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Table S1. Characteristics of the acute myeloid leukemia patients.

	Number (N = 54)
Sex (male/female)	29/25
Age, (median, range, y)	
≥60 (66, 60-88)	33
<60 (48, 20-59)	21
Treatment	
No treatment	0
Chemotherapy	54
HSCT	31
No treatment info	0
MFC, blasts in BM	
Detected	33
Undetected	21
Cytogenetics	
Normal	28
Abnormal	25
Unknown	1
Gene mutations (positive/total no. of patients tested)	
<i>TET2</i>	4/54
<i>IDH1</i>	3/54
<i>IDH2</i>	3/54
<i>WT1</i>	3/54

HSCT, hematopoietic stem cell transplant; y, year; MFC, multiparameter flow cytometry; BM, bone marrow.

Table S3. Multivariate cox regression analysis.

Variable	Hazard ratio (95% CI)	<i>P</i>
Myeloblast \leq 5%	4.6 (0.72-29.3)	0.11
Myeloblast > 5%	1.3 (0.17-10.0)	0.80
Cluster 2	1.0 (0.16-6.6)	0.98
Cluster 3	7.8 (1.1-53.3)	0.03

Myeloblast count of 0% and cluster 1 are reference groups in multivariate cox regression analysis.

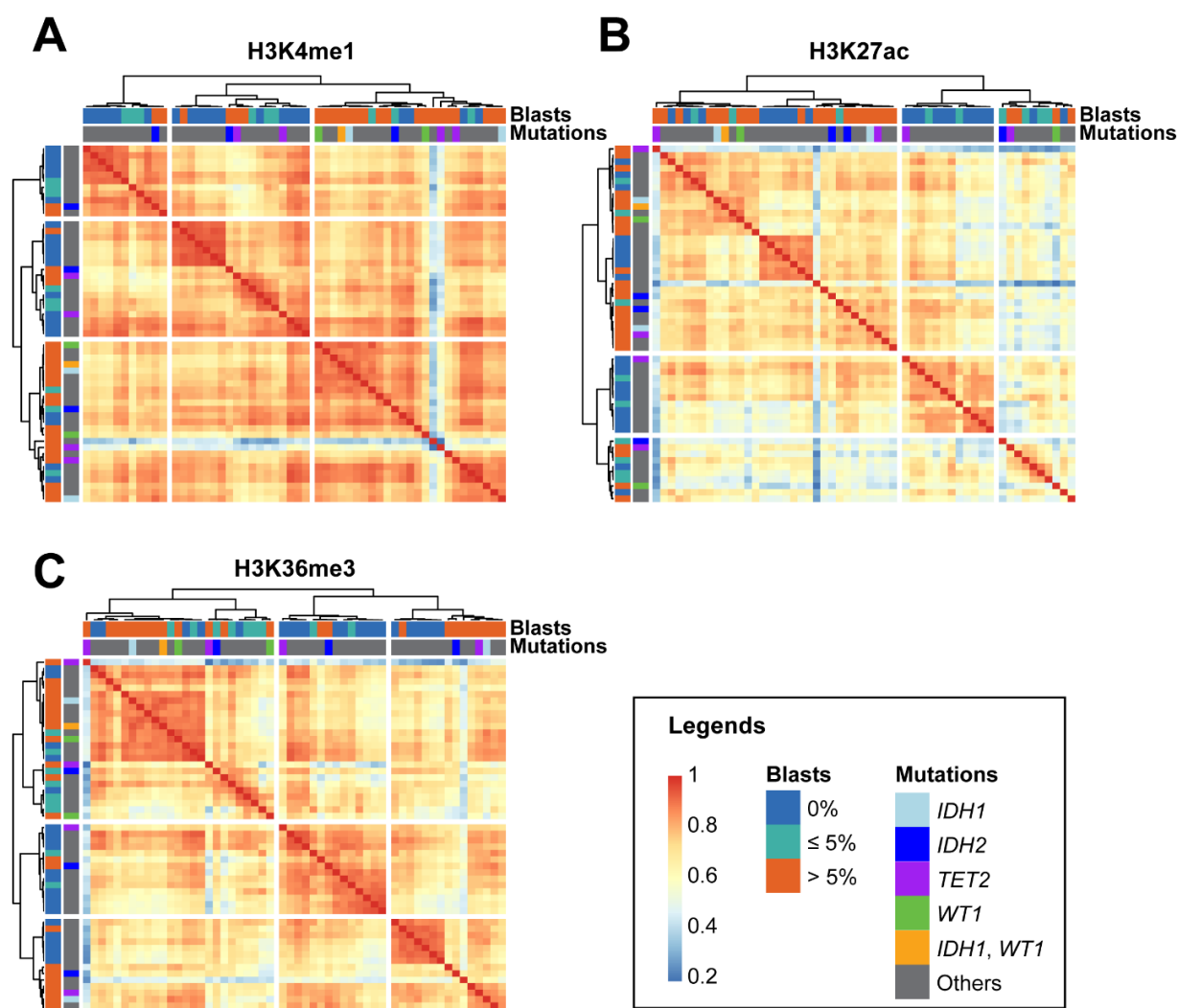


Figure S1. Classification of acute myeloid leukemia patient samples. Unsupervised hierarchical clustering of 54 AML samples using pairwise Pearson's correlation coefficient of 5-hydroxymethylcytosine (5hmC) levels in 500 most variable regions marked with H3K4me1 (A), H3K27ac (B), and H3K36me3 (C).

