FAKULTNÍ NEMOCNICE BRNO

Interní hematologická a onkologická klinika
FN Brno a LF MU

MUNI MED

Treatment Choices Unveiled: Decoding Patient-Doctor Decision Dilemmas

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Department of Internal Medicine, Hematology and Oncology, University Hospital Brno and Masaryk University, Brno, Czech Republic

CML Horizons Hybrid Meeting, Vilnius, Lithuania, 24-26 May, 2024

Case reports

Case report 1

- Male, *2003

- **CML diagnosed in chronic phase in 10/2020 (17-year-old)**
- **Risk scores**: not applicable
- WBC 413 Hb 7.3 PLT 1080

- ECOG 1, splenomegaly +20 cm, sweating, subfebrilia
- Comorbidities: 0
- Student, sportsman

Presented with courtesy of the patient

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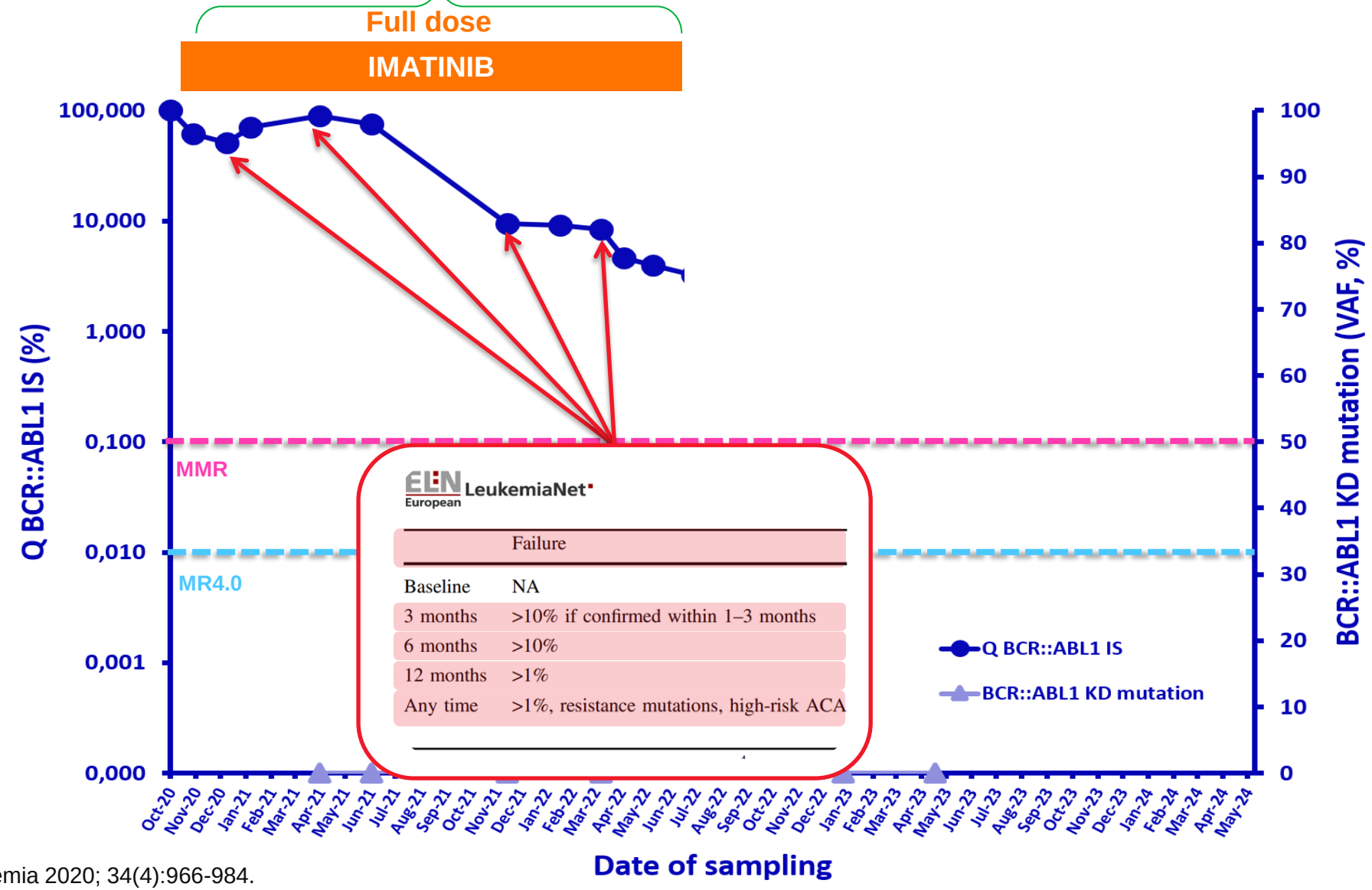

ELN European LeukemiaNet

	Failure
Baseline	NA
3 months	>10% if confirmed within 1–3 months
6 months	>10%
12 months	>1%
Any time	>1%, resistance mutations, high-risk ACA

Hochhaus A., et al. Leukemia 2020; 34(4):966-984.

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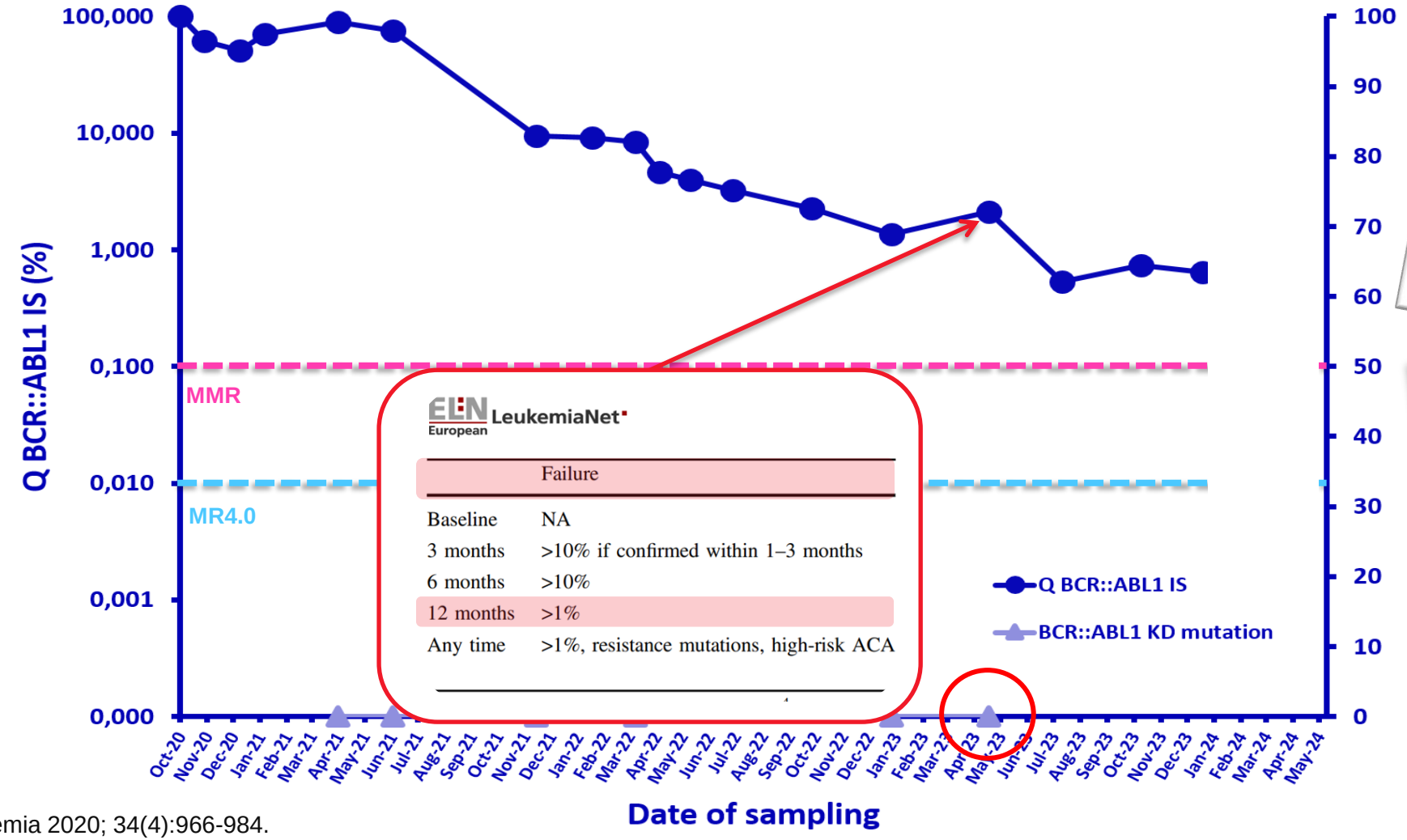
Full dose IMATINIB | Full dose DASATINIB | § 16 ASCI



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Case report 2

- Female, *2004

- **CML diagnosed in chronic phase in 5/2021 (16-year-old)**
- **Risk scores**: not applicable
- WBC 203 Hb 9.9 PLT 580

- ECOG 0, no splenomegaly, pain in the L elbow
- Comorbidities: 0
- Student, sports: football (extra league), fishing

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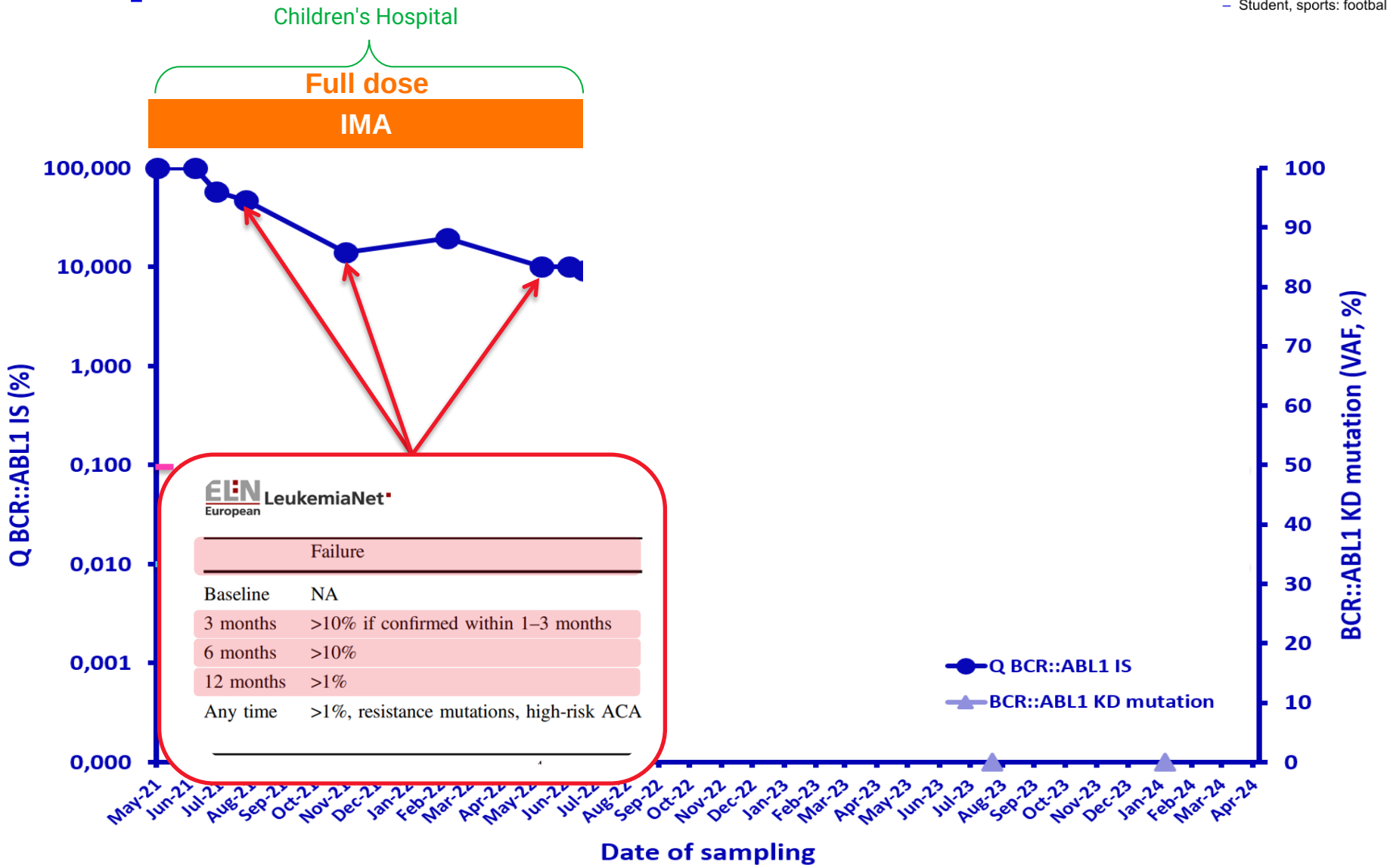

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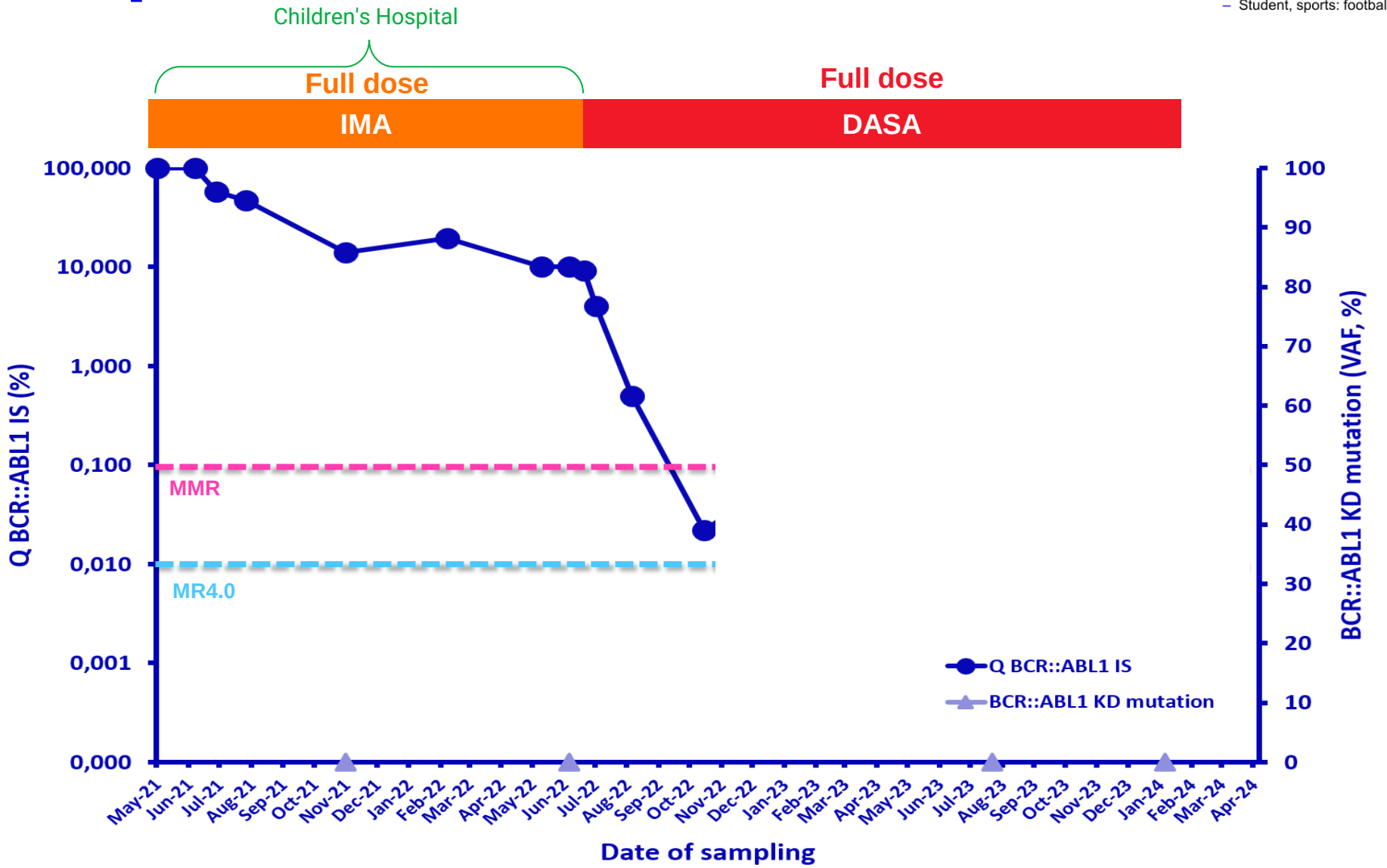

