

# Chemistry Laboratory Update

**Effective 10/23/2024**

## **Updates to Valproic Acid and Phenytoin Lab Orders**

**Intended audience:** WDL Clients

Wisconsin Diagnostic Laboratories (WDL) will be discontinuing the stand-alone tests for Valproic Acid, Free [LAB9273] and Phenytoin, Free [LAB9157]. WDL will continue to offer the recommended tests Valproic Acid, Total and Free [LAB9274] and Phenytoin, Total + Free [LAB9159].

Measurement of free valproic acid and phenytoin is particularly important for patients with renal disease or conditions affecting albumin concentration. Both drugs are highly protein-bound, but their protein binding can be variable and unpredictable, influenced by factors such as dose or drug-drug interactions. Evaluating both the percent free and free drug concentration as part of therapeutic drug monitoring can provide valuable insights for dose optimization and help minimize variations between different assay methods.

For patients without conditions impacting protein binding, the tests Valproic Acid, Total [LAB9272] and Phenytoin, Total [LAB9158] remain available for therapeutic drug monitoring.

**For questions or additional information, please contact:**

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