TECHNICAL BULLETIN

☒NEW TEST ☐TEST CHANGE

NOTIFICATION DATE: 05/29/2025

EFFECTIVE DATE: Immediate

1T Pre-Term Preeclampsia Screen (1TPTPE)

On the effective date, Northwell Health Laboratories will perform first trimester preterm preeclampsia screening (1TPTPE) using ThermoFisher BRAHMS Kryptor Gold Immunoanalyzers based on Time-Resolved Amplified Cryptate Emission TRACE technology.

1T Pre-Term Preeclampsia Screen is a first trimester screening test for cases of preeclampsia necessitating delivery prior to 37 weeks gestation. The test combines the ultrasound evaluation of Uterine Artery Doppler Pulsatility Index (UtAD-PI) with Mean Arterial Pressure (MAP) and the first trimester maternal serum analytes PAPP-A and PlGF. An increased risk result means that the clinician may consider the administration of low dose aspirin. The patient should be counseled regarding the importance of greater than 90% compliance with the aspirin regime for effectiveness. The clinician may further consider more frequent prenatal visits, blood pressure checks and consultation/discussion with the patient regarding lifestyle modifications, such as diet and exercise, and to ensure they understand the warning signs and symptoms of preeclampsia.

At an approximate 15% screen positive rate the estimated detection efficiency for preterm preeclampsia (<37 weeks) is over 80% and that for early onset preeclampsia (<34 weeks) is over 90%.

1T Pre-Term Preeclampsia Screen is a standalone screening test for pre-term preeclampsia but may also be ordered as part of 1T Maternal Fetal Screen which includes five biochemical markers and screens for T21, T18/13 as well as preterm preeclampsia.

Test Requirement/Parameters	**1T Pre-Term Preeclampsia Screen**
Analyte(s):	PAPP-A and PlGF
Method:	Time-Resolved Amplified Cryptate Emission (TRACE)
Specimen Requirements:	Maternal Serum
Submission Container/Tube:	Gold top serum separator tube
Specimen Volume/Minimum Volume:	3ml (0.5 ml min)
Gestational Age Range:	10w0d – 13w6d

Collection Instructions:	Allow blood to clot, avoiding hemolysis. Separate serum from cells by centrifugation. Transport spun tube to testing laboratory.
Specimen Stability:	Room Temperature 6 days Refrigerated 14 days
Ultrasound	UtAD-PI is assessed when CRL is 45-84mm. Sonographer must be credentialed by the Fetal Medicine Foundation and the certification number must be provided. Ultrasound data is submitted to FMF on a regular basis for quality control
Biophysical Information	Patient weight, height, left arm blood pressure and right arm blood pressure are required
Reference Range:	Pre-Term Preeclampsia Risk < 1/150
Computer Interface Code:	**PDM # 251467**
Test Order:	**1TPTPE**