Conventional Cytogenetics: The karyotyping was performed with 3 ml of heparinized bone marrow. At least 20 metaphases were observed and analyzed through G bands by Trypsin and Giemsa (GTG) banding technique with over 450-550 bands resolution observed. The chromosomal abnormalities which were observed in the data set were reported in accordance with the International System for Human Cytogenetic Nomenclature. GTG method for chromosomal analysis revealed a female karyotype with the presence of Philadelphia chromosome in all metaphases studied. Of the 20 metaphases, 12 (60% of metaphases) showed an extra copy of 1q which was translocated on chromosome number 13 at bands 13q34 and 10 (40% of metaphases) showed an extra copy of 1q translocated on chromosome number 16 at bands 16q24. The overall karyotype of the patient was 46,XX,t(9;22)(q34;q11.2),der(1;13)(q12;q34)[12]/46,XX,t(9;22)(q34;q11.2),der(1;16)(q12;q24)[8]. (Figures 2 and 3).

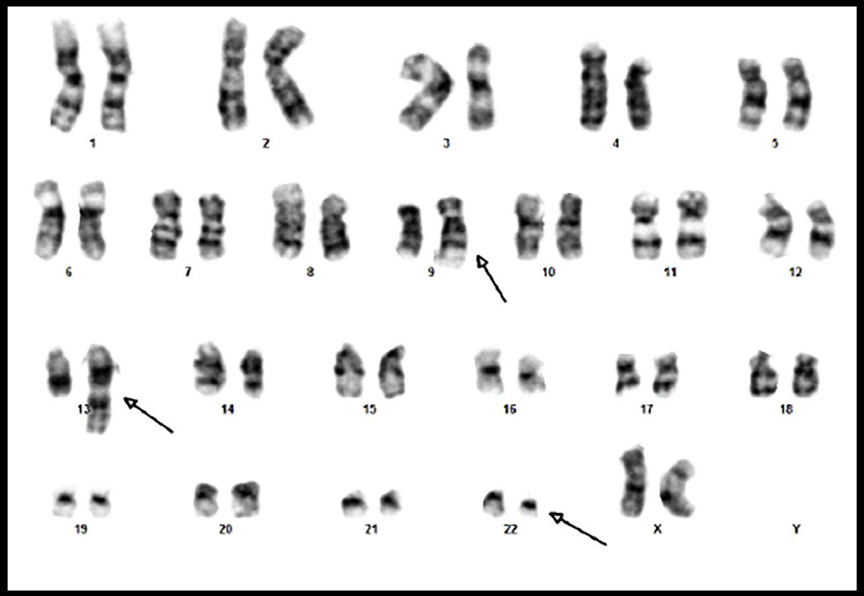

Figure 2

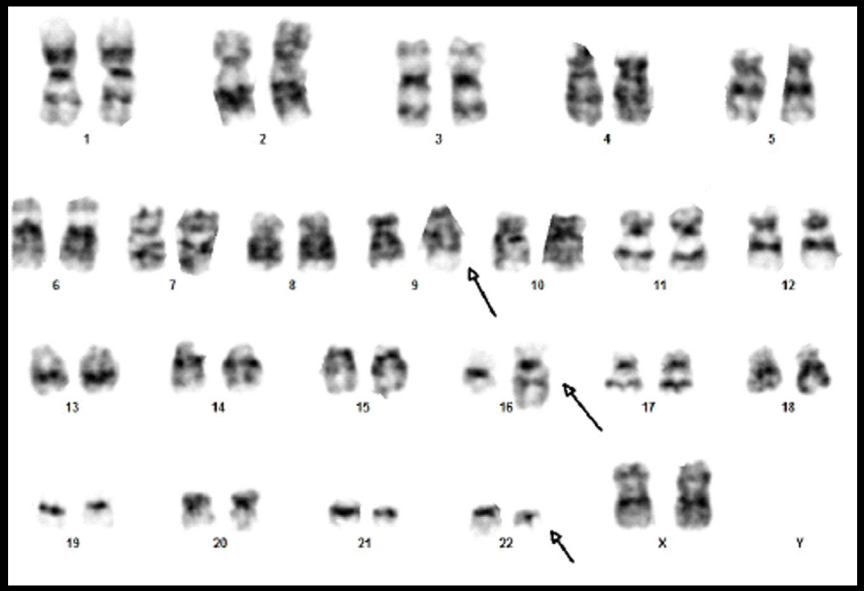

Figure 3

Molecular Cytogenetics by Fluorescence in situ hybridization (FISH): FISH analysis was performed with dual color dual fusion probe. The protocol involved direct cell pellet obtained from the bone marrow sample. At least 200 interphase cells were analyzed and signals were counted accordingly. The images were captured using Olympus fluorescent microscope BX-61 equipped with a CCD camera and analyzed using Bio-view (FISH) software. FISH analysis revealed dual fusion for BCR/ABL with the presence of 2F (fusion) 1G (green) 1O (orange), and for Trisomy 1q with 3G (green) 3O (orange) signals in all 200 Interphase studied (Figures 4 and 5).