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Pattern of Translocations in Acute Leukaemia: A Single Centre Experience

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ABSTRACT A multifaceted approach is the current modality to the diagnoses of acute leukaemia. Given the importance of knowing chromosomal aberrations for rapid diagnosis and better treatment selection, this study assessed the frequency of common chromosomal translocations among acute leukaemia patients. In this retrospective study, both conventional karyotype and RT-PCR detecting translocations (HemaVision®-28N) were utilised in 400 patients with acute leukaemia of all subtypes in King Abdulaziz University, Jeddah (2015-2020). The researchers identified 38 acute leukaemia cases associated with translocations out of 400 new cases (9.5%), 326 samples were negative (81.5%) and 36 resisted PCR (9%). The most frequent observed translocation is t(9;22) (q34;q11.2) P190 (representing 28.9% of the total positive calls), followed by t(15;17) (q24;q21) (PML-RARA) and t(8;21) AML-ETO, each of which represents 13 percent. The resulting acute leukaemia translocation frequencies are similar to that published in the literature both locally and globally.