



CENTER FOR  
PRECISION DIAGNOSTICS

**Cytogenetics FISH Laboratory Hematology/Oncology Panels Offered**

**CLL (Chronic Lymphocytic Leukemia)**

- D13S319 (13q14) and LAMP1 (13q34)
- 12 centromere
- ATM (11q22.3) and 11 centromere
- 17p (P53) and 17 centromere
- t(11;14) – reflex 14q32 IGH, t(14;18) and t(8;14) as needed depending on result

**MM (Multiple Myeloma)**

- RB1 (13q14) and LAMP1 (13q34)
- t(11;14) – reflex 14q32 IGH, t(14;16) and t(4;14) as needed depending on result
- 17p (P53) and 17 centromere

**Lymphoma - B cell**

- MYC Break Apart Probe – reflex t(8;14) as needed depending on result
- BCL6 (3q27)
- t(14;18) – reflex 14q32 IGH, t(11;14) and t(8;14) as needed depending on result

**AML (Acute Myelogenous Leukemia)**

- t(15;17) PML/RARA
- inv(16)
- t(8;21) RUNX1T1/RUNX1
- 11q23 MLL

**CMML (rule out CMML panel)**

- Chronic Monomyelocytic Leukemia**
- 4q12 FIP1L1-CHIC2-PDGFR A
  - 5q33 PDGFRB
  - 8p12 FGFR1, 8cen D8Z2
  - t(9;22) BCR/ABL1

**ALL (Acute Lymphoblastic Leukemia)**

- t(9;22) BCR/ABL1 (adult/pediatric)
- 11q23 MLL (adult/pediatric)
- t(12;21) ETV6/RUNX1 (pediatric)
- 4 centromere, 10 centromere, 17 centromere (pediatric)

**MDS (Myelodysplastic Syndrome)**

- D13S319 (13q14) and LAMP1 (13q34)
- 5/5q- EGR1
- 7/7q-
- 8 centromere and 20q
- 11q23 MLL

**Sarcoma**

- 12p13 ETV6
- 12q13 DDIT3
- 16p11 FUS
- 18q11.2 SS18
- 22q12 EWSR1

**MPN (Myeloproliferative Neoplasm)**

- 13/21
- 5/5q- EGR1
- 7/7q-
- 8 centromere and 20q
- t(9;22) BCR/ABL1 (look also for +9)

**MPN/MDS combined**

- 13/21
- 5/5q- EGR1
- 7/7q-
- 8 centromere and 20q
- t(9;22) BCR/ABL1
- 11q23 MLL