Intraperitoneal delivery of a novel drug-like compound improves disease severity in severe and intermediate mouse models of Spinal Muscular Atrophy

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Supplementary Table 1A and B

Structure	Solubility (pH 7.4)	SMN2 EC50	Mouse µsome T _{1/2}	Human µsome T _{1/2}	Plasma stability	
31 μM		0.28 μM	39 min	>120 min	326 min	

Dose	Plasma	Plasma	Plasma	Plasma	Brain	Brain	Brain	Brain	B/P
(mg/kg)	C _{max} (ng/mL)	AUC _{0-24h} (ng.h/mL)	T _{max} (h)	T _{1/2} (h)	C _{max} (ng/mL)	AUC _{0-24h} (ng.h/mL)	T _{max} (h)	T _{1/2} (h)	
20 mpk IP	7660	34291	0.5	2.2	13500	51310	0.5	1.9	1.5/1

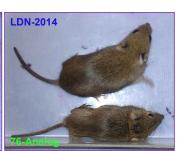
Supplementary Tables 1A and B LDN-2014 characteristics and pharmacokinetic properties

Tables are adapted from previously published data for compound LDN-2014 (compound **27**, ¹⁶). (**A**) General characteristics of LDN-2014. (**B**) Mouse pharmacokinetic properties of LDN-2014

Supplementary Figure 1







Supplementary Figure 1 In vivo efficacy of LDN-2014 in Smn^{2B/-} mice

LDN-2014 (5 mg/kg), 76-series analog (5 mg/kg) or vehicle (DMSO) injections were administered by IP every other day. Representative images of general appearance of LDN-2014 treated mice in comparison to mice treated with the 76-series analog at age of P60. Development of spinal deformity (kyphosis) can be clearly seen in animals treated with the 76-series analog.