LETTER TO THE EDITOR

Prognostic stratification in venetoclax-based acute myeloid leukemia treatments: the molecular prognostic risk signature tested in a real-world setting

Authors

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https://doi.org/10.3324/haematol.2024.285934

Received: June 10, 2024.
Accepted: August 27, 2024.
Early view: September 5, 2024.

SUPPLEMENTARY TABLE 1. Clinical characteristics of the study patients

Characteristic	Whole cohort (n = **150**)	ND cohort (n = **61**)	RR cohort (n = **89**)	P*	mPRS groups - whole cohort			P**
					Higher benefit (n = **83**, 56%)	Intermediate benefit (n = **47**, 31%)	Lower benefit (n = **20**, 13%)	
Age (range) y	64 (19-86)	72 (35-86)	58 (19-74)	**<.001**	65 (25-83)	65 (19-81)	60 (42-86)	.745
Male sex	89 (59%)	36 (59%)	53 (59%)	.949	52 (62%)	23 (49%)	14 (70%)	.180
ELN 2022, n (%)								
favorable	31 (21%)	11 (18%)	20 (23%)	.509	22 (27%)	9 (19%)	0 (0%)	**.030**
intermediate	29 (19%)	8 (13%)	21 (23%)	.110	15 (18%)	14 (30%)	0 (0%)	**.017**
adverse	90 (60%)	42 (69%)	48 (54%)	.066	46 (55%)	24 (51%)	20 (100%)	**<.001**
Cytogenetics, n (%)								
normal	82 (55%)	34 (56%)	48 (54%)	.826	52 (67%)	26 (55%)	4 (20%)	**.003**
t(8;21) or inv(16)	9 (6%)	2 (3%)	6 (7%)	.353	5 (6%)	4 (8%)	0 (0%)	.406
Chromosome 5 or 7 or 17 abnormality	7 (5%)	3 (5%)	4 (4%)	.902	4 (5%)	2 (4%)	1 (5%)	.986
Complex karyotype	19 (13%)	10 (16%)	9 (10%)	.255	4 (5%)	0 (0%)	13 (65%)	**<.001**
Mutation, n (%)								
NPM1	34 (23%)	11 (18%)	23 (26%)	.261	17 (20%)	15 (32%)	2 (10%)	.113
TET2	18 (12%)	10 (16%)	8 (9%)	.170	12 (14%)	4 (9%)	2 (10%)	.579
ASXL1	27 (18%)	17 (28%)	10 (11 %)	**.009**	16 (19%)	11 (23%)	0 (0%)	.066
DNMT3A	45 (30%)	14 (23%)	31 (35%)	.118	25 (30%)	17 (36%)	3 (15%)	.224
IDH1	13 (9%)	6 (10%)	7 (8%)	.673	8 (10%)	5 (11%)	0 (0%)	.328
IDH2	30 (20%)	10 (16%)	20 (23%)	.360	24 (29%)	6 (13%)	0 (0%)	**.004**
RUNX1	29 (19%)	15 (25%)	14 (16%)	.177	20 (24%)	8 (17%)	1 (5%)	.135
TP53	20 (13%)	10 (16%)	10 (11%)	.361	0 (0%)	0 (0%)	20 (100%)	NA
FLT3 ITD	25 (17%)	13 (21%)	12 (13%)	.206	0 (0%)	25 (53%)	0 (0%)	NA
FLT3 TKD	5 (3%)	3 (5%)	2 (2%)	.370	3 (4%)	1 (2%)	1 (5%)	.816
CBL	1 (1%)	0 (0%)	1 (1%)	.406	1 (1%)	0 (0%)	0 (0%)	.669
PTPN11	10 (6%)	3 (5%)	7 (8%)	.477	5 (6%)	4 (8%)	1 (5%)	.818
NF1	1 (1%)	0 (0%)	1 (1%)	.406	1 (1%)	0 (0%)	0 (0%)	.669
STAG2	11 (7%)	8 (13%)	3 (3%)	.521	8 (10%)	3 (6%)	0 (0%)	.317
BCOR	13 (9%)	7 (11%)	6 (7%)	.311	11 (13%)	2 (4%)	0 (0%)	.070
SF3B1	8 (5%)	4 (6%)	4 (4%)	.580	6 (7%)	2 (4%)	0 (0%)	**.042**
Secondary AML, n (%)	31 (20%)	19 (31%)	12 (13%)	**.008**	16 (19%)	9 (19%)	6 (30%)	.541
Partner drug, n (%)								
Azacitidine	129 (86%)	60 (98%)	70 (79%)	**<.001**	72 (87%)	40 (85%)	17 (90%)	.864
Decitabine	8 (6%)	1 (2%)	7 (8%)	.095	3 (4%)	3 (6%)	2 (10%)	.484
LD-ARAC	12 (8%)	0 (0%)	12 (14%)	**.002**	8 (9%)	4 (9%)	0 (0%)	.357
Response, n (%)								
ORR (CR or CRi)	86 (57%)	33 (54%)	53 (59%)	.507	62 (75%)	17 (36%)	7(35%)	**<.001**