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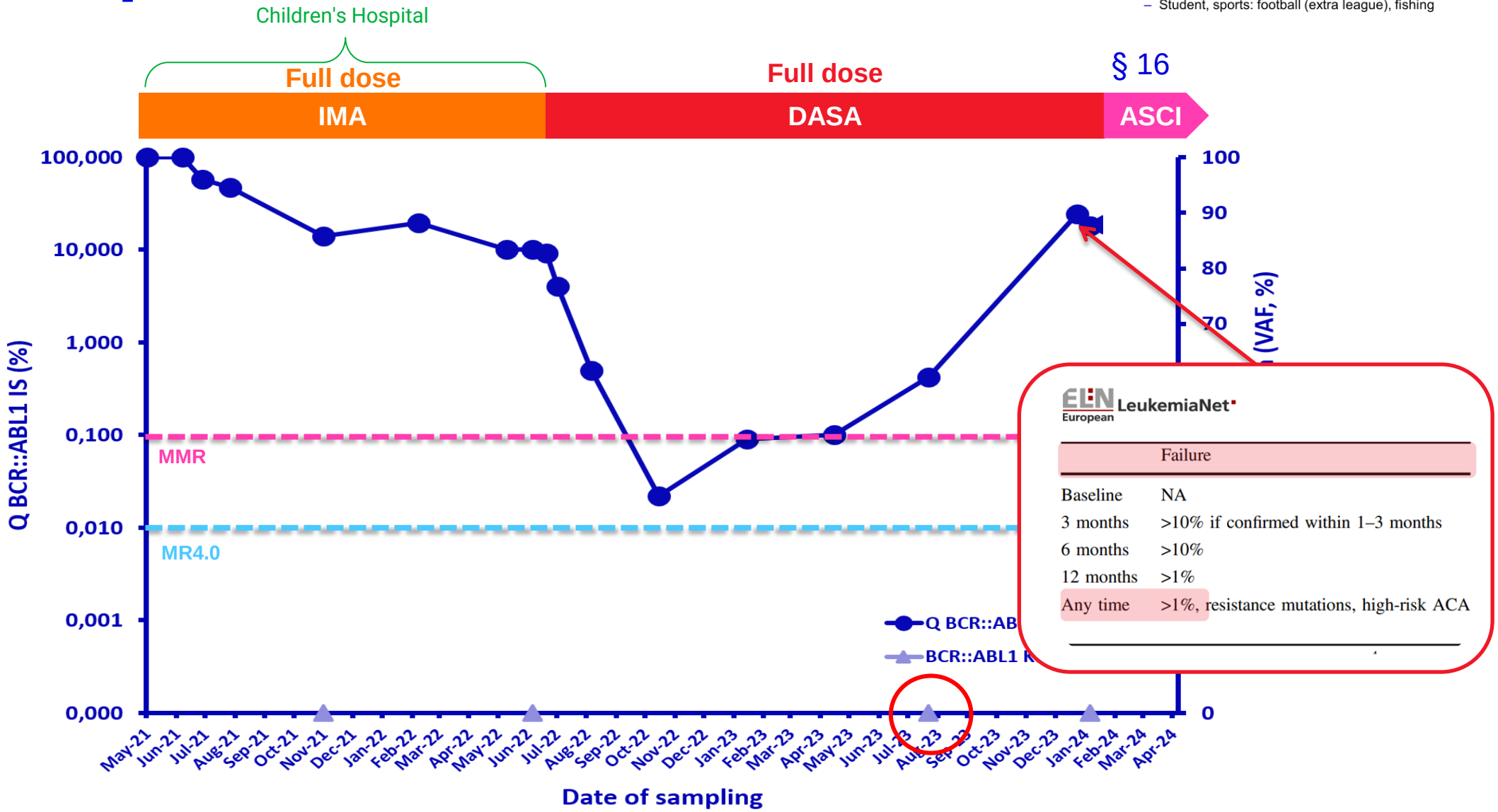

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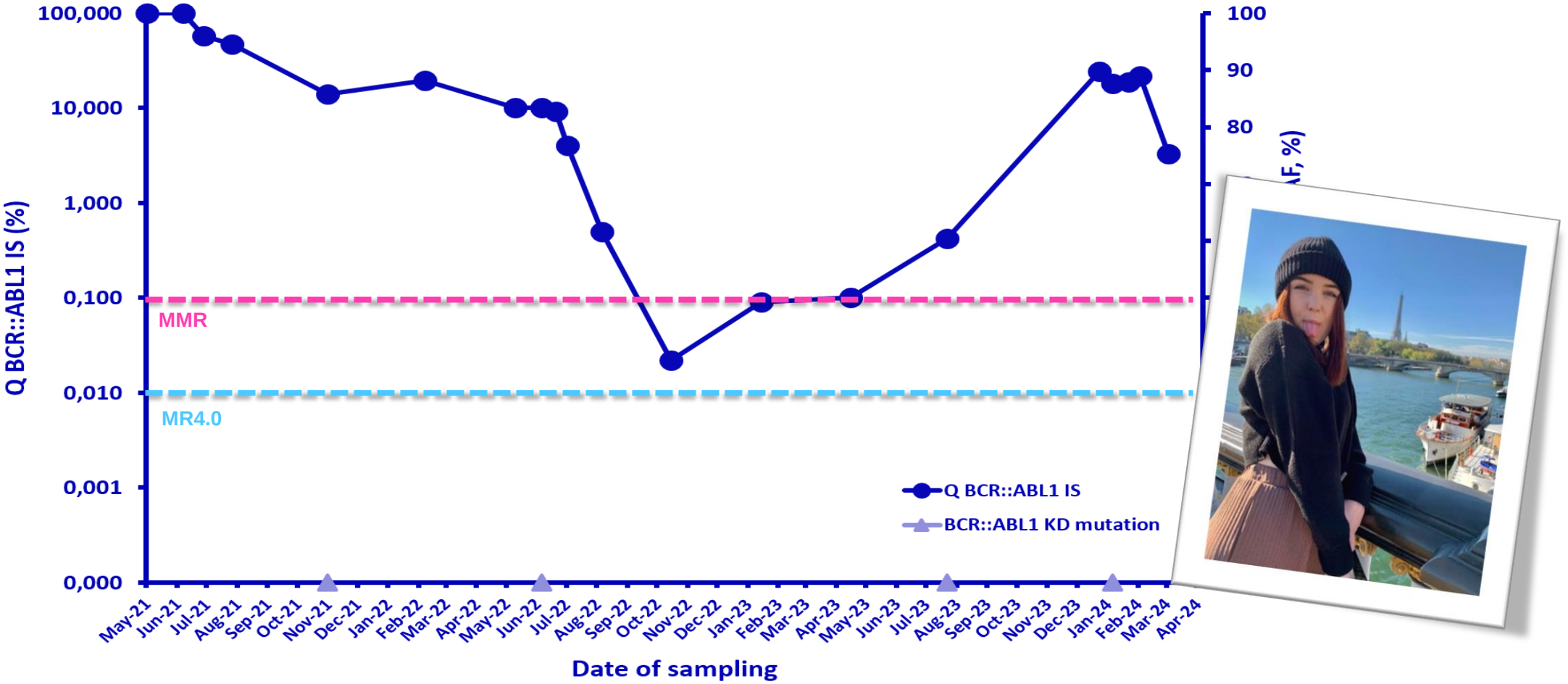
Children's Hospital

Full dose | Full dose | § 16

IMA | DASA | ASCI | aloSCT



Case report 3

- Male, *1928

- **CML diagnosed in CP in 11/2021 (93-year-old)**
- **Risk scores**: Sokal – high, Haford – intermediate, EUTOS – low, ELTS score - high
- WBC 62 Hb 13.7 PLT 1250

- ECOG 0, no splenomegaly, no complaints
- Comorbidities: ischemic cardiac disease, atrial fibrillation, hypertension, MGUS, prostate surgery
- Retired (originally a carpenter)

Presented with courtesy of the patient

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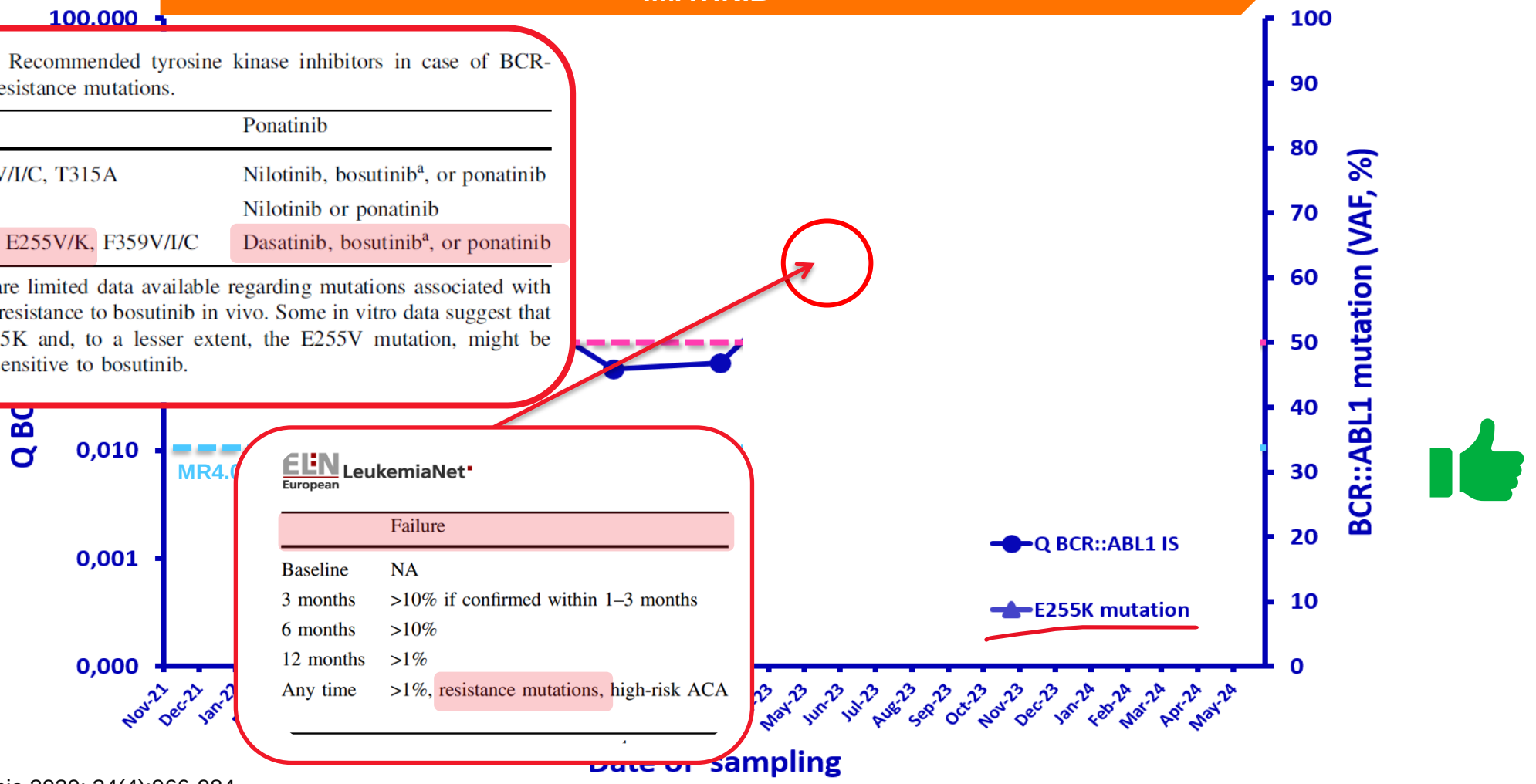
Full dose → 300 mg q.i.d.→ 200 mg → 300 mg q.i.d.

IMATINIB

Table 5 Recommended tyrosine kinase inhibitors in case of BCR-ABL1 resistance mutations.

T315I	Ponatinib
F317L/V/I/C, T315A	Nilotinib, bosutinib[a], or ponatinib
V299L	Nilotinib or ponatinib
Y253H, E255V/K, F359V/I/C	Dasatinib, bosutinib[a], or ponatinib

[a]There are limited data available regarding mutations associated with clinical resistance to bosutinib in vivo. Some in vitro data suggest that the E255K and, to a lesser extent, the E255V mutation, might be poorly sensitive to bosutinib.



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Hochhaus A., et al. Leukemia 2020; 34(4):966-984.

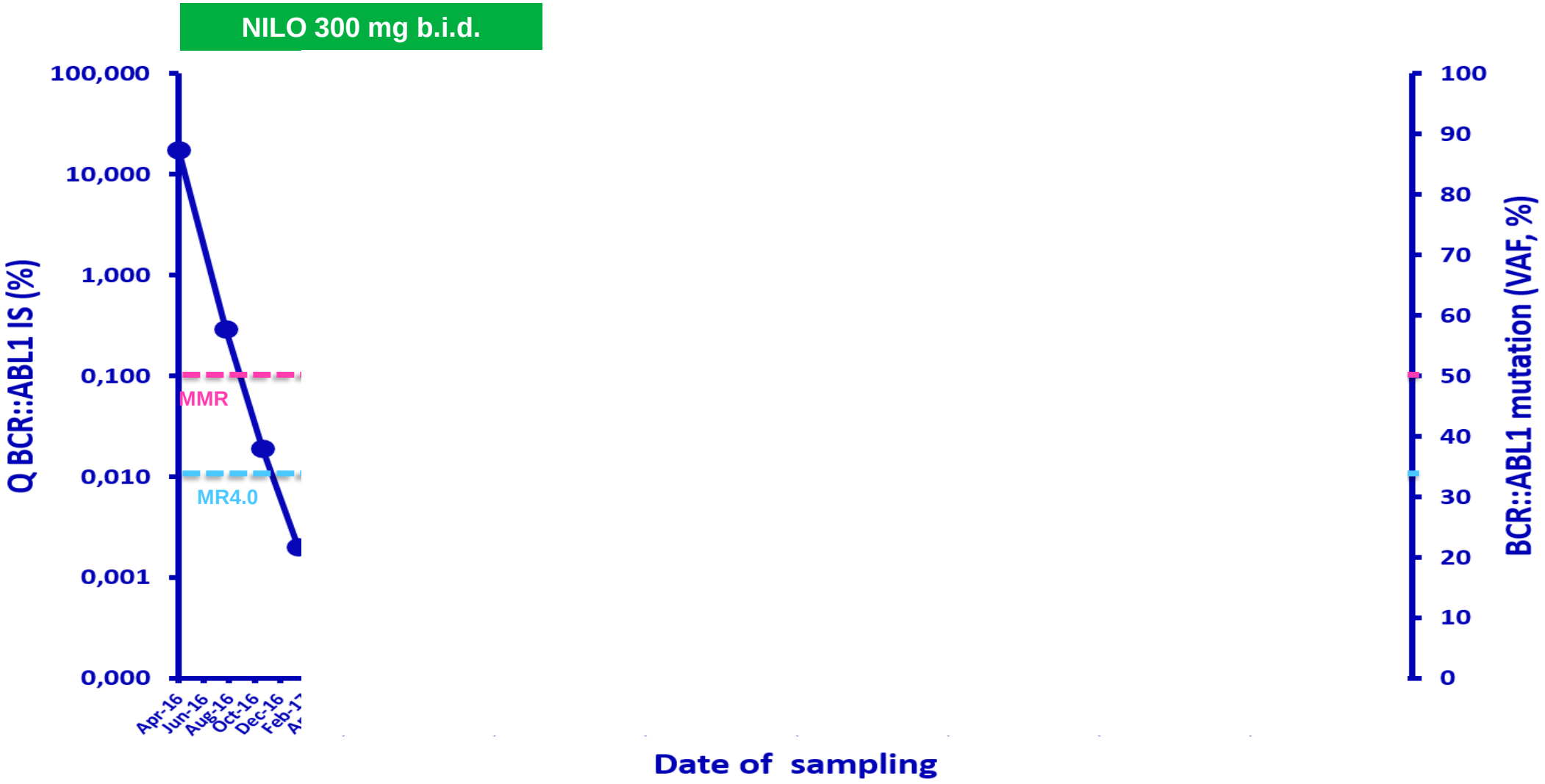
Case report 4

- Male, *1966

- **CML diagnosed in CP in 4/2016 (49-year-old)**
- **Risk scores**: Sokal – high, Haford – intermediate, EUTOS – low
- ECOG 1
- Comorbidities:
  - Psoriasis
  - Atopic eczema
  - Gout
  - Hypertension
  - After the car accident with thorax injury in the past, after the left knee surgery, after both ears surgery with subsequent hypacusis
- Married, 2 children, former carpenter, now security of the building

