

# Measurable residual disease-guided therapy in intermediate-risk acute myeloid leukemia patients is a valuable strategy in reducing allogeneic transplantation without negatively affecting survival

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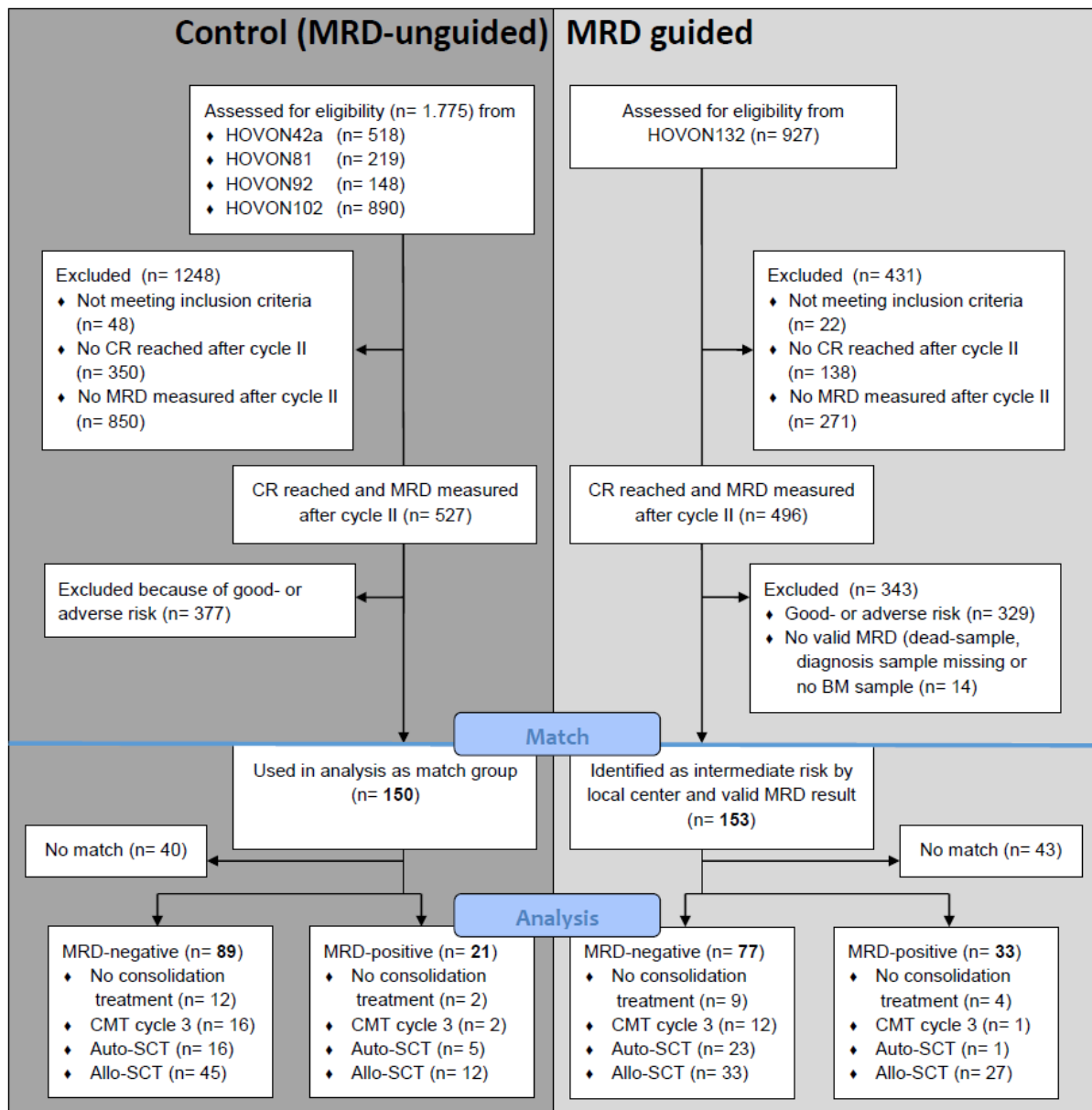
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Lettero et al. Supplementary table and figures

