## **Biomarker Report**

Patient Name: Jane Doe (Fictitious)

Date of Birth: 02/15/1985 (Fictitious)

Date of Report: 02/24/2025 (Fictitious)

Sample ID: JD-CP-0040

## 1. Comprehensive Biomarker Panel

#	Biomarker	Result	Reference Range	Note
1	Red Blood Cell (RBC) Count	4.4 x10^6/μL	4.0–5.5 x10^6/μL	Normal
2	Hemoglobin (HGB)	13.8 g/dL	12.0–15.5 g/dL	Normal
3	Hematocrit (HCT)	41 %	36–46 %	Normal
4	Mean Corpuscular Volume (MCV)	90 fL	80–100 fL	Normal
5	Mean Corpuscular Hemoglobin (MCH)	30 pg	27–33 pg	Normal
6	Mean Corpuscular Hemoglobin Conc. (MCHC)	34 g/dL	32–36 g/dL	Normal
7	Red Cell Distribution Width (RDW)	13 %	11–15 %	Normal
8	White Blood Cell (WBC) Count	7.0 x10^3/μL	4.0–11.0 x10^3/μL	Normal
9	Neutrophils	60 %	40–70 %	Normal
10	Lymphocytes	30 %	20–40 %	Normal
11	Monocytes	7 %	2–10 %	Normal
12	Eosinophils	2 %	1–5 %	Normal
13	Basophils	1 %	0–2 %	Normal
14	Platelet Count	220 x10^3/μL	150-400 x10^3/μL	Normal
15	Mean Platelet Volume (MPV)	9 fL	7.5–11.5 fL	Normal
16	Fasting Glucose	90 mg/dL	70–99 mg/dL	Normal
17	Hemoglobin A1c	5.3 %	4.0–5.6 %	Normal
18	Blood Urea Nitrogen (BUN)	14 mg/dL	7–20 mg/dL	Normal
19	Creatinine	0.9 mg/dL	0.6–1.2 mg/dL	Normal

# Biomarker	Result	Reference Range	Note
20 Estimated GFR (eGFR)	95 mL/min/1.73m <sup>2</sup>	>90 mL/min/1.73m²	Normal
21 Sodium (Na)	140 mmol/L	135–145 mmol/L	Normal
22 Potassium (K)	4.3 mmol/L	3.5–5.1 mmol/L	Normal
23 Chloride (Cl)	101 mmol/L	98–107 mmol/L	Normal
24 Bicarbonate (HCO3) / CO2	26 mmol/L	23–29 mmol/L	Normal
25 Calcium (Ca)	9.5 mg/dL	8.5–10.5 mg/dL	Normal
26 Phosphorus (P)	3.5 mg/dL	2.5–4.5 mg/dL	Normal
27 Magnesium (Mg)	1.9 mg/dL	1.7–2.2 mg/dL	Normal
28 Total Protein	7.3 g/dL	6.0-8.3 g/dL	Normal
29 Albumin	4.5 g/dL	3.4-5.0 g/dL	Normal
30 Total Bilirubin	0.8 mg/dL	0.3–1.2 mg/dL	Normal
31 Aspartate Aminotransferase (AST)	25 U/L	10–35 U/L	Normal
32 Alanine Aminotransferase (ALT)	30 U/L	7–35 U/L	Normal
33 Alkaline Phosphatase (ALP)	80 U/L	40–120 U/L	Normal
34 Gamma-Glutamyl Transferase (GGT)	22 U/L	9–48 U/L	Normal
35 Lactate Dehydrogenase (LDH)	170 U/L	140–280 U/L	Normal
36 Total Cholesterol	250 mg/dL	<200 mg/dL	High
37 Low-Density Lipoprotein (LDL)	160 mg/dL	<100 mg/dL	Elevated
38 High-Density Lipoprotein (HDL)	45 mg/dL	>50 mg/dL (female)	Slightly low
39 Triglycerides	180 mg/dL	<150 mg/dL	Mildly elevated
40 C-Reactive Protein (CRP)	3 mg/L	<3 mg/L	Upper limit of normal