Mar-2026 08:26 | Rec. Date:13-Mar-2026 08:26

Approved By: Dr Pradeep Kumar V
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 2 of 12

Dr Pradeep Kumar V
Pathologist
KMC NO. - 97304

Printed On: 14-Mar-2026 19:06

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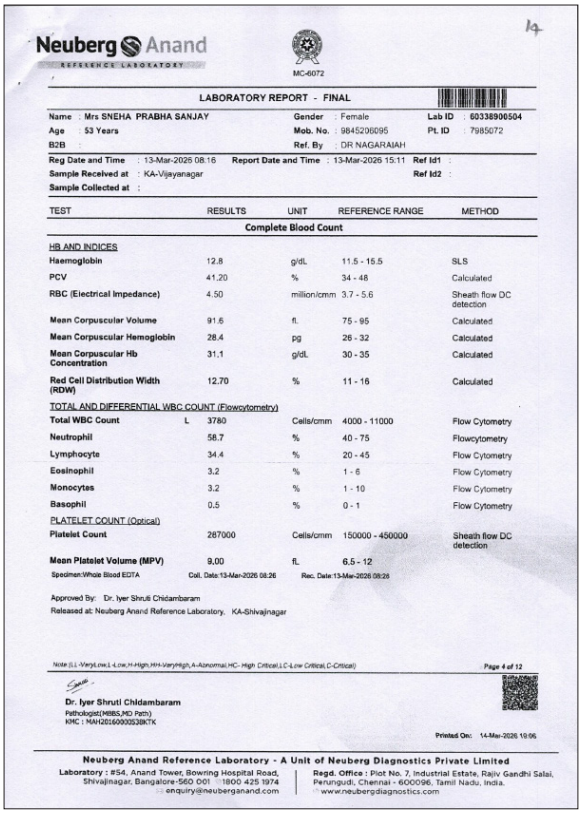

Neuberg Anand REFERENCE LABORATORY — MC-6072

14

LABORATORY REPORT - FINAL

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60338900504
Age : 53 Years | Mob. No. : 9845206095 | Pt. ID : 7985072
B2B : | Ref. By : DR NAGARAIAH
Reg Date and Time : 13-Mar-2026 08:16 | Report Date and Time : 13-Mar-2026 15:11 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
Complete Blood Count				
HB AND INDICES				
Haemoglobin	12.8	g/dL	11.5 - 15.5	SLS
PCV	41.20	%	34 - 48	Calculated
RBC (Electrical Impedance)	4.50	million/cmm	3.7 - 5.6	Sheath flow DC detection
Mean Corpuscular Volume	91.6	fl.	75 - 95	Calculated
Mean Corpuscular Hemoglobin	28.4	pg	26 - 32	Calculated
Mean Corpuscular Hb Concentration	31.1	g/dL	30 - 35	Calculated
Red Cell Distribution Width (RDW)	12.70	%	11 - 16	Calculated
TOTAL AND DIFFERENTIAL WBC COUNT (Flowcytometry)				
Total WBC Count	L 3780	Cells/cmm	4000 - 11000	Flow Cytometry
Neutrophil	58.7	%	40 - 75	Flowcytometry
Lymphocyte	34.4	%	20 - 45	Flow Cytometry
Eosinophil	3.2	%	1 - 6	Flow Cytometry
Monocytes	3.2	%	1 - 10	Flow Cytometry
Basophil	0.5	%	0 - 1	Flow Cytometry
PLATELET COUNT (Optical)				
Platelet Count	287000	Cells/cmm	150000 - 450000	Sheath flow DC detection
Mean Platelet Volume (MPV)	9.00	fl.	6.5 - 12	

Specimen:Whole Blood EDTA | Coll. Date:13-Mar-2026 08:26 | Rec. Date:13-Mar-2026 08:26

Approved By: Dr. Iyer Shruti Chidambaram
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 4 of 12

