

# DIAGNOSTIC METHODOLOGY OF RELAPSE AFTER BONE MARROW TRANSPLANTATION IN A PATIENT WITH ACUTE LEUKEMIA

LABĂU Otilia, NICORICIU Florin

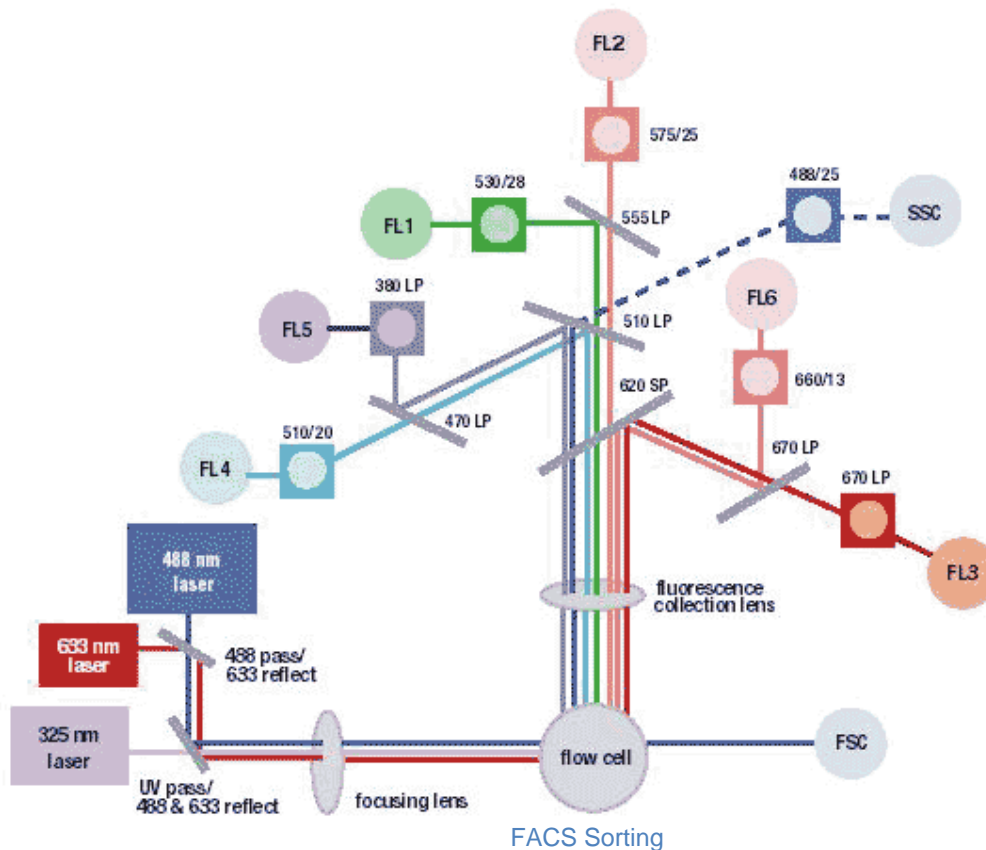
University of Oradea, [otilia\\_labau@yahoo.com](mailto:otilia_labau@yahoo.com)

**Key words:** Leukemia, bone marrow transplantation, flow cytometry.

## Abstract

Bone marrow transplantation is a well established modality of treatment for oncologic, hematologic and immunologic diseases, however the recurrence is the main cause of treatment failure. The variables regarding to selection, conditioning and follow up should be analyzed since they can influence it in a fundamental manner.

The early diagnosis of relapse is sustained by the ability to detect the minimal residual disease. The methodology using flow cytometry, conventional cytogenetic, fluorescence in situ hybridization (FISH) and polymerase chain reaction (PCR) allow the diagnosis of these residual clone that are responsible for relapse.



## Bibliographic references

1. Summarised Armitage's achievement, j.o. *bone marrow transplantation*, *NEJM*. 1994; 330.2 (12): 827 - 838.
2. Barret, a. j. et al. bone marrow transplantation is acute lymphoblastic leukemia treatment: factors influencing relapse and survival. *blood*. 1989; 74: 862
3. Mourratidou, m. et al. recurrence of acute leukemia treatment in donor cells after bone marrow transplantation: documantation by in situ DNA hybridization. *BMT* 1993; 12: 77 - 80.
4. Hughes, t. et al. detection of residual treatment leukemia after bone marrow transplant for chronic myeloid leukemia treatment: role of polymerase chain reaction in predicting relapse. *blood* 1991; 77: 874 - 878(1)
5. Thompson, j. et al. molecular quantification or residual disease in chrhonic myelogenous leukemia treatment after bone marrow transplantation. *blood* 1992, 79: 1629 - 1635.