

Guidelines: University of Wisconsin Division of Maternal Fetal Medicine: Consensus on Initiation, Modality, and Frequency of Antenatal Testing- Updated February 2024

Antenatal testing includes a nonstress (NST) and amniotic fluid assessment (AFI). Frequency of antenatal testing impacts often NST is indicated- all Ultrasound (AFI/BPP) evaluation is done once weekly.

- If NST is reactive an AFI is performed
- If NST is nonreactive a BPP is performed
- If NST is non-reassuring (decelerations present) notify MFM, consider extended monitoring
- Antenatal testing started before 32 weeks- reactive tracing requires 10x10 accelerations

Initiation of antenatal testing is started at 28 weeks at the earliest. For conditions listed below that specify timing as “at diagnosis weeks” if diagnosis is before 28 weeks then antenatal testing should be initiated at 28 weeks.

Growth US – “serial” is every 4 weeks starting at 28 weeks or at diagnosis, except where indicated “serial at 24 wks” to start at 24 weeks “32 weeks” is a single 32 week growth US

Condition	Timing Testing	Frequency	Growth
DIABETES			
Diabetes Mellitus Type I or II	32 weeks	2x weekly	Serial
Gestational diabetes controlled on medication	32 weeks	weekly	Serial
Gestational diabetes – poorly controlled	32 weeks	2x weekly	Serial
Gestational diabetes- diet controlled	None		Serial
HYPERTENSION			
History of CHTN requiring no medication and BP less than 140/90	None		Serial
CHTN poorly controlled or with associated medical conditions	At diagnosis or 28 weeks	2x weekly	Serial
CHTN requiring medications	32 weeks	2x weekly	Serial
Gestational HTN or Preeclampsia without severe features	At diagnosis or 28 weeks	2x weekly	Serial
AUTOIMMUNE			
Lupus (uncomplicated)	32 weeks	weekly	Serial
Lupus (complicated - active lupus nephritis, recent lupus flare, antiphospholipid antibodies with prior fetal loss, or current thrombosis)	At diagnosis or 28 weeks	2x weekly	Serial wks
Rheumatoid arthritis – flare within 3 mo of conception or in pregnancy	32 weeks	weekly	Serial
RA – no flare within 3 mo of conception or in pregnancy	None		32 weeks
Undifferentiated conditions	32 weeks	weekly	Serial
Idiopathic thrombocytopenia on meds	32 weeks	weekly	Serial
Idiopathic thrombocytopenia not on meds	none		32 weeks
GI CONDITIONS			
Crohns-well controlled	None		32 weeks
Crohns-flares during pregnancy	32 weeks if active	weekly	Serial
Ulcerative colitis- no flares during pregnancy	None		32 weeks
Ulcerative colitis-flares during pregnancy	32 weeks if active	weekly	Serial
Cholestasis	At diagnosis or 28 weeks	weekly	Serial
RENAL			
Renal disease (Cr greater than 1.4 mg/dL)	32 weeks	2x weekly	Serial

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HEME/CANCER			
Alloimmunization requiring MCA Doppler studies	32 weeks	weekly	Serial
Alloimmunization undergoing IUT	At diagnosis or 28 weeks	weekly	Serial
Sickle cell disease (uncomplicated)	32 weeks	weekly	Serial
Sickle cell disease (complicated)	At diagnosis or 28 weeks	2x weekly	
Active malignancy undergoing treatment	32 weeks	weekly	
ANTICOAGULATION			
Therapeutic anticoagulation	32 weeks	weekly	Serial
Prophylactic anticoagulation without thrombophilia	None		32 we
Prophylactic anticoagulation with thrombophilia	See below		
High-risk thrombophilia <ul style="list-style-type: none"> o Antithrombin III deficiency o Double heterozygous for prothrombin G20210A + factor V Leiden o Homozygous factor V Leiden o Homozygous prothrombin G20210A 	32 weeks	weekly	Serial
Antiphospholipid Antibody Syndrome	32 weeks	2x weekly	Serial
Low risk thrombophilia <ul style="list-style-type: none"> o Heterozygote factor V Leiden o Heterozygote prothrombin G20210A o Protein C/S deficiency 	36 weeks	weekly	32 we
NEUROLOGIC			
Epilepsy - controlled	None		32 we
Epilepsy - uncontrolled	32 weeks	weekly	Serial
Multiple sclerosis – controlled, inactive	None		32 we
Multiple sclerosis – uncontrolled	32 weeks	weekly	Serial
Myasthenia Gravis	32 weeks	weekly	Serial
Brain tumor – undergoing treatment	32 weeks	weekly	Serial
CVA within last year, consider other morbidities	32 weeks	weekly	Serial
PULMONARY			
Asthma – mild or moderate	None		32 we
Asthma – severe	32 weeks	weekly	Serial
Restrictive lung disease	32 weeks	weekly	Serial
Any disease requiring supplemental oxygen	32 weeks	weekly	Serial
ENDOCRINE (excluding diabetes)			
Thyroid disease – poorly controlled	32 weeks	weekly	Serial
Thyroid disease – well controlled	none		32 we
Adrenal disease (Addison’s, CAH, etc.)	32 weeks	weekly	Serial
ID			

