



TECHNICAL NOTICE

SOUTH BEND MEDICAL FOUNDATION

Lamellar Body Counts, amniotic fluid

Effective Date: May 1, 2011

Performing Department: Automated Lab

Clinical Significance: As of May 1st of 2011, the South Bend Medical Foundation will discontinue testing of lecithin-Albumin (L/A) Ratio, amniotic fluid (#23801) since reagents are no longer available. Lamellar Body Counts, amniotic fluid (#25150) will continue to be offered to assess fetal lung maturity.

Lamellar body counts are a direct measurement of surfactant production by type II pneumocytes. Its measurement is accomplished by a hematology instrument, Sysmex XE2100, based on the similarity in size of LBC and platelets.

Use: Fetal lung maturity is controversial in non-elective delivery. After 37 weeks of gestation the risk of respiratory distress syndrome is very low, thus FLM testing is usually not performed if physicians feel prolonging pregnancy will place mother and fetus at high risk. Prior to 32 to 34 weeks of gestation, the prevalence of neonatal morbidity from prematurity is high that knowledge of FLM does not substantially alter obstetric management. However, FLM testing can be useful in managing complicated pregnancies in the gestational age of 34 to 37 weeks.

Reference Range: Lamellar body counts: Mature \geq 50,000/ul, Transitional: 15,000 to 49,000/ul, Immature: < 15,000/ul

Specimen Requirements and Collection:

Specimen: amniotic fluid

Preferred Volume: 1mL

Minimum Volume: .05 mL

Storage/ Transport: Room temperature or refrigeration up to 1 week

Causes for Rejection: Fluids containing obvious mucus or meconium, bloody specimens, frozen specimens

Testing Schedule: Daily

Order: Lamellar Body Counts Test #: 25150 CPT: • 83664

For additional information contact Deborah H. Sun, Ph.D. (dsun@sbfm.org) or Brett Colter, Director of General Laboratory Operations (bcolter@sbfm.org) or South Bend Medical Foundation, (574) 234-4176 or (800) 544-0925.