TECHNICAL BULLETIN

□NEW TEST □ TEST CHANGE

NOTIFICATION DATE: 04/23/2025 EFFECTIVE DATE: 04/28/2025

Aspartate Aminotransferase (AST)

On the effective date, Northwell Health Laboratories will introduce an improved test for measuring aspartate aminotransferase (AST) enzyme activity. This new test includes pyridoxal-5-phosphate (vitamin B6) activation.

Pyridoxal-5-phosphate acts as an essential cofactor in the amino transfer reaction necessary for aminotransferase enzyme activity. By incorporating pyridoxal-5-phosphate into the test reagent, we can prevent inaccurately low AST results in samples from patients with insufficient endogenous pyridoxal phosphate, such as those with a vitamin B6 deficiency.

A method comparison study conducted at Northwell Health Laboratories revealed a strong positive correlation between the new and existing tests, with a correlation coefficient greater than 0.98.

Test Requirements	New	Current
Assay Methodology	Aspartate Aminotransferase with pyridoxal phosphate activation	Aspartate Aminotransferase without pyridoxal phosphate activation
Specimen Type	Serum or Plasma	Serum or Plasma
Specimen Volume	1 mL Serum or Plasma (min 0.5 mL)	1 mL Serum or Plasma (min 0.5 mL)
Reference Interval	Female: 10 – 35 U/L Male: 10 – 40 U/L	10 – 40 U/L
Computer Interface Code	PDM # 5300130	PDM # 5300130
Test Order	SGOT	SGOT

