



## The 65th ASH Annual Meeting Abstracts

**ONLINE PUBLICATION ONLY****642. CHRONIC LYMPHOCYTIC LEUKEMIA: CLINICAL AND EPIDEMIOLOGICAL****Patterns of Disease, Risk Factors and Treatment in Chronic Lymphocytic Leukemia (CLL). a retrospective Report of Real World Patient Cohort from United Arab Emirates**Arif Alam, MBBS<sup>1</sup>, Khaled Al Qawasmeh<sup>2</sup>, Nida Alam<sup>3</sup>, Philip L. McCarthy, MD<sup>4</sup><sup>1</sup> Department of Oncology, Tawam Hospital Abu Dhabi Health services company, Abu Dhabi, United Arab Emirates<sup>2</sup> department of Oncology, Tawam hospital, Al Ain, United Arab Emirates<sup>3</sup> Al Razi Street Dubai health care city, Mohammed Bin Rashid University of Medicine and Health Sciences, Dubai, United Arab Emirates<sup>4</sup> Department of Medicine, Roswell Park Comprehensive Cancer Center, Buffalo, New York, NY

## Introduction:

Chronic Lymphocytic Leukemia (CLL) is an indolent B cell Malignancy. It is the most common type of leukemia in Western Hemisphere (35% of all leukemia (American Cancer Society. *Cancer Facts & Figures 2023*) but is rare in East Asia. Data about CLL in Middle Eastern countries is scarce. Here we report a retrospective analysis of the patients with CLL seen in a real world setting at the largest cancer center in UAE.

## Methods:

This is a retrospective analysis of patients diagnosed with CLL between January 2018 to September 2022. Data was collected from Electronic Medical Records (EMR) regarding patient demographics, risk profile (genetics) and treatment patterns.

## Results:

Thirty-seven patients with CLL were seen in the study period. They accounted for approximately 3 % of all leukemia patients (Al-Shamsi HO. The State of Cancer Care in the United Arab Emirates in 2022. *Clin Pract.* 2022 Nov 23;12(6):955-985). The median age was 59 years (range 30 to 88 years.) Sixteen percent of the patients were under the age of 50 years. The majority of the patients were male (5:1). The median WBC at presentation was 30000/ $\mu$ l, Hemoglobin was 112 grams/liter and platelet count was 140000/ $\mu$ l.

Approximately one third of the patients (35%, 13 out of 37) have not required any therapy due to early-stage disease and/or comorbidities. Twenty-four patients (65 %) had advanced stage disease and required therapy at the time of diagnosis.

FISH results are available for 19/24 patients on therapy. The most common was deletion 13q (8/24) followed by Trisomy 12 (7/24). 17p/TP 53 deletion was seen in 3/24 and 1/24 had ATM gene deletion. IGHV mutational analysis is not available for most patients

Treatment patterns showed chemoimmunotherapy (CIT) in 10/24 patients (Bendamustine rituximab N=8 and FCR N= 2), BTK inhibitors as single agent 9/24 while 5/24 patients receive Venetoclax<sup>R</sup> in combination with Anti CD 20 antibody.

## Conclusion:

This is the first report on CLL seen in a large tertiary care center in UAE over a period of 5 years. The number of patients is significantly less (3%) as compared to incidence in western hemisphere (35%) of all leukemia cases. Median age (59 years) is at least a decade earlier than western hemisphere with a preponderance in males.

Treatment patterns are being rapidly revised with the availability of BTK inhibitors, Venetoclax<sup>R</sup> and anti-CD 20 monoclonal antibodies to conform with current guidelines. More epidemiologic investigation is needed to understand the low numbers of patients with CLL reported in this UAE cancer center.

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