

Case study 1: Optimal response to imatinib treatment and management of the patient

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EUTOS for CML



European Treatment and Outcome Study

Background

- Most patients with chronic myeloid leukemia relapse after discontinuation of imatinib
- Therefore current recommendations suggest lifelong imatinib treatment even in complete molecular responders
- In view of ongoing long-term low grade adverse effects there is a concern about tyrosine kinase inhibition and strategies to discontinue imatinib therapy are in discussion

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Patient 1

Male patient, 63 yrs old

June 2002

CML, Ph+, BCR/ABL+ (b3a2)

chronic phase

Euro score: intermediate risk

no HLA-identical donor



400 mg/d imatinib + low dose IFN

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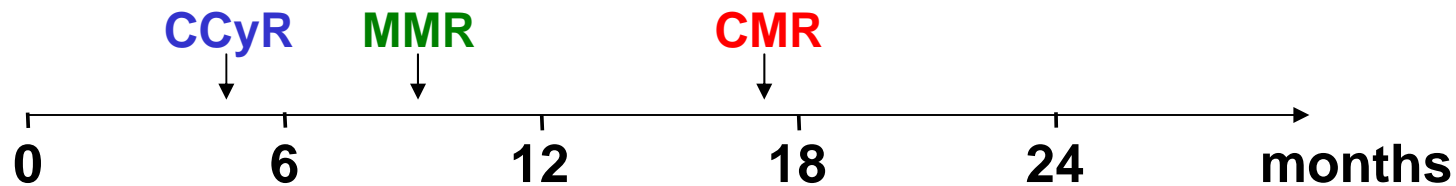
Patient 1

Male patient, 63 yrs old
December 2005

CCyR since November 2002,
(after 5 months of therapy)

MMR since March 2003,
(after 9 months of therapy)

CMR (nested PCR negative)
since November 2003,
(after 17 months of therapy)



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Patient 1

WHAT WOULD YOU SUGGEST?

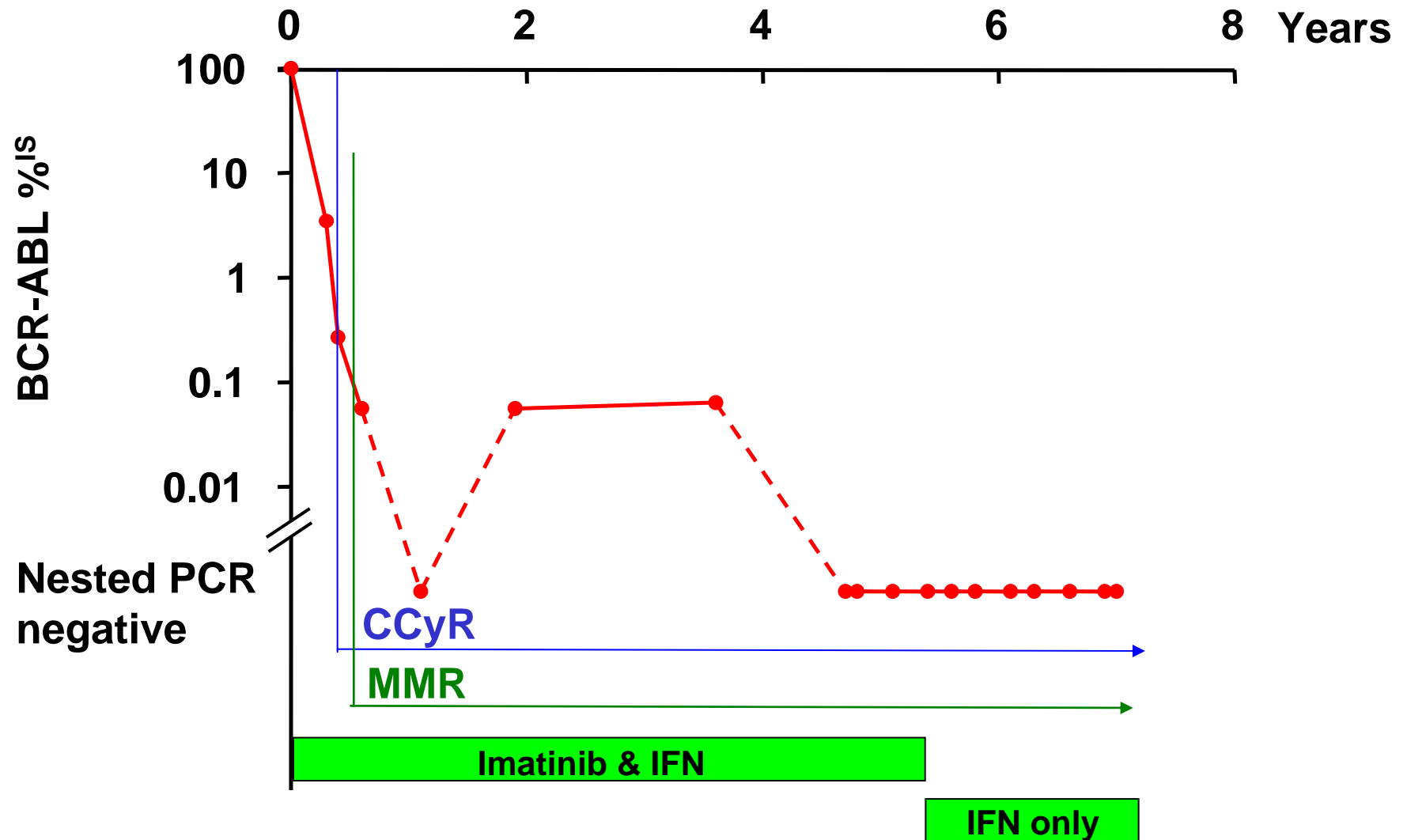
- 1. Continue 400 mg/d imatinib and IFN**
- 2. Stop imatinib and IFN and monitor monthly**
- 3. Stop imatinib and continue IFN alone**
- 4. Stop IFN and continue imatinib alone**