Presented with courtesy of the patient

Case report 4



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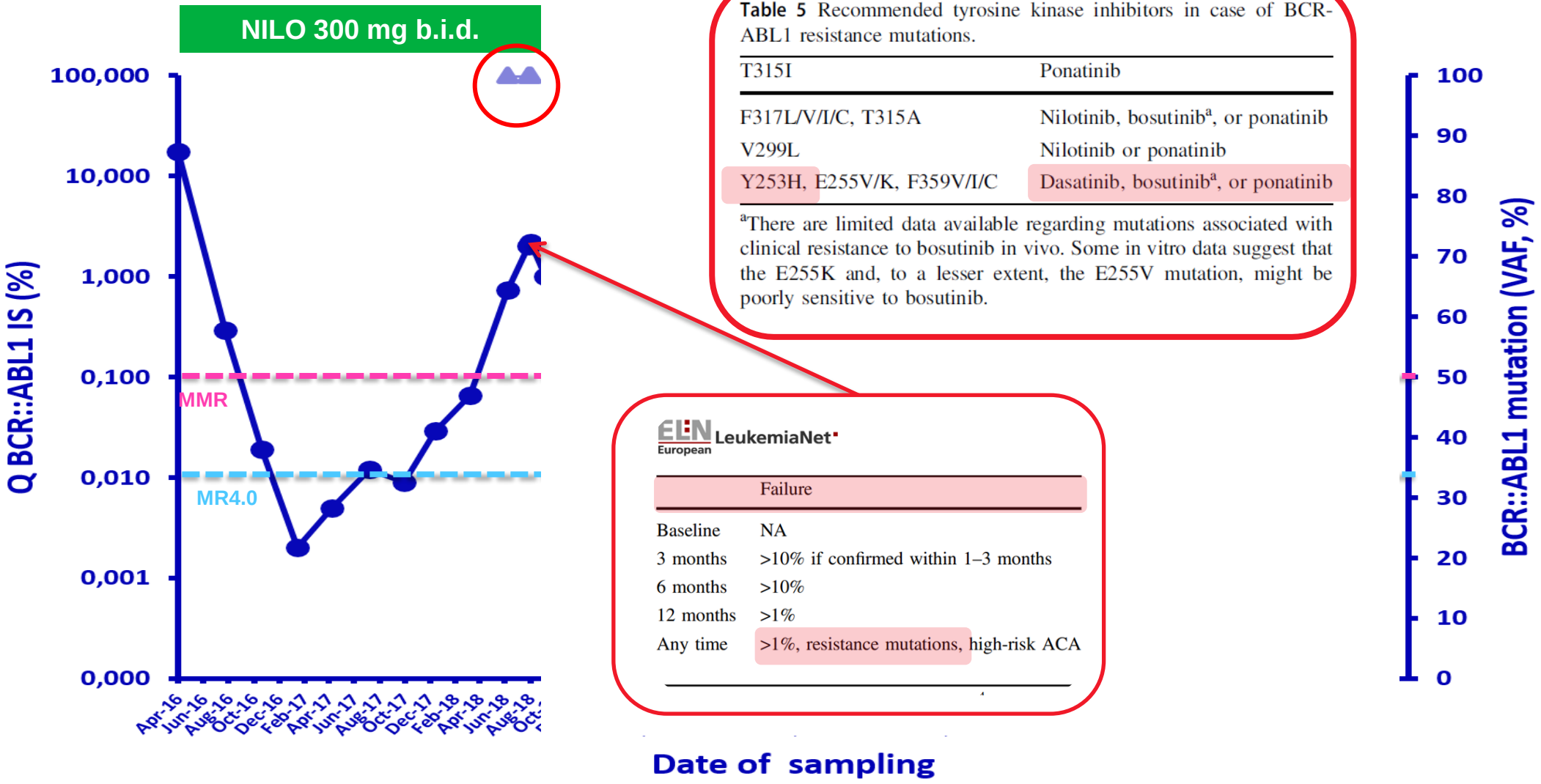

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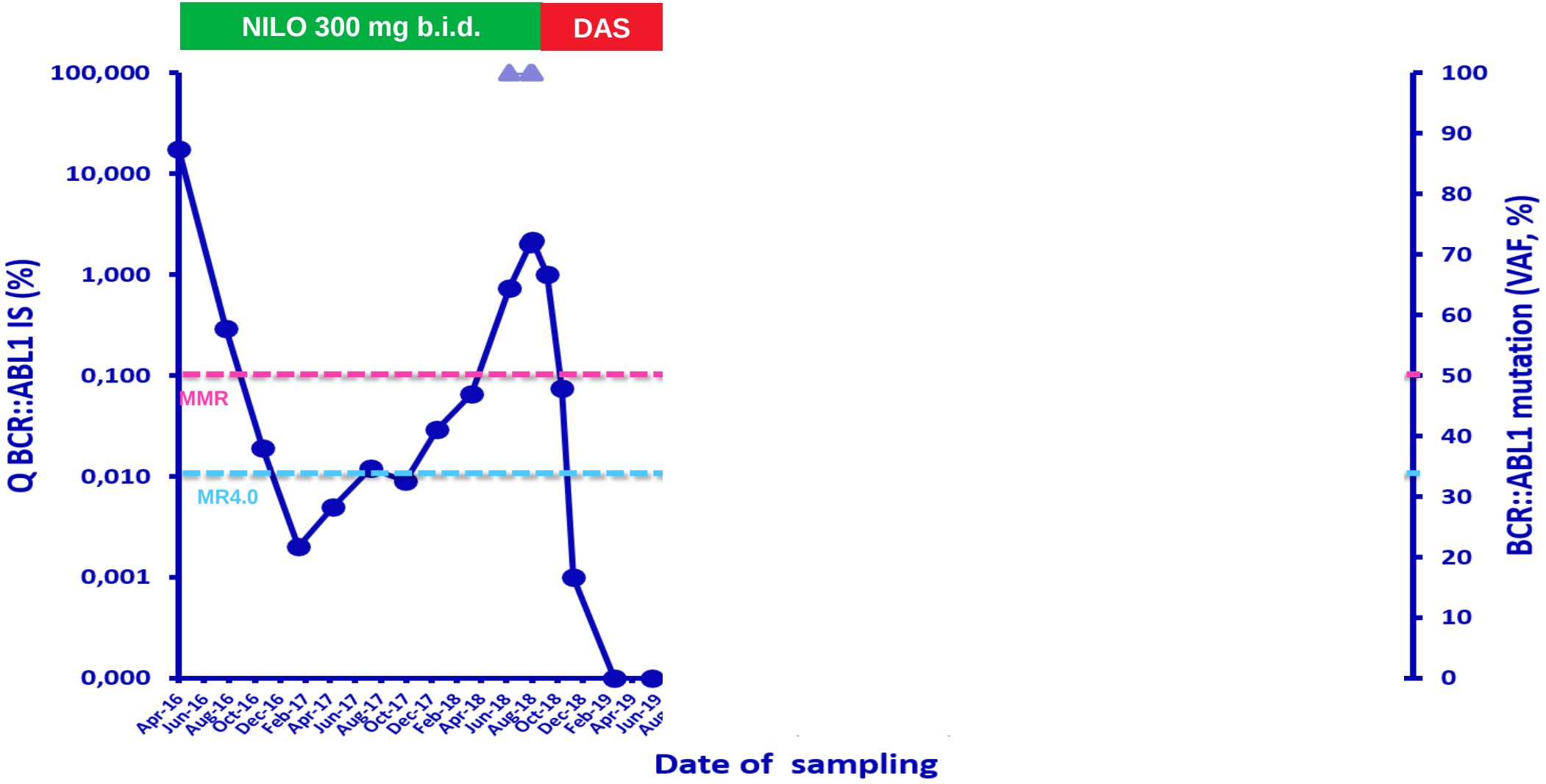

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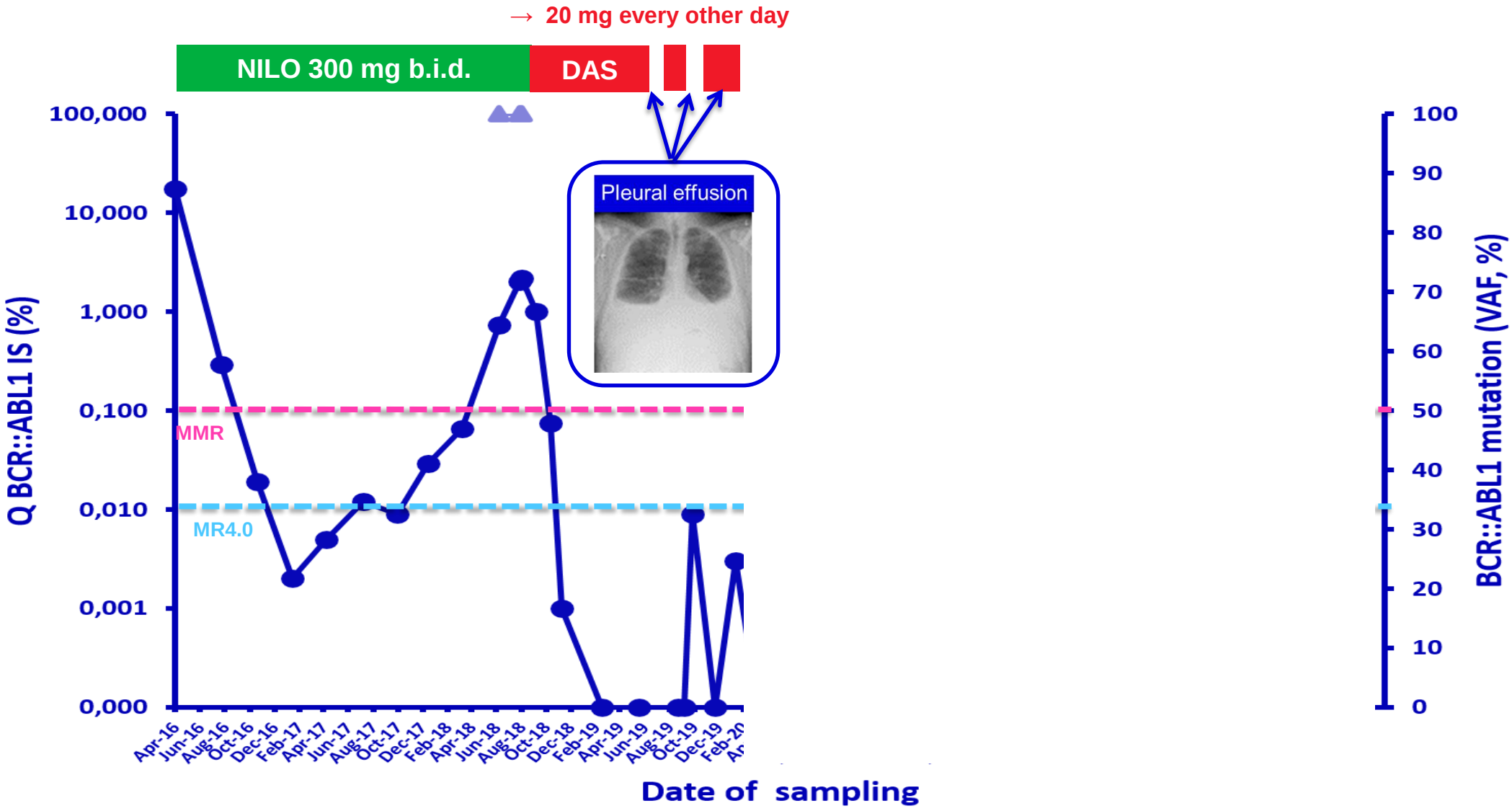

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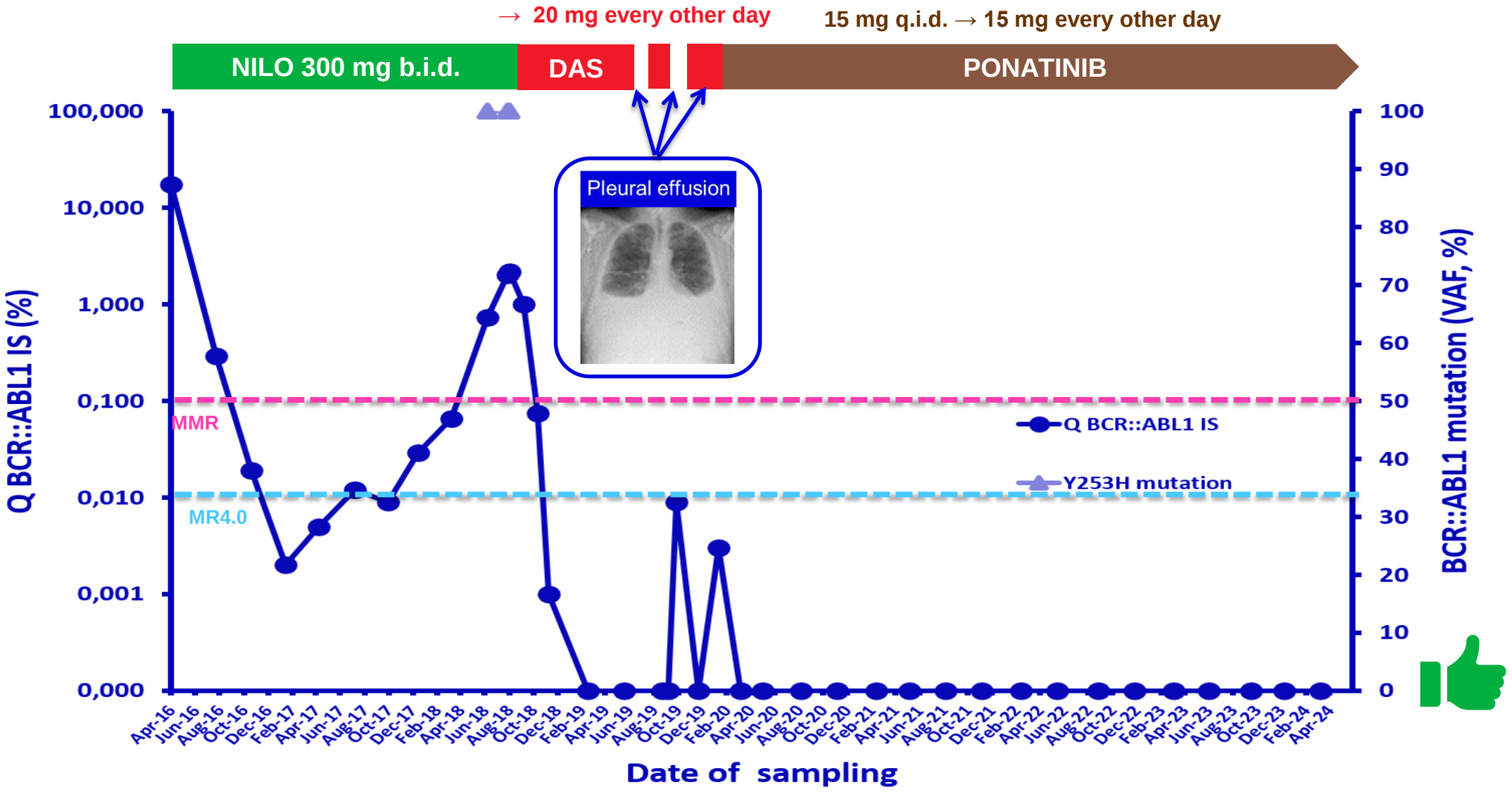

Case report 5

- Male, *1972

- **CML diagnosed in chronic phase in 9/2018 (46-year-old)**

- **Risk scores:** Sokal – low, Hasford – low, EUTOS – low, ELTS – low
- WBC 17 Hbg 16.5 PLT 372
- ECOG 0, no splenomegaly, no symptoms
- Comorbidities:
  - Chronic obstructive bronchopulmonary disease
  - Arthrosis, right hip TEP in 2014, recently post left hip TEP implantation
  - BMI 32
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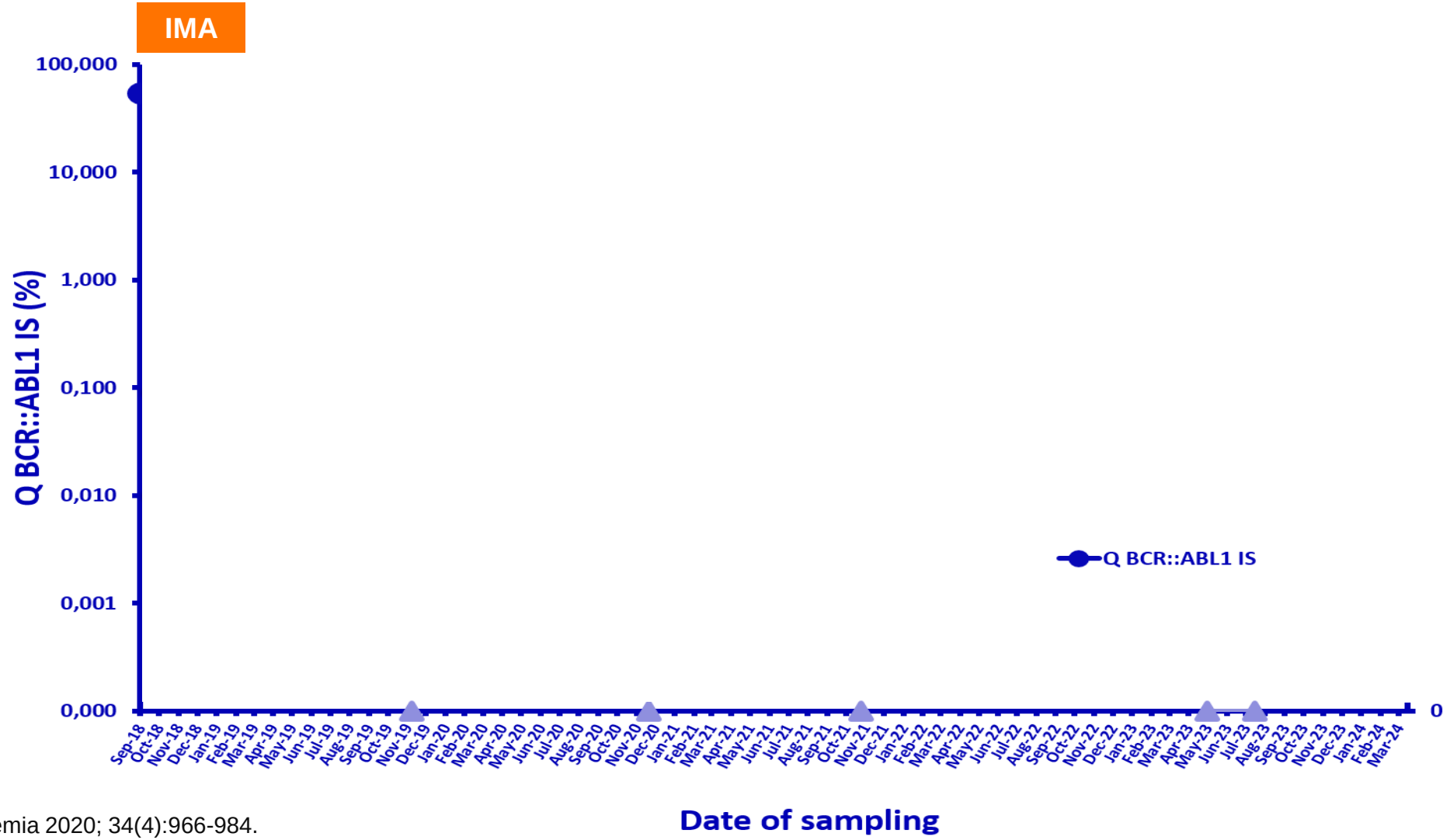

