Lab Dept:	**Chemistry**
Test Name:	**LAMOTRIGINE LEVEL**

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
Special Instructions:	If this is a STAT order, please check with the provider to see if the specimen should be shipped immediately and performed STAT by the reference lab at an additional cost. If immediate shipment is necessary, please call the lab to make arrangements.

Specimen

Specimen Type:	Blood
Container:	Green (Lithium Heparin), **no gel** tube Alt: Red microtainer, **no gel**
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, Epiepsy Currents, v.5(3), PMC1198624 Efficacy and Safety of Lamotrigine Monotherapy in Children and Adolescents with Epilepsy (March 2009) European Journal of Paediatric Neurology, Volume 13, Issue 2, pp 141-145
Updates:	3/22/2016: Testing moved from MedTox to internal test at Children's