### General Information

**Lab Order Codes:** LAMO  
**Synonyms:** Lamictal  
**CPT Codes:** 80175 – Lamotrigine  
**Test Includes:** Lamictal level reported in ug/mL.

### Logistics

**Test Indications:** Monitoring serum concentration of lamictal (lamotrigine), assessing compliance or adjusting lamotrigine dose in patients receiving other anticonvulsant drugs which interact pharmokinetically with lamictal (lamotrigine).

**Lab Testing Sections:** Chemistry – St. Paul

**Phone Numbers:**  
MIN Lab: 612-813-6280  
STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 4 hours, test performed daily

### Specimen

**Specimen Type:** Blood  
**Container:** Red top NO GEL tube  
Alternate: Green top NO GEL (Lithium Heparin) tube  
**Draw Volume:** 0.6 mL blood  
**Processed Volume:** 0.2 plasma/serum  
**Collection:** Routine venipuncture  
**Special Processing:** Lab Staff: Centrifuge specimen, remove aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.
Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimens; sample clotted; collected in a gel tube

**Interpretive**

Reference Range: 2 – 20 ug/mL

Note: Current clinical information suggests the recommended concentrations for lamotrigine during chronic therapy are 2 - 20 ug/mL.

Critical Values: N/A

Limitations: Reporting Limit: 0.85 ug/mL

Methodology: Immunoassay

References:

- ARK™, Lamotrigine Assay package insert, ARK Diagnostics, Inc, 1190 Bordeaux Drive, Sunnyvale, CA 94089 USA, Printed in USA, Revised October 2010, 1600-0179-00 Rev 02
- ARK™, Lamotrigine Calibrator package insert, ARK Diagnostics, Inc, 1190 Bordeaux Drive, Sunnyvale, CA 94089 USA, Printed in USA, Revised October 2010, 1600-0179-00 Rev 02
- ARK™, Lamotrigine Control package insert, ARK Diagnostics, Inc, 1190 Bordeaux Drive, Sunnyvale, CA 94089 USA, Printed in USA, Revised October 2010, 1600-0179-00 Rev 02
- Making Sense of Lamotrigine Serum Levels (May 2005) Bassel W Abou-Khalil, MD, American Epilepsy Society, Epilepsy Currents, v.5(3), PMC1198624

Updates:

3/22/2016: Testing moved from MedTox to internal test at Children's
11/4/2016: Tube update