

S5 Table. Pharmacokinetic parameters of praziquantel (PZQ) enantiomers and its major metabolites in in Healthy Normal Volunteers (HNV) after administration of racemic PZQ, or the single PZQ enantiomer itself. Using an Independent-Samples Kruskal-Wallis Test, the difference in AUC of the enantiomers found to be statistically significant (P=0.007) at 40 mg/kg only. The brands, when named, are listed in subscript: (ODT): represents new racemic 150mg oral dispersion formulation (dispersed in water), L-ODT: (R)-PZQ formulation, CYS: Cysticide formulation given with water. The superscript descriptions show the additional information of the study; (a): Fasting, (b): Without H₂O, (c): Crushed tablets and Fed state. Unless otherwise stated the following acronyms represent; AUC: Area under the plasma concentration-time curve, B (AUC_{0-inf}): Area under the plasma concentration-time curve extrapolated from time zero to infinity, t_{1/2}: Elimination half-life, C_{max}: Peak plasma concentration, T_{max}: Time to reach peak plasma concentration following drug administration.

PZQ Dose (mg/kg)	Drug Administered	Drug Measured	N	t _{1/2} (h)	T _{max} (h)	C _{max} (ng/ml)	AUC	
							(ng* h/ml)	(ng* h/ml)
10	(R)-PZQ (L-ODT) ^[1, 2]							
	HNV	(R)-PZQ	18	1.06 (N=17)	2.25	90		217 ^B (N=17)
20	(R)-PZQ (L-ODT) ^[1, 2]							
	HNV	(R)-PZQ	36	2.98	2.50	379		825 ^B
	HNV ^(a)		35	2.80	2.00	131		506 ^B
	HNV ^(b)		36	2.71	4.00	471		955 ^B
	PZQ (ODT) ^[1, 2]							
	HNV	(R)-PZQ	15	1.92 (N=14)	4.00	155		345 ^B
30	HNV	(S)-PZQ	15	3.96	3.50	786		2226 ^B
	(R)-PZQ (L-ODT) ^[1, 2]							
40	HNV	(R)-PZQ	17	3.30	3.00	1052		2324.9 ^B
	PZQ (ODT) ^[1, 2]							
	HNV	(R)-PZQ	30	3.31	3.00	881		1928,1970 ^B
	HNV ^(a)		14	4.17	4.25	189		864 ,925 ^B
	HNV	(S)-PZQ	30	4.58	3.00	2330		7542 ^B
	HNV ^(a)		14	5.28	4.50	839		4996 ^B
	PZQ (CYS) ^[1, 2]							
	HNV	(R)-PZQ	30	3.83	1.50	763		2048 ^B , 1994
	HNV ^(c)		15	3.07 (N=14)	2.50	446		1538 ^B (N=14),1343
	HNV	(S)-PZQ	30	4.62	2.00	2179		8293 ^B
60	HNV		15	4.35	3.50	1556		6509 ^B
	PZQ (ODT) ^[1, 2]							
	HNV	(R)-PZQ	15	4.20	3.00	1548		4871 ^B ,4770
	HNV	(S)-PZQ	15	4.35	4.00	3234		14686 ^B

		PZQ ^[3,4]						
1500	<i>HNV</i>	<i>(R)-PZQ</i>	1	1.68	2.73	51	338 ^B	
	<i>HNV</i>		9	1.55	2.67	160	870 ^B	
	<i>HNV</i>	<i>(S)-PZQ</i>	1	1.33	2.33	165	857 ^B	
	<i>HNV</i>		9	1.46	2.55	520	2990 ^B	
	<i>HNV</i>	<i>(R)-4-OH-</i>	1	1.51	2.56	2176	12865 ^B	
	<i>HNV</i>	<i>PZQ</i>	9	1.7	2.72	1310	8800 ^B	
	<i>HNV</i>		1	1.68	3.32	1169	7717 ^B	
	<i>HNV</i>	<i>(S)-4-OH-</i>	9	1.91	3.05	780	5600 ^B	
		<i>PZQ</i>						

References

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