

Background

In the last decade, the incorporation of anti-CD20 monoclonal antibodies, bendamustine, B-cell receptor inhibitors, and Bcl-2 antagonists have changed the paradigm of chronic lymphocytic leukemia (CLL) treatment, improving overall survival (OS)

Objective

To evaluate the influence of the date of diagnosis (before or after 2010) and whether new drugs were received as frontline therapy.

Materials & Methods

We conducted a retrospective observational study in patients diagnosed with CLL between 2003 and 2016. Main outcome measure was OS.

Results

One hundred eighty-two patients were evaluated: 104 men (57%) and 78 women (43%); median age 74 years (39–97). Seventy-one patients (39%) were diagnosed before 2010, and 111 (61%) from 2010 onward. With a median follow-up of 76 months (range, 20–212), 77/182 (42%) patients had received ≥1 line(s) of treatment. Twenty patients (26%) received the front-line treatment before 2010.

Half of the patients received new drugs in first-line (n=39), 92% of them from 2010 onward. Median OS of patients diagnosed before 2010 was 66 months (35.32–96.68) vs 143 months (95% CI 90.5–195.5) (p=0.032) as of 2010. In patients ≤ 65 years, median OS has not been reached, being 80.5% at 10 years: 65% for those diagnosed before 2010 and 97% after 2010, p=0.036. Median OS of patients > 65 years was 6 years (95% CI 4.17–7.83), and increased from 82 months for those diagnosed before 2010, to 110 months in those diagnosed after 2010, p=0.744.

Patients treated with new drugs in first-line had an increased median OS from 76 months and 13% at 10 years to a median not reached and OS of 77% at 10 years, p=0.000. This difference was more prominent in those ≤ 65 years: 20% vs 100% at 10 years (p=0.012), while it was not significant for those > 65 years (11% vs 50% at 10 years, p=0.181). However, in a multivariate model, treatment with new drugs retained statistical significance (HR 0.414; 95% CI 0.183–0.935) along with age ≤ 65 years (HR 0.256; 95% CI 0.085 - 0.771) and CIRS ≤ 6 (HR 0.247; 95% CI 0.111 - 0.551).

Summary

The implementation of new drugs in the front line has led to an increase in OS, especially in young patients

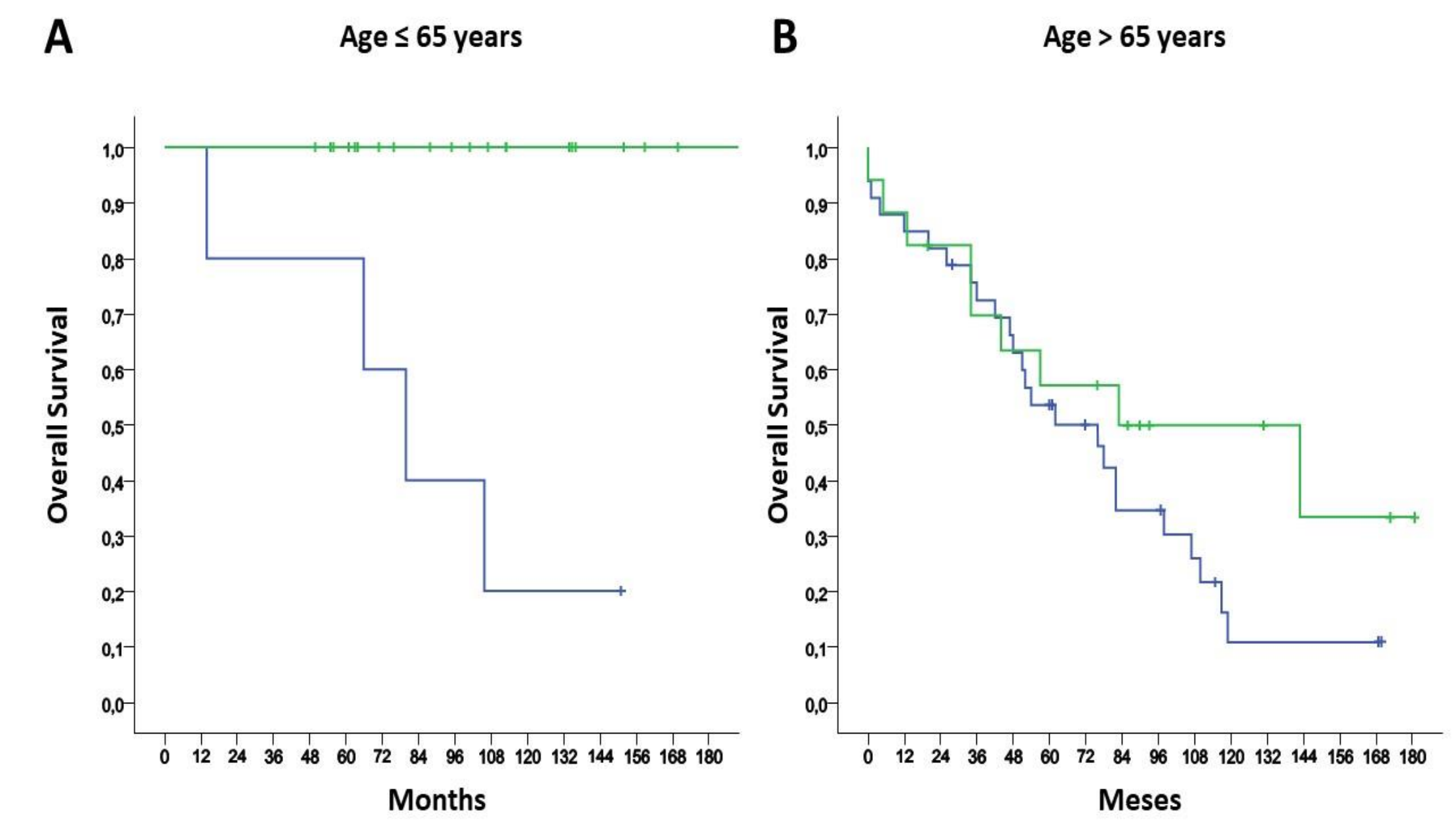


Figure 1. Overall survival