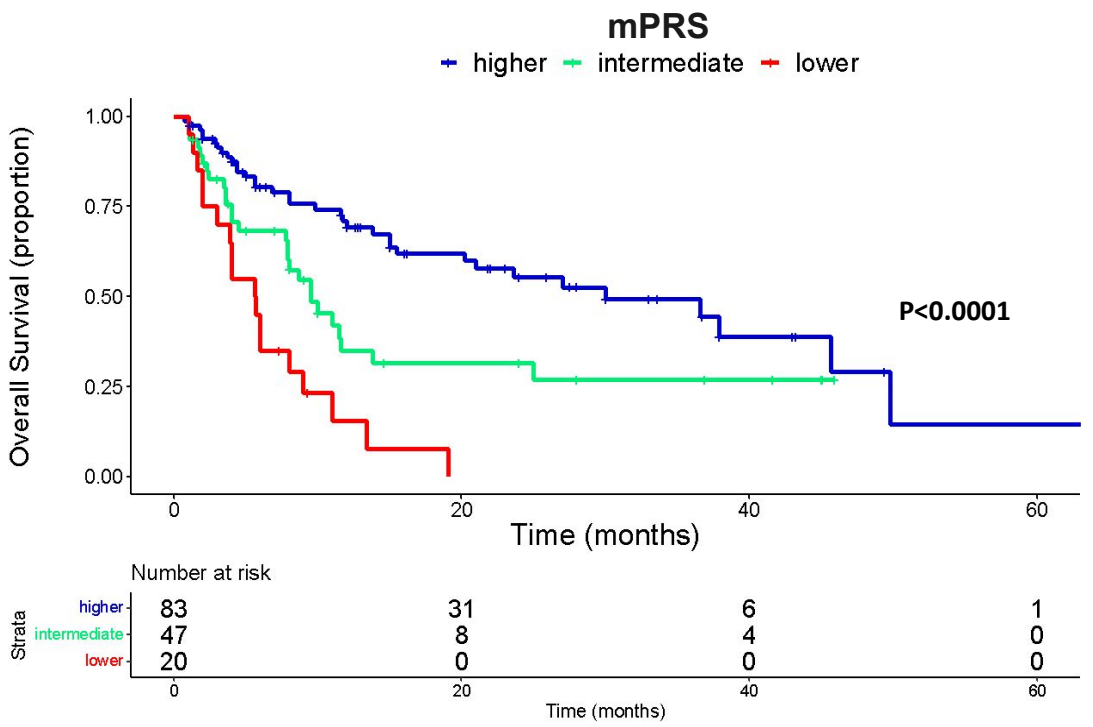
Abbreviations: AML, acute myeloid leukemia; ND, newly diagnosed; RR, relapsed or refractory; mPRS, molecular prognostic risk signature; ELN, European LeukemiaNet; LD-ARAC, low dose cytarabine; CR, complete remission; CRi, CR with incomplete hematological recovery; ORR, overall response rate; NA, not available.

