Treatment of chronic-phase chronic myeloid leukemia in patients randomized to dasatinib or imatinib after suboptimal responses to 3 months of imatinib therapy: final 5-year results from DASCERN

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Supplementary information

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Table S1. Response by treatment adherence.

	Randomized to dasatinib (n=171)			Randomized to imatinib (n=86)			
	Low (n=19)	Medium (n=154)	High (n=1)	Low (n=6)	Medium (n=79)	High (n=0)	Missing (n=1)
Number of patients (%)							
MMR	14 (74)	120 (78)	0	2 (33)	36 (46)	0	0
MR^4	12 (63)	80 (52)	0	1 (17)	26 (33)	0	0
$MR^{4.5}$	7 (37)	56 (36)	0	0	22 (28)	0	0

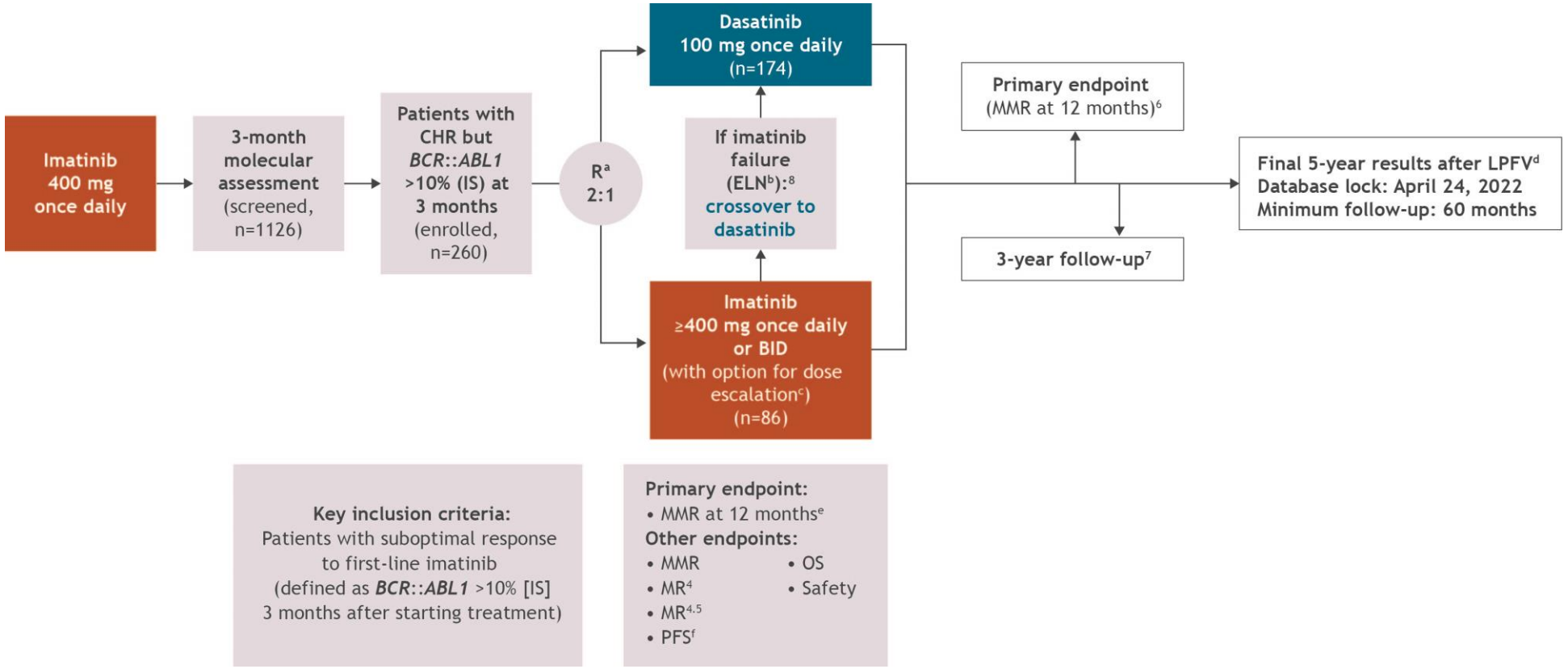
MMR: major molecular response; MR^4: 4-log reduction in *BCR*::*ABL1* or ≤0.01% International Standard; $MR^{4.5}$: 4.5-log reduction in *BCR*::*ABL1* or ≤0.0032% International Standard.

