# Long-Term Follow-Up Study in Childhood Acute Lymphoblastic Leukemias

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## Summary

A long-term follow-up genetic study in 121 children with the diagnosis of acute lymphoblastic leukemia (ALL) is presented. The control group of 121 healthy children free of any cancer or precancer disorder in their medical history (matched by sex and age) was studied for statistical comparison. The medical history, familial history with special attention to cancer incidence and to mutagenic factors, dermatoglyphics, chromosome and nuclear DNA cytometric data at the time of ALL diagnosis, and late effects with special attention to secondary malignancies and reproduction of ALL survivors were examined. Finally, the prognosis in the ALL patients investigated was calculated. For this prognostic calculation, not only classical data (sex, age at the time of diagnosis, WBC count at the time of diagnosis etc.), but also our clinical and laboratory genetic data (familial cancer history, prenatal mutagenic exposure, occupational mutagenic exposures in parents were used. Using this complex model of prognostic calculation we divided our ALL patients more exactly into different prognostic groups.

These first results of our long-term follow-up genetic study helped us not only in differenting ALL patients according to prognosis, but also in providing genetic counselling in at-risk families. The initial experiences concerning reproduction of ALL long-term disease-free survivors are good.

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