

Table 2
Toxicokinetic parameters^a for vinpocetine and apovincaminic acid in dam plasma following a daily gavage dose of vinpocetine in HSD rats from GD6 to GD18.

Parameter	Dose	
	5 mg/kg	20 mg/kg
Vinpocetine^b		
C _{max} _Observed (ng/mL) ^c	497	1420
C _{max} _Predicted (ng/mL)	342 (36)	948 (133)
T _{max} Observed (h)	0.750	0.750
T _{max} Predicted (h)	1.11 (0.28)	1.37 (0.40)
K01(h ⁻¹)	2.44 (0.94)	1.94 (0.88)
K01 half-life (h)	0.284 (0.110)	0.358 (0.162)
K10 (h ⁻¹)	0.201 (0.015)	0.173 (0.019)
K10 half-life (h)	3.45 (0.25)	4.02 (0.45)
AUC (0-T) (ng/mL.h)	1830	7020
AUC _∞ (ng/mL.h)	2120 (220)	6960 (940)
Cl1_F (mL/h/kg)	2350 (240)	2870 (390)
V1_F (mL/kg)	11,700 (1700)	16,700 (3330)
Apovincaminic acid^d		
C _{max} _Observed (ng/mL)	1070	2560
T _{max} Observed (h)	1.50	1.00
λ _z (h ⁻¹)	0.170	0.157
Half-life (h)	4.07	4.41
AUC (0-T) (ng/mL.h)	6060	23,500
AUC _∞ (ng/mL.h)	6170	24,200
Cl1_F (mL/h/kg)	811	826
V1_F (mL/kg)	4760	5250

^a Values given are mean (standard error, SE).

^b Based on one-compartmental model with first order input, first order output, and 1/Yhat² weighting.

^c Observed values have no SE to report.

^d Based on non-compartmental analysis (NCA).