# URMC Division of Maternal-Fetal Medicine

## GUIDELINES FOR INITIATION OF NON STRESS TESTS AND AFI

| INDICATIONS | WEEKS GESTATION | | | | | | | | | | | Wkly US | US COMMENTS | NST COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 37 | 38 | 40 | 41 | | | |
| **Diabetes** | | | | | | | | | | | | | | |
| A1 GDM (not requiring pharmacologic tx) | | | | | | | | | | | | | Not routinely recommended | Not routinely recommended |
| A2 GDM | | | | | x | | | | | | | | | if other factors associated with increased risk of adverse pregnancy outcome are present, it may be reasonable to start surveillance earlier in pregnancy |
| Pre-Gestational Diabetes | | | x | | x | | x | | | | | | fetal echo 20-22w | |
| Pre-Gestational Diabetes, uncontrolled | | | x | | x | | x | | | | | | fetal echo 20-22w | |
| **Hypertensive Disorders** | | | | | | | | | | | | | | |
| Chronic HTN no medications AND normal BP (<140/90) | | | | | | | | | | | | | | |
| Chronic HTN on medications OR mild range BPs | | | x | | x | | x | | | | | | Weekly If requiring medication adjustments | Twice weekly If requiring medication adjustments |
| Gestational HTN | x | | x | | x | | x | | | | | ☑ | at discovery and growth q4 wks | Twice weekly testing: 1 NST and 1 BPP + weekly labs |
| Preeclampsia without severe features | x | x | x | x | x | x | x | | | | | ☑ | at discovery and then q2-3 wks | Twice weekly testing: 1 NST and 1 BPP + weekly labs |
| Preeclampsia with severe features or severe gestational HTN | x | x | x | x | x | | | | | | | ☑ | at discovery and then weekly | Inpatient monitoring is recommended. |
| **Abnormal Fetal Growth* -- Please also see SMFM consult series as these guidelines are in evolution** | | | | | | | | | | | | | | |
| EFW 3-10% or isolated AC <3%ile | x | x | x | x | x | x | x | x | x | | | ☑ | at discovery and then serial UA Doppler assessment weekly | Weekly NST/BPP at Dx (with desired intervention); UA Doppler q 1-2 weeks for 1-2 weeks. If stable findings, UA Doppler q 2-4 weeks, CTG 1x per week<br>EFW q 3-4 weeks |
| EFW <3%ile | x | x | x | x | x | x | x | | | | | ☑ | at discovery and then serial UA Doppler assessment weekly | Twice weekly NST/BPP at Dx (with desired intervention) |
| EFW < 10% or isolated AC <3%ile with elevated S/D (>95%ile) | x | x | x | x | x | x | x | | | | | ☑ | at discovery and then serial UA Doppler assessment weekly | Twice weekly NST/BPP at Dx (with desired intervention) |
| EFW < 10% or isolated AC <3%ile with A/REDF | x | x | x | x | x | | | | | | | ☑ | at discovery and then serial UA Doppler assessment per MFM consultation | Inpatient monitoring is recommended. |
| Isolated AC <10%ile | | | | | | | | | | | | | Follow-up US in at least 2 weeks to rule out FGR, Dopplers at Dx. | |
| **Multiple Gestation** | | | | | | | | | | | | | | |
| Multiples - Di/Di | | | x | | x | | x | | | | | | | Not routinely recommended |
| Multiples - Mono/Di | x | x | x | x | x | x | x | | | | | | q 2 weeks starting @ 16 weeks; fetal echo 20-22w | |
| Multiples - Mono/Mono | x | x | x | x | x | x | | | | | | | q 2 weeks starting @ 16 weeks; fetal echo 20-22w | Consider inpatient monitoring at 28 wks |
| **Maternal Complications** | | | | | | | | | | | | | | |
| Age over 40 | | | | | | | | | | | | | Not routinely recommended | Weekly NST |
| Lupus / Chronic Kidney Disease/ APLS | | | x | | x | | x | | | | | | | Twice weekly if unstable. |
