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# Correlation between CD200 Expression on Leukemic Stem Cells and Response to Treatment in De-novo Adult Acute Myeloid Leukemia Patients

Nouran A Hassan[1], Tamer M Ibrahim[2], Nermeen A Nabih[2], Rana G Abdelfatah[3]

[1]Bachelor of Medicine & Surgery, Faculty of Medicine, Ain Shams University

[2]Professor of Internal Medicine & Hematology, Department of Hematology, Faculty of Medicine, Ain Shams University

[3]Lecturer of Internal medicine & Hematology, Department: Hematology, Faculty of Medicine, Ain Shams University

## INTRODUCTION

CD200 is the ligand for CD200 receptor (CD200R), expressed on myeloid and Lymphoid cells and is considered an important immunological checkpoint, which Subsequently inhibits anti-tumour immune responses. In this study, we aim to study the relation between CD200 and the response outcome to induction therapy in adult AML Egyptian patients.(1)(2)

## AIM

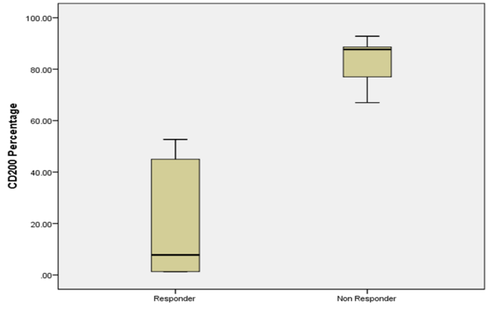
To assess the expression of CD200 in leukemic stem cells and its impact on response to induction therapy relation in adult patients with acute myeloid leukemia.

## METHOD

This study was a cross sectional study conducted from Adult Clinical Haematology department Ain Shams University Hospitals during the period between May 2021 to December 2022.
Beside the basic investigations, fluroscence flow cytometry will be performed in order to analyze CD200 protein expression on samples from AML patients.

## RESULTS

**CD200 expression ranged from 1.3 to 92.8 with mean± SD of 49.20±34.61. There were 19 patients (27.9%) were “negative CD200” and 49 patients (72.1%) were positive CD200. The higher positive CD200 was found in non-responder group 31 patients (100%) compared to responder group 18 patients (48.6%). Meanwhile, there was a statistically significant difference between responder group and non-responder group according to CD200 level with p-value(p<0.001).**




Box plot between responder group and responder group according to CD200 percentage.

## CONCLUSIONS

CD200 expression in myeloid blast in AML patients could play a role in the development of AML. Analysis of this marker could serve as prognostic marker and might guide the therapy in AML patients in the future

## REFERENCES

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## CONTACT INFORMATION

Rana Gamal Ahmed Abdelfatah

EMAIL: raanagamal@gmail.com

+201067869081