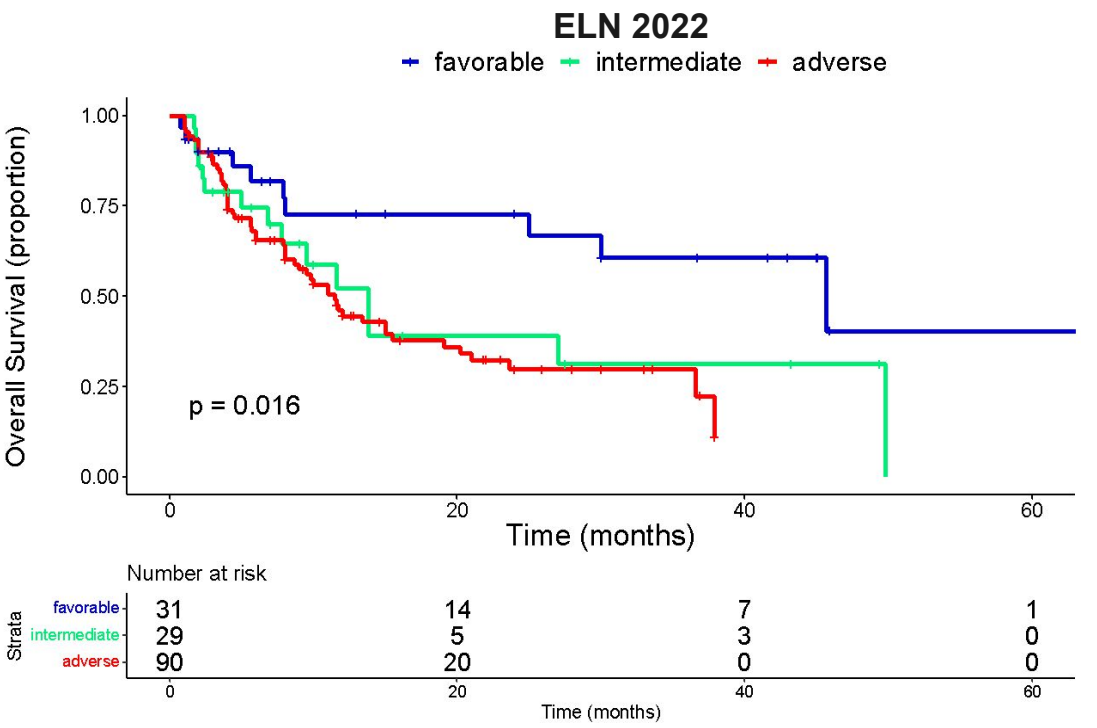
*p-value is calculated between ND cohort and RR cohort

**p-value is calculated between higher-, intermediate- and lower-benefit group

SUPPLEMENTARY FIGURE 1. Clinical outcome according to the mPRS and ELN2022 model in the entire cohort - OS according to the mPRS and ELN2022 model. (A) EFS according to the mPRS and ELN2022 model. (B) *Abbreviations: OS, overall survival; EFS, event free survival; mPRS, molecular prognostic risk signature; ELN, European LeukemiaNet; HR, hazard ratio; CI, confidence interval.*

A.





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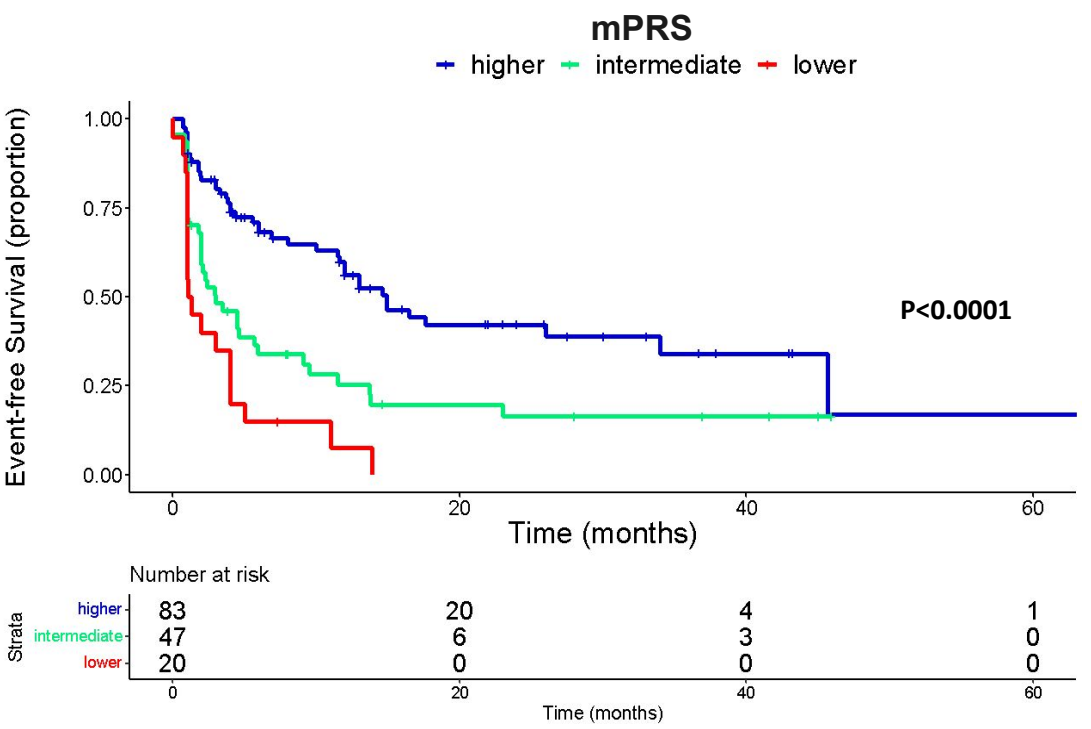