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Molecular follow-up patient 1



Patient 2

Male patient, 49 yrs old

April 2000

**CML, Ph+, BCR/ABL+ (b3a3)
chronic phase**

Euro CML Score: low risk

First treatment: IFN & AraC (IRIS),

No cytogenetic remission,

Intolerance

October 2000



Imatinib 400 mg/d

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Patient 2

Male patient, 49 yrs old

July 2004

CCyR since May 2001,

(after 13 months of therapy)

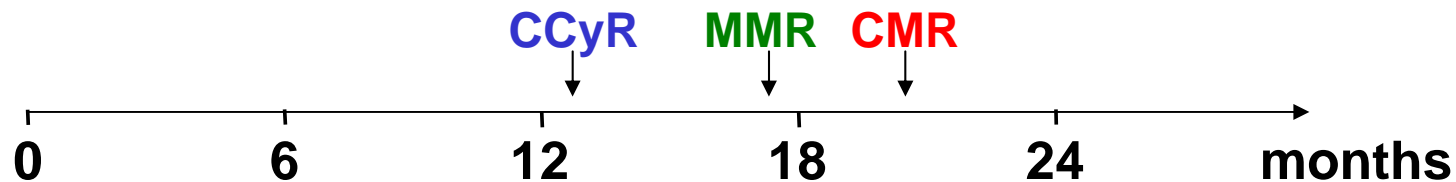
MMR since August 2001,

(after 17 months of therapy)

CMR (nested PCR negative)

since November 2001,

(after 19 months of therapy)



Patient 2

WHAT WOULD YOU SUGGEST?

1. Continue 400 mg/d imatinib
2. Stop imatinib and monitor monthly
3. Restart IFN alone

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Patient 2

Male patient, 49 yrs old

Stop imatinib and monitor monthly

August 2004

Nested PCR positive b3a3

0.011% BCR-ABL^{IS}

**Complete cytogenetic
remission**

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Patient 2

WHAT WOULD YOU SUGGEST?

