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ELEVENTH ANNUAL MEETING

APPARENT CURE FOR CHRONIC MYELOID LEUKEMIA (CML): TREATMENT-FREE REMISSION AT ACADEMIC CENTERS IN HUNGARY

Ádám Wiedemann[1], Mária Dömötör[2], Árpád Bátai[2], Laura Horváth[1] and Péter Farkas[1]

1. Semmelweis University-Department of Internal Medicine and Hematology, Budapest, Hungary
2. Saint George Hospital of County Fejér-Department of Hematology, Székesfehérvár, Hungary

SEMMELWEIS UNIVERSITY 1769

INTRODUCTION

Since the approval of the first tyrosine kinase inhibitor (TKI) in 2001, CML has been managed with lifelong TKI treatment. In recent years however, multiple clinical trials have demonstrated that in some cases, CML patients who had achieved at least a deep molecular response (DMR) on TKI therapy can stop the medication and could stay in remission without progression, thus achieving a Treatment-Free Remission (TFR).

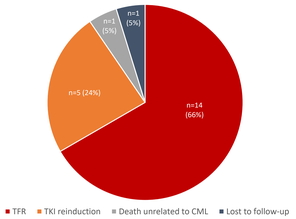
AIM

To analyze real-life data of CML patients who had at least a trial of TKI discontinuation in two Hungarian Hematology Centers (Semmelweis University-Department of Internal Medicine and Hematology; Saint George Hospital of County Fejér-Department of Hematology) between January 1, 2018, and December 31, 2022.

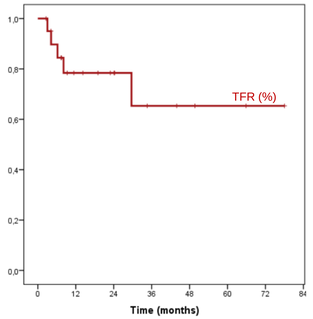
METHOD

- A total of 21 patients were included in the analysis.
- Data were collected between the time of discontinuation and April 30, 2023.
- Patients were typically monitored every 4-8 weeks during TFR by BCR-ABL1 real-time PCR.
- Retrospective analysis was performed using SPSS (version 20.0; SPSS, Chicago, IL) software package.

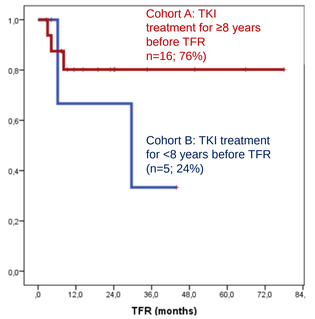
RESULTS



Patient distribution at the end of our retrospective analysis



Percentage of patients maintaining TFR; a 65,3% succes rate was achieved at 48 months (4 years) after TKI discontinuation



Percentage of patients maintaining TFR in two distinct cohorts

Patient characteristics (n=21)	
Male gender	10 (48%)
Median age (years)	
At diagnosis	52 (20-70)
At start of TFR	65 (31-76)
Prior TKI duration (years)	13 (3.5-18)
No. of TKI lines	
1	17 (81%)
2	3 (14%)
3	1 (5%)
Time spent in DMR (years)	5 (2.5-13)

CONCLUSIONS

The ability to achieve TFR represents a significant advancement in the management of CML, as it offers the potential for cure. We have demonstrated that well chosen patient cohorts in deep DMR can remain in sustained remission without continuous TKI treatment, thus lessening the financial and medical burden for these patients.

REFERENCES

1. **Atallah E et al.** Treatment-Free Remission: the New Goal in CML Therapy. *Curr Hematol Malig Rep. 2021 Oct;16(5):433-439. doi: 10.1007/s11899-021-00653-1. Epub 2021 Oct 7. PMID: 34618317; PMCID: PMC8495665.*
2. **Mahon FX** Treatment-free remission in CML: who, how, and why? *Hematology Am Soc Hematol Educ Program. 2017 Dec 8;2017(1):102-109. doi: 10.1182/asheducation-2017.1.102. PMID: 29222243; PMCID: PMC6142562.*
3. **Hughes T et al**. Moving treatment-free remission into mainstream clinical practice in CML. *Blood 128 1 (2016): 17-23 .*

CONTACT INFORMATION

Semmelweis University-Department of Internal Medicine and Hematology

H-1088, Hungary, Budapest, Szentkirályi street 46.

wiedemannadam@yahoo.com