

## Autoimmune cytopenias in chronic lymphocytic leukemia at disease presentation in the modern treatment era: is stage C always stage C?

Carlo Visco, Agostino Cortelezzi, Francesca Moretta, Erika Falisi, Francesco Maura, Silvia Finotto, Wilma Barcellini, Achille Ambrosetti, Antonino Neri, Marco Ruggeri, Francesco Rodeghiero

### Abstract

Abstract Anemia and thrombocytopenia at chronic lymphocytic leukemia (CLL) presentation have long been considered to be predictive of a poor prognosis, irrespective of the cause of cytopenia, yielding an advanced stage of the disease. We identified 86 patients with CLL who were diagnosed after year 2000 with Binet C disease at first presentation. Cytopenia was considered related to autoimmune conditions in 27 (31.3%; stage C "immune") or secondary to bone marrow failure in 59 (68.6%; stage C "infiltrative"). No difference in clinical characteristics, mutational status, cytogenetics, TP53 and NOTCH1 mutations was observed between stage C "immune" and "infiltrative." Patients with stage C "immune" had a trend toward a better overall survival than patients with stage C "infiltrative" (median 74 vs. 63 months), but the difference was not statistically significant ( $p = 0.30$ ). This difference was not modified by adjustment for CLL tumor burden at presentation, and survival of stage C "immune" patients was significantly inferior compared to an unselected cohort of patients with stage A, but similar to stage B. Our findings suggest that autoimmune cytopenias at CLL diagnosis have a negative impact on patient outcome.