| Prenatal Lab Panels | | |
|---|---|---|
| **Selective Labs (cont.)** | • Free thyroxine test<br>• Fragile X screening | • Thyroid disease<br>• Family history of related disorder, or suggestive intellectual disability |

Abbreviations: GDM: gestational diabetes mellitus; HIV: human immunodeficiency virus; HPV: human papillomavirus

### *b. Early (Dating) Ultrasound*

Accurate dating is crucial to the management of pregnancy because it drives the milestones and decision making for the application of appropriate monitoring and intervention as the pregnancy proceeds. The estimated due date is initially established by calculating 280 days from the first day of the last normal menstrual period. This practice has the potential to produce an inaccurate due date because only about 50% of patients accurately recall the date of the last menstrual period or because menstrual cycles might be shorter or longer than 28 days or might be irregular.(222) The Work Group advises a first-trimester ultrasound to establish or confirm the gestational age and estimated birth date and to confirm the presence of cardiac activity. For pregnant patients who present after the first trimester, we advise performing a dating and anatomical ultrasound at the earliest opportunity, preferably before 22 weeks. Besides confirming or establishing an estimated due date, there are other indications for performing an ultrasound early in pregnancy, including evaluation of vaginal bleeding, confirmation of an intrauterine location, presence and chronicity of multiple gestations, presence of uterine anomalies, or presence of other pelvic pathology. Patients with complaints of bleeding or pain should be referred for immediate ultrasound on presentation.

### *c. Genetic Screening*

The many different methods for screening for fetal aneuploidy are offered at different times during a pregnancy. Although considered optional, prenatal fetal aneuploidy screening and diagnostic testing should be offered to all pregnant patients, regardless of risk of aneuploidy. Offering prenatal screening and diagnostic testing for aneuploidy, regardless of maternal age or risk factors, respects the values and preferences of patients who make this choice. See Recommendations 1 and 2 for further information on screening recommendations.

In addition to tests that screen for aneuploidy, maternal serum alpha-fetoprotein (MSAFP) can be used to screen for neural tube defects (NTD) such as open spina bifida. When performed between 15 and 22 weeks, this test is not a part of NIPT (prenatal cell-free DNA screening [cfDNA]) and should, therefore, be offered to patients who choose to undergo NIPT for their aneuploidy screening test. That MSAFP might have limited use on its own as a screening test is important to note given studies suggesting high-quality ultrasound has a higher detection rate for NTDs.(223) However, unexplained elevated MSAFP (elevated MSAFP unrelated to a diagnosis of open NTD or other anatomic malformation) is associated with an increased risk of adverse