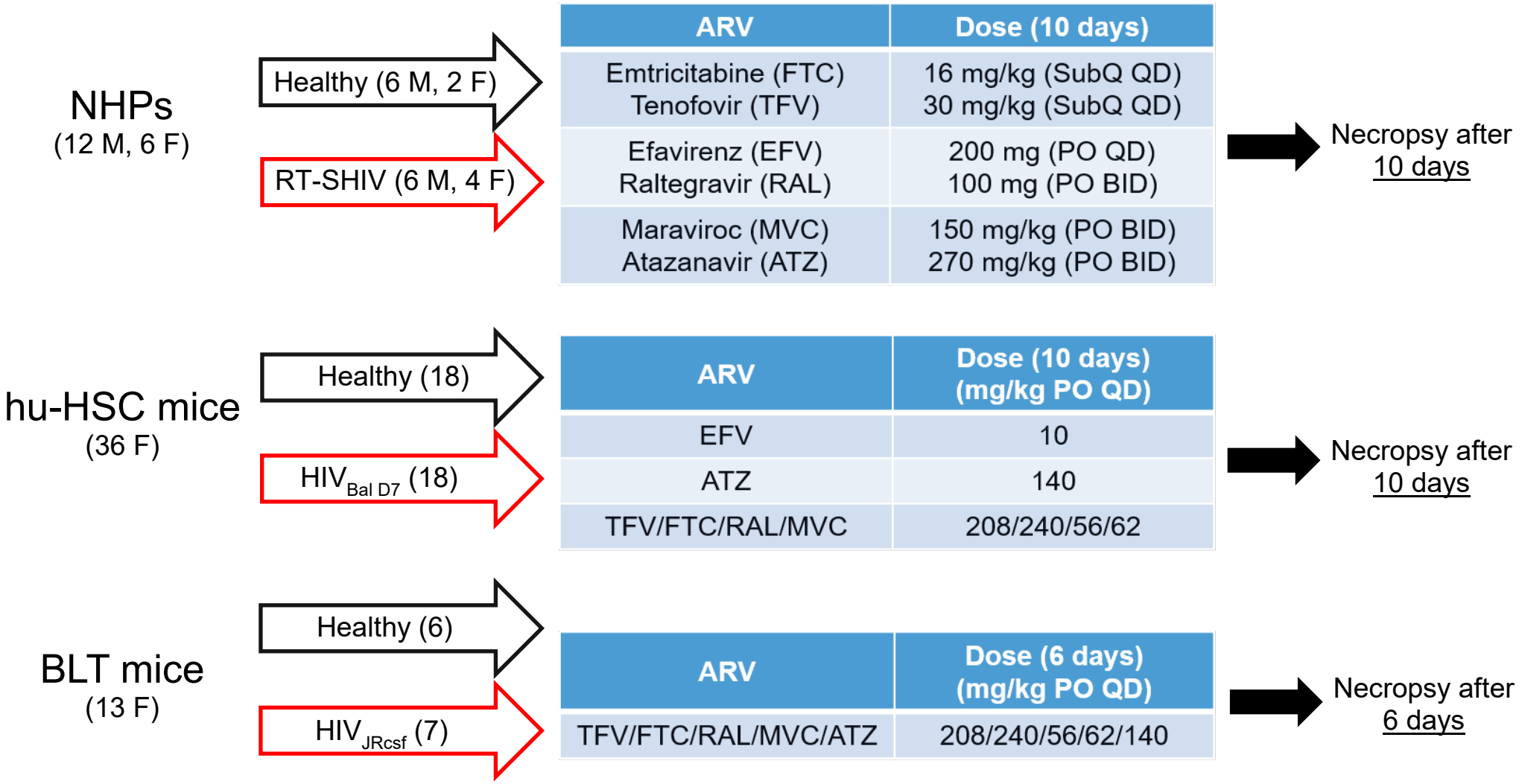

FIG S1 Antiretroviral doses and combinations in preclinical species. Abbreviations: ARV, antiretroviral; NHP, nonhuman primates; BLT, bone marrow-liver-thymus. Dosing abbreviations: SubQ, subcutaneous; QD, daily; PO, by mouth; BID, twice daily. BLT mice were not dosed with EFV due to toxicity concerns.

Table S1 Physicochemical properties of analyzed ARVs and the influence of drug transporter proteins (1–9)

	Physicochemical Properties			Drug Transporter Affinities		
ARV	**Log P**	**pKa**	**Percent protein bound (%)**	**Substrate**	**Inhibitor**	**Inducer**
FTC	-0.5	2.65	<4	MRP1, ENT1	MRP1, MRP2	PGP
TFV	-1.6	3.75	<5	MRP2, MRP4, BCRP, ENT1	MRP1, MRP2	
EFV	4.6	10.2	99.5	BCRP	MRP1, MRP2, PGP, BCRP	PGP
ATV	4.5	4.7+	86	MRP1, MRP2, PGP, OATP2A1	PGP, BCRP, OATP2A1	PGP
RAL	1.1	6.3¶	83	PGP, BCRP		
MVC	5.1	7.3	76	MRP2, PGP	PGP	

ARV, antiretroviral; FTC, emtricitabine; TFV, tenofovir; EFV, efavirenz; ATV, atazanavir; MVC, maraviroc; RAL, raltegravir.

+ indicates pKa value of ATV was derived from Clinical Pharmacology and Biopharmaceutics Review Application Number 21-567, which can be accessed here: https://www.accessdata.fda.gov/drugsatfda_docs/nda/2003/21-567_Reyataz_BioPharmr_P1.pdf

¶ indicates pKa value of RAL was derived from Clinical Pharmacology and Biopharmaceutics Review Application Number 203045Orig1s000, which can be accessed here: https://www.accessdata.fda.gov/drugsatfda_docs/nda/2011/203045Orig1s000ClinPharmR.pdf

Percent protein bound values derived from individual package inserts available at: https://dailymed.nlm.nih.gov/dailymed/

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