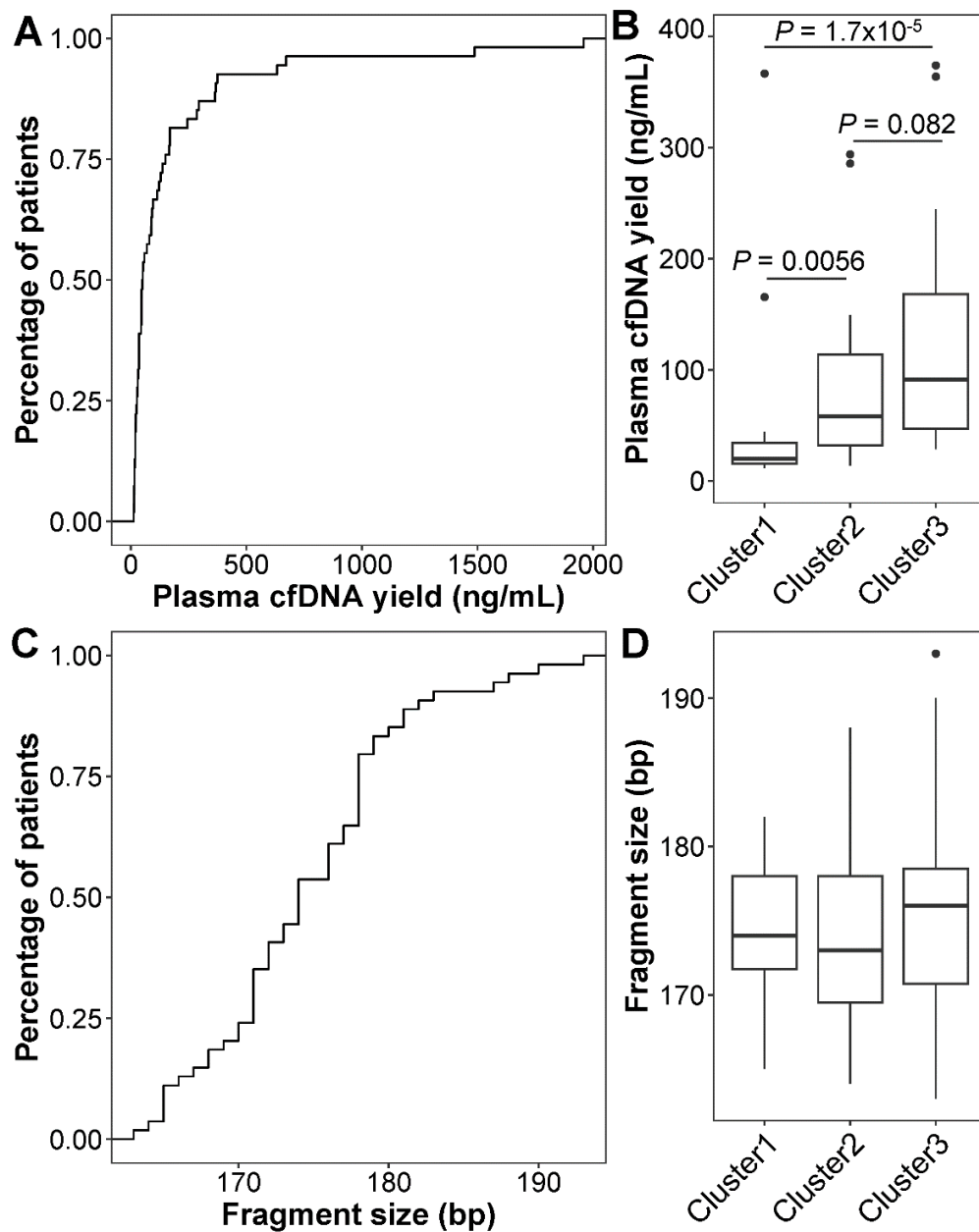


Figure S2. Characteristics of plasma cfDNA in acute myeloid leukemia patients. (A) Cumulative frequency distribution of plasma cfDNA yield in acute myeloid leukemia (AML) patients. (B) Boxplot of plasma cfDNA yield among three clusters. The center line represents median. Bounds of box represent 25th and 75th percentiles. Whiskers are Tukey whiskers. (C) Cumulative frequency distribution of plasma cfDNA fragment sizes in AML patients. (D) Boxplot of plasma cfDNA fragment sizes among three clusters. The center line represents median. Bounds of box represent 25th and 75th percentiles. Whiskers are Tukey whiskers.