



Como o meu objetivo pode influenciar a terapia de primeira linha na LMC?

Carla Boquimpani

Grupo Oncoclínicas / HEMORIO

Nenhum conflito de interesse

Aos 20 anos



Aos 50 anos



Aos 70 anos



O tratamento da LMC tem que ser personalizado

Quais são os objetivos no tratamento da LMC?



Segurança



Efetividade



Custo

Se juntar tudo.....





Como escolher o melhor
objetivo ?

“Nesse caso tanto faz”

CHRONIC MYELOID LEUKEMIA SURVEY ON UNMET NEEDS (CML SUN): BALANCING TOLERABILITY AND EFFICACY GOALS OF PATIENTS AND PHYSICIANS THROUGH SHARED TREATMENT DECISION-MAKING

Dr. Fabian Lang

Author(s): Fabian Lang, Zack PEMBERTON-WHITELEY, Joannie Clements, Cristina Ruiz, Delphine Rea, Lisa Machado, Naoto Takahashi, Sung-Ho Moon, Andrew P Grigg, Cornelia Borowczak, Peter Schuld, Pauline Frank, Cristina Constantinescu, Carla Boquimpani, Jorge Cortes

CML SUN - 361 patients and 198 physicians in practice for between three and 35 years, who were personally responsible for treatment decisions for patients with CML