1. **Restart 400 mg/d imatinib**
2. **Restart IFN alone**
3. **Continue without therapy and monitor monthly**

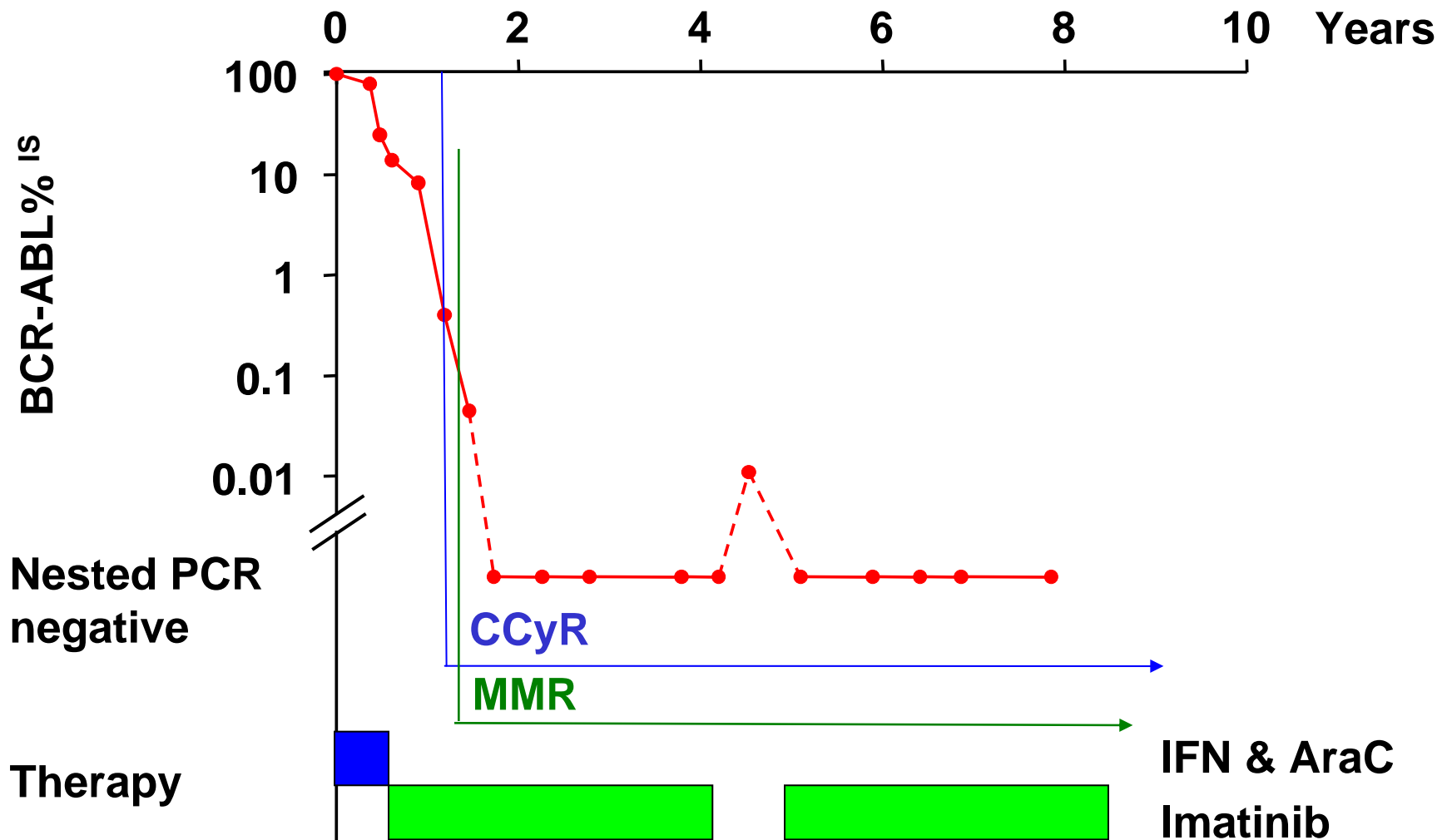
