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Therapiewechsel in fortgeschrittener CML: Wann und Wie?

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Disclosures

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CML VI: Primary endpoint: TKI-Switch



> 1 TKI-Switch: n=86 (14%)

Kohlbrenner et al. ASH 2022

CML VI: Reason for Switch



Tyrosine kinase Inhibitors (TKIs) in CML



- Imatinib
- Dasatinib
- Nilotinib
- Bosutinib
- Ponatinib
- ELVN
- Asciminib (ABL001)
- TERN

Treatment recommendations in CP-CML



What exactly means treatment line?

• Intolerance

OR

• Real resistance?

ELN 2020 Treatment milestones

	Optimal	Warning	Failure
Baseline	NA	High-risk ACA, high-risk ELTS score	NA
3 months	≤10%	>10%	>10% if confirmed within 1–3 months
6 months	≤1%	>1-10%	>10%
12 months	≤0.1%	>0.1-1%	>1%
Any time	≤0.1%	>0.1–1%, loss of ≤0.1% (MMR) ^a	>1%, resistance mutations, high-risk ACA

For patients aiming at TFR, the optimal response (at any time) is BCR-ABL1 $\leq 0.01\%$ (MR⁴).

A change of treatment may be considered if MMR is not reached by 36–48 months.

NA not applicable, ACA additional chromosome abnormalities in Ph+ cells, ELTS EUTOS long term survival score.

^aLoss of MMR (BCR-ABL1 > 0.1%) indicates failure after TFR

Therapy decision in CML – independent of treatment line



Adverse events Toxicity QoL

Efficacy

Efficacy in focus

OPTIC (Optimizing Ponatinib Treatment In CP-CML): Study design

OPTIC is an ongoing multicenter randomized phase 2 trial



 At the data cutoff for the 4-year analysis (May 8, 2023), median follow-up in patients with the T315I mutation was 60.6, 63.5, and 60.7 months in the 45-mg, 30-mg, and 15-mg cohorts, respectively

OPTIC* 3-year data Remission rates according to dosage and mutation status

by 36 months ■ 45 mg cohort (n=93) 30 mg cohort (n=93) 15 mg cohort (n=91)80 -70 -60.2% (95% CI, 49.5-70.2) 60 -Patients (%) 50 39.8% 39.6% (95% CI, 29.8-50.5) (95% CI, 29.5-50.4) 40 -30 20 10 n/N n/N 56/93 36/91 37/93 0 Patient cohort

Patients achieving ≤1% BCR::ABL1^{IS}

Patients achieving ≤1% BCR::ABL1^{IS} by 36 months by mutation status at baseline



Cortes JE, et al., ASH 2022; Abstract 620.

ASCEMBL Study Design

- Data cutoff for current analysis: October 6, 2021
- Median duration of follow-up: 2.3 years (120 weeks) from randomization to last contact date ۲
- **Primary endpoint:** MMR rate at week 24
- **Key secondary endpoint:** MMR rate at week 96



2L, 2nd line; ELN, European LeukemiaNet.

^a Must meet lack of efficacy criteria based on 2013 ELN recommendations for 2L TKI therapy⁵.

^b Patients who discontinued bosutinib treatment due to intolerance or any reason other than lack of efficacy were **not** allowed to switch to asciminib. Hughes, T et al., ASH 2022, Abstr. 3008

MMR Rates at Weeks 24, 96, and 156

Figure 3. MMR Rates at Weeks 24, 96, and 156



^a The treatment difference after adjusting for the baseline MCyR status, was 12.2% (95% CI, 2.19%-22.3%; 2-sided *P*=0.029) at Week 24, 21.74% (95% CI, 10.53%-32.95%; two-sided *P*=0.001) at Week 96, and 23.16% (95% CI: 13.14, 33.18; 2-sided *P*<0.001) at Week 156.

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Remission rates Ascembl vs. OPTIC



This is an indirect comparison between Asciminib and Ponatinib, as data are from different clinical trials.

ASCEMBL: Change from Baseline in MDASI-CML Symptom Severity Score



Rea et al., Leukemia. 2023; 37(5): 1060–1067

Intolerance in focus

How is daily life with CML?



Everything is connected with everything



How does (in)tolerance affect QOL?

Non-hematologic AEs reported by patients

Not at all A little Quite a bit/ very much

Physical HRQOL aspects by fatigue severity



How relevant is QOL to TKI therapy?

TKI treatment goals perceived by patients and physicians

- The CML Sun survey
- Online
- 361 patients and 198 physicians; 11 countries



1L





2L



41%	

3L



Optimizing TKI tolerability by shared decision-making



Patient and physician input on treatment selections

Lang F, et al. Presented at EHA 2023; abstract P668.

Relative toxicity of TKIs

Side effects	Imatinib	Nilotinib	Dasatinib	Bosutinib	Ponatinib	Asciminib
Myelosuppression	++	+	+	+	+	+
Edema	++	-	++	-	-	-
Muscle/Bone pain	++	-	+	-	+	-
Diarrhea	++	+	+	+++	+	-
Hepatic	+	++	+	+++	+	(+)
Glucose/Cholesterol elevation	-	++	-	-	-	-
Arterial thrombotic events	-	++	(+)	(+)	+++	?
	Nausea	Rash	Hemorrhage	Nausea	Abdominal pain	Hypertension

Zusammenfassung

- Auswahl des TKI jeweils unter Berücksichtigung von Effizienz und Toxizität/QoL
- Bei Therapieversagen Option mit Ponatinib und Asciminib, bisher kein direkter Vergleich bzgl Effizienz, allo SZT nicht vergessen
- Bei Intoleranz QoL bei Patienten und Ärzten im Fokus, allerdings zeigt sich ein Unterschied in der Wahrnehmung bei gemeinsamen Entscheidungsprozessen (Shared decision making)
- Bzgl Verträglichkeit ergeben sich aus Studiendaten Hinweise für einen Vorteil bei Asciminib, prospektive Real World Studiendaten sind rar