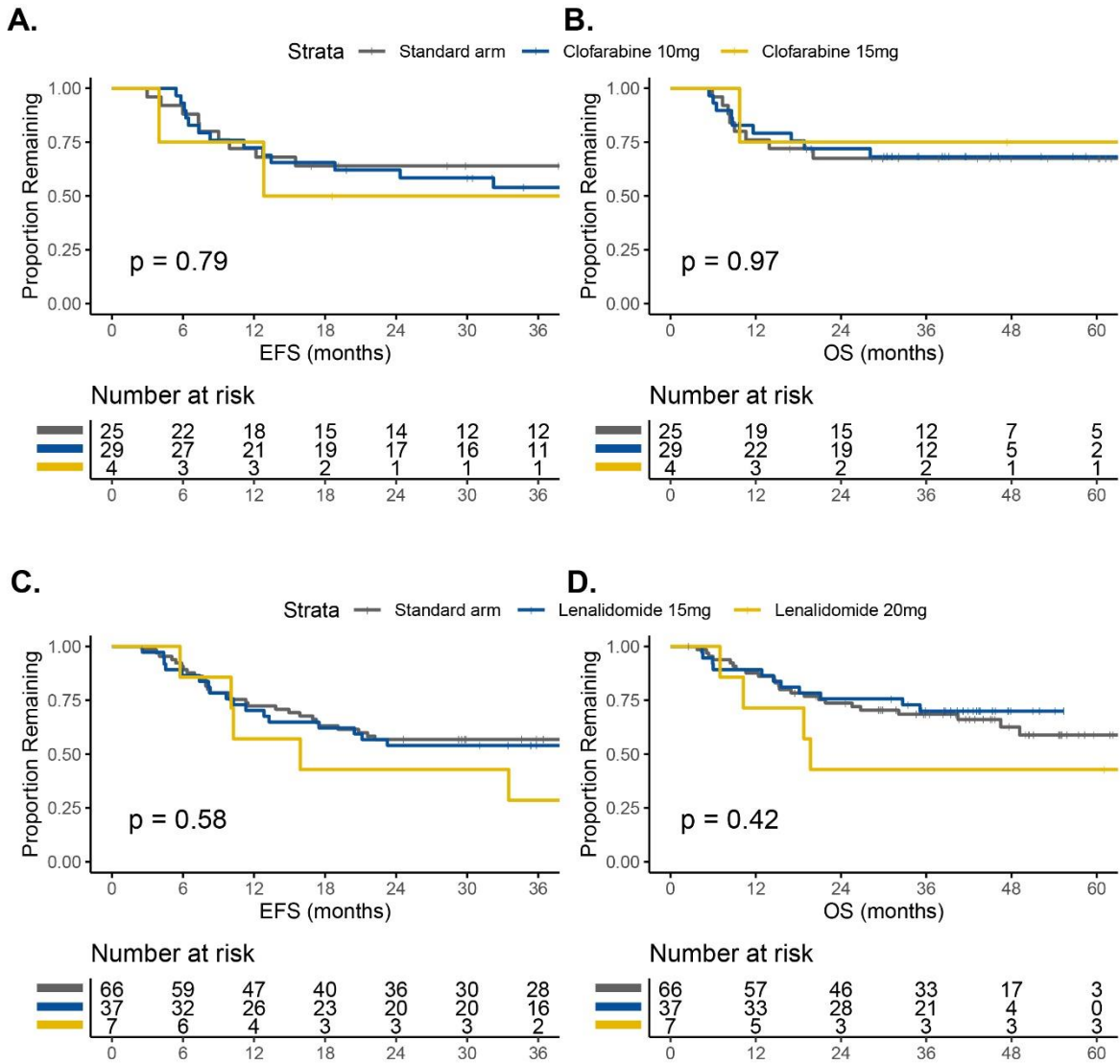
		No. of patients evaluated	MRD-unguided group (%)	MRD-guided group (%)	P-value
<b>Total</b>			110 (100)	110 (100)	
<b>Trial code</b>	HO42a		40 (36)	0 (0)	
	HO81		7 (6)	0 (0)	
	HO92		5 (5)	0 (0)	
	HO102		58 (53)	0 (0)	
	HO132		0 (0)	110 (100)	
<b>Male sex</b>			53 (48)	56 (51)	0.686
<b>Age (years)</b>	≤45		30 (27)	42 (38)	0.223
	46-60		59 (54)	51 (46)	
	>60		21 (19)	17 (16)	
<b>WHO/ECOG performance status</b>	0		60 (55)	61 (56)	0.990
	1		46 (42)	45 (41)	
	2		4 (4)	4 (4)	
<b>Diagnostic subgroup</b>	AML		101 (92)	103 (94)	0.604
	High-risk RAEB		9 (8)	7 (6)	
<b>AML type</b>	De novo		94 (86)	100 (91)	0.247
	sAML		13 (12)	6 (6)	
	tAML		3 (3)	4 (4)	
<b>WBC, x 10<sup>9</sup> /L</b>	≤20		74 (67)	71 (65)	0.129
	20-100		33 (30)	29 (26)	
	>100		3 (3)	10 (9)	
<b>Cytogenetics</b>	CN-X-Y	215	94 (89)	76 (70)	0.003*
	CA rest		11 (10)	30 (28)	
	Monosomal karyotype <sup>#</sup>		1 (1)	3 (3)	
<b>Sub classification of normal karyotype (NK)</b>	NPM1-neg FLT3-ITD-neg	170	38 (40)	31 (41)	0.471
	NPM1-neg FLT3-ITD-pos		13 (14)	5 (7)	
	NPM1-pos FLT3-ITD-pos		35 (37)	32 (42)	
	NPM1/FLT3-ITD-unknown		8 (9)	8 (11)	
<b>Gene mutations</b>	NPM1-pos	200	37 (34)	36 (33)	0.895
	FLT3-ITD-pos	198	50 (46)	42 (38)	0.544
	NPM1-neg FLT3-ITD-neg	198	50 (46)	56 (51)	0.293
	NPM1-neg FLT3-ITD-pos		14 (13)	6 (6)	
	NPM1-pos FLT3-ITD-pos		36 (33)	36 (33)	
	IDH1-pos	183	11 (13)	11 (11)	0.722
	IDH2-pos	184	17 (20)	16 (16)	0.544
<b>MRD status after cycle II</b>	Neg		89 (81)	77 (70)	0.060
	Pos		21 (19)	33 (30)	
<b>Consolidation therapy received</b>	Cycle 3		18 (16)	13 (12)	0.772
	Auto-SCT		21 (19)	24 (22)	
	Allo-SCT		57 (52)	60 (55)	
	None		14 (13)	13 (12)	

