LETTER TO THE EDITOR

Impact of high-sensitivity next-generation sequencing measurable residual disease and subsequent stem cell transplant in patients receiving blinatumomab for MRD-positive B-cell acute lymphoblastic leukemia

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Supplementary Information

Supplemental Table 1. NGS MRD response rates NGS MRD response rates

Supplemental Figure 1. Disposition of patients who received blinatumomab for MRD

Supplemental Figure 2. Impact of NGS MRD negativity after blinatumomab in different subgroups

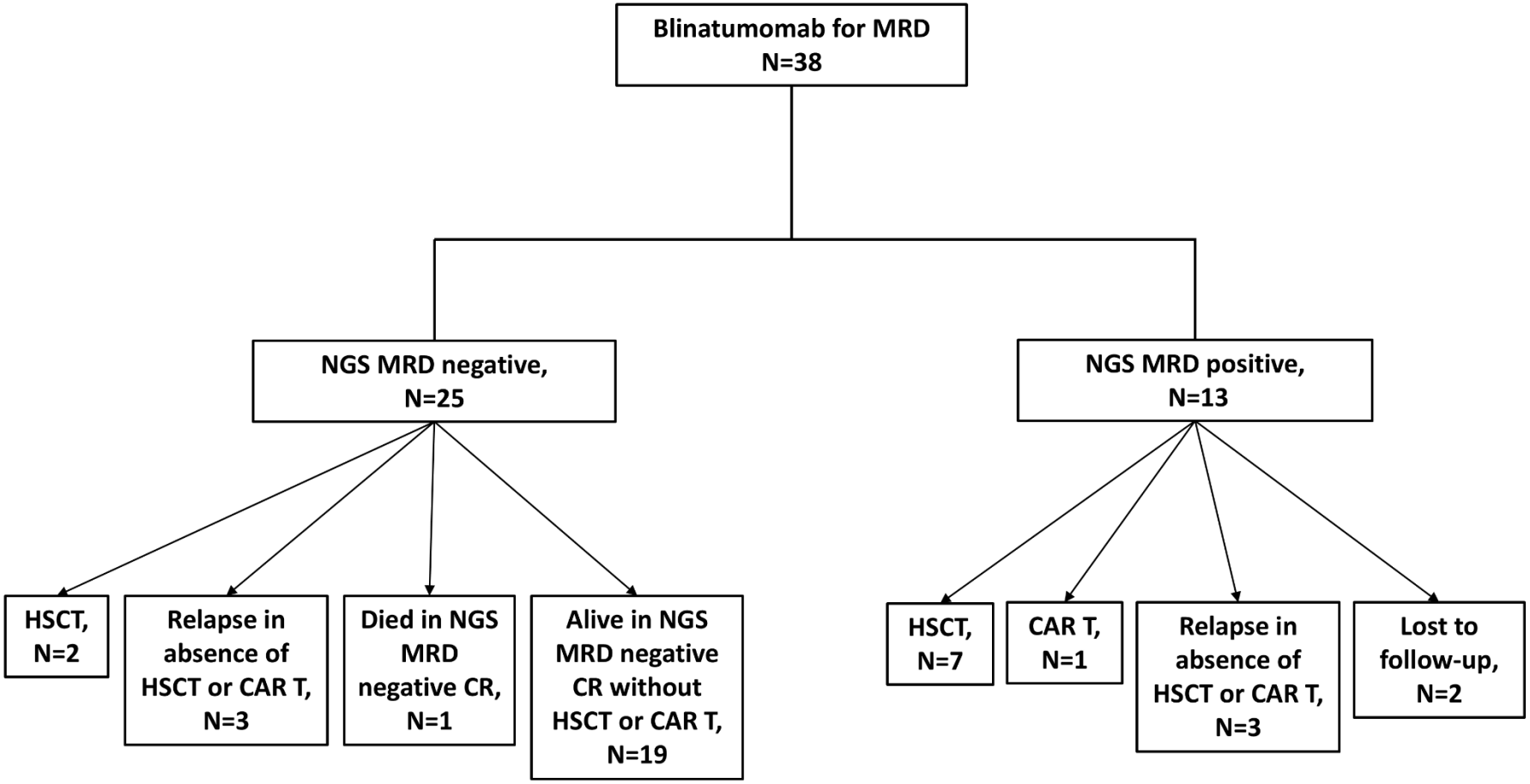
Supplemental Table 1. NGS MRD response rates

