

# Types of Testing - Fluorescence In-Situ Hybridization and Molecular DNA Testing

## Fluorescence In-Situ Hybridization (FISH)

Microdeletion Syndromes

Williams Syndrome  
 Prader Willi Syndrome  
 Angelman Syndrome  
 Miller-Dieker Syndrome  
 Smith-Magenis Syndrome  
 DiGeorge Syndrome, Velo-cardiofacial Syndrome  
 Other syndromes, FISH can be arranged upon request

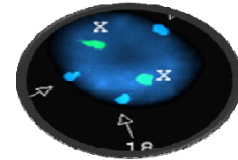
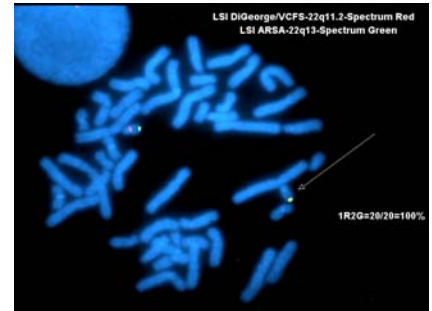
Aneuploidy

Prenatal specimen to rule out common aneuploidy (18), (13), (21), X and Y  
 Postnatal specimen to rule out aneuploid chromosome  
 Cancer specimen to rule out aneuploid chromosome

Unidentified Rearrangements or Marker

Painting Probe for any chromosome

Cancer Specific Rearrangements



### AML

t(15;17) PML/RARA  
 t(8;21) ETO/AML1  
 Inv(16) CBFβ  
 11q23 MLL  
 +8 CEP8  
 AML Panel

### MM

CEP 9/15  
 Del 13q D13S319  
 t(4;14) FGFR3/IGH  
 t(11;14) CCND1/IGH  
 17p13/11q21 p53/ATM  
 Entire Panel

### CLL

Cq21  
 +12 CEP12  
 Del(13)q D13S319  
 11q22.3 ATM  
 17p13 p53  
 t(11;14) CCND1/IGH  
 CLL Panel

### MDS

-7 / del7q D7S486  
 -5 / del5q EGR1  
 5q31 PDGFRB  
 Del 20q D20S108  
 +8 CEP8  
 Del 13q FKHR  
 MDS Panel

### CML/MPD

t(9;22) BCR/ABL  
 CHIC2/del4q12 FIP1L1/  
 PDGFRA

### Lymphoma

3q27 BCL6  
 2p23 ALK  
 t(11;14) CCND1/IGH  
 t(8;14) CMYC/IGH  
 18q21 MALT1  
 t(14;18) IGH/BCL2  
 Lymphoma Panel

### Post Transplant

CEP X/Y

### ALL

t(12;21) TEL/AML1  
 t(9;22) BCR/AML  
 11q23 MLL  
 Hyperploidy/hypoploidy 4,

### Solid Tumors:

Oligodendroglioma 1p/19q  
 Synovial Sarcoma 18q11.2

Ewing Sarcoma 22q12  
 Neuroblastoma 2p24

## Molecular DNA

Fragile X Testing  
 Prader-Willi / Angelman

PCR  
 Uniparental Disomy methylation study