CG-203 Attachment A: FISH Panels

Contingent on a positive immunophenotype result performed concurrently at TCH, at a referring institution, or reference laboratory, selected FISH probe panels will be performed according to the following diagnoses:

1. **Precursor B-cell acute lymphoblastic leukemia or lymphoma**
    - Centromere for chromosomes 4, 10, 17
    - ETV6-RUNX1 fusion - t(12;21)
    - BCR-ABL1 fusion - t(9;22)
    - MLL gene rearrangement - 11q23
    - CDKN2A (p16) gene deletion - 9p21 band

    If above probes are Negative, or if only positive for CDKN2A deletion or RUNX1 copy number change, then add:
    - IGH gene rearrangement - 14q32
    - TCF3 (E2A) gene rearrangement - t(1;19)
    - CRLF2 gene rearrangement - Xp22.33/Yp11.32

2. **T-cell acute lymphoblastic leukemia or lymphoma**
    - CDKN2A (p16) gene deletion - 9p21 band
    - BCR-ABL1 fusion - t(9;22)
    - MLL gene rearrangement - 11q23
    - TCR A/D - 14q11

3. **Acute myeloid leukemia**
    - MLL gene rearrangement - 11q23
    - CBFB gene rearrangement - inv(16)

    If above probes are Negative, then add:
    - ETO-RUNX1 fusion - t(8;21)
    - ETV6 BAP (12p13 break apart)
    - Monosomy 5/5q31 deletion
    - Monosomy 7/7q31 deletion

4. **Myelodysplastic syndrome (MDS) panel**
    - Monosomy 5/5q31 deletion
    - Monosomy 7/7q31 deletion
    - LSI 20 - 20q12 deletion
    - Centromere for chromosome 8

5. **Burkitt Lymphoma**
    - MYC-IGH fusion - t(8;14)

      If above probe shows MYC rearrangement, but no fusion then add:
    - MYC BAP (8q24)