Response N (%)	Ph-negative (N=26)	Ph-positive (N=12)	Total cohort (N=38)	P*
NGS MRD negativity (overall)	14/26 (54)	11/12 (92)	25/38 (66)	
NGS MRD negativity (after 1 cycle)	8/18 (44)	7/9 (78)	15/27 (56)	
MFC+	8/15 (53)	7/8 (88)	15/23 (65)	>0.99
MFC-/NGS+	6/11 (55)	4/4 (100)	10/15 (67)	
MRD ≥10^{-3}	3/8 (38)	3/3 (100)	6/11 (55)	0.46
MRD <10^{-3}	11/18 (61)	8/9 (89)	19/27 (70)	
CR1	12/21 (57)	10/11 (91)	22/32 (69)	0.39
CR2 or later	2/5 (40)	1/1 (100)	3/6 (50)	
No prior inotuzumab exposure	4/7 (57)	9/10 (90)	13/17 (77)	0.31
Prior inotuzumab exposure	10/19 (53)	2/2 (100)	12/21 (57)	
Standard-risk disease	7/12 (58)	-	7/12 (58)	0.71
High-risk disease	7/14 (50)	-	7/14 (50)	

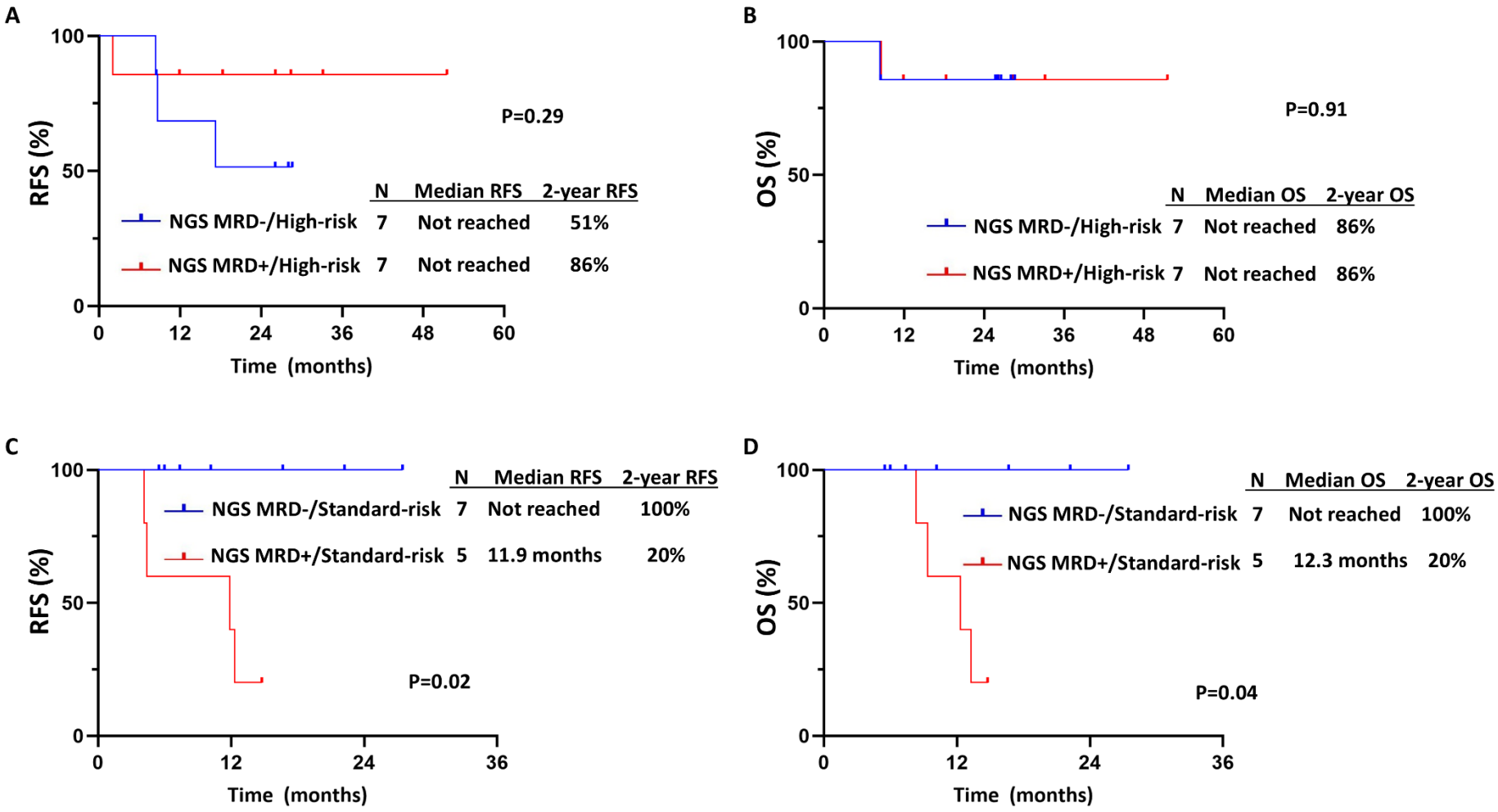
*P-value refers to comparisons in total cohort

