

Discordant clinical presentation and outcome in infant twins sharing a common clonal leukaemia

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We report the different presentation features and clinical outcome between two identical infant twins with acute lymphoblastic leukaemia with a shared clonal disease and MLL gene rearrangement.

One twin relapsed and died, but the other is in complete remission > 4 years after diagnosis. These data, and similar observations on other twin infants with leukaemia, suggest that despite a common clonal in utero, post-natally these leukaemias can evolve independently, at different rates, in the twinned individuals, and that the usually fatal leukaemia associated with t(4;11) MLL gene rearrangement can be effectively treated when the leukaemic burden is small.