**Table S3.** Pharmacodynamic (PD) model development for the exposure-response analysis of disulfiram and metabolites on plasma HIV-1 RNA. Each metabolite model represents a separate model that included only the metabolite itself. P-values are from likelihood ratio tests comparing models to the reference model.

Model	-2 Log Likelihood (OFV)	Pª	P <sup>b</sup>	df
No drug effect	1625.40			0
Drug effect <sup>a</sup>	1611.01	1.5 x 10 <sup>-4</sup>		1
Dose effect <sup>b</sup>	1602.05	3.4 x 10 <sup>-5</sup>	0.01	3
Drug exposure effect <sup>c</sup>				
AUC <sub>0-72</sub> DSF effect	1610.00	0.004	0.80	4
AUC <sub>0-72</sub> M1 effect	1610.26	0.004	0.86	4
AUC <sub>0-72</sub> M2 effect	1609.27	0.003	0.63	4
AUC <sub>0-72</sub> M3 effect	1608.38	0.002	0.45	4
AUC <sub>0-72</sub> M4 effect	1608.26	0.002	0.43	4

Abbreviations: OFV = objective function value; df = degrees of freedom; AUC = area under the time by concentration curve; DSF = disulfiram; M1-M4 = metabolites 1-4. <sup>a</sup> Reference model is the "No drug effect" model. <sup>b</sup> Reference model is the "Drug effect" model. <sup>c</sup> Drug effect model: changes in CA-US RNA during and after disulfiram administration, with both a fixed and random effect for during/after vs before disulfiram administration. <sup>d</sup> Dose effect: changes in CA-US RNA over time by administered disulfiram dose. <sup>e</sup> Drug exposure effect: changes in CA-US RNA during/after vs before disulfiram administration, by metabolite concentrations measured as the area under the curve.