Figure. Top 5 Tx goals for patients and HCPs by line of therapy^a



Objetivo: Sobrevida global igual da população geral



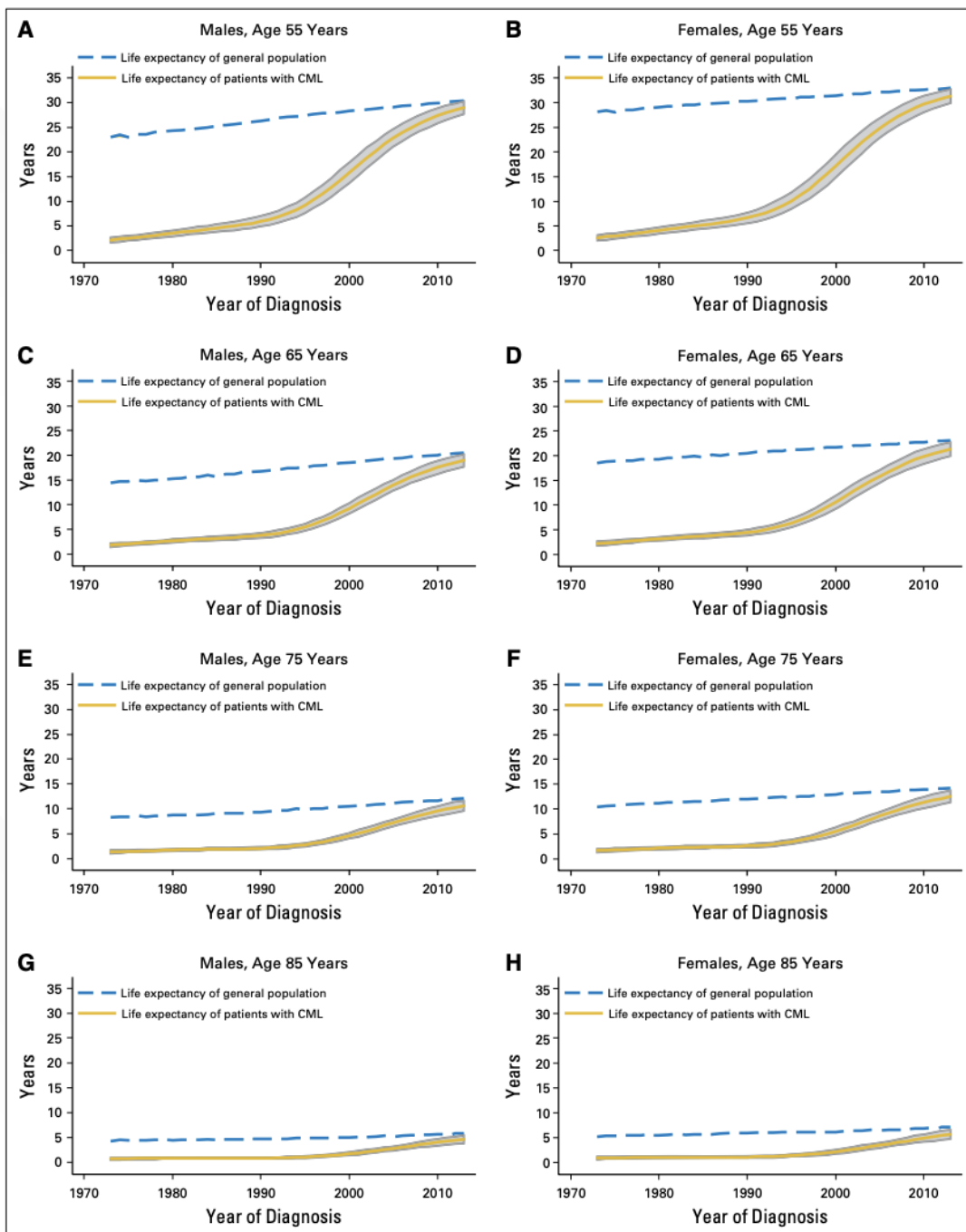
JOURNAL OF CLINICAL ONCOLOGY

O R I G I N A L R E P O R T

Life Expectancy of Patients With Chronic Myeloid Leukemia Approaches the Life Expectancy of the General Population

*Hannah Bower, Magnus Björkholm, Paul W. Dickman, Martin Höglund, Paul C. Lambert, and
Therese M.-L. Andersson*

Bower, J Clin Oncol 2016 Aug 20;34(24):2851-7



- A expectativa de vida do brasileiro é de 76 anos em média pelos dados do IBGE de 2023.
- A mediana de idade ao diagnóstico do paciente com LMC é de 55 a 60 anos, e no Brasil é de 48 a 50 anos
- Um paciente pode viver em tratamento para a **LMC durante 26 a 28 anos aproximadamente**

Como será tratar um paciente com LMC por 28 anos?

Diagnóstico



28 anos depois



Nenhuma
comorbidade



Objetivo: escolha baseada nas comorbidades

Suggestions for TKI selection for frontline therapy based on selected comorbidities

Comorbidity	Preferred	Less preferred
Diabetes	Imatinib, dasatinib, bosutinib	Nilotinib
Pulmonary disease/pulmonary arterial hypertension	Imatinib, bosutinib, nilotinib	Dasatinib
Gastrointestinal issues	Nilotinib, dasatinib	Imatinib, bosutinib
Cardiovascular	Imatinib, bosutinib	Nilotinib, dasatinib
Peripheral arterial	Imatinib, bosutinib (dasatinib?)	Nilotinib
Liver	Imatinib, dasatinib (nilotinib?)	Bosutinib
Renal	Nilotinib, dasatinib	Imatinib, bosutinib

Comorbidities		Imatinib	Nilotinib	Dasatinib	Bosutinib	Ponatinib	Asciminib	Legend	
 Cardiovascular	Hypertension	Green	Yellow	Green	Green	Yellow	Grey	Preferred	Risk of related AEs based on comorbidity
	Ischemic heart disease	Green	Orange	Green	Green	Red	Grey		Very low
	Occlusive peripheral artery disease	Green	Orange	Green	Green	Red	Grey		Low
	Congestive heart failure	Orange	Red	Orange	Green	Red	Grey	Less preferred	Intermediate
	Diabetes	Green	Orange	Green	Green	Yellow	Green	Avoid, if possible	High
	QT prolongation	Green	Red	Green	Green	Yellow	Green		
 Pulmonary	Pulmonary disease	Green	Green	Orange	Green	Green	Green		
	Pulmonary arterial hypertension	Green	Green	Red	Green	Green	Green		
 Gastrointestinal issues		Green	Green	Yellow	Orange	Green	Green		
 Pancreatic dysfunction		Green	Orange	Green	Green	Yellow	Yellow		
 Liver dysfunction		Yellow	Orange	Green	Orange	Red	Green		
 Kidney dysfunction		Yellow	Green	Green	Yellow	Green	Green		