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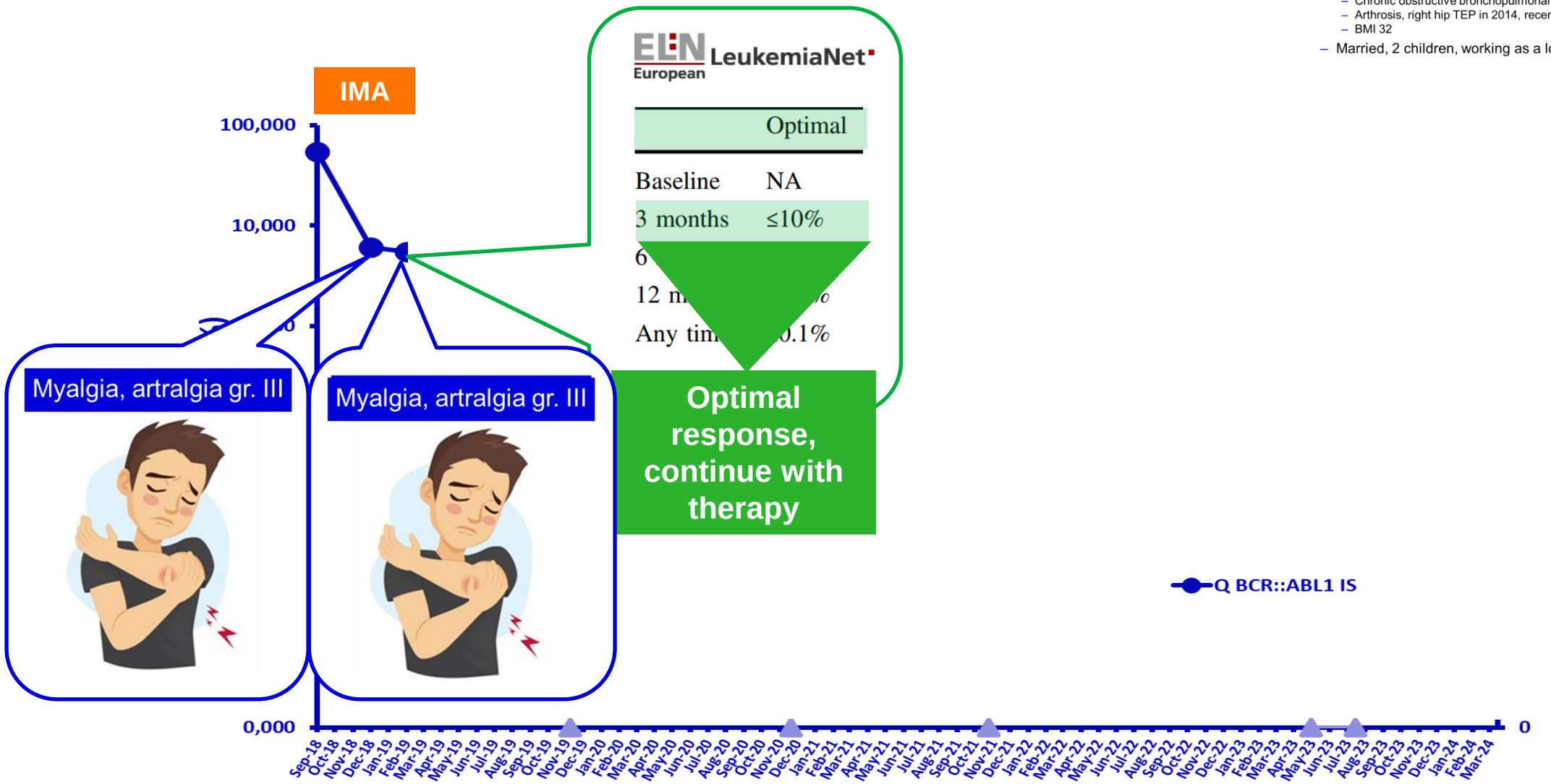

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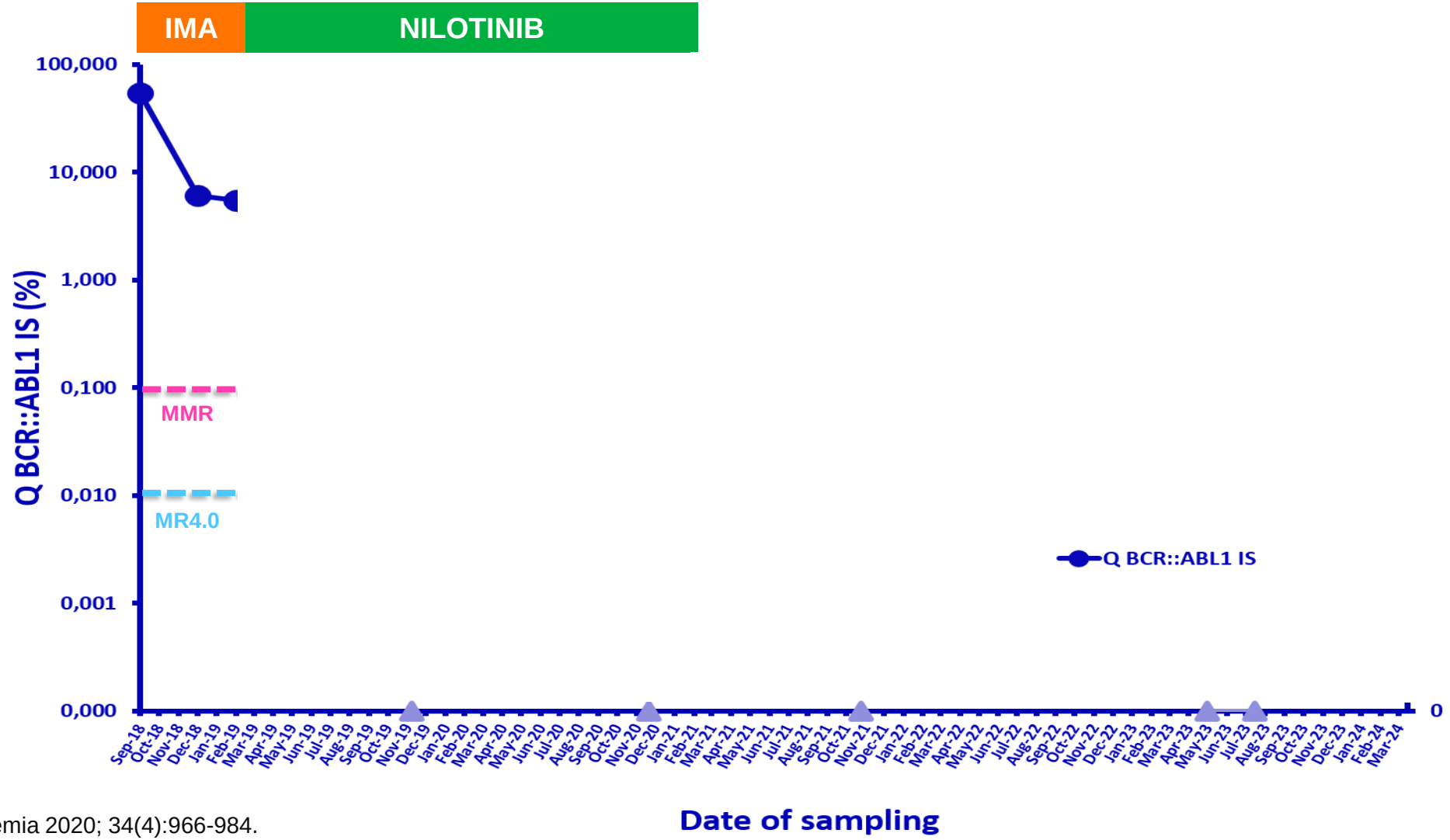

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25-50% dose reduction

IMA | NILOTINIB

Myalgia, artralgia gr. II

Rash gr. II

Switch to another therapy

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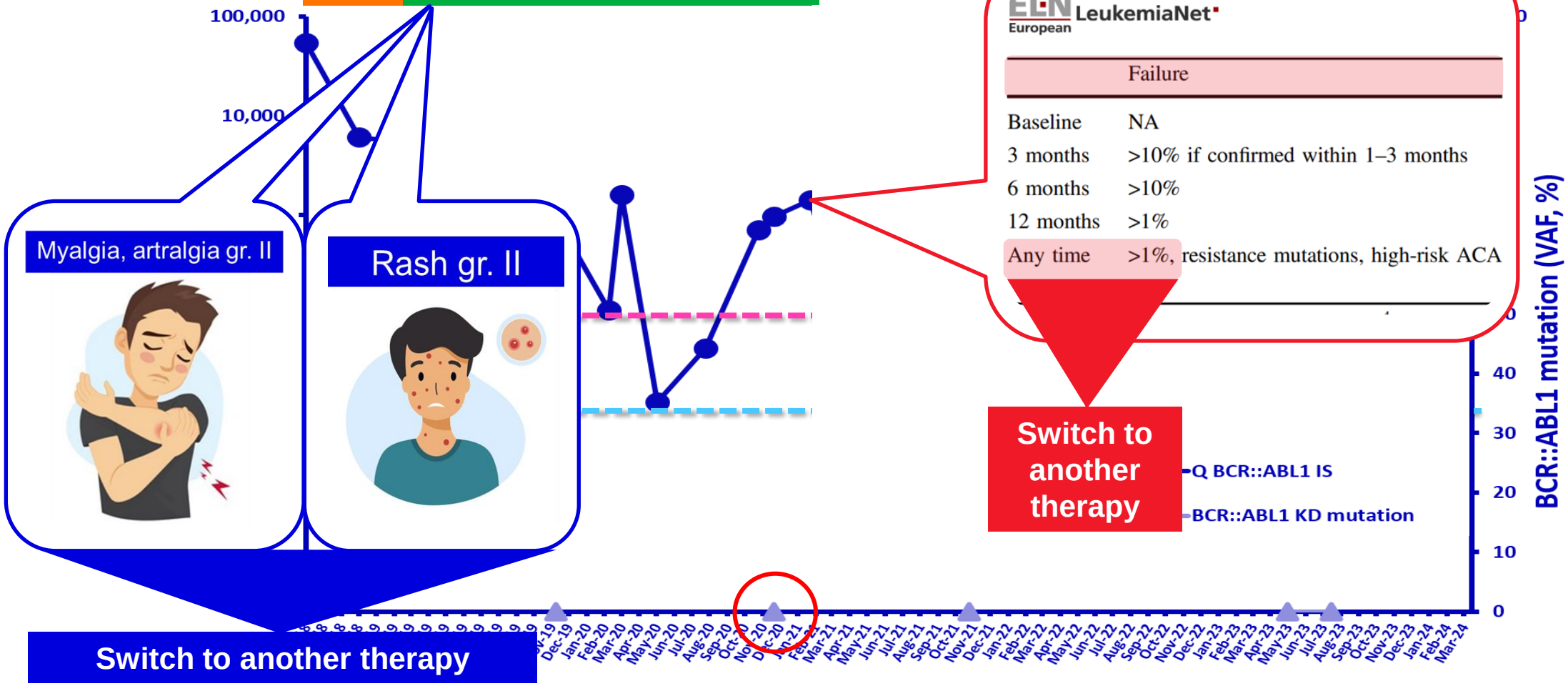

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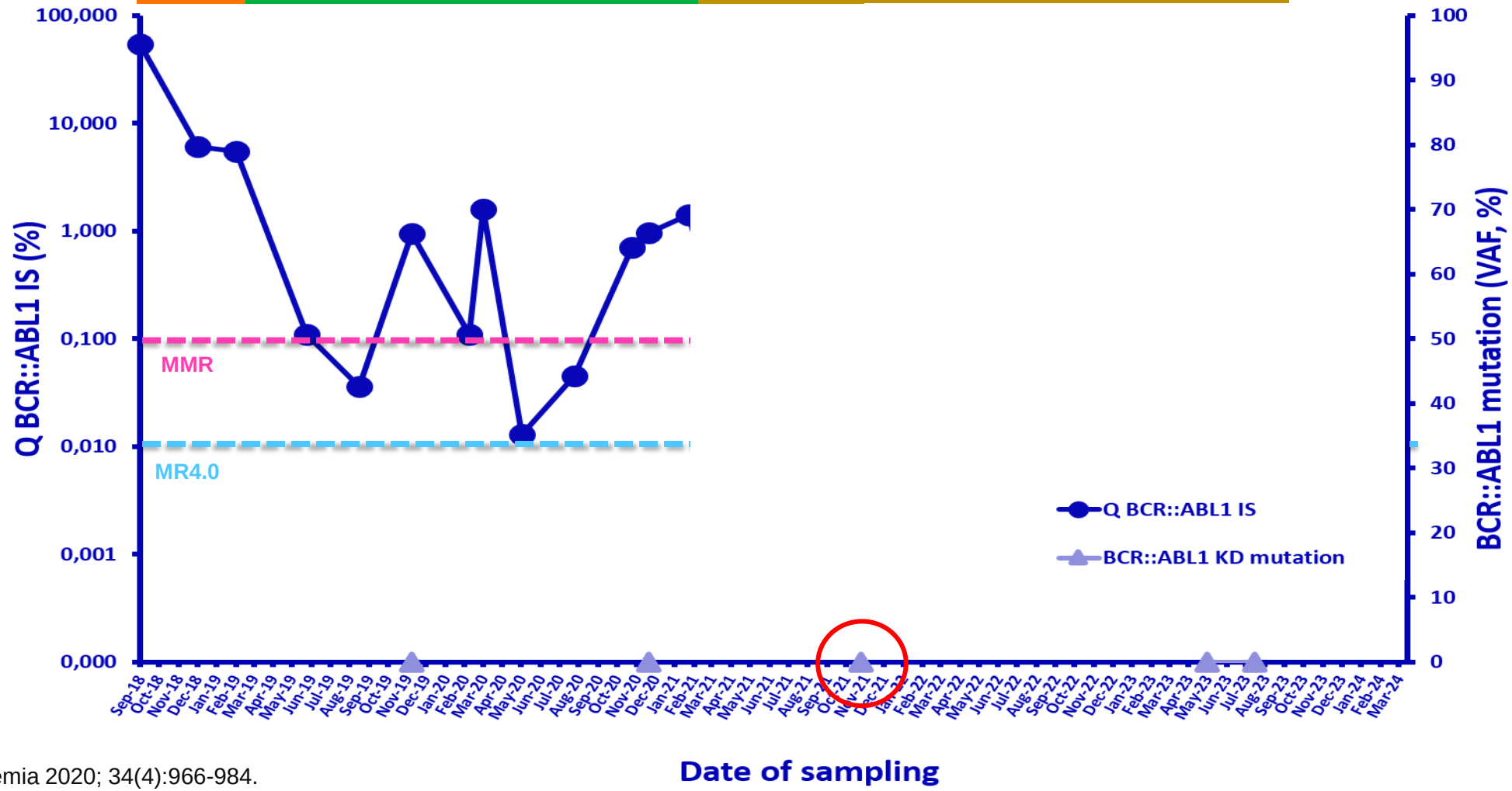
§ 16

