TEST CHANGE

Phosphatidylethanol (PEth), Whole Blood, Quantitative

3002598, PETH

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (K2 or K3EDTA), pink (K2EDTA), dark green (lithium heparin), or gray (potassium oxalate).
Specimen Preparation:	Transport 2~~1~~ mL whole blood in the original collection tube.~~-~~ (Min: 1~~0.5~~ mL)
Transport Temperature:	Refrigerated. Also acceptable: Frozen.
Unacceptable Conditions:	Gel separator tubes, plain red, light blue (citrate), or yellow (SPS or ACD solution).
Remarks:	
Stability:	Ambient: 3 hours; Refrigerated: 2 weeks; Frozen: 1 month (-20 degrees C)
Methodology:	Quantitative Liquid Chromatography-Tandem Mass Spectrometry
Note:	
CPT Codes:	80321 (Alt code: G0480)
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

Phosphatidylethanol (PEth) is a group of phospholipids formed in the presence of ethanol, phospholipase D, and phosphatidylcholine. PEth is known to be a direct alcohol biomarker. The predominant PEth homologues are PEth 16:0/18:1 (POPEth) and PEth 16:0/18:2 (PLPEth), which account for 37-46% and 26-28% of the total PEth homologues, respectively. PEth is incorporated into the phospholipid membrane of red blood cells and has a general half-life of 4-10 days and a window of detection of 2-4 weeks. However, the window of detection is longer in individuals who chronically or excessively consume alcohol. Serial monitoring of PEth may be helpful in monitoring alcohol abstinence over time. PEth results should be interpreted in the context of the patient's clinical and behavioral history. Patients with advanced liver disease may have falsely elevated PEth concentrations (Nguyen VL, et al, Alcoholism: Clinical and Experimental Research, 2018).

Reference Interval:

Refer to report