



Test Update Fetal Lung Maturity Testing

Effective Thursday July 20, 2011, the UCH Clinical Laboratory began performing the Lamellar Body Count Density (LBC), replacing the test known as FPOL as a method of fetal lung maturity testing. LBC is an in-house test with a rapid turnaround time. This test method requires the submission of *amniotic fluid from an amniocentesis only*. Vaginal pool samples or amniotic fluid contaminated with blood or meconium will be sent to an outside lab for L/S ratio with PG testing.

Specification	L/S PG Testing	Lamellar Body Count Testing
Sample Type	5.0mL uncentrifuged amniotic fluid from a vaginal pool or amniocentesis samples contaminated with blood or meconium in a clear plastic container with no additive.	5.0mL uncentrifuged amniotic fluid from an amniocentesis ONLY in a clear plastic container with no additive.
Order Mnemonic	LSPG (may require additional paperwork)	LBC
Reference Range/ Interpretive Data	L/S ratio and % PG reported with an interpretation of Mature, Transitional, or Immature Pattern included on the report.	Mature, low risk of RDS: $\geq 50^9/L$ Intermediate risk of RDS: $15-49^9/L^{**}$ Immature, high risk of RDS: $\leq 15^9/L$ <i>**Samples with Intermediate results will reflex to LSPG testing and be performed on the next available run at the outside lab.</i> RDS = Respiratory Distress Syndrome
Turnaround Time	Testing performed once daily at outside lab. Sample must be received before 1100 to make the run. Results reported after 1600 daily.	30 minutes (available 24/7)
Sample Rejection Criteria	Sample not properly identified; incorrect container; insufficient sample volume.	Sample not properly identified; incorrect container; centrifuged sample; insufficient sample volume; frozen sample; Hematocrit >1%; vaginal pool sample; sample contaminated with meconium.
Stability	4 hours at 2-8 C. Freeze spun amniotic fluid at -20 C if not analyzed within 4 hours	Ambient: 1 week Refrigerated: 1 week Frozen: unacceptable
Preferred Volume	5.0- 10.0 mL uncentrifuged amniotic fluid	5.0-10.0 mL uncentrifuged amniotic fluid
Minimum Volume	4.0 mL centrifuged amniotic fluid	0.5 mL uncentrifuged amniotic fluid for LBC only
Method	Thin Layer Chromatography	Impedance

Please call Ronald Lepoff, M.D. at 720-848-7044 if you have any questions or visit our website at <http://www.uch.edu/for-healthcare-professional/Clinical-Laboratory/index.aspx> for additional information.

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