Objetivo: escolha baseada nos eventos adversos

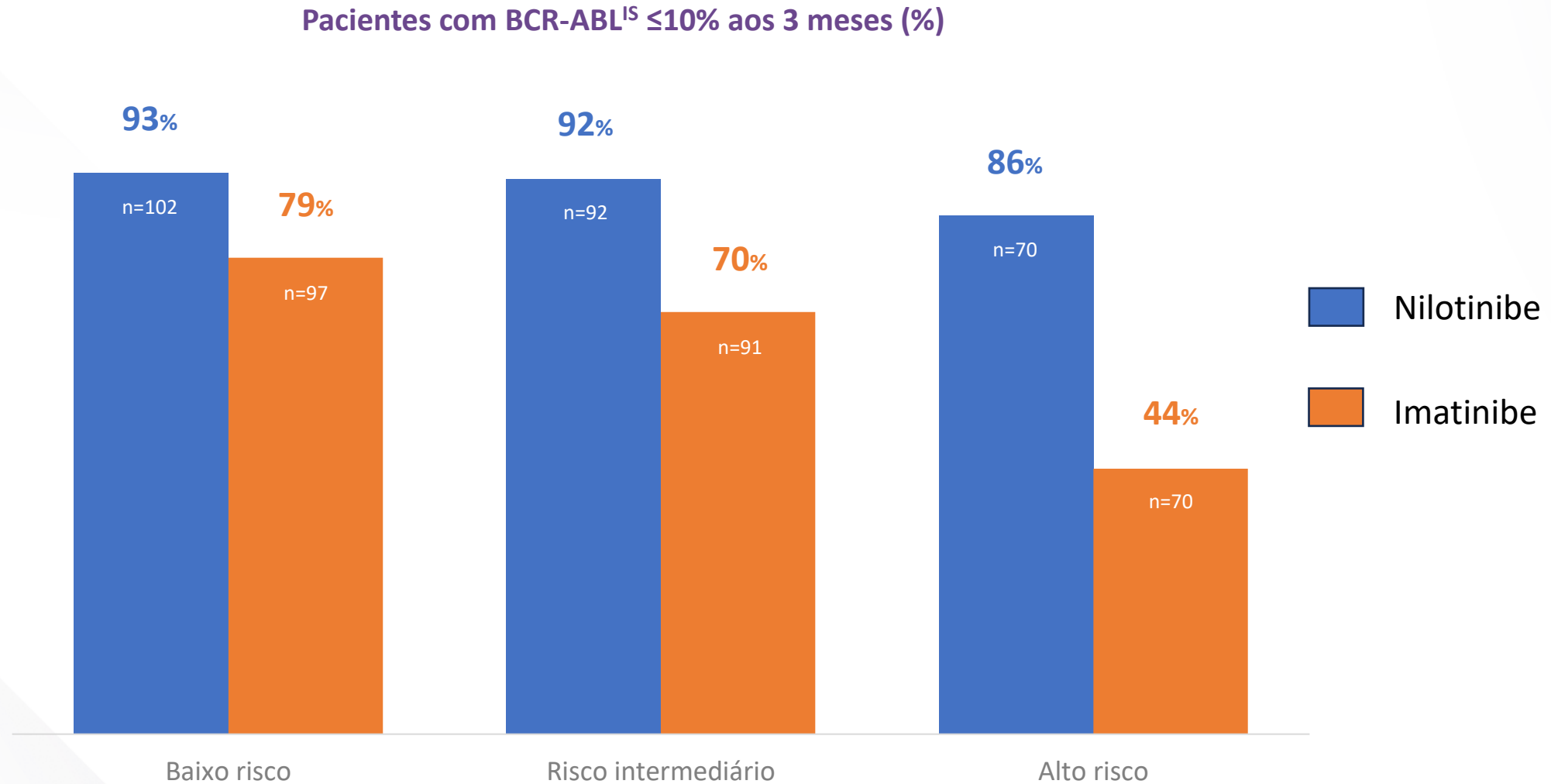
	Imatinib	Dasatinib	Nilotinib	Bosutinib	Ponatinib	Asciminib
Hematological						
Neutropenia	++	++	+	+	++	+
Thrombocytopenia	+	++	+	++	++	++
Anemia	+	+	+	+	++	+
Nonhematological						
Edema	+++	-	-	+	-	+
Nausea	++	+	+	+++	+	+
Vomiting	++	+	+	++	+	+
Muscle spasms	+++	-	-	-	-	-
Rash	+	-	+++	+	+++	-
Pleural effusion	-	+++	-	+	-	-
Headache	-	-	+	+	+++	+
Diarrhea	+	+	-	+++	+	-
Fatigue	+	+	+	+	++	+
Liver dysfunction	+	++	+++	+++	+	-
Arterial occlusive events	-	+	++	-	+++	?

