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Deadly fusion

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Jonathan B Weitzman

Email: jonathanweitzman@hotmail.com

Acute megakaryoblastic leukemia (AMKL) kills its young victims within a matter of months; and AMKL is associated with a chromosomal translocation t(1;22)(p13;q13). In the July issue of *Nature Genetics*, Ma *et al.* report the identification of two novel genes that are fused at the translocation breakpoint (*Nature Genetics* 2001, **28**:220-221). They used a cloning strategy based on fluorescence *in situ* hybridization (FISH) to define the breakpoint and to recover bacterial artificial chromosome (BAC) clones covering the region. From these, they cloned a chromosome 22 gene, named *MKL1* (megakaryoblastic leukemia-1) that contains a SAP DNA-binding motif and may be involved in chromatin remodelling. MKL1 is fused to a gene on chromosome 1 called *RBM15* (RNA-binding motif protein 15); it encodes RNA-recognition motifs and resembles the *Drosophila* gene *spen*. The authors speculate that the RMM15-MKL1 fusion protein causes aberrant RNA processing and signalling that disrupts megakaryoblast differentiation and/or proliferation.

References

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2. *Nature Genetics* , [<http://genetics.nature.com>]
3. SAP - a putative DNA-binding motif involved in chromosomal organization.
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