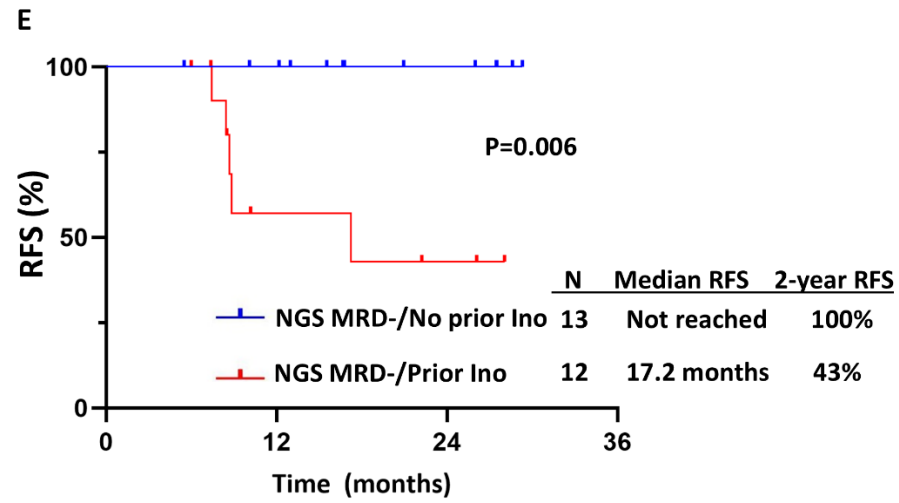
Abbreviations: NGS, next generation sequencing; MRD, measurable residual disease; Ph-, Philadelphia chromosome negative; Ph+, Philadelphia chromosome positive; MFC, multiparameter flow cytometry; CR1, first remission

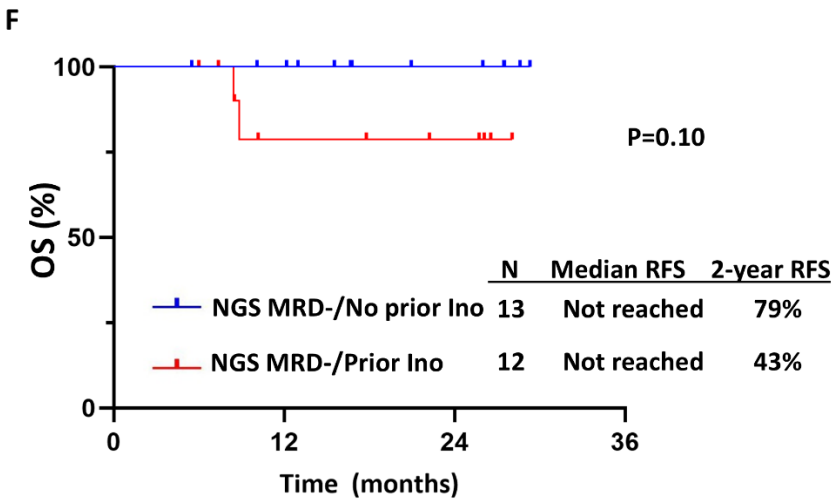
Supplemental Figure 1. Disposition of patients who received blinatumomab for MRD