**Table S1: Characteristics of MRD-guided and MRD-unguided group.** Not shown is ASXL1, CEPBA, RUNX1, TP53, t(8;21) and inv(16) because all patients were negative. <sup>#</sup>All patients with a monosomal karyotype had a t(9;11)(p21.3;q23.3) simultaneously present, which takes precedence over

rare, concurrent adverse-risk gene mutations, making these patients intermediate risk according to the ELN-2017 classification. CA, abnormal cytogenetics; CN, normal cytogenetics; ECOG, Eastern Cooperative Oncology Group; neg, negative; pos, positive; sAML, secondary AML (after myelodysplastic syndrome and antecedent hematologic disease); tAML, therapy-related AML (in case of previous chemotherapy or radiotherapy); WHO, World Health Organization. Statistical differences are assessed using Pearson Chi-Square test or Fisher's Exact Test in categorical variables, and the Mann-Whitney U test was used to analyze continuous variables.



**Figure S1. Consort diagram.** Four studies were used for the matched MRD-unguided group (left side) and one study for the MRD guided group (right side). After matching, 110 patients remained in both groups.



**Figure S2: Event-free survival (EFS) and overall survival (OS) stratified by experimental agent randomization in the HO102 (top) and the HO132 study (bottom).** The EFS and OS from the HO81 and HO92 studies were also not significantly different, but are not shown since only 7 and 5 patients are included, respectively. **(A)** EFS for patients included from the HO102 trial, stratified by randomization. **(B)** OS for patients included from the HO102 trial, stratified by randomization. **(C)** EFS for patients included from the HO132 trial, stratified by randomization. **(D)** OS for patients from HO132 trial, stratified by treatment arm.