

P5 | Cancer Genetics

Loss of the Y chromosome in male patients with Myeloid Neoplasms

Ambrósio A.¹; Geraldés M.C.¹; Ventura C.¹; Furtado J.¹; Correia H.¹

¹Unidade de Citogenética, Departamento de Genética INSA, IP, Lisboa.

Loss of the Y chromosome (LOY) is describe as a both a normal age - related event and a marker of a neoplastic clone in haematological diseases. In order to understand the relationship between LOY chromosome and the different myeloid neoplasms, we retrospectively analysed cytogenetic results of 891 males' patients, from 1995 to 2016 with myeloid neoplasms. Sixty one patients showed LOY. Of the 61 patients without Y chromosome 24 (2,7%) had Myelodysplastic Syndromes (MDS); 24 (2,7%) had Myeloproliferative Neoplasms (MN); 6 (0,67%) had Neoplasm Myelodysplastic Syndrome / Myeloproliferative Neoplasms (MDS/MN) and 7 (0,79%) had Acute Myeloid Leukaemia (AML). These percentages can be different if we consider only the pathology in which was found the LOY: 7,7% of all patients with MDS (310); 6,1% of all patients with NM (391); 6,6% in the patients with MDS/MN (90) and 7,6% in patients with AML (92). There are few reports of LOY associated with Myeloid Neoplasms, since this has been considered mainly an age-related event. There for the tendency of LOY in our data, seems to indicate that careful consideration should be taken when evaluating male patients with LOY.