Quinacrine banding of leukemic cells of a female patient with acute myeloid leukemia revealed a reciprocal translocation involving chromosomes 8 and 21 ([t(8;21)(q22;q22)]; in addition to the translocation, the cells also were missing one X chromosome [45,X-]. A second female patient with an identical abnormality was added when the paper was in the proof stage. [The SC* indicates that this paper has been cited over 175 times, making it the most cited paper from this journal.]

First Recurring Translocation in Human Leukemia

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March 26, 1990

It is a widely accepted notion that new and unexpected observations often have difficulty getting published and that there is therefore a delay in making them widely available. However, it is a matter of fact that the discovery of a translocation in a patient with acute myeloid leukemia presented here was the result of a serendipitous observation. The discovery of the translocation was made by the use of quinacrine banding, a technique that allows the identification of individual chromosomes in malignant cells. The results of this study indicate that the translocation is a recurring feature of human leukemia.