Table S2. Treatment-emergent adverse events leading to study discontinuation.

	Randomized to dasatinib (n = 171[b])		Randomized to imatinib (n = 86)		Imatinib (after crossover to dasatinib) (n = 46)		Imatinib (no crossover) (n = 40)	
	Any grade	**Grade 3/4**	**Any grade**	**Grade 3/4**	**Any grade**	**Grade 3/4**	**Any grade**	**Grade 3/4**
Patients with TEAEs[a] leading to study discontinuation, n (%)	13 (7.6)	5 (2.9)	5 (5.8)	1 (1.2)	3 (6.5)	1 (2.2)	2 (5.0)	0
Events, n (%)								
Thrombocytopenia	3 (1.8)	2 (1.2)	0	0	0	0	0	0
Pleural effusion	2 (1.2)	1 (0.6)	1 (1.2)	0	1 (2.2)	0	0	0
Pulmonary hypertension	2 (1.2)	0	1 (1.2)	0	1 (2.2)	0	0	0
Dyspnea	1 (0.6)	0	0	0	0	0	0	0
Hydrothorax	1 (0.6)	0	0	0	0	0	0	0
Pulmonary arterial hypertension	1 (0.6)	0	0	0	0	0	0	0
Myocardial injury	1 (0.6)	0	0	0	0	0	0	0
Palpitations	1 (0.6)	0	0	0	0	0	0	0
Pneumonia	1 (0.6)	1 (0.6)	0	0	0	0	0	0
Neutrophil count decreased	1 (0.6)	1 (0.6)	1 (1.2)	1 (1.2)	1 (2.2)	1 (2.2)	0	0
White blood cell count decreased	1 (0.6)	1 (0.6)	1 (1.2)	0	1 (2.2)	0	0	0
Blood bilirubin increased	1 (0.6)	0	0	0	0	0	0	0
Blood cholesterol increased	1 (0.6)	0	0	0	0	0	0	0
Low density lipoprotein increased	1 (0.6)	0	0	0	0	0	0	0
Breath holding	1 (0.6)	0	0	0	0	0	0	0
Platelet count decreased	0	0	1 (1.2)	1 (1.2)	1 (2.2)	1 (2.2)	0	0
Fatigue	0	0	1 (1.2)	0	0	0	1 (2.5)	0
Arthralgia	0	0	1 (1.2)	0	0	0	1 (2.5)	0

