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Prognostic Impact of the Serum Levels of Soluble CD23 in B-Cell Chronic Lymphocytic Leukemia

To the Editor:

With great interest we read the article of Sarfati et al¹ dealing with the prognostic impact of the serum levels of soluble CD23 (sCD23) in B-cell chronic lymphocytic leukemia (B-CLL). The results of their study show that, as expected, the stage of disease at initial presentation of the patient predicts survival, and that the serum levels of sCD23 correlate with the total tumor burden, ie, the involvement of lymph nodes and the involvement of liver and spleen, and with the rate of progression into higher stages of the disease. Interestingly, the authors describe a threshold level of sCD23 of 574 U/mL above that the probability of survival of the patients is adversely affected. The conclusion is drawn that the serum level of sCD23 at first diagnosis is a major risk factor for disease progression and has an impact on overall survival. These results are in accordance with data of our own trial that will be published elsewhere.² However, the design of the study of Sarfati et al provokes some critical comments.

Survival data from patients diagnosed in 1983 as well as from patients first presented in 1994 were summarized and plotted together. In the meantime, however, the probability of survival within a given risk group has changed, probably due to advances in supportive care. While in 1975 Rai et al³ reported a median survival time of 19 months for patients with stages III and IV disease—corresponding to the 20 months median survival time for patients with stage C disease as published by Binet et al⁴ in 1981—the median survival was recorded to be 30 months for the same risk group of patients in 1989.⁵ In addition, at least since 1990, a proportion of patients may have received treatment with nucleoside analogues which could have influenced the overall outcome.⁶ Therefore, and because no analysis of the causes of death is given, the survival curves presented by Sarfati et al may be biased essentially and cannot confirm definitely the prognostic importance of sCD23. Also, unfortunately, Sarfati et al were not able to examine any correlation of sCD23 levels with other already known risk factors including the pattern of bone marrow (BM) infiltration,⁷ the lymphocyte doubling time (LDT),⁸ and levels of the serum thymidine kinase (sTK).⁹ In our own trial on newly diagnosed patients with Binet stage A B-CLL a strong correlation between high levels of sCD23 and a diffuse BM infiltration, an LDT \leq 12 months and an sTK $>$ 5 U/mL was established. Multivariate analysis showed that sCD23 and the LDT were superior over the BM infiltration pattern and sTK levels in predicting progressive disease.² Thus, we are convinced that the serum level of sCD23 at initial presentation of a patient with early stage B-CLL has a great prognostic impact. However, the study of Sarfati et al contributes only partially to the establishment of sCD23 as a recognized risk factor in B-CLL.

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