

# Allogeneic stem cell transplantation is effective after pathway inhibitor treatments in CLL – a retrospective study on behalf of the Chronic Malignancies Working Party of EBMT

Author names

Michel van Gelder<sup>1</sup>, Diderik-Jan Eikema<sup>2</sup>, Joe Tuffnell<sup>2</sup>, Linda Koster<sup>2</sup>, Peter Dreger, Johannes Schetelig, Alexander Kulagin, Annoek Broers, Frédéric Baron, Nicolaus Kröger, Jan Vydra, Mi Kwon, Régis Peffault de Latour, Pavel Jindra, Tobias Gedde-Dahl, Ibrahim Yakoub-Agha, Carlos Solano Vercet, Martin Kaufmann, Edouard Forcade, Matthew Collin, Johan Maertens, Nicola Di Renzo, Joanna Drozd-Sokolowska<sup>3</sup>, Kavita Raj<sup>4</sup>, Donal P. McLornan<sup>4</sup>, Olivier Tournilhac<sup>5</sup>.

Author affiliations

1. Maastricht University Medical Center (NL), 2. EBMT Leiden Study Unit (NL), 3. Medical University Warsaw (PL), 4. University College London Hospitals (UK), 5. Clermont-Ferrand University Hospital (F) on behalf of all EBMT-CMWP members

## OBJECTIVES

- Describe outcome after allogeneic stem cell transplantation in double-exposed CLL patients.

## CONCLUSIONS

- Outcome after alloSCT is as good as in pre-cBTKi / BCL2i era (M. van Gelder, BMT 2017)
- Refractory CLL before alloSCT: inferior outcome
- Outcome not inferior with del(17p) / TP53 mutation
- AlloSCT can be considered in transplant-eligible patients –especially when ncBTKi and/or liso-cel are not available

## INTRODUCTION

The prognosis for most CLL patients refractory to both covalent BTK- and BCL2-inhibitors (cBTKi and BCL2i) remains dismal, even with non-covalent BTKi and liso-cel.

## AIM

Evaluate outcome of allogeneic stem cell transplantation (alloSCT) in double-exposed CLL patients.

## METHODS

EBMT Registry

- CLL patients
- alloSCT between 2015 and 2020
- exposed to both cBTKi and BCL2i
- no Richter's transformation
- Kaplan-Meier for Graft-versus-Host Relapse-Free Survival (GRFS), PFS, Overall Survival (OS)
- Competing Risks Analyses for cumulative incidence of Relapse and non-Relapse Mortality (NRM)

## RESULTS

- 127 patients
- median age 60 years (range 31 – 71)
- prior chemo-immunotherapy in 84%
- 46% with known TP53 abnormalities
- 80% BCL2i as last treatment before alloSCT
- median duration of last treatment before alloSCT 4.4 months (range 0.2 – 22)
- 77% responsive disease at alloSCT
- 81% reduced-intensity conditioning
- 65% 10/10 HLA-matched donor

Figure 1. Outcome (OS) after alloSCT similar as in pre-cBTKi/BCL2i era

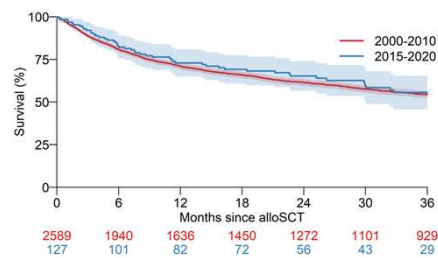


Figure 2. OS, PFS, GRFS, CIR and NRM after alloSCT in patients exposed to cBTKi and/or BCL2i as first treatment

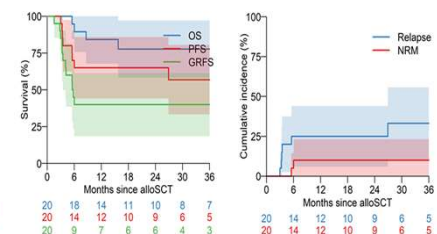


Figure 3. OS, PFS, GRFS, CIR and NRM after alloSCT according to response before alloSCT in patients treated with a cBTKi and / or BCL2i as last treatment before transplantation.

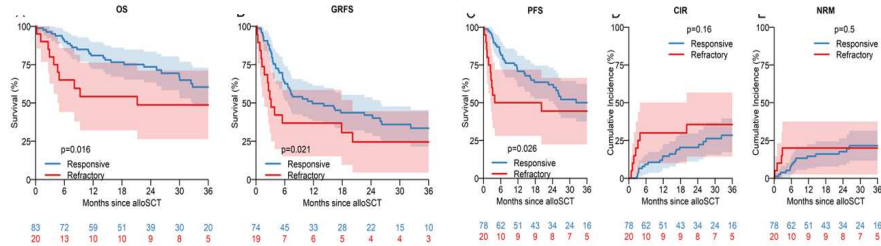
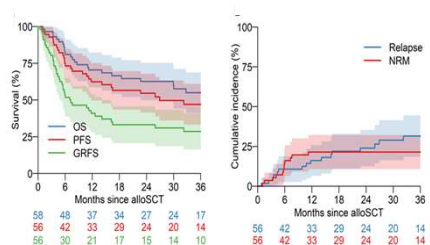


Figure 4. OS, PFS, GRFS, CIR and NRM after alloSCT in double-exposed patients with known TP53 abnormalities



## REFERENCES

M van Gelder et al., Long-term survival of patients with CLL after allogeneic transplantation: a report from the European Society for Blood and Marrow Transplantation, Bone Marrow Transplant 2017; 52(3):372-380.

## DISCLOSURES

None

## CONTACT

m.van.gelder@mumc.nl