| Obesity (BMI>40) | | | x | | x | | x | | | | | | | Weekly NST |
| Uncontrolled Hyper/Hypothyroidism | | | x | | x | | x | | | | | | Not recommended if euthyroid | Not recommended if euthyroid |
| Maternal Cardiac Disease | | | x | | x | | x | | | | | | | Dependent on type and severity of disease or lesion |
| Sickle Cell Disease | | | x | | x | | x | | | | | | | Twice weekly if unstable or complicating factors. |
| Active Substance Abuse (not THC/tobacco) | | | x | | x | | x | | | | | | If well-controlled, consider one growth ultrasound at 32 weeks. | NST not recommended if well-controlled on medication-assisted treatment |
| **Obstetric Complications** | | | | | | | | | | | | | | |
| Prior IUFD (occurred at > 32 weeks) | | | | | x | | | | | | | | consider single USN after 28w to identify IUGR | Start at 32w or 1-2 weeks prior to GA of prior IUFD (no earlier than 28 weeks). If IUFD occurred at < 32w in prior pregnancy, individualize surveillance plan. |
| Cholestasis of Pregnancy | | | | | **or at discovery** | | | | | | | | | |
| Isolated Oligohydramnios (by DVP < 2cm) | | | | | | | | | | | | ☑ | at discovery and then weekly | |
| Red Cell Alloimmunization (at risk pregnancy not requiring transfusion) | | | | | | | | | | | | ☑ | weekly MCA starting at 18-20 wks if prior affected child, Kell Ab, or titer > 1:16 | If getting weekly MCA, perform simultaneous weekly BPP instead of NST |
| Post-dates | | | | | | | | | | x | x | ☑ | one between 40-41 weeks | |
| **Fetal anomalies** | | | | | | | | | | | | | | |
| CPAM, CVR ≥ 1.6 | x | x | x | x | x | x | x | x | x | | | ☑ | at discovery and then weekly | |
| CPAM CVR < 1.6 or BPS | x | | x | | x | | x | | | | | | every 2-4 weeks (until resolution) | Not routinely recommended. |
| Sacrococcygeal teratoma, vascular | x | x | x | x | x | x | x | x | x | | | ☑ | at discovery and then weekly | |
| Sacrococcygeal teratoma, cystic | x | x | x | x | x | x | x | | x | | | | every 2 weeks (for small or predominantly cystic lesions) | Not routinely recommended |
| CDH | x | | x | | x | | x | | x | | | ☑ | Monthly | Weekly BPP, can be increased to twice weekly if FGR, oligohydramnios, or polyhydramnios |
| Congenital Heart Disease | x | | x | | x | | x | | | | | | Monthly | Dependent on type and severity of lesion |
| Gastroschisis, w/o FGR | x | | x | | x | | x | | | | | | Monthly | |
| Gastroschisis, w/ FGR | **as per FGR** | | | | | | | | | | | | as per FGR | as per FGR |
| Urinary Tract Dilation (UTD) | x | | x | | x | | x | | | x | | | monthly for moderate or high risk UTD, one at 32-34 wks for low risk UTD | Not routinely recommended |
| Trisomy 21 | x | | x | | x | | x | | | | | | | Not routinely recommended, manage as per complicating factors |
| Hydrops (nonimmune) | x | x | x | x | x | x | x | x | x | | | ☑ | | antepartum testing has not been shown to improve outcomes, consider if 1) nonlethal etiology, 2) viable GA, 3) surveillance/delivery may improve outcome (eg: fetal arrhythmia, anemia, pleural effusion, CPAM, TTTS/TAPS) |
| **Uterine/Placental issues** | | | | | | | | | | | | | | |
| Vasa previa | | | | | | | | | | | | | Consider inpt management 30-34 wks | |
| Placenta Previa | | | | | x | | | | | | | | | |

| KEY | NST= 1x wkly | NST = 2x wkly | x = US |
|---|---|---|---|

Last updated 12/2020.