Redução de dose do TKI reduz evento adverso

- Imatinibe – Dose 400 mg para 300mg em RMP = Melhor tolerância sem perda da eficácia
- Dasatinibe – Dose de 50mg/dia pode prevenir a incidência de derrame pleural e hipertensão arterial
- Nilotinibe - No estudo NILO-RED, o Nilotinibe foi reduzido para apenas uma vez ao dia após os pacientes atingirem MMR.
- Bosutinibe - Dose mais baixa de bosutinibe 400 ou 300mg pode ser considerada em pacientes frágeis, pacientes com comorbidades graves que falharam em múltiplos TKI
- Ponatinibe – Estudo Optic evidenciou melhor resposta e menos EA nos pacientes que iniciaram com 45mg e reduziram para 15mg após alcançarem PCR <1%

Cervantes, Ann Hematol (2017) 96(1):81–5
Murai, Lancet Haematol (2021) 8(12):e902–e11
Rea, Blood (2017) 130(Supplement 1):318
Latagliata, Blood (2019) 134(Supplement_1):1649
Cortes, Blood (2021) 138(21):2042–50

Objetivo: Escolha do TKI baseado no risco prognóstico



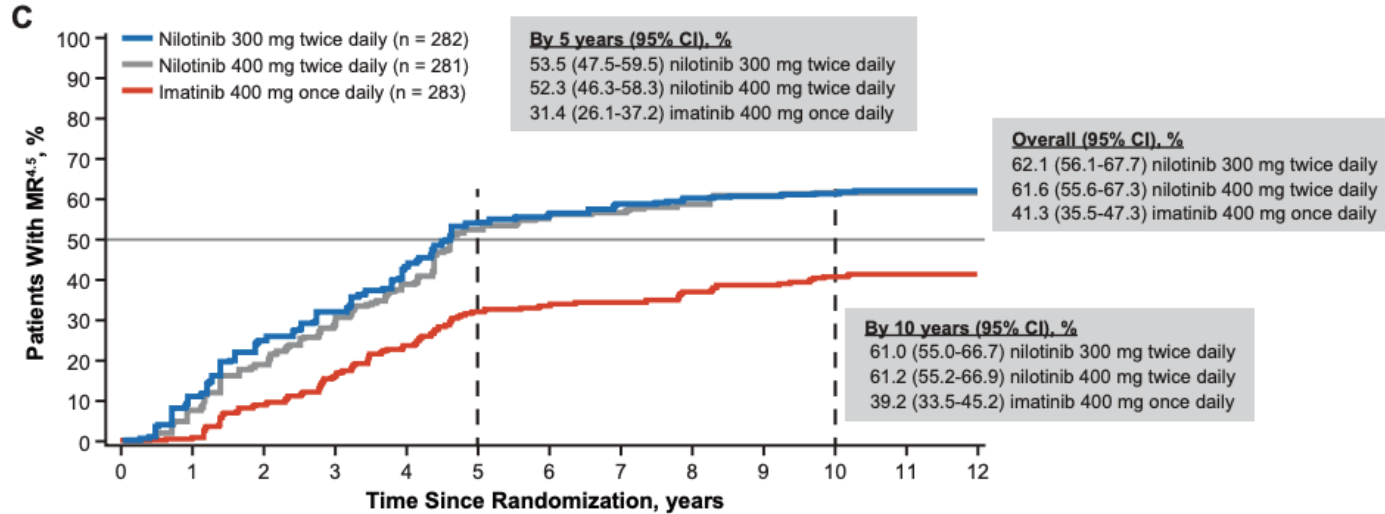
Hochhaus A, et al. Leukemia. 2016;30(5):1044-54.