Dr. Iyer Shruti Chidambaram
Pathologist(MBBS,MD Path)
KMC : MAH20160000528KTK

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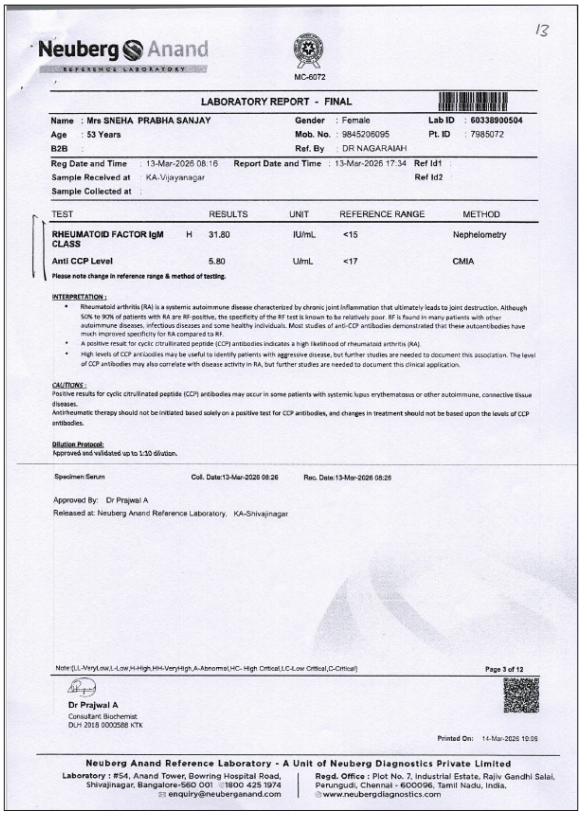

Neuberg Anand REFERENCE LABORATORY — MC-6072

13

LABORATORY REPORT - FINAL

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60338900504
Age : 53 Years | Mob. No. : 9845206095 | Pt. ID : 7985072
B2B : | Ref. By : DR NAGARAIAH
Reg Date and Time : 13-Mar-2026 08:16 | Report Date and Time : 13-Mar-2026 17:34 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
RHEUMATOID FACTOR IgM CLASS	H 31.80	IU/mL	<15	Nephelometry
Anti CCP Level	5.80	U/mL	<17	CMIA

Please note change in reference range & method of testing.

INTERPRETATION :

- Rheumatoid arthritis (RA) is a systemic autoimmune disease characterized by chronic joint inflammation that ultimately leads to joint destruction. Although 50% to 80% of patients with RA are RF-positive, the specificity of the RF test is known to be relatively poor. RF is found in many patients with other autoimmune diseases, infectious diseases and some healthy individuals. Most studies of anti-CCP antibodies demonstrated that these autoantibodies have much improved specificity for RA compared to RF.
- A positive result for cyclic citrullinated peptide (CCP) antibodies indicates a high likelihood of rheumatoid arthritis (RA).
- High levels of CCP antibodies may be useful to identify patients with aggressive disease, but further studies are needed to document this association. The level of CCP antibodies may also correlate with disease activity in RA, but further studies are needed to document this clinical application.

CAUTIONS :
Positive results for cyclic citrullinated peptide (CCP) antibodies may occur in some patients with systemic lupus erythematosus or other autoimmune, connective tissue diseases.
Antirheumatic therapy should not be initiated based solely on a positive test for CCP antibodies, and changes in treatment should not be based upon the levels of CCP antibodies.

Dilution Protocol:
Approved and validated up to 1:10 dilution.

Specimen:Serum | Coll. Date:13-Mar-2026 08:26 | Rec. Date:13-Mar-2026 08:26

Approved By: Dr Prajwal A
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 3 of 12

Dr Prajwal A
Consultant Biochemist
DLH 2018 3000588 KTK

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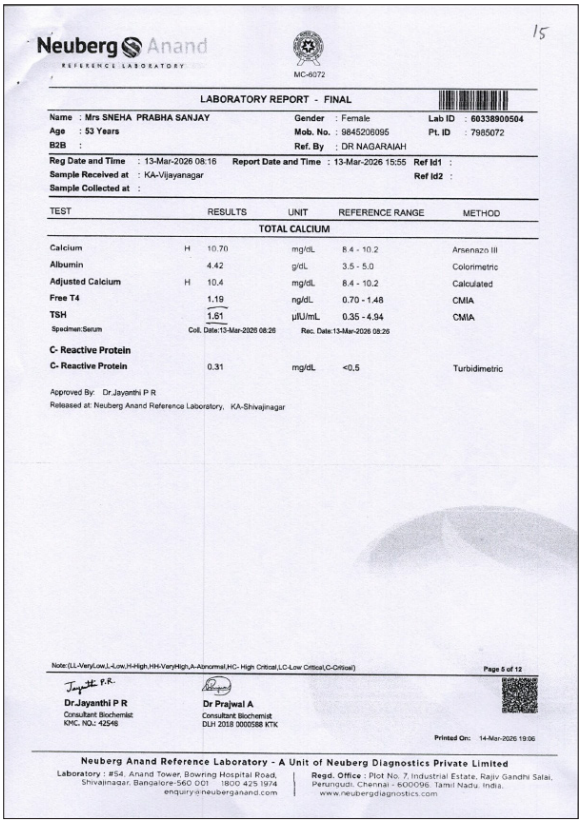