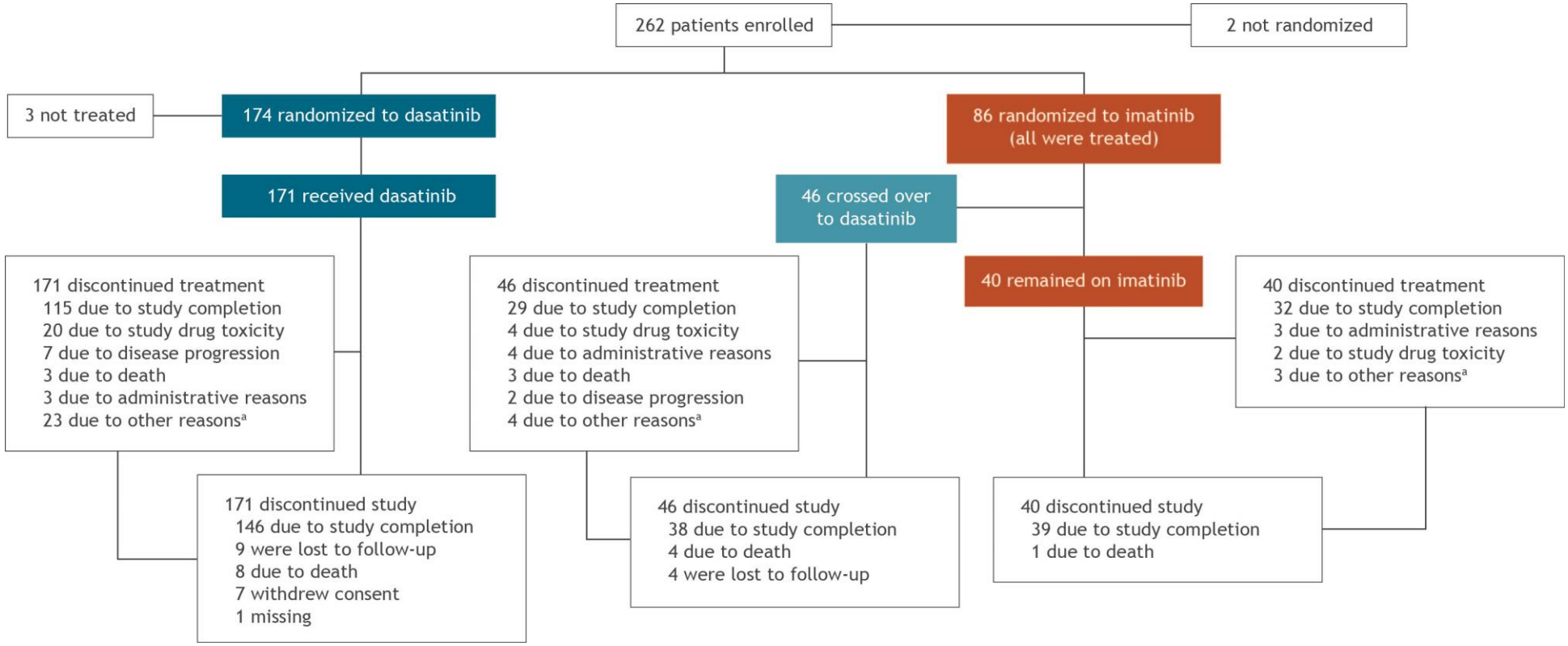
[a]By Common Terminology Criteria for Adverse Events preferred term. [b]Three patients randomized to dasatinib were not treated. TEAE: treatment emergent adverse event.

Figure S1. Study design.



[a]Randomization occurred ≤8 weeks after the 3-month molecular assessment. Patients were stratified by Sokal score (high, intermediate, low, or unknown) and time from the 3-month molecular assessment to randomization (≤4 weeks *vs*. >4 weeks). [b]Patients randomized to imatinib, meeting ELN 2013 failure criteria, and without dasatinib-resistant mutations could cross over to dasatinib. [c]Dose escalation for suboptimal responses (ELN 2013 criteria) was permitted in both treatment arms (if no intolerance) and was at the investigator's discretion. [d]Patients were followed every 3 months for the first 24 months, then every 6 months until month 60; patients were then followed annually. [e]After day 1 of first-line imatinib treatment (~9 months after randomization). [f]Time from randomization to transformation to accelerated phase, blast phase or death, whichever occurred first. BID: twice daily; CHR: complete hematological response; ELN: European LeukemiaNet; IS: International Standard; LPFV: last person first visit; QD: once daily; R: randomization.

Figure S2. CONSORT diagram.



[a]Other reasons included adverse events unrelated to study drug, patient request, withdrawal of consent, loss to follow-up, achievement of maximum clinical benefit, poor/non-compliance, no longer meeting study criteria, pregnancy, imatinib treatment failure, and administrative reasons.