



Acute lymphoblastic leukemia

# Clinical characteristics and outcomes of B-ALL with *ZNF384* rearrangements: a retrospective analysis by the Ponte di Legno Childhood ALL Working Group

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## To the Editor

B-acute lymphoblastic leukemia (B-ALL) comprises a wide variety of subtypes with diverse clinical and biological features and outcomes. Risk-stratified and targeted therapy

according to genetic subtype has improved B-ALL outcomes [1]. Next generation sequencing (NGS) has identified several novel subtypes, including one with *ZNF384* rearrangements involving *ZNF384* located at position 12p13.31 [2–7]. Interestingly, patients with this subtype appear to express various leukemic phenotypes, including B-ALL (with or without aberrant expression of myeloid markers) and B/myeloid mixed phenotype acute leukemia (MPAL). In this regard, ~5% of childhood B-ALL, ~10% of adult B-ALL, and 48% of B/Myeloid MPAL cases have been observed to harbor

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