Multicenter study of epidemiological and molecular characteristics in patients with chronic lymphocytic leukemia/small lymphocytic lymphoma in Baja California Sur, México

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INTRODUCTION

Chronic lymphocytic leukemia is a hematologic neoplasm derived from B-cell lineage lymphocytes and is highly prevalent in Western populations, representing 25–30% of leukemias in adults. At the time of diagnosis, molecular subclassification is a cornerstone for prognosis and treatment.

At the international level, the epidemiology and genetic characteristics of this disease have been widely described; however, in Mexico, especially in Baja California Sur, information remains limited.

The lack of regional data limits adequate patient characterization and its prognostic impact, highlighting the importance of generating local evidence that contributes to improving hematologic care in the region.

AIM

To describe characteristics by sex, age, molecular features, and treatment in patients with chronic lymphocytic leukemia from several public and private hospitals in the state of Baja California Sur, Mexico (Hospital General de Zona 1 del Instituto Mexicano del Seguro Social, Hospital Juan María Salvatierra, IMSS Bienestar, and Clínica Médica del Cortés).

METHOD

Multicenter study including public and private hospitals in the state of Baja California Sur, Mexico, over a period from March 2020 to September 2025, with a confirmed diagnosis of chronic lymphocytic leukemia/small lymphocytic lymphoma established through bone marrow or peripheral blood immunophenotyping, or immunohistochemistry from bone marrow or lymph node biopsy, with or without NGS/FISH analysis of specific mutations.

RESULTS

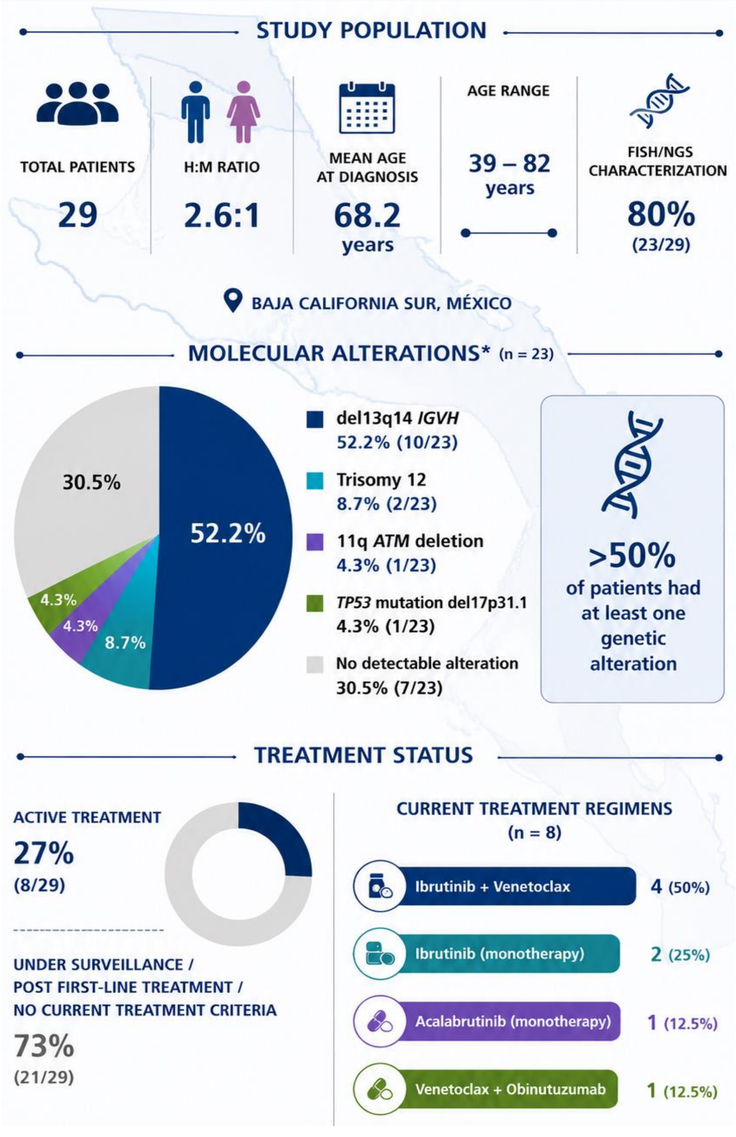
A total of 29 patients were included, with an H:M ratio of **2.6:1**, a maximum age of **82** years, a minimum age of **39** years, a mean age at diagnosis of **68.2** years, and **FISH/NGS characterization performed in 80% of the total population (23/29).**

More than half of the patients had at least one genetic alteration, with the most frequent alteration identified being **del13q14 IGVH** in **52.2% (10/23)** of the studied patients.

Trisomy 12 was identified in 8.7% (2/23), 11q ATM deletion 4.3% (1/23), and a frequency of only **4.3%** of **TP53** mutation **del17p31.1,** (1/23).

For treatment purposes, **27%** of the patients are on active treatment, with the most commonly used regimen being **Ibrutinib + Venetoclax** (4), followed by ibrutinib monotherapy (2), acalabrutinib monotherapy (1), and Venetoclax + Obinutuzumab (1).

The rest of the population is under surveillance after first-line treatments or without current treatment criteria.



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