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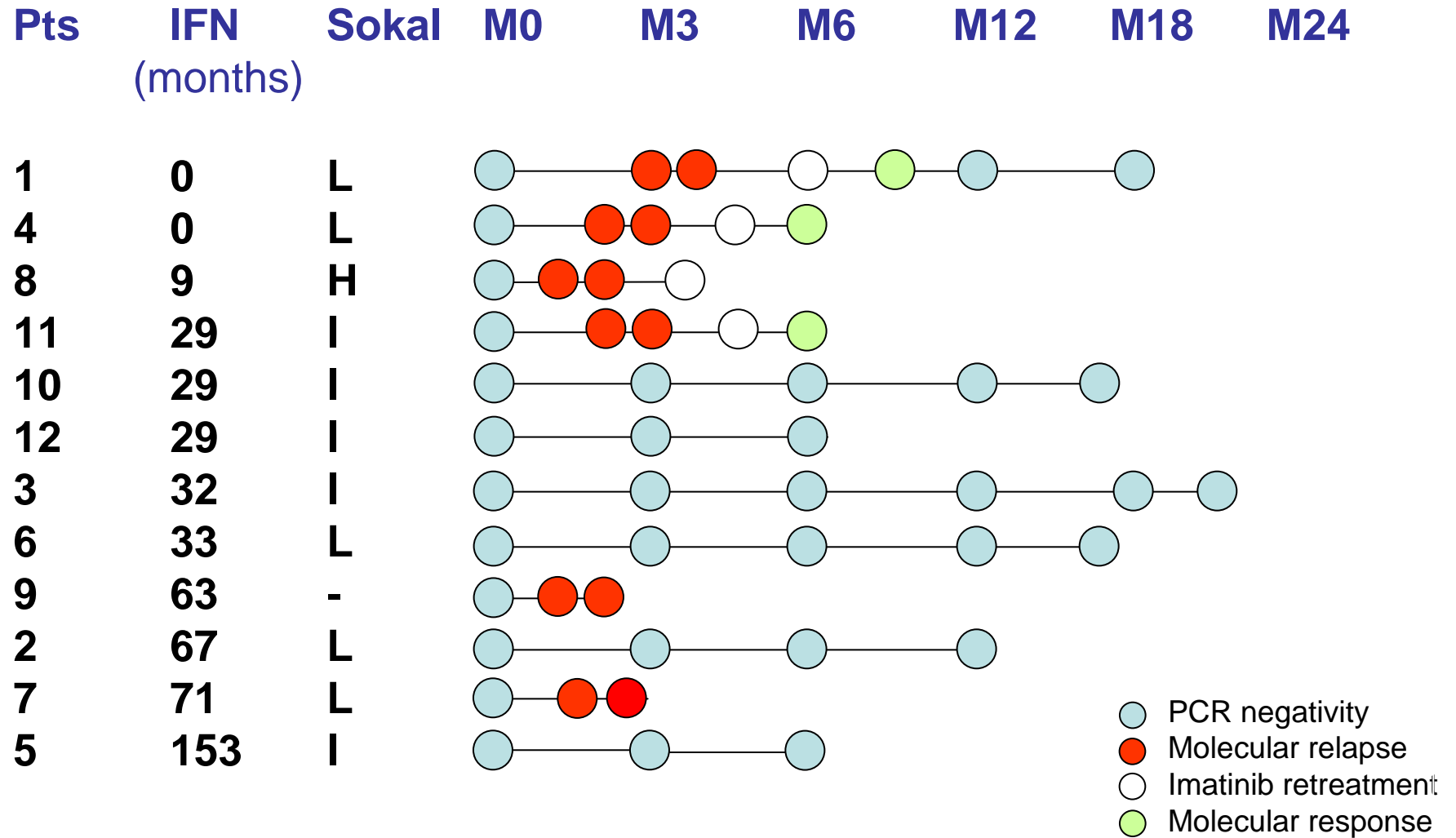
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Molecular follow-up patient 2

