HOX gene dysregulation

Changes in HOX gene expression can be associated with chromosomal rearrangements generating fusion genes, such as those involving MLL and NUP98, or molecular defects, such as mutations in NPM1 and CEBPA for example. Several miRNAs are involved in the control of HOX gene expression and their expression correlates with HOX gene dysregulation. HOX genes dysregulation is a dominant mechanism of leukemic transformation [1)]

1)

De Braekeleer E, Douet-Guilbert N, Basinko A, Le Bris MJ, Morel F, De Braekeleer M. Hox gene dysregulation in acute myeloid leukemia. Future Oncol. 2014 Feb;10(3):475-95. doi: 10.2217/fon.13.195. PMID: 24559452.