IMA | NILOTINIB | BOSUTINIB



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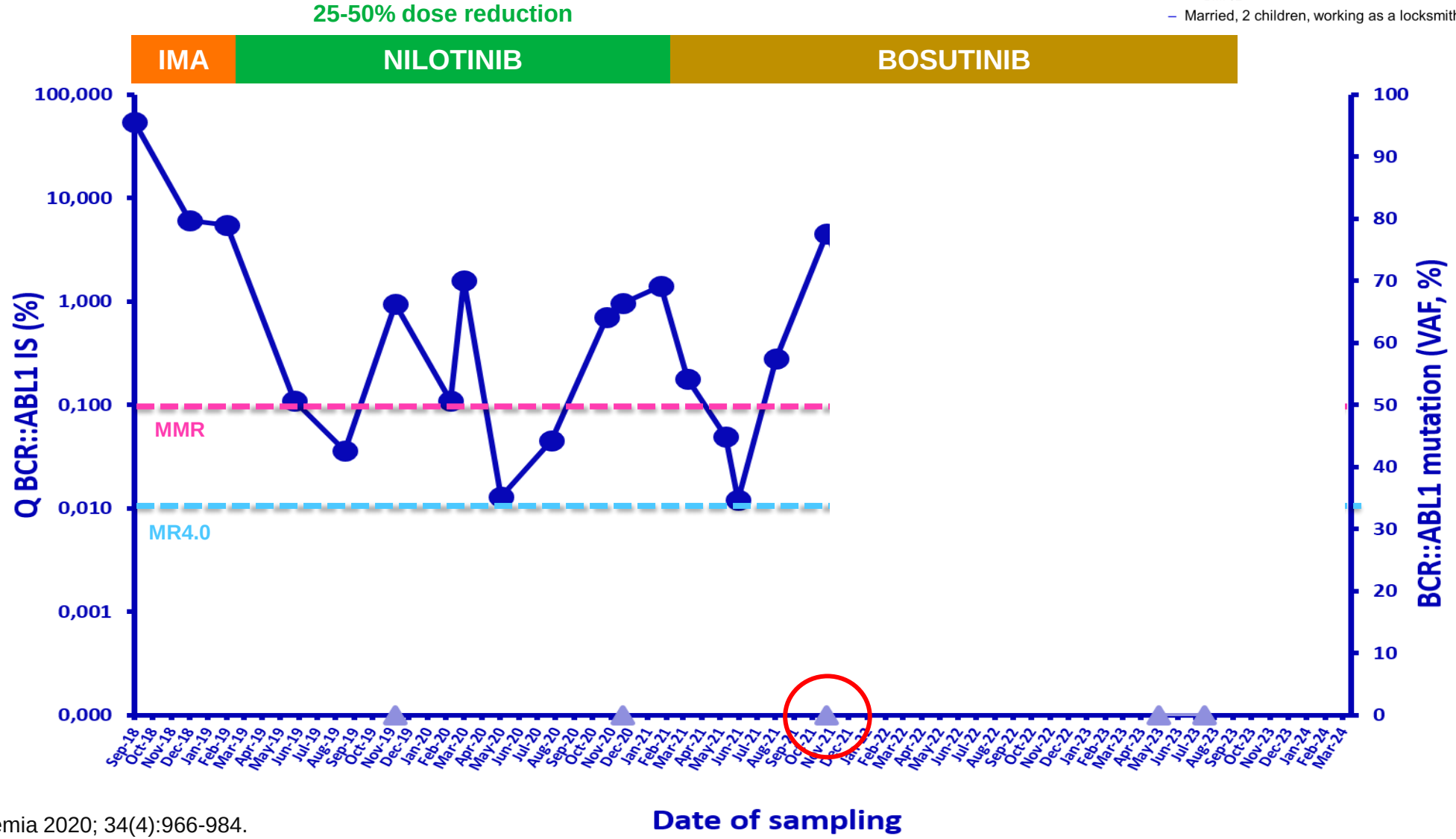

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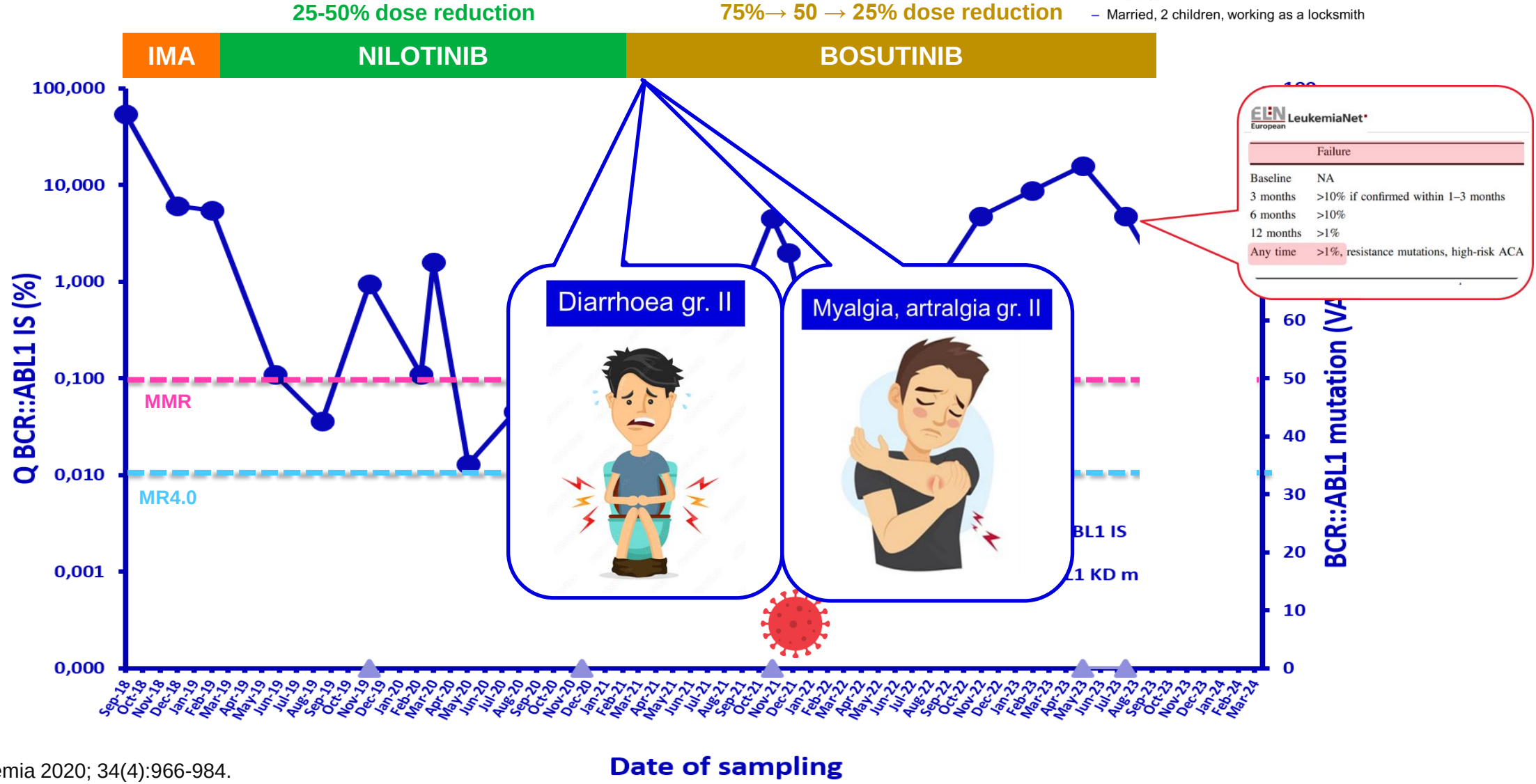

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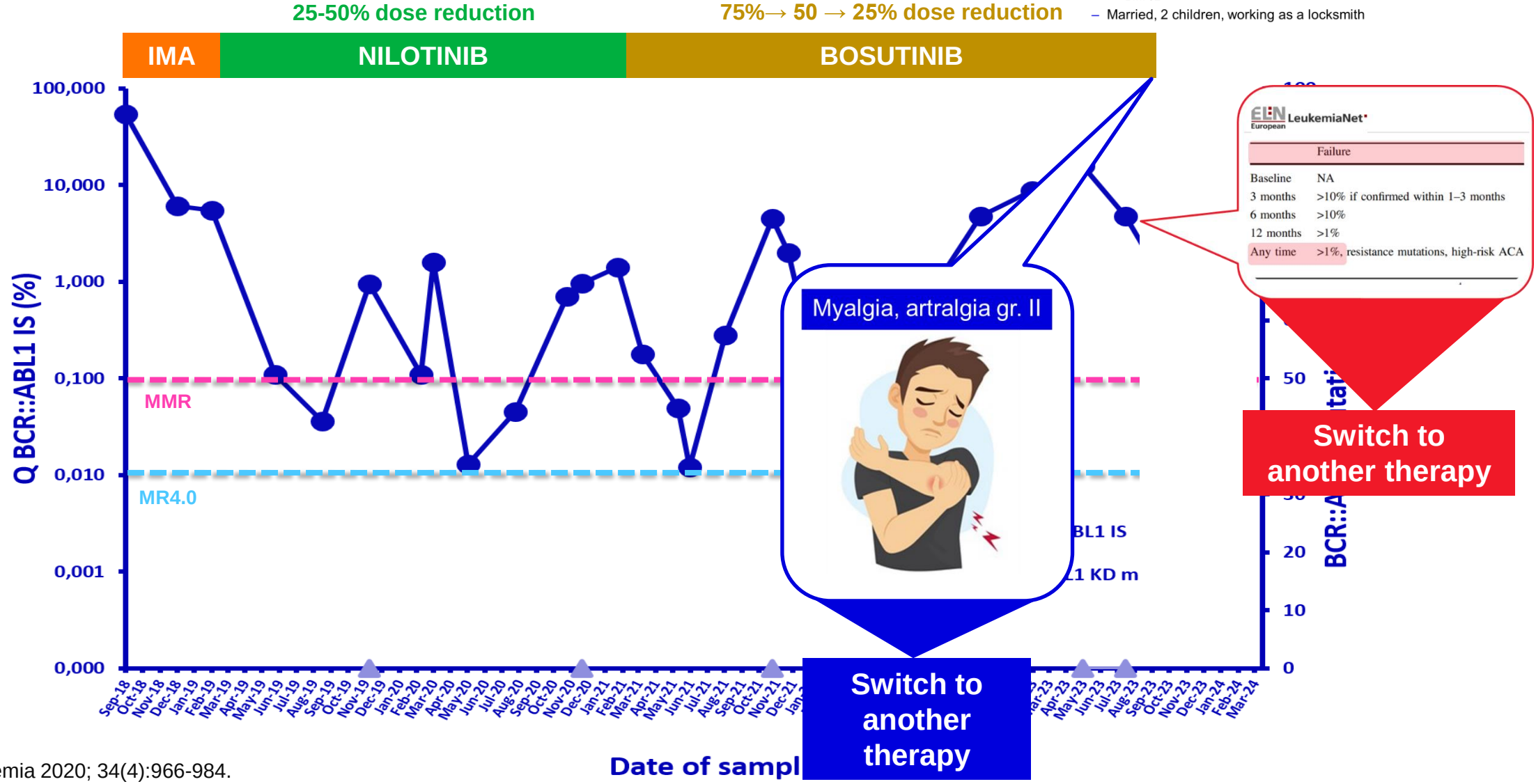

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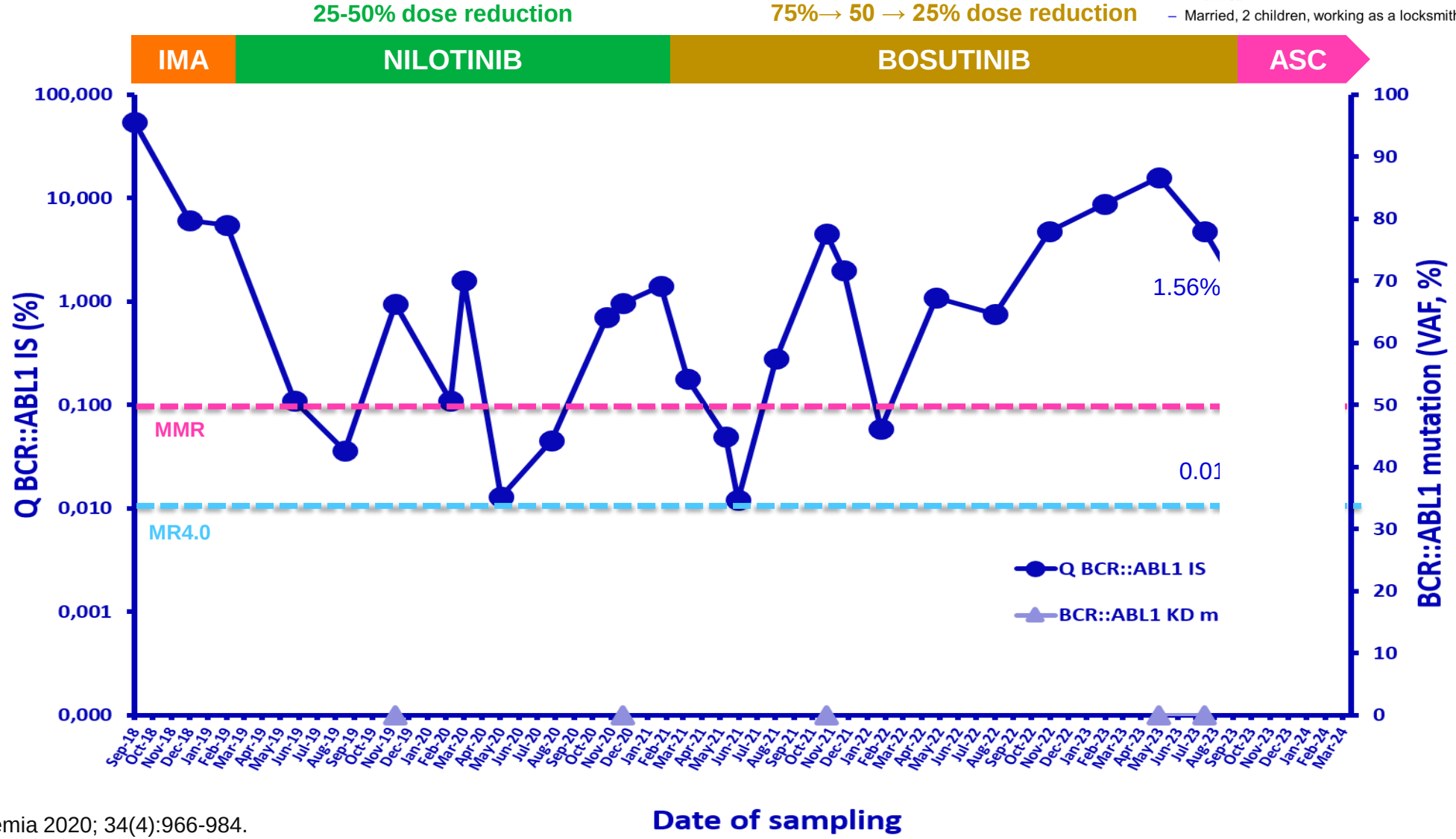

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Case report 6

- Female, *1952

- **CML diagnosed in chronic phase in 3/2021 (71-year-old)**
- **Risk scores:** Sokal – intermediate, Hasford – intermediate, EUTOS – high, ELTS – intermediate
- WBC 33 Hb 14.7 PLT 437
- ECOG 0, no splenomegaly, no symptoms
- Comorbidities:
  - Hypertension, dyslipidemia, ischemic stroke in 2010, varicose veins of lower limbs, autoimmune thyroiditis, dermatitis rosaceiformis

- Married, 2 children, retired (used to work in a day nursery)

