**Myelodysplastic Syndrome Testing Algorithm**

**INDICATIONS FOR TESTING**
Bone marrow aspirate is collected based on clinical suspicion for MDS

If needed for monitoring a previously identified cytogenic finding:

**ORDER**
Interphase chromosome FISH with the appropriate probe

**PERFORM**
- Cytogenetic evaluation for MDS
- Chromosome analysis

Abnormal karyotype (≥20 metaphase cells available for analysis)

FISH testing is not indicated⁴

Normal karyotype (≥20 metaphase cells available for analysis)

FISH testing is not indicated⁴

Suboptimal karyotype or no growth (<20 metaphase cells available for analysis)

**REFLEX TO**
MDS FISH panel test OR Cytogenomic SNP microarray testing

**CONSIDER**
Cytogenomic SNP microarray testing

**Abbreviations**
- FISH: Fluorescence in situ hybridization
- MDS: Myelodysplastic syndrome
- SNP: Single nucleotide polymorphism

⁴Standard MDS FISH panels are unlikely to increase diagnostic sensitivity when a metaphase cytogenetic study with ≥20 cells is completed.

**Reference**