Remember to use ELTS to avoid labelling many as high-risk

(b) Risk strata proportions and outcome

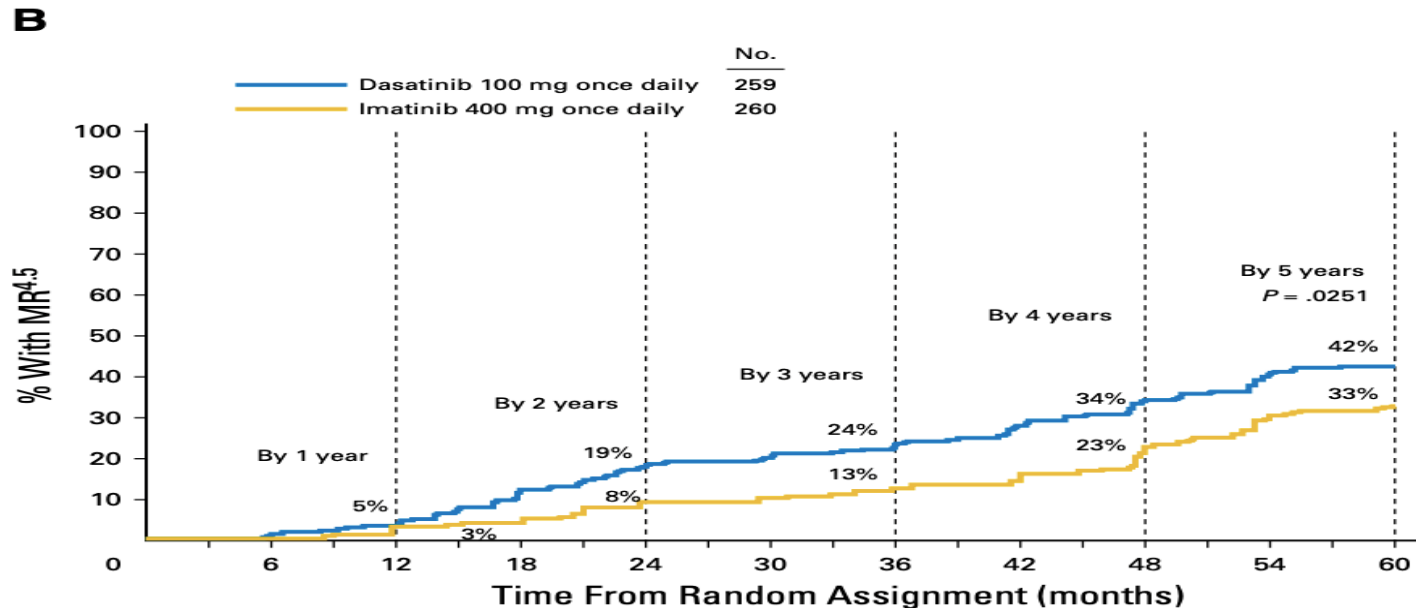
	Low risk		Intermediate risk		High risk	
$n = 5154$	Sokal	ELTS	Sokal	ELTS	Sokal	ELTS
%	38	55	38	28	23	13
10-year OS	89%	88%	81%	79%	75%	68%
6-year LRD	3%	2%	4%	5%	8%	12%

Objetivo: Escolha baseada na intenção de TFR



ENESTnd

Nilotinibe x Imatinibe



DASISION

Dasatinibe x Imatinibe

Escolha baseada na personalização

- Se paciente de baixo/intermediário risco prognóstico → Imatinibe
- Se paciente de alto risco prognóstico sem comorbidades → TKI 2G
- Se paciente de alto risco prognóstico com comorbidades → Imatinibe
- Se paciente jovem com intenção de interromper (exemplo: gestação programada) → TKI 2G
- Se paciente com insuficiência renal → TKI 2G
- Se paciente idoso com ou sem comorbidades mesmo em risco alto → Imatinibe