Case report 6

- Female, *1952

- **CML diagnosed in chronic phase in 3/2021 (71-year-old)**
- **Risk scores:** Sokal – intermediate, Hasford – intermediate, EUTOS – high, ELTS – intermediate
- WBC 33 Hbg 14.7 PLT 437
- ECOG 0, no splenomegaly, no symptoms
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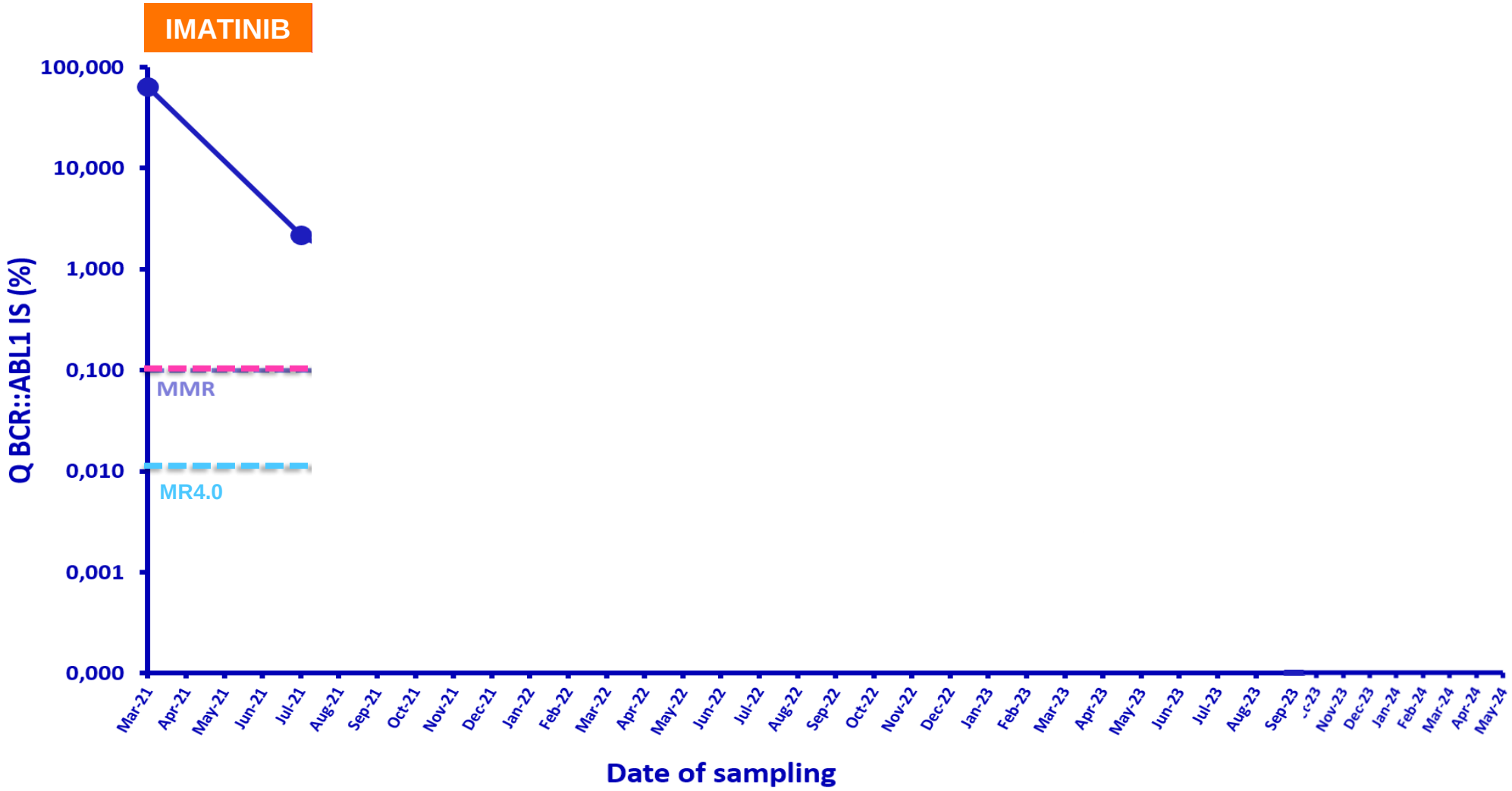

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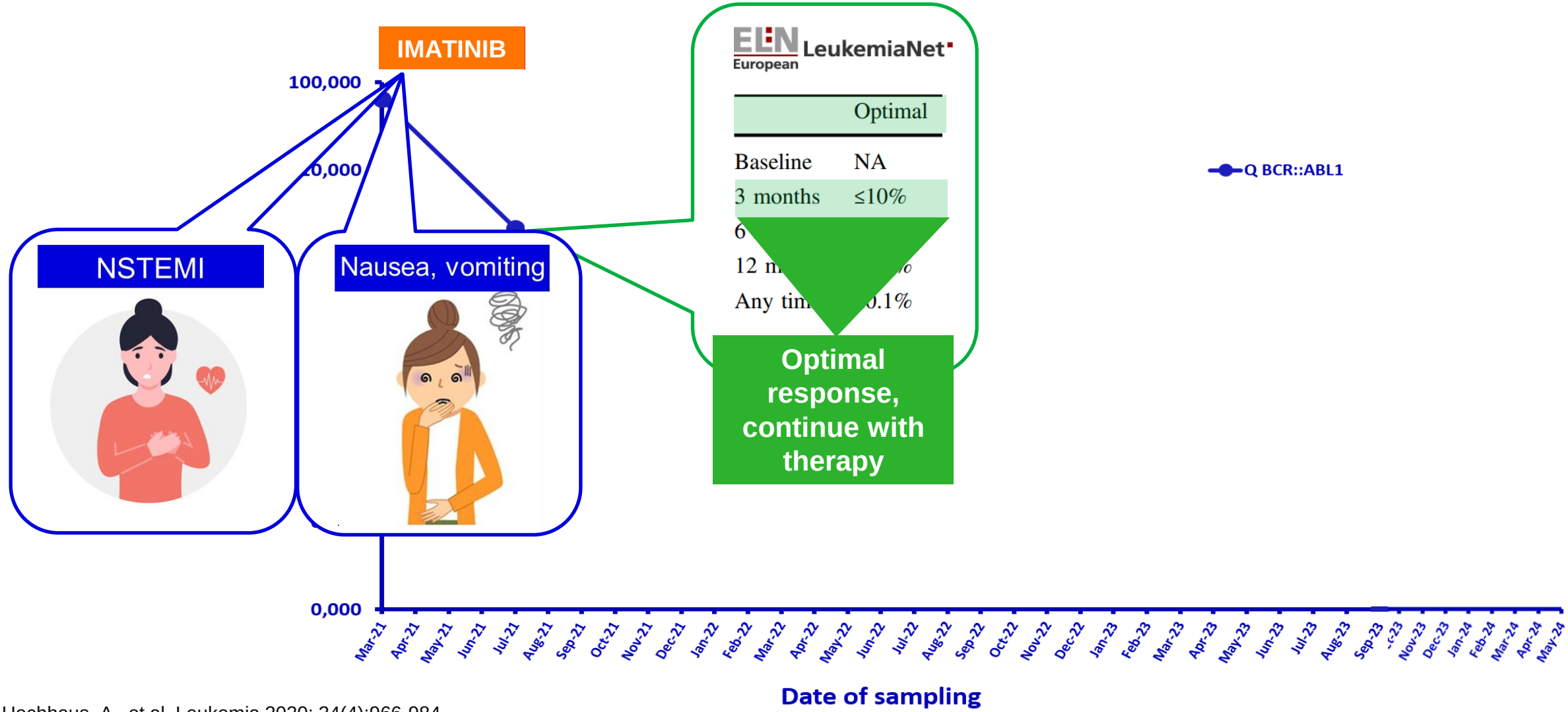

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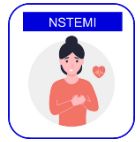

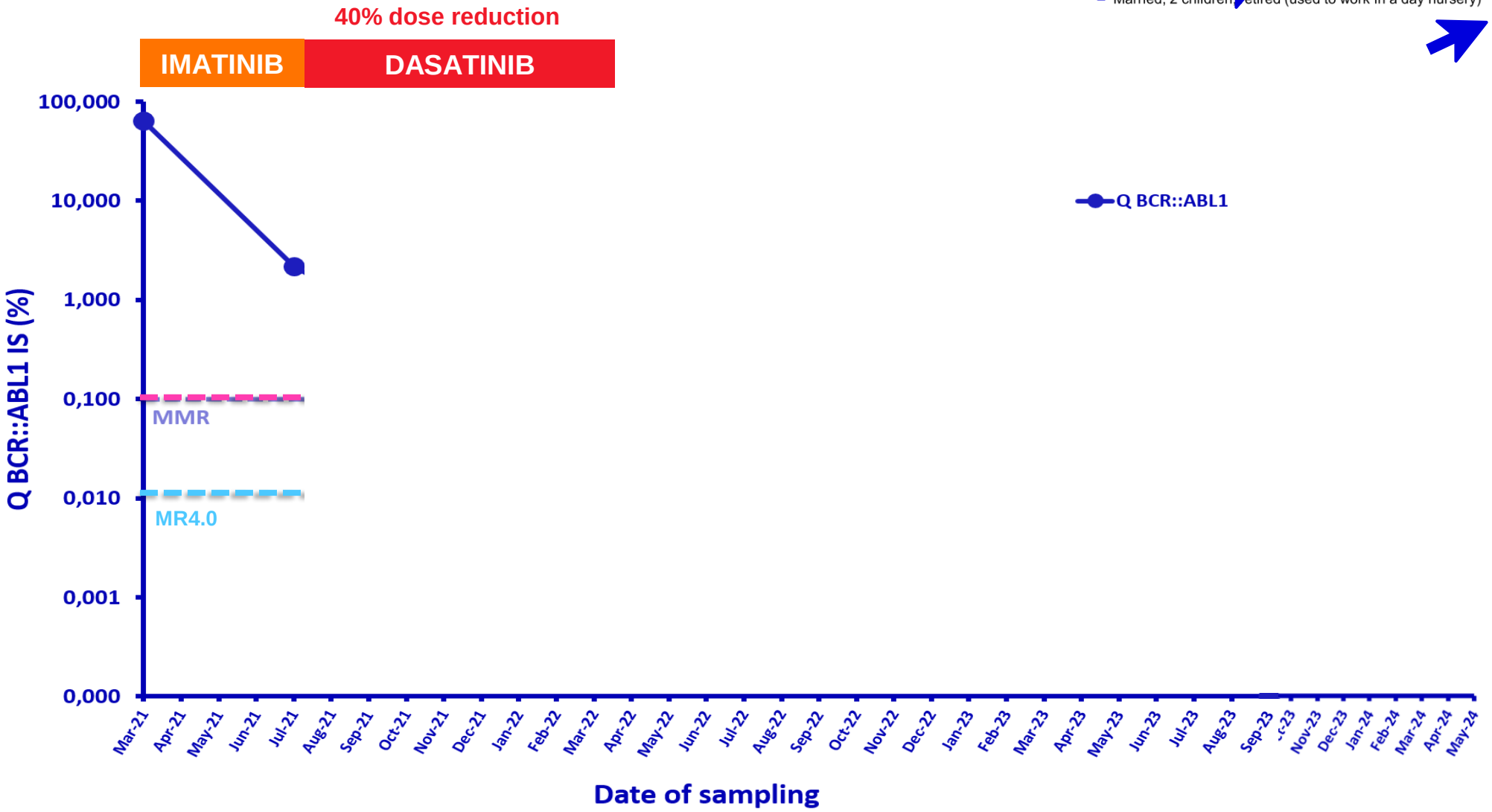

Case report 6

- Female, *1952
- **CML diagnosed in chronic phase in 3/2021 (71-year-old)**
- **Risk scores:** Sokal – intermediate, Hasford – intermediate, EUTOS – high, ELTS – intermediate
- WBC 33 Hbg 14.7 PLT 437
- ECOG 0, no splenomegaly, no symptoms
- Comorbidities:
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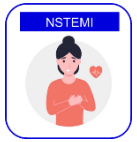

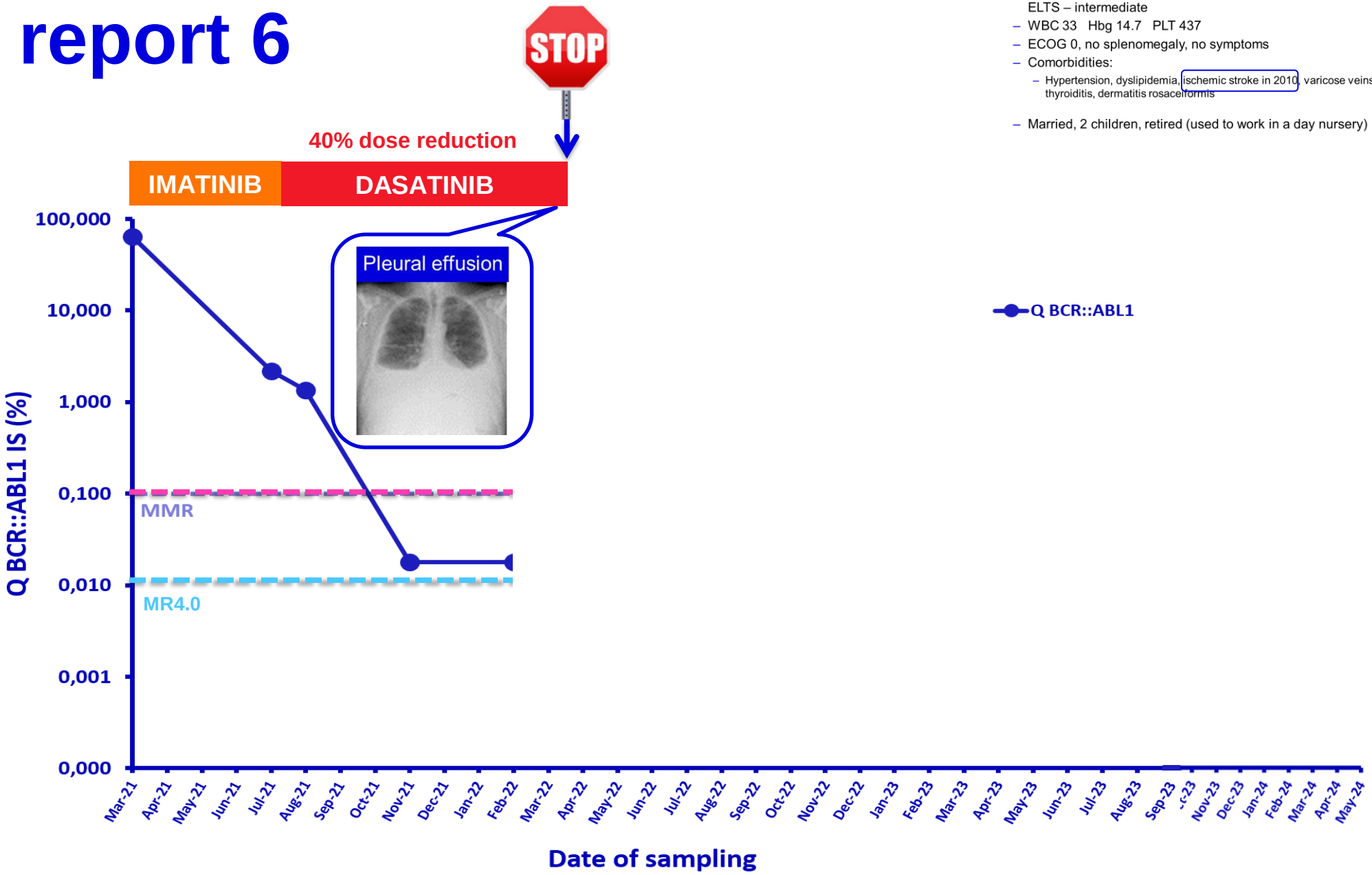

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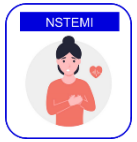

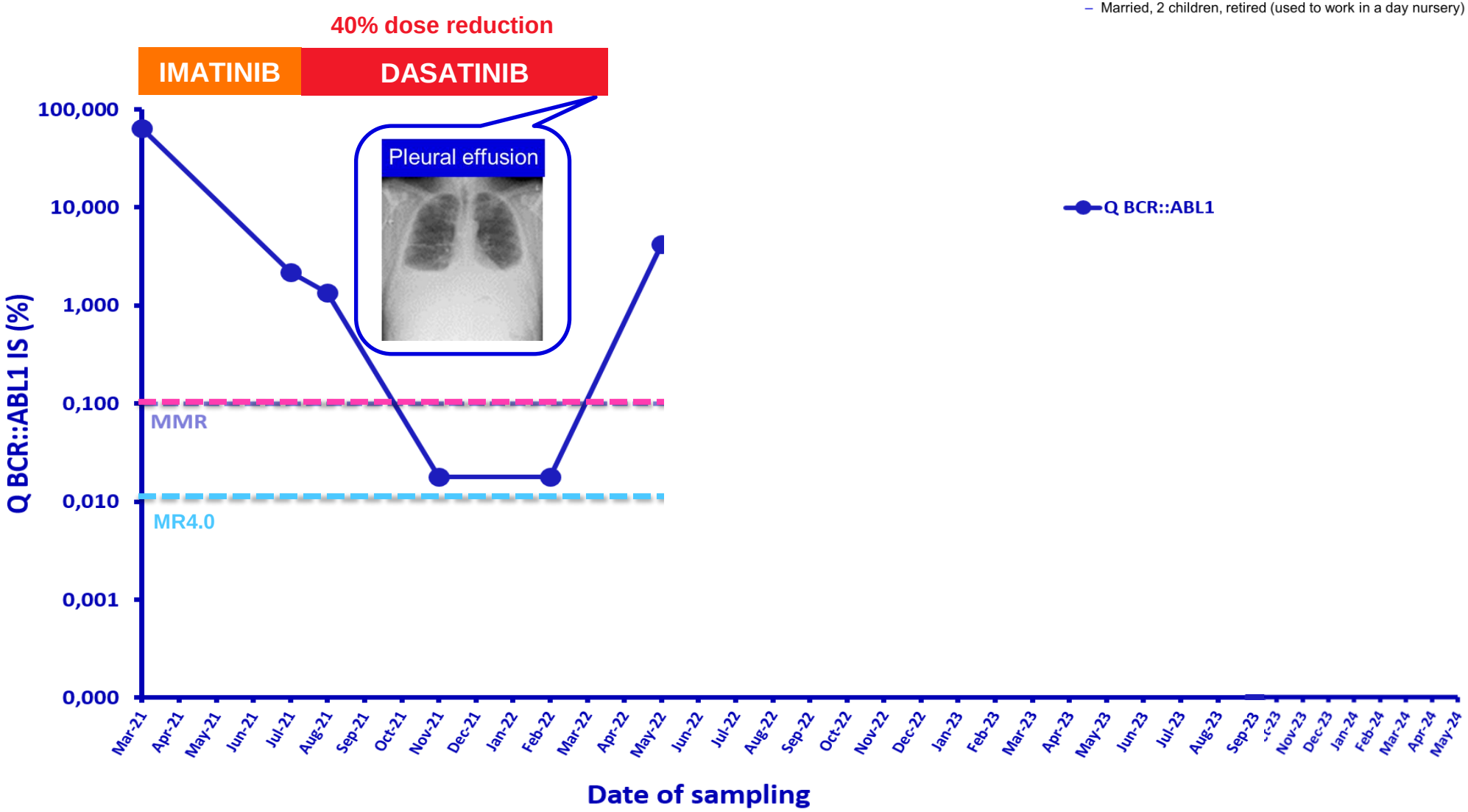

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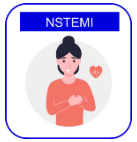

