Comprehensive Diagnostic Report

• Patient Name: Mr. Arjun Verma

• Age/Gender: 42 / Male Patient ID: 011224XX

• Sample Type: EDTA Blood / Serum / Plasma / Urine

• Collection Date: 12-Jul-2025 • Referring Physician: Dr. Maya Rao • Lab Name: NovaPath Diagnostics



🔬 Haematology, Lipids, and Glucose Panel



Haematology

Test	Result	Ref. Range	Interpretation
Haemoglobin	10.2 g/dL ▼	13.0 – 16.5 g/dL	Low – Indicative of anaemia
RBC Count	4.79 million/cmm	4.5 – 5.5 million/cmm	Normal
WBC Count	10,570 /cmm 🔺	4,000 – 10,000 /cmm	Slightly elevated – Possible infection
Platelet Count	150,000 /cmm	150,000 – 410,000 /cmm	Low-normal
MPV	14.0 fL 🔺	7.5 – 10.3 fL	Elevated – Potential platelet activation
ESR	7 mm/hr	0 – 14 mm/hr	Normal

Lipid Profile

Test	Result	Ref. Range	Interpretation
Total Cholesterol	248 mg/dL 🔺	<200 mg/dL	High – Cardiovascular risk
Triglycerides	168 mg/dL 🔺	<150 mg/dL	Borderline high
LDL	170 mg/dL 🔺	<100 mg/dL	High – Atherogenic risk
HDL	35 mg/dL ▼	>40 mg/dL	Low – Reduced protection
VLDL	33.6 mg/dL	15 – 35 mg/dL	Normal
LDL/HDL Ratio	4.9 🔺	<3.5	High
CHOL/HDL Ratio	3.1	Up to 5.0	Acceptable

Glucose Profile

Test	Result	Ref. Range	Interpretation
Fasting Glucose	141 mg/dL 🔺	74 – 106 mg/dL	High – Impaired glycemic control
HbA1c	7.1% 🔺	<6.5%	Diabetic – Poor long-term control
Mean Blood Glucose	157.07 mg/dL	_	Elevated average level



Thyroid, Nutrition, Immunology, Urine Analysis

Thyroid Function

Test	Result	Ref. Range	Interpretation
Т3	1.01 ng/mL	0.58 – 1.59 ng/mL	Normal
T4	7.84 mg/mL	4.87 – 11.72 mg/mL	Normal
TSH	0.82 μIU/mL	0.35 – 4.94 μIU/mL	Lower-normal – Clinical relevance to be correlated

Nutritional Assessment

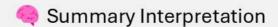
Test	Result	Ref. Range	Interpretation
Vitamin D (25-OH)	8.98 ng/mL ▼	30 – 100 ng/mL	Severe deficiency
Vitamin B12	<148 pg/mL ▼	187 – 833 pg/mL	Deficient – Suggestive of megaloblastic anemia
Iron	103 µg/dL	49 – 181 μg/dL	Normal
TIBC	352 µg/dL	261 – 462 µg/dL	Normal
Transferrin Saturation	29.26%	20 – 50%	Normal

拳 Immunoassay Panel

Test	Result	Ref. Range	Interpretation
Homocysteine	23.86 µmol/L ▲	6.0 – 14.8 µmol/L	Elevated – Risk factor for vascular disease
Ige Total	492 IU/mL 🔺	0 – 87 IU/mL	High – Allergic predisposition noted
PSA	0.573 ng/mL	0 – 4 ng/mL	Normal – No concern at present

🚽 Urinalysis

Parameter	Result Ref. Range		Remarks
Appearance	Pale yellow, clear	Normal	Healthy
рН	6.0	4.6-8.0	Normal
Specific Gravity	1.030	1.005 – 1.030	Upper limit – Possible dehydration
Protein, Glucose, Ketones	Absent	Absent	Normal
RBC / Pus Cells	Nil / 1-2	Nil / Nil	Within acceptable range
Casts/Crystals	Absent	Absent	Normal



The report indicates:

- Anaemia (low haemoglobin, B12 deficiency)
- Dyslipidemia (elevated cholesterol and LDL, low HDL)
- Uncontrolled diabetes (elevated fasting glucose and HbA1c)
- Vitamin D deficiency and high homocysteine—suggesting increased cardiovascular risk
- Elevated Ige pointing to allergy susceptibility

Clinical Note: Immediate follow-up recommended for glycemic control, lipid management, and nutritional support. Consider consults for endocrinology and cardiology.