

## The crucial role of immunophenotyping in hematology and oncology

In this issue Basso *et al.*<sup>1</sup> illustrate how the immunophenotypic analysis of leukemic cells may provide essential information for the diagnosis and follow-up of acute leukemias (AL), and how this information should be combined with that of morphology and genetic investigations. Furthermore, the authors show that the introduction and diffusion of new reagents specific for abnormal fusion products and antigen quantification will provide us with new tools for such investigations and the management of AL.

In the last few years, several papers in this journal have singled out the clinical relevance of immunophenotyping.<sup>2-21</sup>

Béné *et al.*,<sup>10</sup> on behalf of the *European Group on Immunological Classification of Leukemias* (EGIL), have emphasized that the immunophenotype of acute leukemias is an extremely important diagnostic tool. Immunophenotyping data, as for any other clinical or biological characteristics of AL, cannot however be used alone, and must be considered together with all parameters of any given patient. As therapeutic protocols improve, two types of attempts should be made according to the EGIL. First, features of good prognosis should be identified in order to allow the amount of chemotherapy to be decreased and therefore minimize long-term side-effects of these drugs. At the other end of the scale, every effort should be made to understand why patients with apparently common forms of AL fail to respond to validated protocols. Proper and thorough immunophenotyping may help both aims, assuming that specialized clinicians and biologists keep working together on these issues. Patients' samples should therefore be used i) to provide, rapidly, the minimum information necessary for diagnosis, stratification and risk assessment and ii) to explore the potential value of new approaches enforcing the prognostic significance of AL-related immunophenotypic features.

**haematologica** 2001; 86:673-674

[http://www.haematologica.it/2001\\_07/0673.htm](http://www.haematologica.it/2001_07/0673.htm)

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