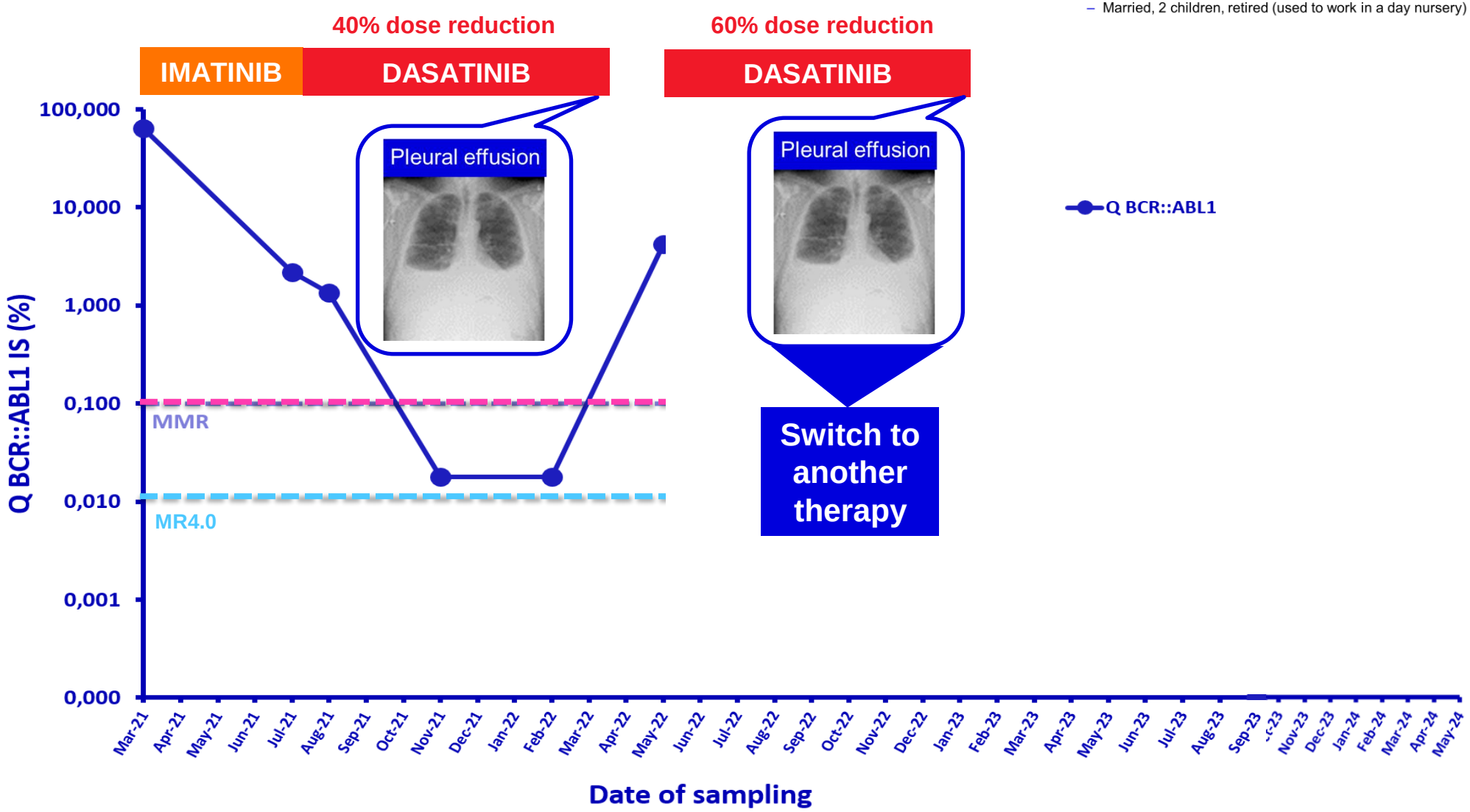

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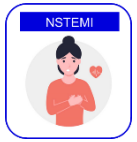

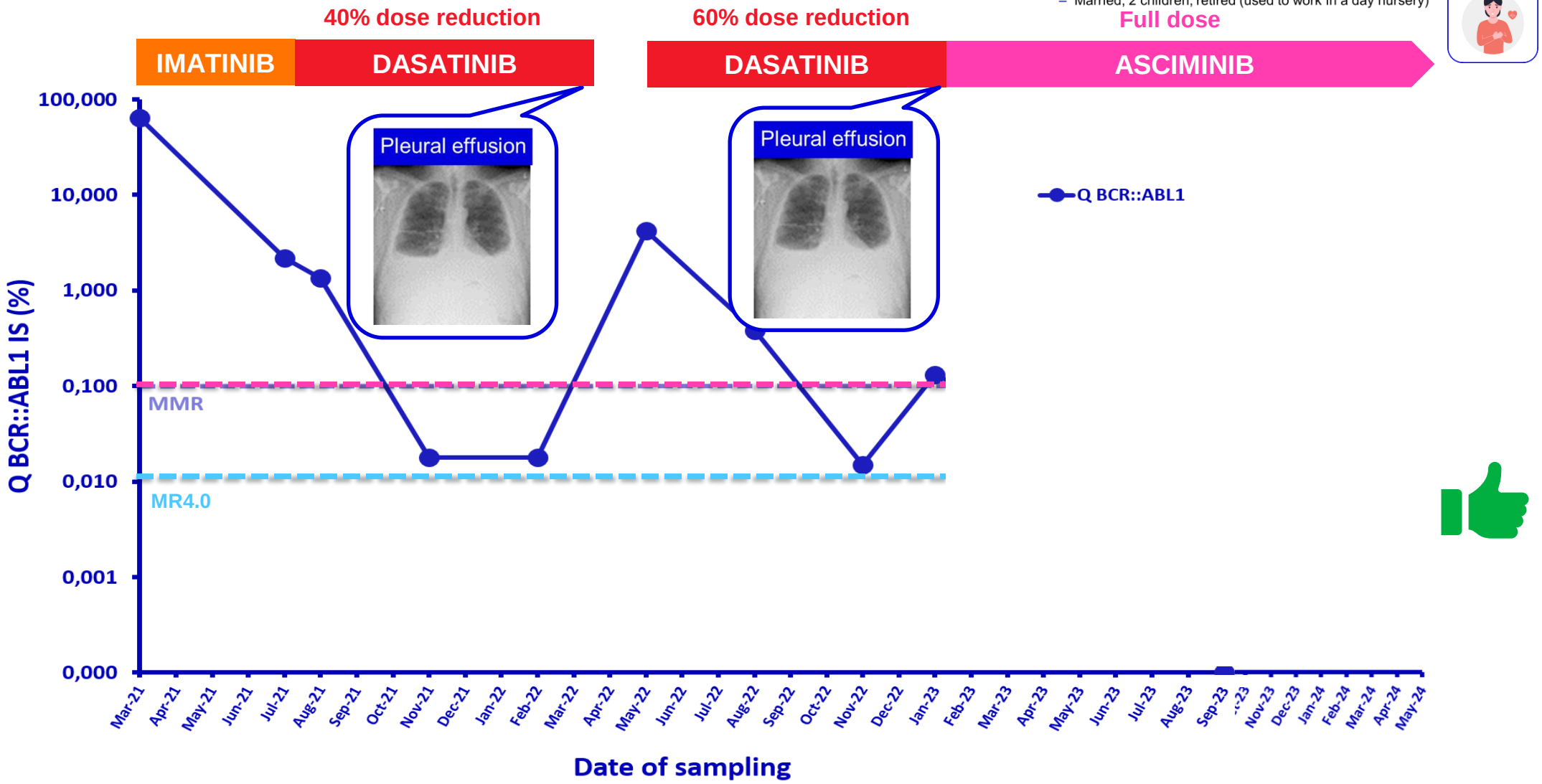

Case report 7

- Male, *1972

- **CML diagnosed in chronic phase in 12/2018 (46-year-old)**
- **Risk scores:** Sokal – low, Hasford – low, EUTOS – low, ELTS – low
- WBC 40 Hb 13.6 PLT 254
- ECOG 1, no splenomegaly, symptoms: cough for 2 months, fatigue
- Comorbidities:
  - Testicular tumour (seminom) l.sin., dg. 2016, after surgery and CTx, progression in 2018, salvage CTx → CR/PR, observation, no medication
  - Polyneuropathy due to CTx
- Married, 1 son, working as an electrician

CTx, chemotherapy

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50% dose reduction

IMATINIB

100,000

10,000

Myalgia, arthralgia gr. III

Fatigue

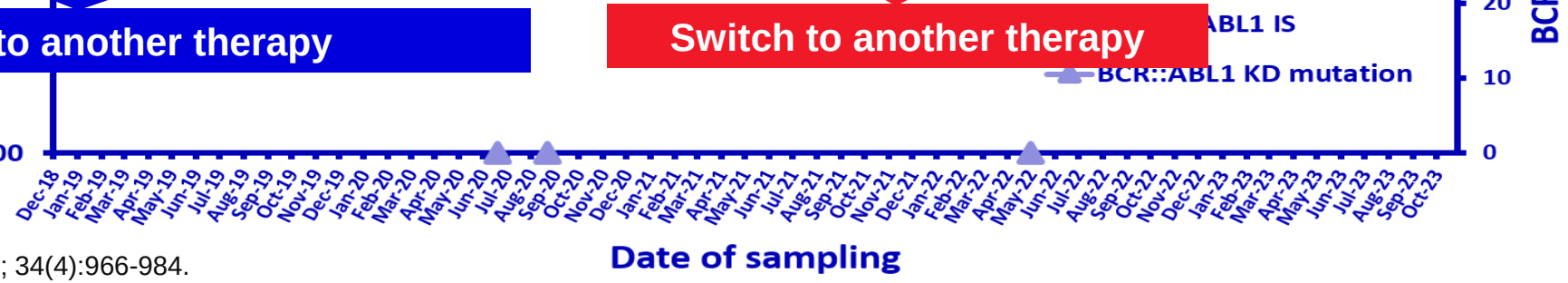
Nausea, vomiting

Switch to another therapy

ELN European LeukemiaNet

	Failure
Baseline	NA
3 months	>10% if confirmed within 1–3 months
6 months	>10%
12 months	>1%
Any	ACA

Switch to another therapy



Hochhaus A., et al. Leukemia 2020; 34(4):966-984.

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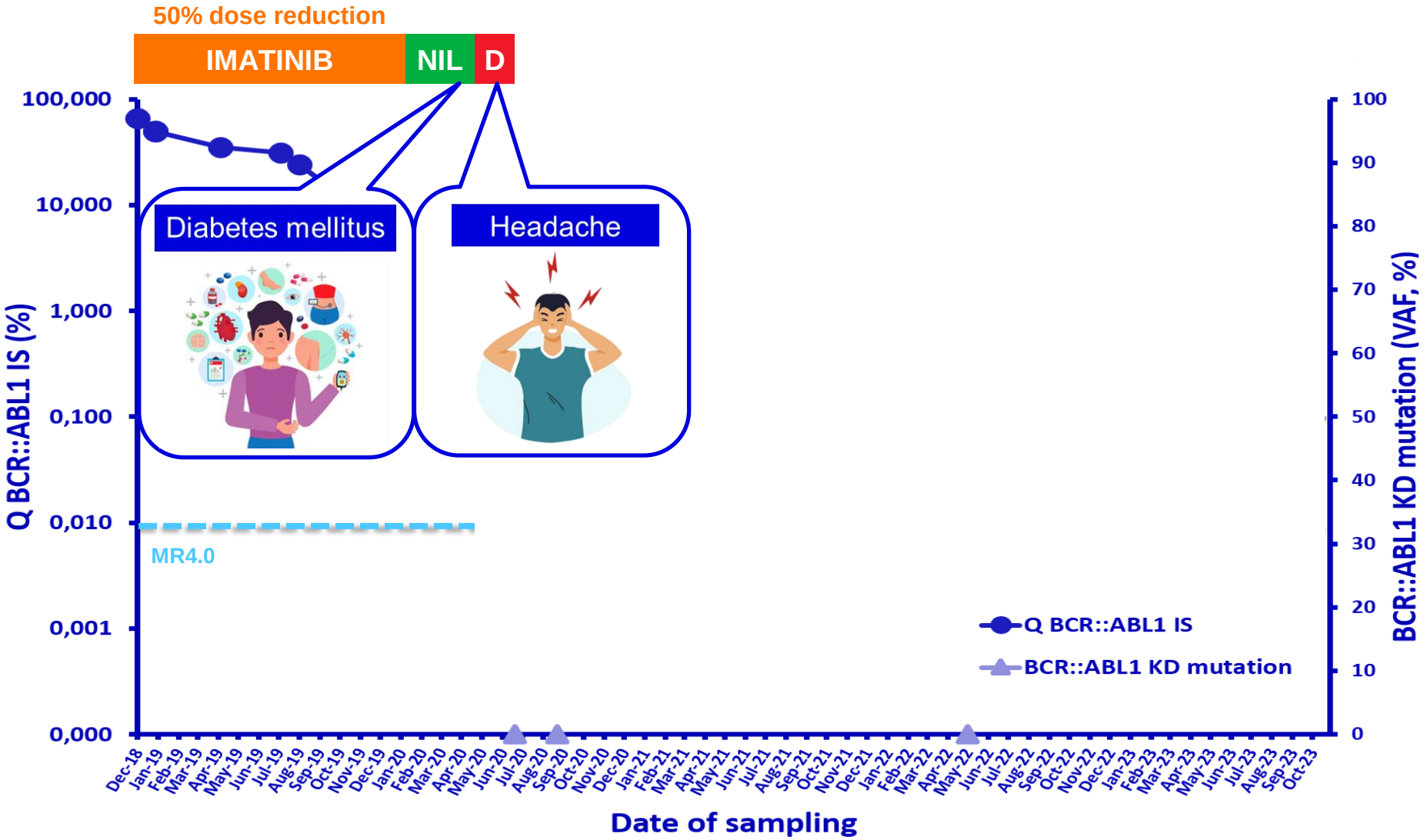

