

Inhibition of menin, BCL-2, and FLT3 combined with a hypomethylating agent cures *NPM1/FLT3-ITD/-TKD* mutant acute myeloid leukemia in a patient-derived xenograft model

Bing Z. Carter,¹ Po Yee Mak,¹⁺ Wenjing Tao,¹⁺ Lauren B. Ostermann,¹ Duncan H. Mak,¹ Baozhen Ke,¹ Peter Ordentlich,² Gerard M. McGeehan,² and Michael Andreeff¹

¹Section of Molecular Hematology and Therapy, Department of Leukemia, The University of Texas MD Anderson Cancer Center, Houston, TX and ²Syndax, Waltham, MA, USA

¹PYM and WT contributed equally as second authors.

Correspondence:

B.Z. CARTER - bicarter@mdanderson.org
M. ANDREEFF -mandreef@mdanderson.org

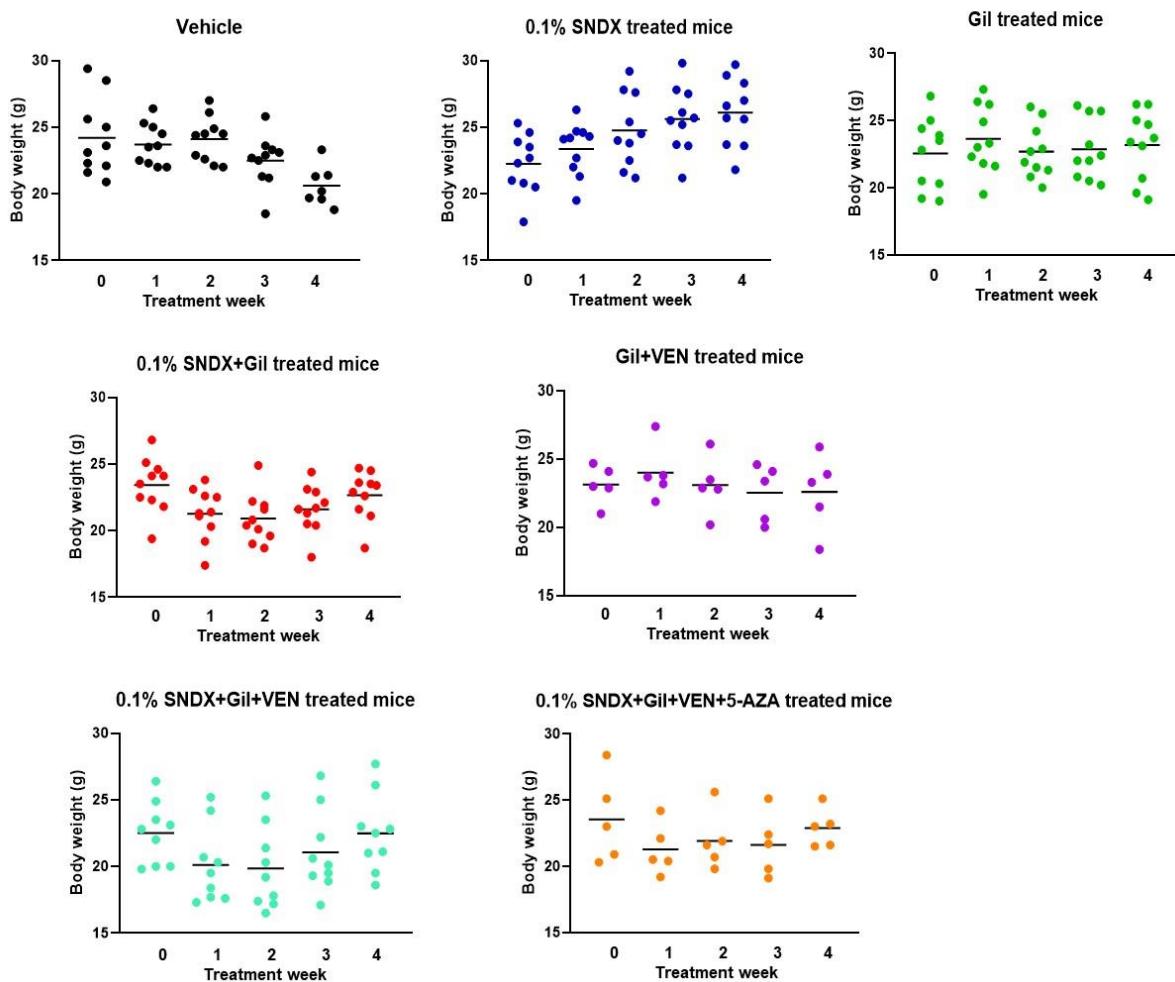
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Supplemental data to Letter to the Editor:

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Supplemental Figure 1



Supplemental Figure 1. Mouse body weights before and during treatment.

Supplemental Table 1. Characteristics of patients

number	source	Blast	cytogenetics	mutations	previous treatments and responses
1	PB	85%	46,XY[6]	NPM1, FLT3-ITD, DNMT3A;IDH2	Resistance to ASTX727, Venetolax and Gilteritinib.
2	PB	95%	46,XY[20]	NPM1, FLT3-ITD/TKD, WT1, DNMT3A	Resistance to Busulfan, Fludarabine and Cladribine, Azacitidine, Venetoclax, Gilteritinib, Cladribine with Idarubicin and Cytarabine (CLIA) plus Gilteritinib.
3	PB	94%	46,XX[1]	NPM1, FLT3-ITD, GATA1, DNMT3A, SMC3, TET2, WT1	Relapsed/Refractory AML. Resistance to 7+3 and GO, High dose Ara-C and midostaurin and azacitidine/venetoclax.
4	PB	93%	Diploid male karyotype 46,XY[14] 2 metaphases photographed/karyotyped	NPM1,FLT3-ITD/TKD, IDH1, DNMT3A	Resistance to 3 + 7 chemotherapy and MEC plus HiDAC consolidation.

Supplemental Table 2. Leukemia cells in mouse BM, spleen, and PB of 3-drug and 4-drug combination treatment groups at death determined by flow cytometric measurement of human CD45 positivity.

Treatment group	Survival days	huCD45+ (%)				Histology	death
		BM	Spleen	PB			
SNDX+VEN+Gil	162	63.5	93.5				moribund
	171						found dead
	195	22.7	49.9				moribund
	274						found dead
	414	0	0	0			sac due to age
	414	0	0	0			sac due to age
SNDX+VEN+Gil+5AZA	189						found dead
	258	0.06	0.15			yes	moribund
	414	0	0	0			sac due to age
	414	<0.001	0	0			sac due to age
	414	0	0	0			sac due to age

huCD45, human CD45; PB, peripheral blood; SNDX, SNDX-50469; VEN, venetoclax; Gil, gilteritinib; 5AZA, 5-azacytidine.