Neuberg Anand REFERENCE LABORATORY — MC-6072

15

LABORATORY REPORT - FINAL

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60338900504
Age : 53 Years | Mob. No. : 9845206095 | Pt. ID : 7985072
B2B : | Ref. By : DR NAGARAIAH
Reg Date and Time : 13-Mar-2026 08:16 | Report Date and Time : 13-Mar-2026 15:55 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
TOTAL CALCIUM				
Calcium	H 10.70	mg/dL	8.4 - 10.2	Arsenazo III
Albumin	4.42	g/dL	3.5 - 5.0	Colorimetric
Adjusted Calcium	H 10.4	mg/dL	8.4 - 10.2	Calculated
Free T4	1.19	ng/dL	0.70 - 1.48	CMIA
TSH	1.61	µIU/mL	0.35 - 4.94	CMIA

Specimen:Serum | Coll. Date:13-Mar-2026 08:26 | Rec. Date:13-Mar-2026 08:26

C- Reactive Protein				
C- Reactive Protein	0.31	mg/dL	<0.5	Turbidimetric

Approved By: Dr Jayanthi P R
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 5 of 12

Dr.Jayanthi P R
Consultant Biochemist
KMC NO:- 42548

Dr Prajwal A
Consultant Biochemist
DLH 2018 3000588 KTK

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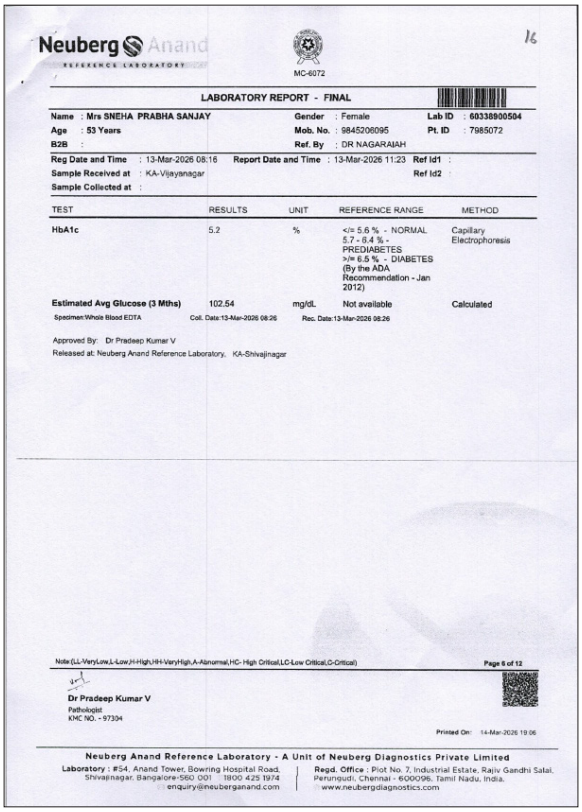

Neuberg Anand
REFERENCE LABORATORY
MC-6072

16

LABORATORY REPORT - FINAL

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60338900504
Age : 53 Years | Mob. No. : 9845206095 | Pt. ID : 7985072
B2B : | Ref. By : DR NAGARAIAH
Reg Date and Time : 13-Mar-2026 08:16 | Report Date and Time : 13-Mar-2026 11:23 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
HbA1c	5.2	%	<= 5.6 % - NORMAL 5.7 - 6.4 % - PREDIABETES >/= 6.5 % - DIABETES (By the ADA Recommendation - Jan 2012)	Capillary Electrophoresis
Estimated Avg Glucose (3 Mths)	102.54	mg/dL	Not available	Calculated

