

Laboratory Report

Comprehensive Panel – Alfa Labs

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Abnormal – Requiring Attention (13)

Test	Result	Reference	Status	Clinical Significance
WBC	2.8 x10 ³ / μL	4-10	LOW	Leucopenia - likely carbamazepine-induced
ANC	0.7 x10 ³ / μL	2-7	CRITICAL	Moderate neutropenia. Infection risk. Threshold for CBZ stop
CEA	6.3 ng/mL	≤5.0	HIGH	Mildly elevated. Oncologist follow-up. Likely inflammatory
Magnesium	1.7 mg/dL	1.9-2.5	LOW	Low (ref 1.9-2.5). Now supplementing with Mg Glycinate 2000mg/day. Low Mg worsens seizures.
ESR	30 mm/hr	0-20	HIGH	Chronic inflammation marker
Fibrinogen	443 mg/dL	200-400	HIGH	Acute phase reactant (inflammation)
INR	1.14	<1.0	HIGH	Mildly prolonged clotting
Creatinine	0.57 mg/ dL	0.63-1.16	LOW	Sarcopenia marker (NOT kidney problem - CysC confirms normal)
Ammonia	0.86 μmol/ L	0.19-0.87	BORDERLINE	At upper limit. Valproate effect. Monitor with protein supplementation
LDL	101 mg/dL	<100	HIGH	Marginally above target
Sodium	137 mEq/L	136-146	BORDERLINE	Low-normal. SIADH history. CBZ-related
Serum Osmolality	279 mOsm/kg	275-295	BORDERLINE	Low-normal, consistent with mild dilution (SIADH pattern)
Valproic Acid Trough	23.10 μg/ mL	50-100	LOW	Sub-therapeutic - intentionally tapering

Normal – Reassuring (26)

Test	Result	Comment
Hemoglobin	13.90 g/dL	Normal
Platelets	169 x10 ³ /μL	Normal
Carbamazepine Level	7.77 μg/mL	Therapeutic
Cystatin C	0.88 mg/L	Normal (eGFR CysC >90) - CONFIRMS normal kidneys
Fasting Glucose	86 mg/dL	Normal
HbA1c	5.1 %	Normal

Test	Result	Comment
HOMA-IR	0.56	Excellent insulin sensitivity
ALT	13 U/L	Normal
AST	17 U/L	Normal
Total Protein	7.6 g/dL	Normal
Albumin	3.9 g/dL	Normal
Vitamin D	33.2 ng/mL	Sufficient
TSH	1.26 mIU/L	Normal
Free T4	0.71 ng/dL	Normal
NT-proBNP	30.8 pg/mL	No heart failure
CA 15-3	9.1 U/mL	Normal
CA 125	3.5 U/mL	Normal
Ferritin	19.4 ng/mL	Low-normal
Calcium	9.3 mg/dL	Normal
Potassium	4.5 mEq/L	Normal
Iron	92 µg/dL	Normal
Cholesterol	191 mg/dL	Normal
HDL	63 mg/dL	Normal
Triglycerides	139 mg/dL	Normal
Blood Urea Nitrogen	13 mg/dL	Normal BUN.
Vitamin B12	876 pg/mL	Upper end of normal range. Supplementation effect.