

Effective Saturday, July 23, 2022, NTD Laboratories, ACL's vendor for first trimester and sequential screening assays, will close its laboratory. Any specimens received at NTD Laboratories after July 23 will **not** be tested. Due to this laboratory closure, ACL will transition first trimester and sequential screening to our primary reference laboratory, ARUP. To facilitate this change, ACL has created three replacement test order codes, which will go-live in Epic on Thursday, July 21, 2022 (see chart below).

Test Name	Current Test Order Code	Test Order Code Effective 7/21/2022
First Trimester Prenatal Screen	FTPSCN	LAB11270
Sequential Screening NTD Assays	STSSEQ	N/A
Sequential Screen, Specimen #1	N/A	LAB11271
Sequential Screen, Specimen #2	N/A	LAB11272

Notable Changes

Specimen requirements

- **Any first trimester maternal serum screen at ARUP requires a serum specimen, not a finger stick sampling.** Any blood spot cards received after July 21 will be rejected and recollection will be required.

Gestational age eligibility

- First trimester
 - Specimen must be drawn between 11 weeks, 0 days and 13 weeks, 6 days. Crown-rump length (CRL) must be between 43-83.9 mm at time of specimen collection.
 - NT must be measured when the CRL is between 38-83.9 mm.
- Second trimester
 - Specimen must be drawn between 14 weeks, 0 days and 24 weeks, 6 days gestation. The recommended time for maternal serum screening is 16 to 18 weeks gestation.

Sequential screen order codes

- Providers will need to order sequential screen- specific tests for each step of the sequential screening process. The first trimester screening code **cannot** be utilized for patients undergoing sequential screening, as was practice with NTD Laboratories.

Registration of certified ultrasonographers

- To reduce any delays in processing of specimens, ARUP has requested ACL register as many sonographers as possible prior to sending samples. Required information includes: sonographer name, certification number, and certification agency [Fetal Medicine Foundation (FMF) or Nuchal Translucency Quality Review (NTQR)]. Please reach out to Janine Rosenberg, Director of Referral Testing, at Janine.Rosenberg@aah.org to initiate this process.

Please reference the table below for a summary of the replacement assays.

	First Trimester Screen	Sequential Screen
ACL Test Name(s)	First Trimester Prenatal Screen	Sequential Screen, Specimen #1 Sequential Screen, Specimen #2
ACL Test Order Code(s)	LAB11270	Specimen #1: LAB11271 Specimen #2: LAB11272
Assay Information		
Sample(s) collected	First trimester	First and second trimesters
Specimen type	Serum	Serum
First-trimester measurements	US: CRL, NT Blood: PAPP-A, total hCG	US: CRL, NT Blood: PAPP-A, hCG
Gestational age requirements	Blood: 43–83.9 mm (11w0d–13w6d) NT: 38–83.9 mm (10w3d–13w6d)	Blood: 43–83.9 mm (11w0d–13w6d) NT: 38–83.9 mm (10w3d–13w6d)
Second-trimester measurements	N/A	AFP, hCG, uE3, DIA
Gestational age requirements	N/A	15w0d–24w6d (by previous CRL)
Test Performance Data		
Down syndrome		
Detection rate	85%	86% after the second draw
False-positive rate	6%	1.6% (0.6% at first draw; 1% at second draw)
Trisomy 18		
Detection rate	~80%	90%
False-positive rate	<1%	0.01%
Open NTDs		
Detection rate	N/A	80%
False-positive rate	N/A	1-2%

AFP, alpha-fetoprotein; CRL, crown-rump length; DIA, dimeric inhibin A; hCG, human chorionic gonadotropin; LMP, last menstrual period; N/A, not applicable; NT, nuchal translucency; NTDs, neural tube defects; PAPP-A, pregnancy-associated plasma protein A; uE3, unconjugated estriol; US, ultrasound

Please contact Janine Rosenberg at 847-349-7348 or Janine.Rosenberg@aah.org with any questions or concerns regarding this transition.