Specimen:Whole Blood EDTA | Coll. Date:13-Mar-2026 08:26 | Rec. Date:13-Mar-2026 08:26

Approved By: Dr Pradeep Kumar V
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 6 of 12

Dr Pradeep Kumar V
Pathologist
KMC NO. - 97304

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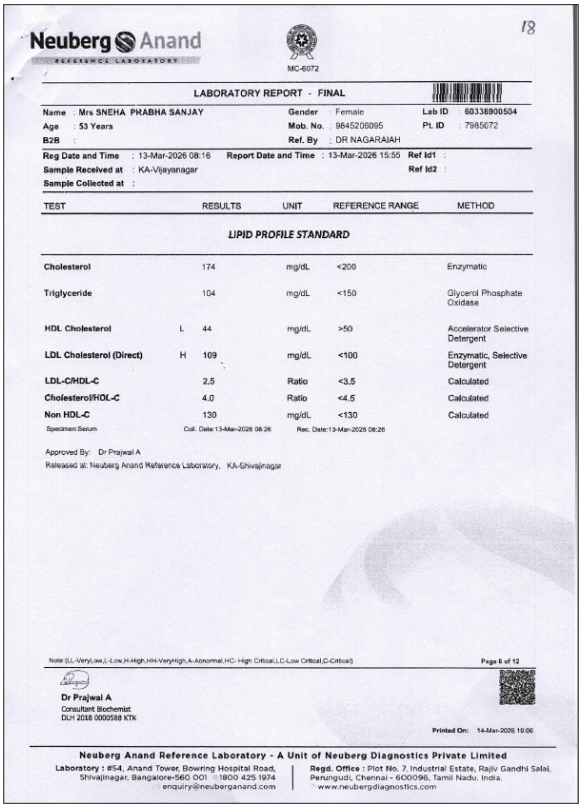

Neuberg Anand
REFERENCE LABORATORY
MC-6072

18

LABORATORY REPORT - FINAL

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60338900504
Age : 53 Years | Mob. No. : 9845206095 | Pt. ID : 7985072
B2B : | Ref. By : DR NAGARAIAH
Reg Date and Time : 13-Mar-2026 08:16 | Report Date and Time : 13-Mar-2026 15:55 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST		RESULTS	UNIT	REFERENCE RANGE	METHOD
LIPID PROFILE STANDARD					
Cholesterol		174	mg/dL	<200	Enzymatic
Triglyceride		104	mg/dL	<150	Glycerol Phosphate Oxidase
HDL Cholesterol	L	44	mg/dL	>50	Accelerator Selective Detergent
LDL Cholesterol (Direct)	H	109	mg/dL	<100	Enzymatic, Selective Detergent
LDL-C/HDL-C		2.5	Ratio	<3.5	Calculated
Chofesterol/HDL-C		4.0	Ratio	<4.5	Calculated
Non HDL-C		130	mg/dL	<130	Calculated

Specimen:Serum | Coll. Date:13-Mar-2026 08:26 | Rec. Date:13-Mar-2026 08:26

Approved By: Dr Prajwal A
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 8 of 12

Dr Prajwal A
Consultant Biochemist
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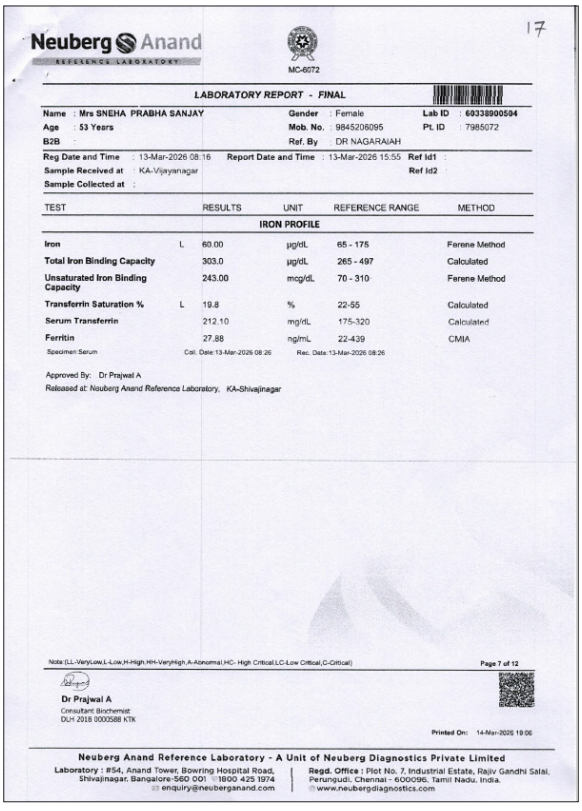

