

## LS07-037 - Flow cytometric signal typing for therapy response prediction in pediatric myeloid leukemia

### Abstract

The rapidly expanding knowledge about the intracellular signaling pathways has placed new small molecule compounds at the forefront of clinical research trials in Leukemia, which either inhibit cell proliferation or activate cell death. The conventional practice of therapy is about to radically change as a result of the development of these new targeted agents. Yet, it is clear that a great amount of work remains to be done to elucidate the mechanisms by which leukemic cells respond to diverse agents and to determine the optimal settings in which patients are bound to benefit maximally from new therapy options. This project aims at developing methods based on flow cytometry to determine the intracellular signaling status of individual leukemic cells to identify useful therapy options and monitor treatment in leukemic patients.

### Keywords:

myeloid leukemia, children, flow cytometry, intracellular signaling, signaltransduction inhibitor, prognostic marker, bcr-abl, murine disease models, leukemic stem cells

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Further links to the persons involved and to the project can be found under  
<https://www.wwtf.at/funding/programmes/ls/LS07-037/>