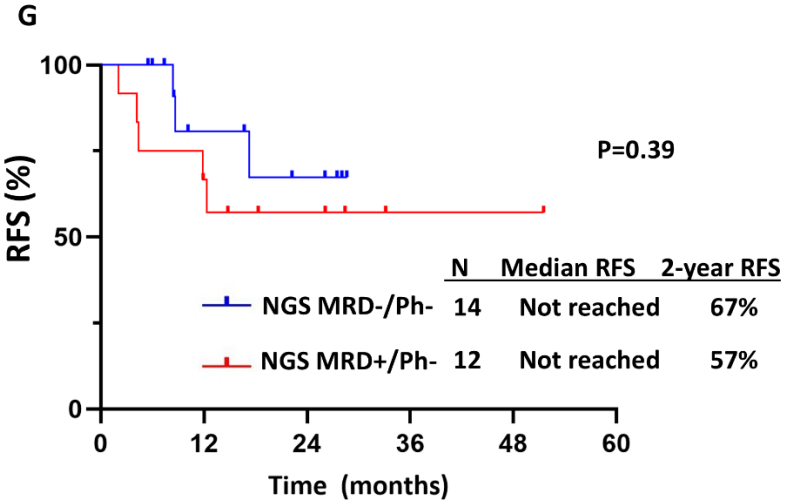


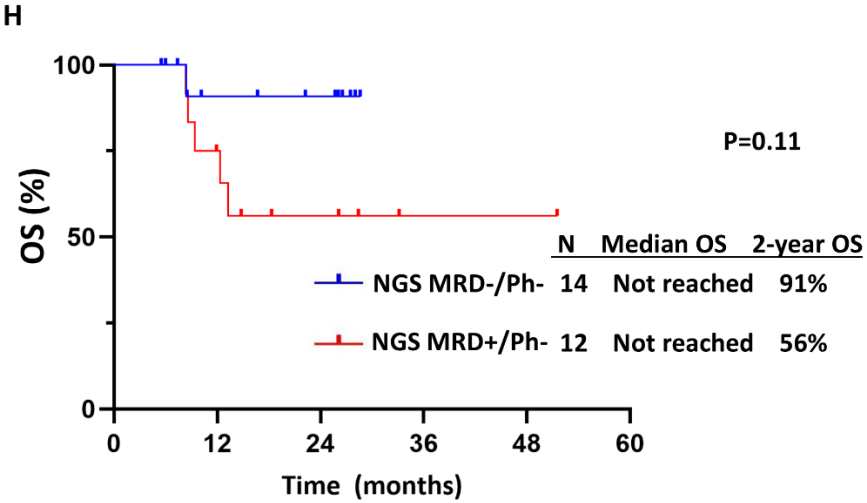
Supplemental Figure 2. Impact of NGS MRD negativity after blinatumomab in different subgroups. **(A, B)** RFS and OS of NGS MRD responders vs non-responders in high-risk Ph-negative B-cell ALL. **C, D)** RFS and OS of NGS MRD responders vs non-responders in standard-risk, Ph-negative B-cell ALL. **(E, F)** RFS and OS of NGS MRD responders with and without prior inotuzumab exposure. (**G, H**) RFS and OS of NGS MRD responders vs non-responders in Ph-negative B-ALL. **(I, J**) RFS and OS of NGS MRD responders vs non-responders in Ph-positive B-ALL