Neuberg Anand
REFERENCE LABORATORY
MC-6072

17

LABORATORY REPORT - FINAL

Name : Mrs SNEHA PRABHA SANJAY | Gender : Female | Lab ID : 60338900504
Age : 53 Years | Mob. No. : 9845206095 | Pt. ID : 7985072
B2B : | Ref. By : DR NAGARAIAH
Reg Date and Time : 13-Mar-2026 08:16 | Report Date and Time : 13-Mar-2026 15:55 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST		RESULTS	UNIT	REFERENCE RANGE	METHOD
IRON PROFILE					
Iron	L	60.00	µg/dL	65 - 175	Ferene Method
Total Iron Binding Capacity		303.0	µg/dL	265 - 497	Calculated
Unsaturated Iron Binding Capacity		243.00	mcg/dL	70 - 310	Ferene Method
Transferrin Saturation %	L	19.8	%	22-55	Calculated
Serum Transferrin		212.10	mg/dL	175-320	Calculated
Ferritin		27.88	ng/mL	22-439	CMIA

Specimen:Serum | Coll. Date:13-Mar-2026 08:26 | Rec. Date:13-Mar-2026 08:26

Approved By: Dr Prajwal A
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

Note:(LL-VeryLow,L-Low,H-High,HH-VeryHigh,A-Abnormal,HC- High Critical,LC-Low Critical,C-Critical) Page 7 of 12

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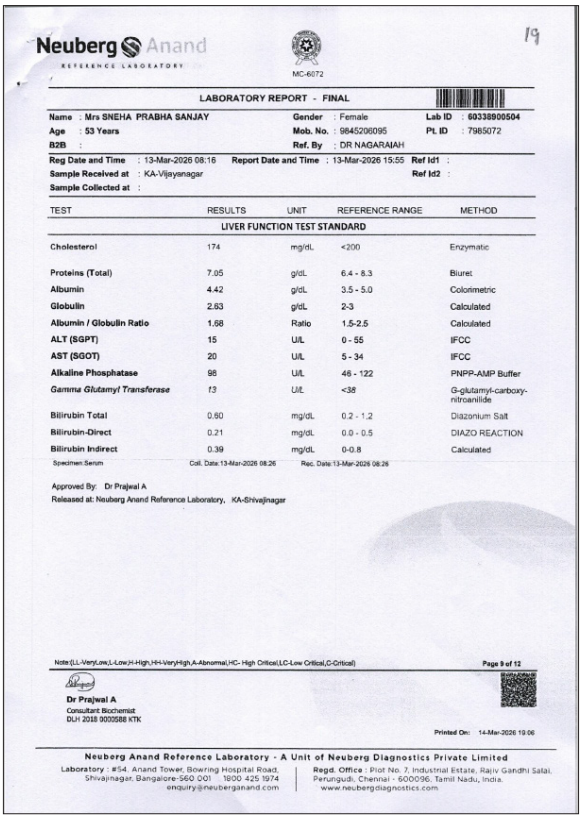

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19

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Reg Date and Time : 13-Mar-2026 08:16 | Report Date and Time : 13-Mar-2026 15:55 | Ref Id1 :
Sample Received at : KA-Vijayanagar | Ref Id2 :
Sample Collected at :

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
LIVER FUNCTION TEST STANDARD				
Cholesterol	174	mg/dL	<200	Enzymatic
Proteins (Total)	7.05	g/dL	6.4 - 8.3	Biuret
Albumin	4.42	g/dL	3.5 - 5.0	Colorimetric
Globulin	2.63	g/dL	2-3	Calculated
Albumin / Globulin Ratio	1.68	Ratio	1.5-2.5	Calculated
ALT (SGPT)	15	U/L	0 - 55	IFCC
AST (SGOT)	20	U/L	5 - 34	IFCC
Alkaline Phosphatase	98	U/L	46 - 122	PNPP-AMP Buffer
Gamma Glutamyl Transferase	13	U/L	<38	G-glutamyl-carboxy-nitroanilide
Bilirubin Total	0.60	mg/dL	0.2 - 1.2	Diazonium Salt
Bilirubin-Direct	0.21	mg/dL	0.0 - 0.5	DIAZO REACTION
Bilirubin Indirect	0.39	mg/dL	0-0.8	Calculated