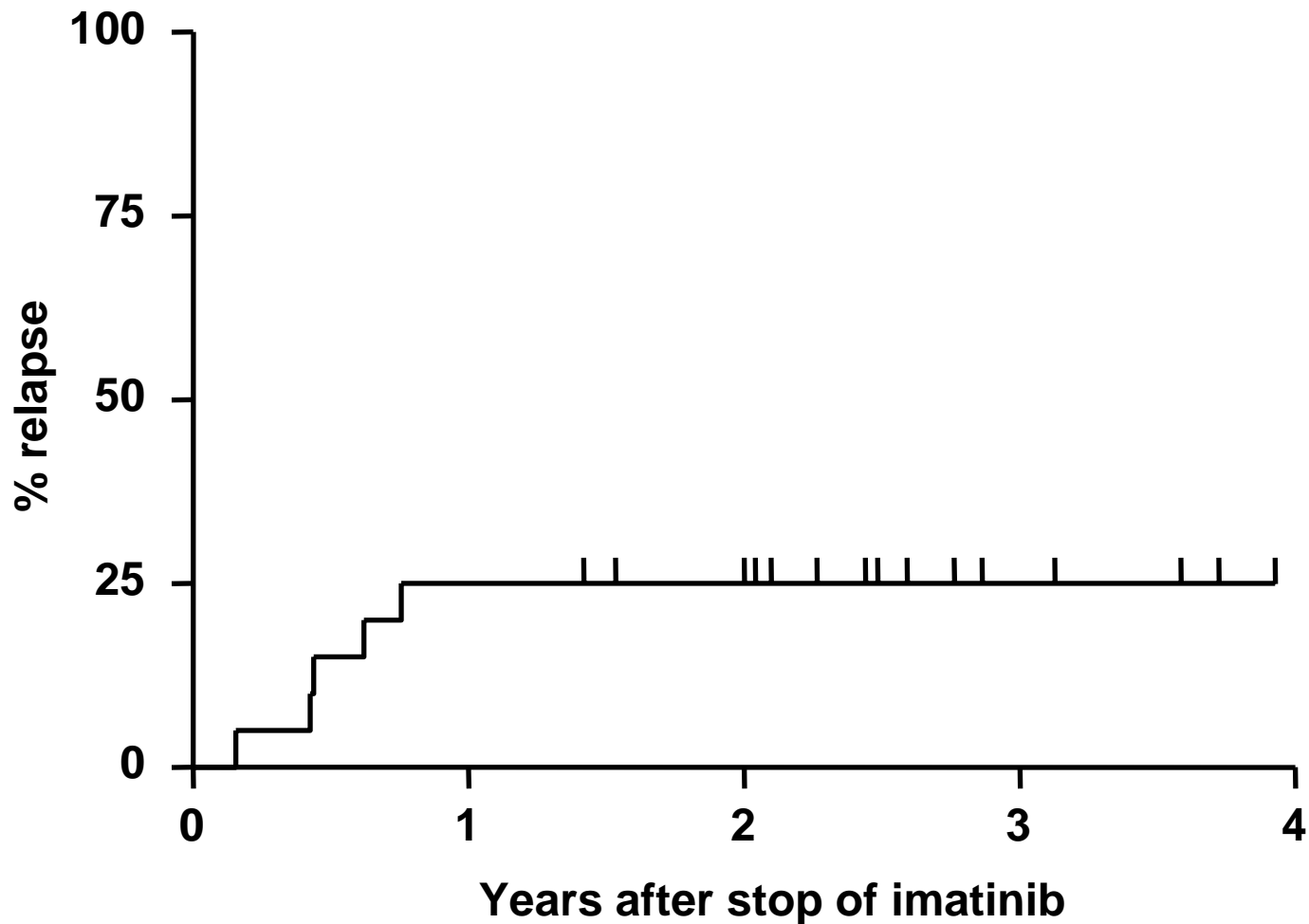
Male patient, 49 yrs old



Molecular remission after imatinib discontinuation



Risk of relapse on IFN maintenance treatment after Imatinib/IFN combination (n=20)



Conclusion: Think about imatinib discontinuation

- **Stable cytogenetic and molecular remission is needed**
- **Monitoring of residual disease with cytogenetics and PCR should be performed frequently after imatinib withdrawal**
- **Imatinib discontinuation should be considered for patients in CMR or MMR after exposure to IFN, but only in the framework of clinical trials**

EU TOPI for CMR

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