First-Line Treatment of Chronic Lymphocytic Leukemia (CLL) Patients With Obinutuzumab-Based Therapy: Single-Center Experience

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CONTEXT

Monoclonal antibodies (mAbs) targeting CD20 on B lymphocytes are of importance in the treatment of B-cell malignancies (1,2,3).

OBJECTIVE

In recent years, a great effort has been made to develop novel mAbs that can provide greater efficacy than well-known rituximab. A second class of mAbs obinutuzumab was presented as a more powerful tool in the treatment of this group of patients.

DESIGN & SETTING

In this retrospective study, 72 patients with symptomatic CLL were included. CLL patients were diagnosed and treated at the University Clinic of Hematology from January 2019 to January 2023.

PATIENTS

All the patients were evaluated for traditional clinical and laboratory prognostic factors and newer prognostic factors including IGHV mutation status and CLL prognostic and predictive genetic abnormalities.

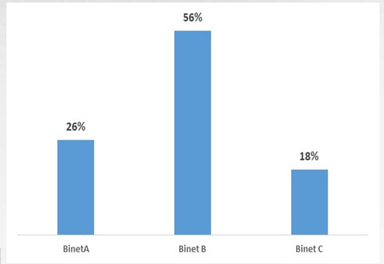


Fig 1. Distribution of patients with CLL treated with obinutuzumab according to Binet stage.

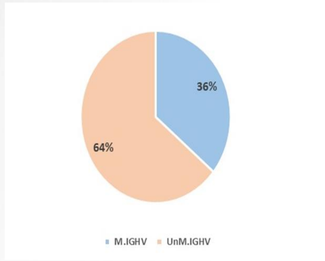


Fig 2. Distribution of CLL patients treated with obinutuzumab patients according to mutational status of IGHV gene.

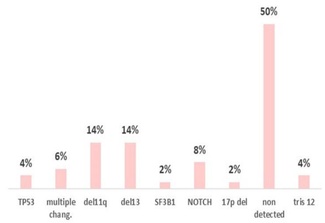


Fig 3. Distribution of CLL patients treated with obinutuzumab according to prognostic molecular markers.

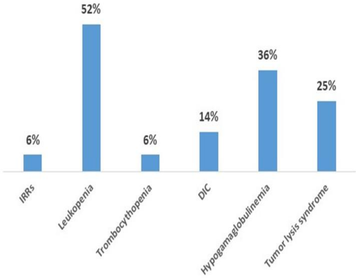


Fig 4. Distribution of CLL patients treated with obinutuzumab according to adverse events.

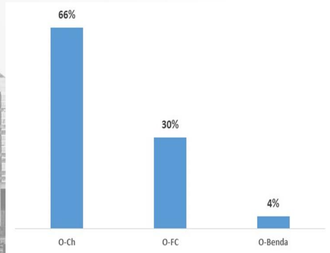


Fig 5. Distribution of CLL patients treated with obinutuzumab according to type of regiments based on obinutuzumab.

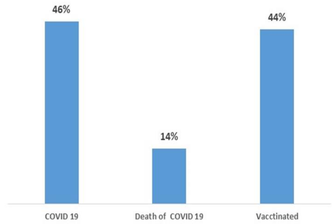


Fig 6. Distribution of CLL patients treated with obinutuzumab according to Covid 19 infection.

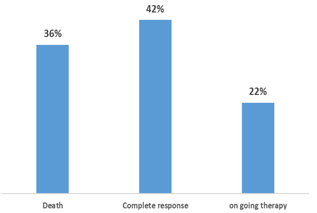


Fig 7. Distribution of CLL patients treated with obinutuzumab according to response of therapy.

RESULTS

Most of the patients treated with obinutuzumab have Binet B stage (56%)(Fig1).

The mutational status of the variable region of the immunoglobulin heavy chain (IGHV) in 64% of the CLL patients treated with obinutuzumab was unmutated (Fig2).

The most common chromosomal abnormalities detected were del(13) and del(11q), found in 14% of the CLL patients (Fig 3).

The most frequent adverse events (AEs) were tumor lysis syndrome and leukopenia(Fig4).

Distribution according therapy (Fig5),Covid 19 infection(Fig6), response of therapy(Fig7).

CONCLUSIONS

Analysis of initial results of application of obinutuzumab-based therapy allows us to conclude that this therapeutic modality is not linked to severe AEs that would limit the administration of therapy.

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3. Shafat T, Grupel D, Porges T, Levi I, Yagel Y, Nesher L. Treatment with obinutuzumab leads to worse outcomes in haematological patients diagnosed with Omicron variant COVID-19. Br J Haematol. 2022 Sep;198(5):826-829.