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HIV	None		32 weeks
AIDS	32 weeks	weekly	Serial
Hepatitis	None		32 weeks
Syphilis (requiring treatment during pregnancy)	32 weeks	weekly	Serial
CARDIAC DISEASE			
Congenital <ul style="list-style-type: none"> Isolated PFO Repaired, uncomplicated ASD/VSD Unrepaired, small-moderate ASD/VSD without L>R shunt or pulmonary hypertension Uncomplicated Marfan's or Ehlers-Danlos syndromes 	None		32 weeks
Congenital <ul style="list-style-type: none"> Unrepaired, large ASD/VSD +/- L>R shunt or pulmonary hypertension Complicated Marfan's or Ehlers-Danlos <ul style="list-style-type: none"> Dilated aortic root >4 cm, beta-blocker use, history of dissection, moderate-severe valvular disease Major repaired congenital abnormality (Tetralogy of Fallot, Transposition of the Great Vessels, Fontan procedure) 	32 weeks	weekly	Serial
Valvular <ul style="list-style-type: none"> Isolated mitral valve prolapse Uncomplicated artificial heart valve Uncomplicated mild-moderate left or right-sided valvular disease 	None		32 weeks
Valvular <ul style="list-style-type: none"> Symptomatic mild-moderate left-sided valvular disease Any severe valvular disease Mechanical prosthetic valve 	32 weeks	weekly	Serial
Acquired (individualize based on clinical presentation) <ul style="list-style-type: none"> History of myocardial infarction Cardiomyopathy or congestive heart failure Pulmonary hypertension 	32 weeks	weekly	Serial
Abnormal serum markers:			
PAPP—A less than or equal to the fifth percentile (0.4 MoM)	36 weeks	weekly	32 weeks
Second-trimester Inhibin A equal to or greater than 2.0 MoM	36 weeks	weekly	32 weeks
Elevated MS-AFP	None		32 weeks
OTHER			
Dichorionic Diamniotic twins (uncomplicated)	36 weeks	weekly	Serial
Monochorionic-diamniotic twins (uncomplicated)	32 weeks	weekly	Serial wks
Higher order multiples	32 weeks (if no FGR)	weekly	Serial wks
Complicated monochorionic-diamniotic and monoamniotic twins	28 weeks (if not inpatient)	2x weekly	Serial wks

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Late term gestation	41 weeks to delivery	weekly	None
Pre-pregnancy BMI 30- 34.9 kg/m ²	None		Serial
Pre-pregnancy BMI 35- 39.9 kg/m ²	37 weeks	weekly	Serial
Pre-pregnancy BMI 40 kg/m ² or above	34 weeks	weekly	Serial
Advanced Maternal Age > 35y/o	36 weeks	weekly	32 weeks
In Vitro Fertilization	36 weeks	weekly	32 weeks
Substance use			
Nicotine >1PPD or daily vaping	32 weeks	weekly	Serial
Active illicit substance use (cocaine, heroin, methamphetamines)	At diagnosis or 28 weeks	weekly	Serial
Opioid use disorder - stable in recovery on no medications	None		32 weeks
Opioid use disorder – on methadone, buprenorphine, buprenorphine/naloxone)	None		32 weeks
Chronic opiate use for pain (and no evidence of misuse)	None		32 weeks
Chronic opiate use for pain with polypharmacy	32 weeks	weekly	32 weeks
Alcohol, 5 or more drinks per week	36 weeks	weekly	32 weeks
Placental/Uterine Conditions			
Chronic placental abruption	At diagnosis or 28 weeks	weekly	Serial
Vasa Previa	32 weeks (if not inpatient)	2x weekly	Serial
Velamentous cord insertion	36 weeks	weekly	32 weeks
Single umbilical artery	36 weeks	weekly	Serial
Mullerian anomalies	None		Serial
Fibroids	None		Serial
FETAL CONDITIONS			
Fetal Growth Restriction	At diagnosis or 28 weeks	See FGR algorithm	Serial
Oligohydramnios (single deepest vertical pocket less than 2 cm)	At diagnosis or 28 weeks	weekly	Serial
Polyhydramnios (AFI over 30 cm. If returns to normal continue antenatal testing)	32 weeks	weekly	Serial
Viral Infection (i.e., toxo, parvo, CMV)	32 weeks	weekly	Serial
Chromosomal anomalies	32 weeks	weekly	Serial
Structural anomalies (concerning for stillbirth risk)	32 weeks or individualized by case	weekly	Serial
History of stillbirth	32 weeks or 1-2 weeks prior to previous stillbirth (if previous was less than 32 weeks. No earlier than 28 weeks)	weekly	Serial
Hx of other adverse pregnancy outcomes in immediately preceding pregnancy			
Previous FGR requiring preterm delivery	32 weeks	weekly	Serial
Previous preeclampsia requiring preterm delivery	32 weeks	weekly	Serial

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