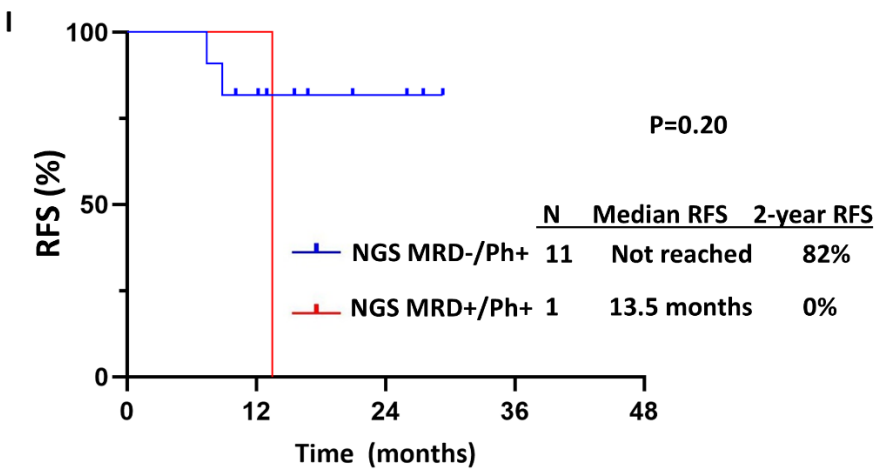


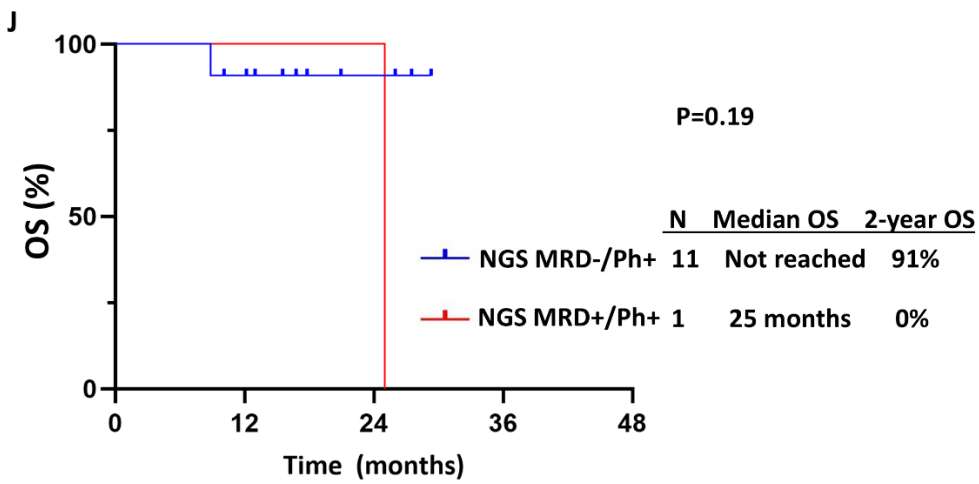

E
100
50
0
RFS (%)
P=0.006
N Median RFS 2-year RFS
NGS MRD-/No prior Ino 13 Not reached 100%
NGS MRD-/Prior Ino 12 17.2 months 43%
0 12 24 36
Time (months)


F
100
50
0
OS (%)
P=0.10
N Median RFS 2-year RFS
NGS MRD-/No prior Ino 13 Not reached 79%
NGS MRD-/Prior Ino 12 Not reached 43%
0 12 24 36
Time (months)


G
100
50
0
RFS (%)
P=0.39
N Median RFS 2-year RFS
NGS MRD-/Ph- 14 Not reached 67%
NGS MRD+/Ph- 12 Not reached 57%
0 12 24 36 48 60
Time (months)


H
100
50
0
OS (%)
P=0.11
N Median OS 2-year OS
NGS MRD-/Ph- 14 Not reached 91%
NGS MRD+/Ph- 12 Not reached 56%
0 12 24 36 48 60
Time (months)


I
100
50
0
RFS (%)
0
12
24
36
48
Time (months)
P=0.20
N Median RFS 2-year RFS
NGS MRD-/Ph+ 11 Not reached 82%
NGS MRD+/Ph+ 1 13.5 months 0%


J
100
50
0
OS (%)
0
12
24
36
48
Time (months)
P=0.19
N Median OS 2-year OS
NGS MRD-/Ph+ 11 Not reached 91%
NGS MRD+/Ph+ 1 25 months 0%