

A Sonic Healthcare Company

MATERNAL WEIGHT: Biochemical markers (hCG, dimeric inhibin, etc.) are calculated as Multiple of the Medians (MoM) which are subsequently adjusted for the deviation of the patient's weight from average.

TESTING INITIAL and REPEAT: Repeat risk assessments are compared to initial assessments to improve accuracy of calculation process and review of data.

FAMILY HISTORY OF NEURAL TUBE DEFECTS (NTDs): A familial history significantly affects the risk of NTDs prior to maternal serum testing and can be factored into the risk calculation.

PRE-EXISTING INSULIN DEPENDENT DIABETES MELLITUS (IDDM): Prior IDDM affects the risk of NTDs and the results of Alpha-Fetoprotein (AFP) testing. IDDM patients are considered screen positive at a different AFP MoM threshold than non-diabetic patients.

MATERNAL RACE: Different races may have different levels of biochemical markers and different risks of NTDs. Race affects Down Syndrome (DS) and NTD risk calculation.

CURRENT SMOKER: Smoking affects and requires adjustment of certain biochemical marker MoMs.

NUMBER OF FETUSES: Twin fetuses affect the levels of biochemical marker MoMs and risk calculation.

**GESTATIONAL AGE (GA)**: The preferred methods to calculate gestational age are by sonogram or last menstrual period. If the former, the laboratory calculates the GA from the sonographic date and the estimated age at sonogram compared to the date of blood draw; if the latter, calculation from LMP and date of draw is performed.

IF PREGNANCY IS FROM A DONOR EGG: The prior risk of DS applies to the age of the donor if the egg or embryo is from a donation.

**FAMILY HISTORY OF DOWN SYNDROME**: Prior history of DS affects the risk of DS in the current pregnancy. Many patients with a prior history of DS or a familial history of DS are advised to receive formalized genetic counseling prior to routine maternal serum screening.

## FIRST TRIMESTER SONOGRAM INFORMATION

DATE PERFORMED: This is the date the sonogram is performed.

LOCATION: Nuchal Translucency (NT) data is adjusted to performance at specific centers and to specific sonographers.

NUCHAL TRANSLUCENCY: NT is an important variable in calculating DS risk in first trimester testing. NT is a sonographic measurement of skin thickness at the back of the neck, used to help identify increased risk for chromosomal conditions including DS in a fetus.

**CROWN-RUMP LENGTH (CRL):** CRL is the measurement of the length of human embryos and fetuses from the top of the head (crown) to the bottom of the buttocks (rump). It is typically determined from sonogram imagery and is used by the laboratory to estimate gestational age (from the formula of Robinson et al).

**SONOGRAPHER/FMF/NTQR#**: Sonographers are credentialed in NT measurements by the Fetal Medicine Foundation (FMF) or the Nuchal Translucency Quality Review (NTQR) programs. Sonographers must be credentialed and in good standing by one or both of these accrediting bodies.

**STATE:** State in which the sonogram is performed.

NASAL BONES: The presence or absence of nasal bones is incorporated into the risk assessment of DS in first trimester.



## Patient History for Maternal Serum Screening

- 1. Please check the applicable test below.
- 2. If test requires NT measurement, patient must get ultrasound first. Ultrasound must be performed by a certified Sonographer.
- 3. The completed History sheet will be submitted to the laboratory along with the specimen for testing.

□ 5375 Quad Screen @ > (GA, 14w 0d – 21w 6d)	□ 5624 Integrated Screen <sup>SM</sup> @ > Sample 1 (GA, 10w 3d – 13w 6d) Sample 2 (GA, 15w 0d – 21w 6d)
□ 2618 Triple Screen @ > (GA, 14w 0d – 21w 6d)	□ 4087 SerumIntegratedScreen <sup>SM</sup> @ > Sample 1 (GA, 10w 3d – 13w 6d) Sample 2 (GA, 15w 0d – 21w 6d)
□ 2617 Maternal AFP for NTD @ (GA, 14w 0d – 21w 6d)	□ 5780 Sequential <i>Screen</i> <sup>SM</sup> @ > Sample 1 (GA, 10w 3d – 13w 6d) NT Measurement Required
□ 2616 First Trimester Screen + @ > NT Measurement Required (GA, 10w 3d – 13w 6d)	□ 4059 Sequential Screen <sup>SM</sup> @ > Sample 2 (GA, 15w 0d – 21w 6d)
Patient Name: Patient DOB:	If pregnancy is from a donor egg, donor DOB:
Requesting Physician:	Account Number:
Pregnancy Information used in Risk Calculations	
Maternal Weight: Ibs. Testing: Initial Repeat	
Family History of Neural Tube Defect:   Yes   No   Pre-existing Insulin Dependent DM:   Yes   No     Maternal Race (please check):   Caucasian   Hispanic   African American   Asian   Other	
Current Smoker: Yes No Number of Fetuses: If twins: Dichorionic Monochorionic	
Gestational Age: Determined by:	
Sonogram: Date of Sonogram:	GA at Sonogram: weeks days
Or LMP: (mm/dd/yy)	Family History of Down Syndrome:  Yes  No
Comment:	
First Trimester Sonogram Information	
Date Performed:	Location:
NT: Singletonmm Twin A	mm Twin Bmm
CRL: Singletonmm Twin A	mm Twin Bmm
Sonographer: F	MF/NTQR#: State:
Nasal Bones: Depresent Depresent Absent	
Other clinical information:	