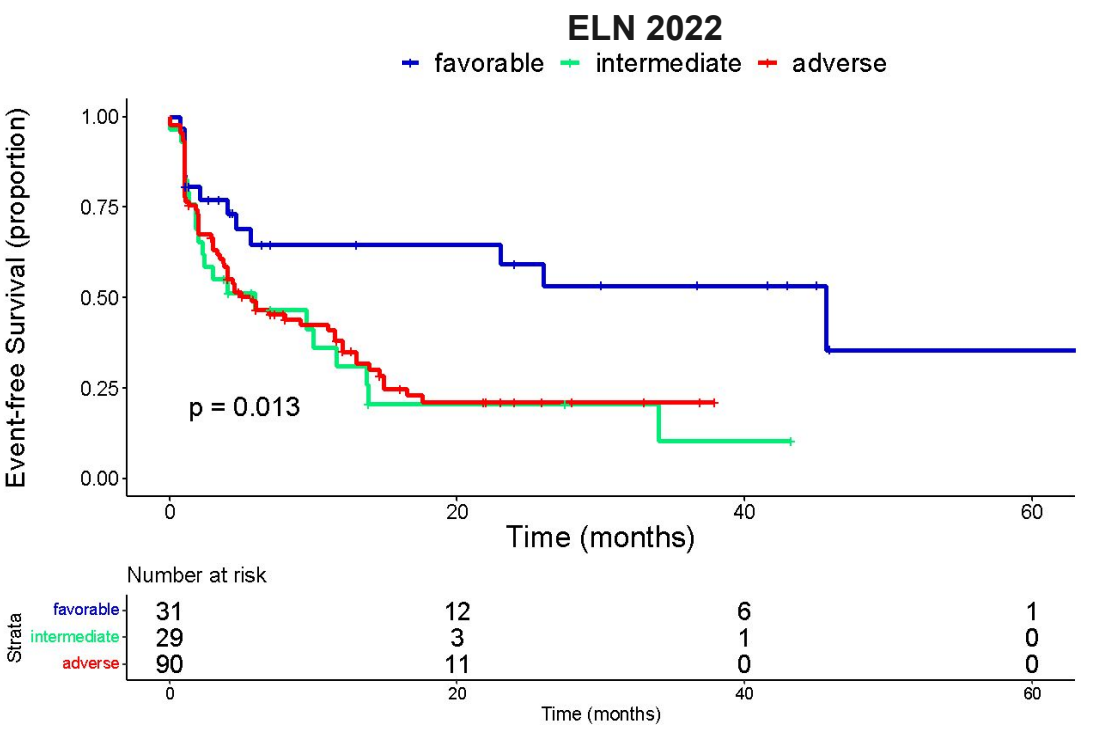

	Median OS, months (95% CI)	HR (95% CI)	P	Median EFS, months (95% CI)	HR (95% CI)	P
mPRS						
higher benefit	30.0 (13.8-46.2)		**<0.001**	14.9 (10.1-19.6)		**<0.001**
intermediate benefit	9.5 (6.5-12.6)	1.99 (1.19-3.32)	**0.008**	3.0 (0.2-5.6)	2.20 (1.40-3.44)	**0.001**
lower benefit	5.6 (2,0-9.3)	4.69 (2.58-8.55)	**<0.001**	1.1 (0.4-1.9)	4.28 (2.44-7.50)	**<0.001**
ELN 2022						
favorable	45.6 (18.3-73.0)		**0.022**	45.6 (15.4-75.9)		**0.020**
intermediate	13.8 (8.8-18.7)	2.21 (0.99-4.95)	**0.054**	5.9 (0.0-14.8)	2.57 (1.26-5.26)	**0.010**
adverse	11.5 (9.1-13.9)	2.66 (1.33-5.32)	**0.006**	5.7 (1.9-9.5)	2.30 (1.23-4.30)	**0.009**