Specimen:Serum | Coll. Date:13-Mar-2026 08:26 | Rec. Date:13-Mar-2026 08:26

Approved By: Dr Prajwal A
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

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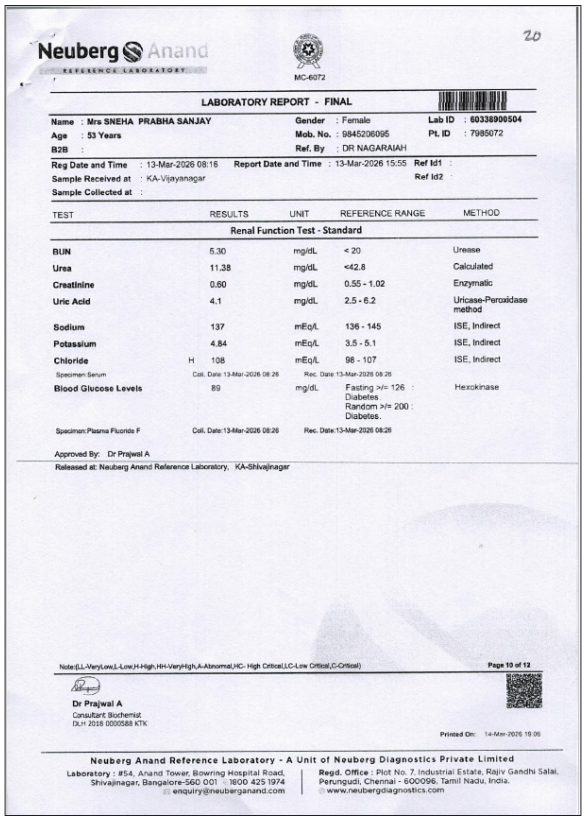

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Age : 53 Years	Mob. No. : 9845206095	Pt. ID	: 7985072
B2B :	Ref. By : DR NAGARAIAH		
Reg Date and Time : 13-Mar-2026 08:16	Report Date and Time : 13-Mar-2026 15:55	Ref Id1	:
Sample Received at : KA-Vijayanagar		Ref Id2	:
Sample Collected at :			

Renal Function Test - Standard

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
BUN	5.30	mg/dL	< 20	Urease
Urea	11.38	mg/dL	<42.8	Calculated
Creatinine	0.60	mg/dL	0.55 - 1.02	Enzymatic
Uric Acid	4.1	mg/dL	2.5 - 6.2	Uricase-Peroxidase method
Sodium	137	mEq/L	136 - 145	ISE, Indirect
Potassium	4.84	mEq/L	3.5 - 5.1	ISE, Indirect
Chloride	H 108	mEq/L	98 - 107	ISE, Indirect
Specimen:Serum	Coll. Date:13-Mar-2026 08:26		Rec. Date:13-Mar-2026 08:26	
Blood Glucose Levels	89	mg/dL	Fasting >/= 126 : Diabetes Random >/= 200 : Diabetes.	Hexokinase
Specimen:Plasma Fluoride F	Coll. Date:13-Mar-2026 08:26		Rec. Date:13-Mar-2026 08:26	

