

Supplementary Materials: Praziquantel–Clays as Accelerated Release Systems to Enhance the Low Solubility of the Drug

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Table S1. Statistical parameters corresponding to the fittings of all the experimental release results of PZQ and PZQ–SEP interaction products to the equations of distinct models.

Proposed models	Medium	Product	R ²	AIC		
Zero Order	Acidic medium pH = 3	PZQ	0.5451	92.651		
		PZQ–SE Pac	0.3602	64.636		
		PZQ–SEP dic	0.1153	8.527		
	SIF medium pH = 6.8	PZQ–SEP et	0.7613	43.354		
		PZQ	0.6017	88.472		
		PZQ–SE Pac	0.4405	63.787		
		PZQ–SEP dic	0.6719	38.991		
		PZQ–SEP et	0.6054	66.174		
		PZQ	0.8403	7.701		
First Order	Acidic medium pH = 3	PZQ–SE Pac	0.4803	2.329		
		PZQ–SEP dic	-	110.453		
		PZQ–SEP et	0.9236	4.773		
	SIF medium pH = 6.8	PZQ	0.9369	-0.923		
		PZQ–SE Pac	0.5581	-5.406		
		PZQ–SEP dic	0.9385	-1.962		
		PZQ–SEP et	0.9252	-6.168		
		PZQ	0.7442	11.352		
		Cube Root (Hixson Crowell)	Acidic medium pH = 3	PZQ–SE Pac	0.4403	-1.466
PZQ–SEP dic	-			108.167		
PZQ–SEP et	0.8729			-13.688		
SIF medium pH = 6.8	PZQ		0.8364	6.634		
	PZQ–SE Pac		0.5183	-6.689		
	PZQ–SEP dic		0.8920	-14.695		
	PZQ–SEP et		0.8341	-5.056		
	PZQ		-/0.7096	-/86.052		
	Square Root (Higuchi)		Acidic medium pH = 3	PZQ–SE Pac	-/0.5382	-/61.050
PZQ–SEP dic		-/0.2128		-/7.240		
PZQ–SEP et		-/0.6006		-/67.055		
(Release ≤ 63.2% ^a / all data ^b)		SIF medium pH = 6.8	PZQ	-/0.7808	-/81.902	
			PZQ–SE Pac	-/0.6237	-/59.423	
			PZQ–SEP dic	-/0.8343	-/31.477	
		PZQ–SEP et	-/0.7761	-/59.941		
		Power Law (Peppas)	Acidic medium pH = 3	PZQ	-/0.7498	-/19.334
				PZQ–SE Pac	-/0.7352	-/60.224
PZQ–SEP dic	-/0.3832			-/114.984		
(Release ≤ 63.2% ^a / all data ^b)	SIF medium pH = 6.8		PZQ–SEP et	-/0.7868	-/55.920	
			PZQ	-/0.8220	-/24.407	
			PZQ–SE Pac	-/0.8059	-/61.710	
	PZQ–SEP dic		-/0.9611	-/102.962		

Weibull	Acidic medium pH = 3	PZQ–SEPet	-/0.9042	-/-64.512
		PZQ	0.8999	-17.443
		PZQ–SEPac	0.8136	-41.182
		PZQ–SEPdic	-	-
	SIF medium pH = 6.8	PZQ–SEPet	0.9522	-26.455
		PZQ	0.9617	-29.813
		PZQ–SEPac	0.8665	-46.846
		PZQ–SEPdic	0.9544	-53.204
		PZQ–SEPet	0.9925	-67.154

^a Values obtained considering only drug released $\leq 63.2\%$; ^b Values obtained considering the complete drug released until 100%.

Table S2. Statistical parameters corresponding to the fittings of all the experimental release results of PZQ and PZQ–VHS interaction products to the equations of distinct models.

Proposed models	Medium	Product	R ²	AIC
Zero Order	Acidic medium pH = 3	PZQ	0.5451	92.651
		PZQ–VHSac	0.3102	42.590
		PZQ–VHSdic	0.9945	34.496
		PZQ–VHSet	0.9433	53.656
		PZQ	0.6017	88.472
		PZQ–VHSac	0.1516	65.619
	SIF medium pH = 6.8	PZQ–VHSdic	0.2148	47.386
		PZQ–VHSet	0.3864	59.811
		PZQ	0.8403	7.701
		PZQ–VHSac	0.4435	18.256
		PZQ–VHSdic	0.9933	11.796
		PZQ–VHSet	0.9637	-5.734
First Order	Acidic medium pH = 3	PZQ	0.9369	-0.923
		PZQ–VHSac	0.1973	20.774
		PZQ–VHSdic	0.2465	-6.151
		PZQ–VHSet	0.5896	7.904
		PZQ	0.7442	11.352
		PZQ–VHSac	0.4228	2.529
	SIF medium pH = 6.8	PZQ–VHSdic	0.9981	-60.378
		PZQ–VHSet	0.9944	-8.505
		PZQ	0.8364	6.344
		PZQ–VHSac	0.1842	9.836
		PZQ–VHSdic	0.2359	-12.633
		PZQ–VHSet	0.5256	0.171
Cube Root (Hixson Crowell)	Acidic medium pH = 3	PZQ	-/0.7096	-/86.052
		PZQ–VHSac	-/0.4555	-/44.734
		PZQ–VHSdic	-/0.9749	-/51.094
		PZQ–VHSet	-/0.6599	-/87.625
		PZQ	-/0.7808	-/81.903
		PZQ–VHSac	-/0.2749	-/63.892
	SIF medium pH = 6.8	PZQ–VHSdic	-/0.3630	-/45.085
		PZQ–VHSet	-/0.9750	-/39.245
		PZQ	-/0.7498	-/19.334
		PZQ–VHSac	-/0.6512	-/78.567
		PZQ–VHSdic	-/0.9741	-/41.975

(Release $\leq 63.2\%$ ^a / all data^b)

Power Law (Peppas)

(Release $\leq 63.2\%$ ^a / all data^b)

		PZQ-VHSet	-/0.7786	-/-23.972
		PZQ	-/0.8220	-/-24.407
	SIF medium pH = 6.8	PZQ-VHSac	-/0.4655	-/-56.212
		PZQ-VHSdic	-/0.5760	-/-76.253
		PZQ-VHSet	-/0.7534	-/-66.999
		PZQ	0.8999	-17.443
	Acidic medium pH = 3	PZQ-VHSac	0.7762	-34.075
		PZQ-VHSdic	0.9549	-31.442
		PZQ-VHSet	0.9948	-35.075
Weibull		PZQ	0.9617	-29.813
	SIF medium pH = 6.8	PZQ-VHSac	0.5524	-25.790
		PZQ-VHSdic	0.6120	-49.126
		PZQ-VHSet	0.8789	-44.003

^a Values obtained considering only drug released $\leq 63.2\%$; ^b Values obtained considering the complete drug released until 100%.