The NEW ENGLAND
JOURNAL of MEDICINE

ORIGINAL ARTICLE

Asciminib in Newly Diagnosed Chronic Myeloid Leukemia

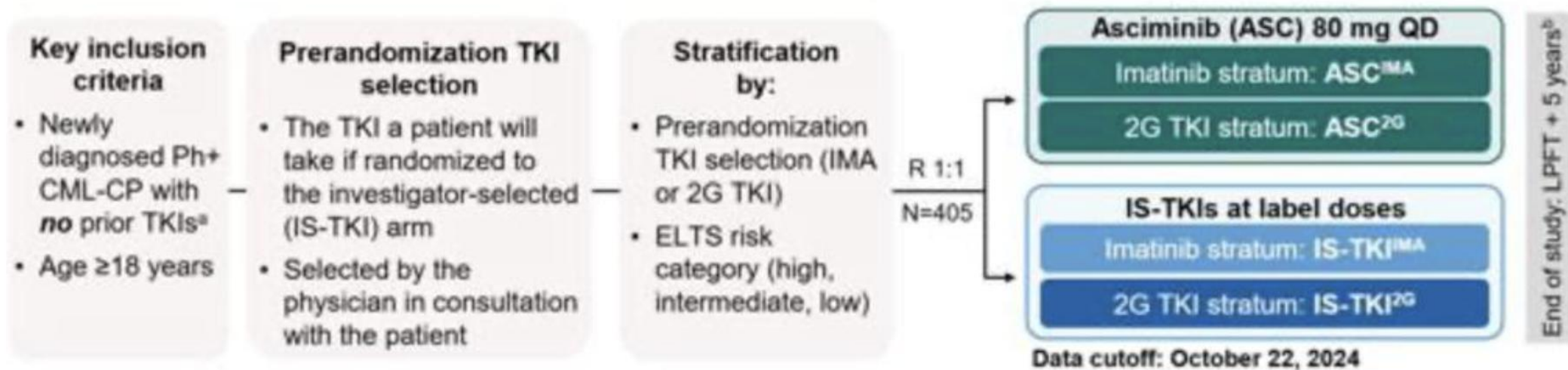
Authors: Andreas Hochhaus, Dr.Med., Jianxiang Wang, M.D., Dong-Wook Kim, M.D., Ph.D., Dennis Dong Hwan Kim, M.D., Ph.D., Jiri Mayer, M.D., Yeow-Tee Goh, M.B., B.S., M.Med., Philipp le Coutre, M.D., **+15** , for the ASC4FIRST Investigators* [Author Info & Affiliations](#)

Published May 31, 2024 | N Engl J Med 2024;391:885-898 | DOI: 10.1056/NEJMoa2400858 | [VOL. 391 NO. 10](#)

Copyright © 2024

ASC4FIRST is a head-to-head study comparing asciminib vs all standard-of-care TKIs in newly diagnosed patients with CML

NCT04971226



Primary endpoints

- MMR at week 48 with asciminib vs all investigator-selected TKIs
- MMR at week 48 with asciminib vs investigator-selected TKIs in the imatinib stratum

Key secondary endpoints

- MMR at week 96 with asciminib vs all investigator-selected TKIs
- MMR at week 96 with asciminib vs investigator-selected TKIs in the imatinib stratum

From Hochhaus A, et al. *N Engl J Med*. 2024;391(10):885-898. Copyright © 2024 Massachusetts Medical Society. Adapted with permission from Massachusetts Medical Society.

ASC, asciminib; ELTS, EUTOS long-term survival score; EUTOS, European Treatment and Outcome Study; IMA, imatinib; LPFT, last patient first treatment; QD, once daily; R, randomized.

^a Either imatinib, bosutinib, dasatinib, or nilotinib is allowed for up to 2 weeks prior to randomization. Treatment with other TKIs prior to randomization was not permitted. ^b Patients will remain on study for 5 years after the last patient first dose, unless they have discontinued early due to treatment failure, disease progression, pregnancy, intolerance, or investigator or patient decision.

A wide-angle landscape photograph of Rio de Janeiro, Brazil, taken during the 'golden hour' of sunset. The sky is filled with soft, wispy clouds, transitioning from a pale blue at the top to a warm orange and yellow near the horizon. The bay of Guanabara is calm, reflecting the colors of the sky. In the background, the iconic Sugarloaf Mountain (Pão de Açúcar) stands prominently on the right side. To the left, other hills and mountains are visible in the distance. The foreground shows a lush green park with many trees and a paved road. A tall, thin utility pole stands in the middle ground. The word 'OBRIGADA' is written in large, white, sans-serif capital letters in the lower-left corner of the image.

OBRIGADA