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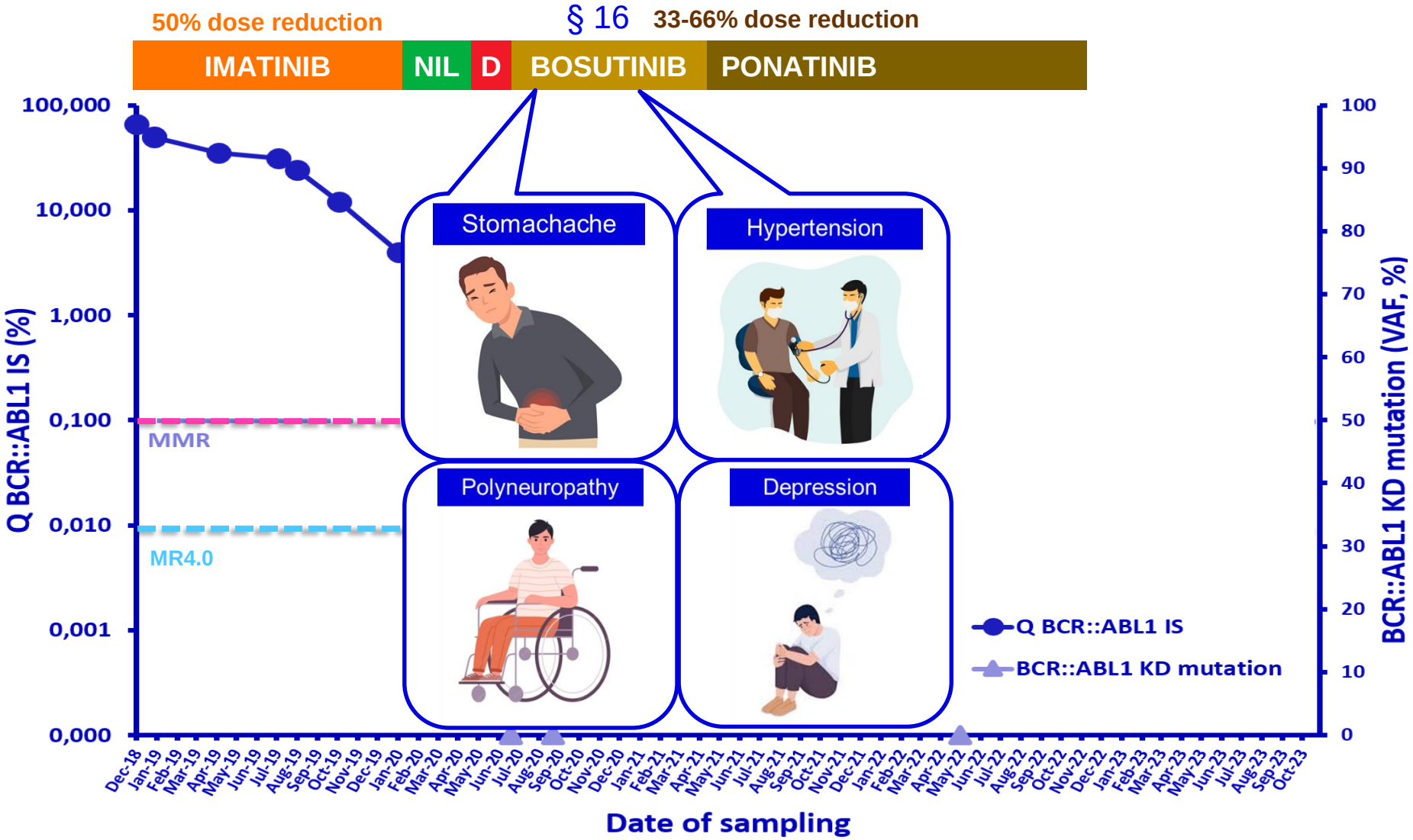

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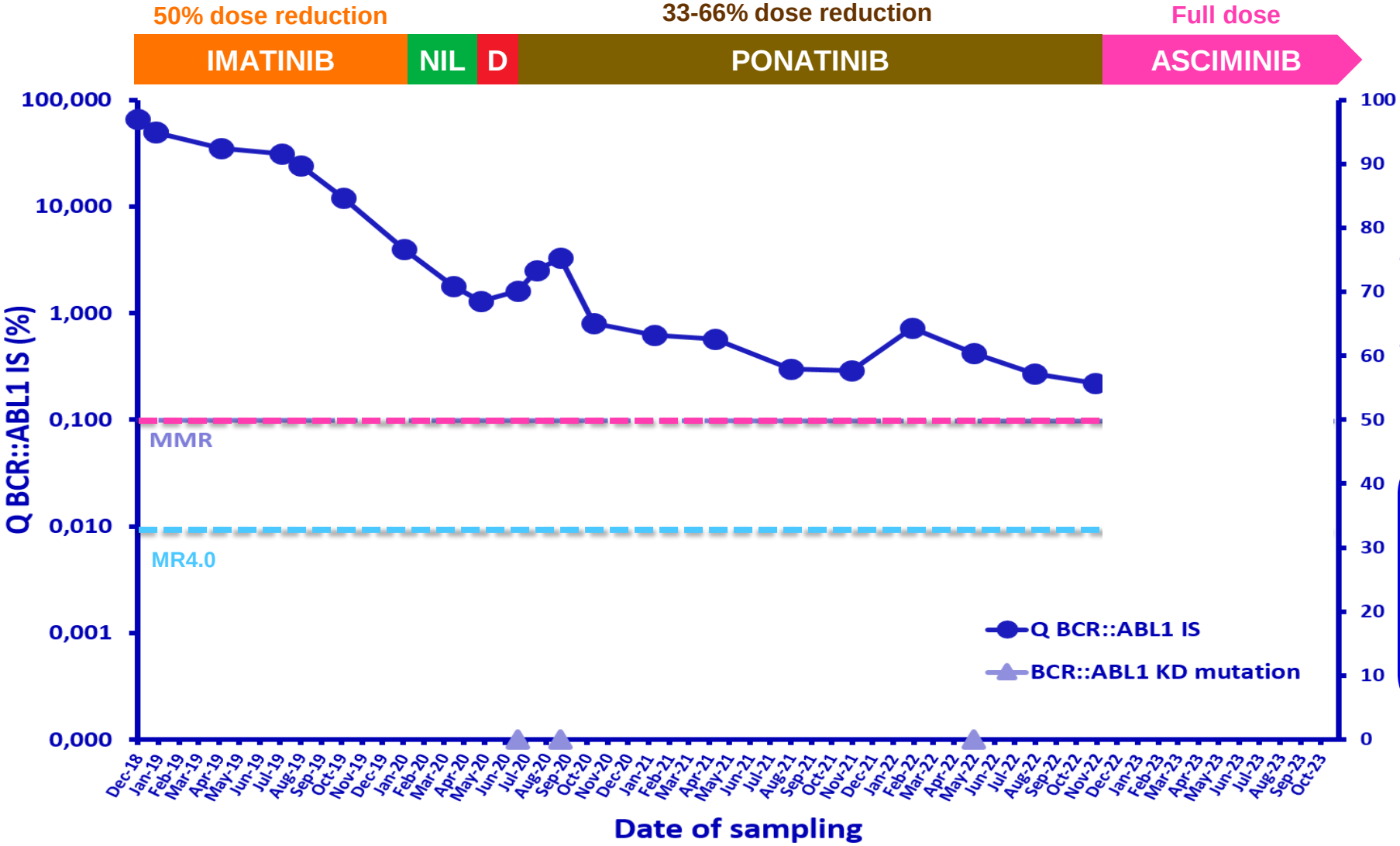
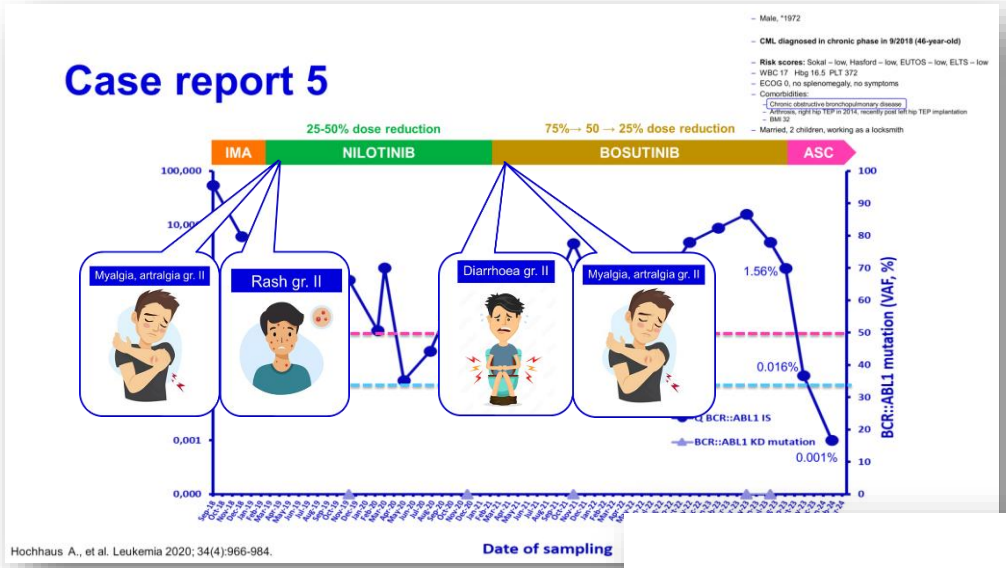
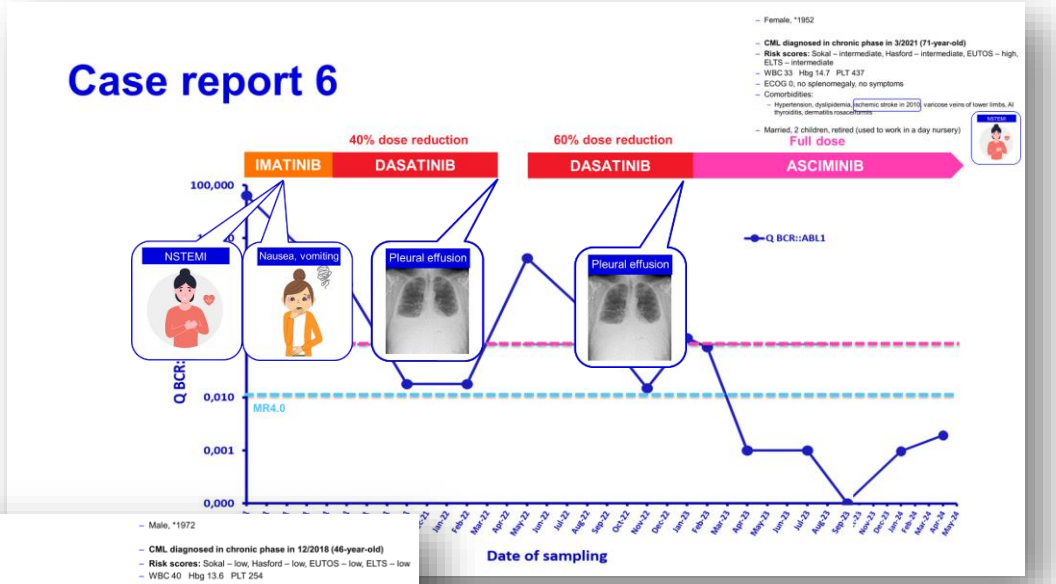


Case reports 5 & 6 & 7





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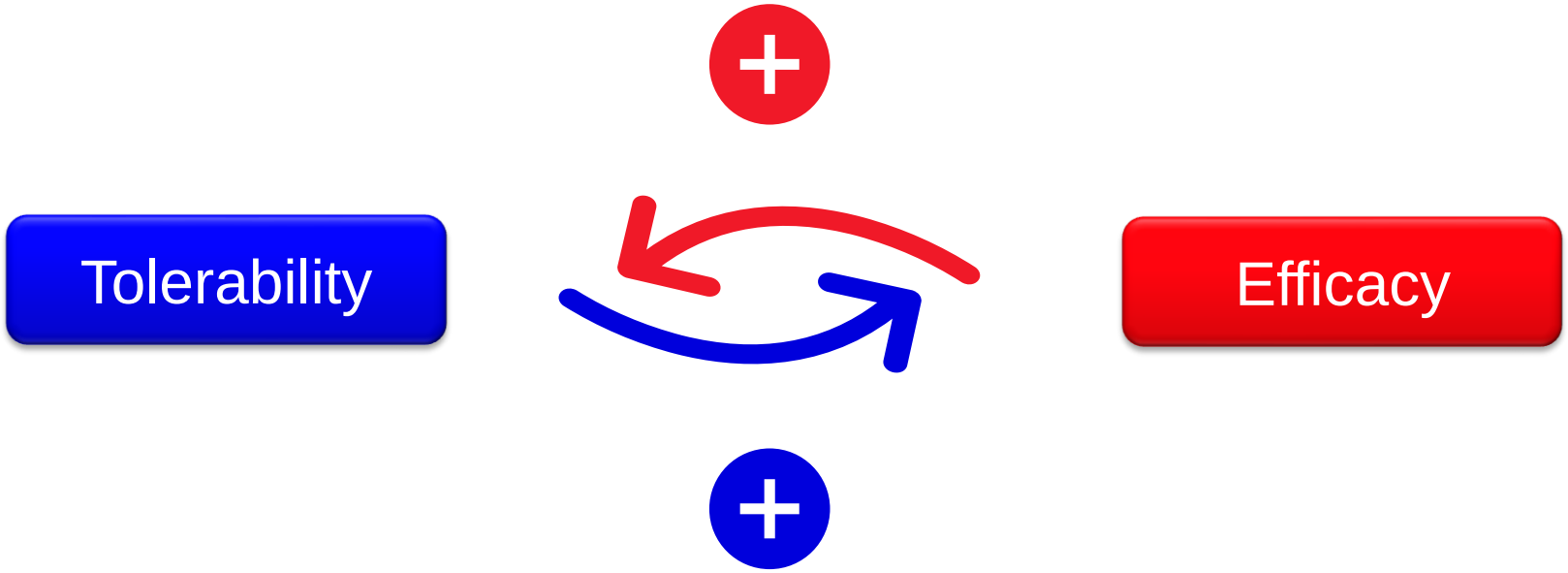
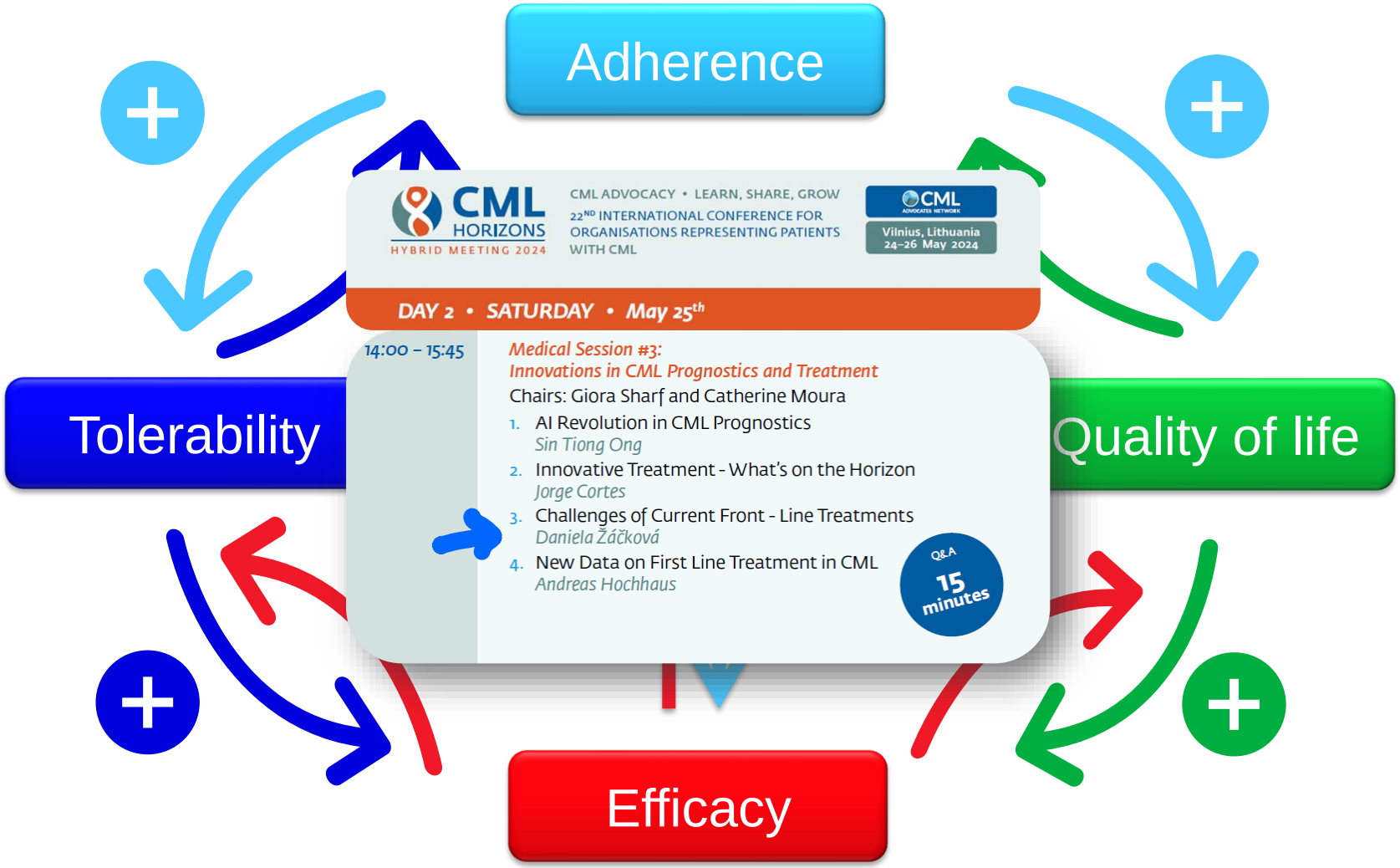


“Everything is connected with everything”



Δ 76 years

Thank you for your attention

zackova.daniela@fnbrno.cz

Presented with courtesy of the patients