Approved By: Dr Prajwal A
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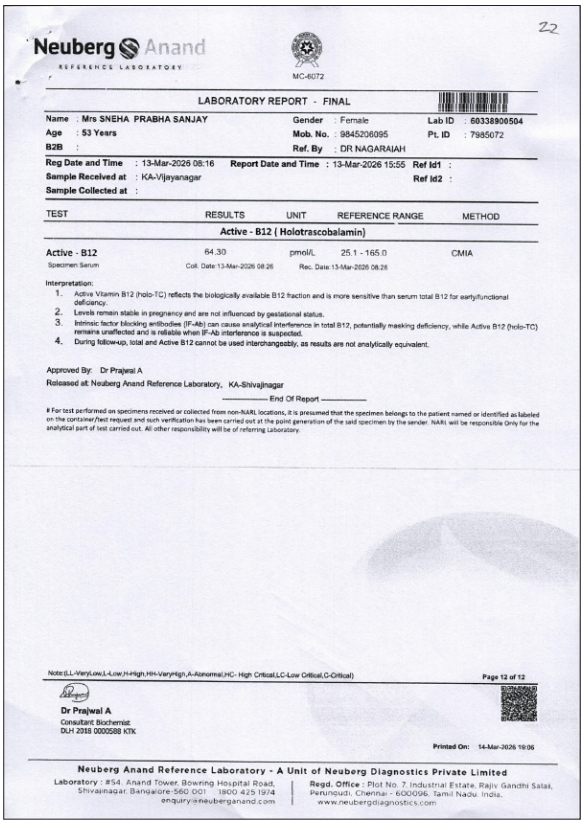

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Sample Received at : KA-Vijayanagar		Ref Id2	:
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Active - B12 (Holotrascobalamin)

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
Active - B12	64.30	pmol/L	25.1 - 165.0	CMIA
Specimen:Serum	Coll. Date:13-Mar-2026 08:26		Rec. Date:13-Mar-2026 08:26	

Interpretation:
1. Active Vitamin B12 (holo-TC) reflects the biologically available B12 fraction and is more sensitive than serum total B12 for early/functional deficiency.
2. Levels remain stable in pregnancy and are not influenced by gestational status.
3. Intrinsic factor blocking antibodies (IF-Ab) can cause analytical interference in total B12, potentially masking deficiency, while Active B12 (holo-TC) remains unaffected and is reliable when IF-Ab interference is suspected.
4. During follow-up, total and Active B12 cannot be used interchangeably, as results are not analytically equivalent.

Approved By: Dr Prajwal A
Released at: Neuberg Anand Reference Laboratory, KA-Shivajinagar

End Of Report

For test performed on specimens received or collected from non-NABL locations, it is presumed that the specimen belongs to the patient named or identified as labeled on the container/test request and such verification has been carried out at the point generation of the said specimen by the sender. NABL will be responsible Only for the analytical part of test carried out. All other responsibility will be of referring Laboratory.

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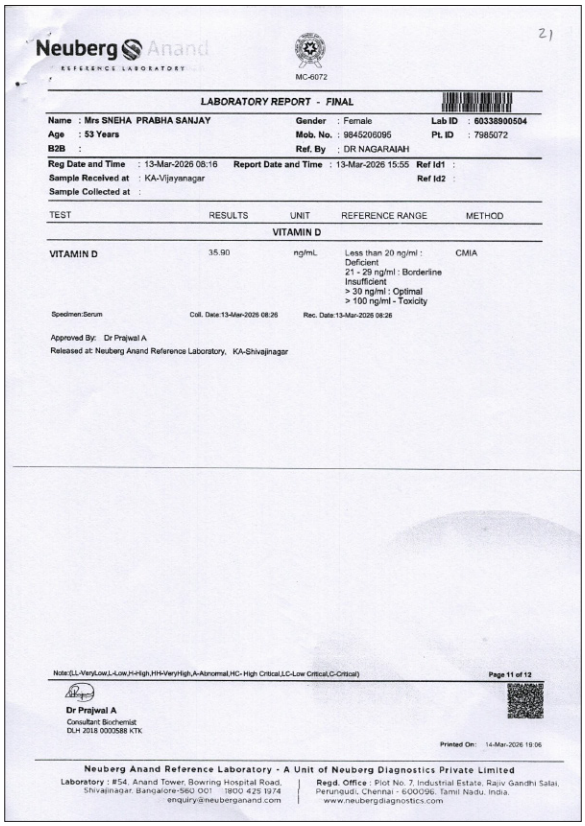

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Sample Collected at :			

VITAMIN D

TEST	RESULTS	UNIT	REFERENCE RANGE	METHOD
VITAMIN D	35.90	ng/mL	Less than 20 ng/ml : Deficient 21 - 29 ng/ml : Borderline Insufficient > 30 ng/ml : Optimal > 100 ng/ml - Toxicity	CMIA
Specimen:Serum	Coll. Date:13-Mar-2026 08:26		Rec. Date:13-Mar-2026 08:26	

Approved By: Dr Prajwal A
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