

Pharmacokinetic interaction of rosuvastatin with artichoke (*Cynara scolymus* L.) leaf extract in rats

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Appendix

Table 1: Calibration curve (1) for rosuvastatin.

Calibration curve (1)				
# Cal	Conc (ng/ml)	Rosuvastatin	Atorvastatin	Area Ratio
cal 1	2000	40412	284975	0.1418
cal 2	1000	22544	284975	0.0791
Cal 3	500	11374	254076	0.0448
cal 4	250	7545	299773	0.0252
cal 5	125	4248	288172	0.0147
cal 6	100	3203	222633	0.0144
cal 7	40	2165	225451	0.0096

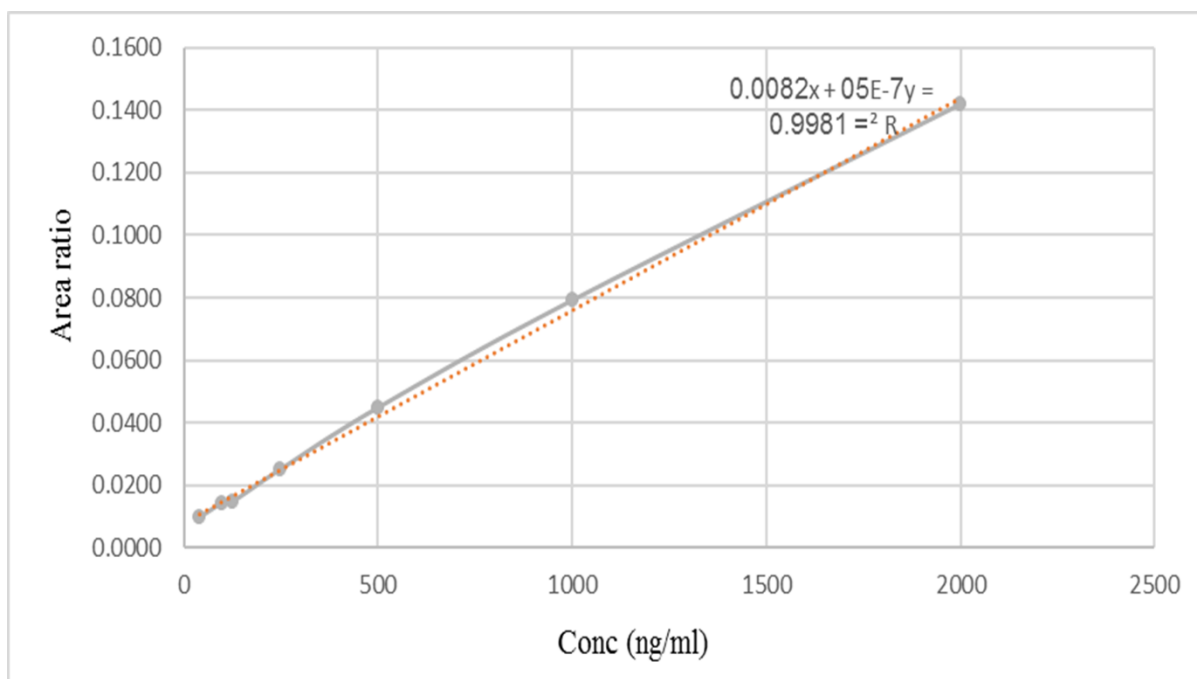


Figure 1. Calibration curve (1) for rosuvastatin.

Calibration curve (2)				
# Cal	Conc (ng/ml)	Rosuvastatin	Atorvastatin	Area Ratio
cal 1	2000	36544	284975	0.1282
cal 2	1000	20121	284975	0.0706
cal3	500	10212	254076	0.0402
cal 4	250	6854	299773	0.0229
cal 5	125	3745	288172	0.0130
cal 6	100	3021	222633	0.0136
cal 7	40	1949	225451	0.0086

Table 2: Calibration curve (2) for rosuvastatin.

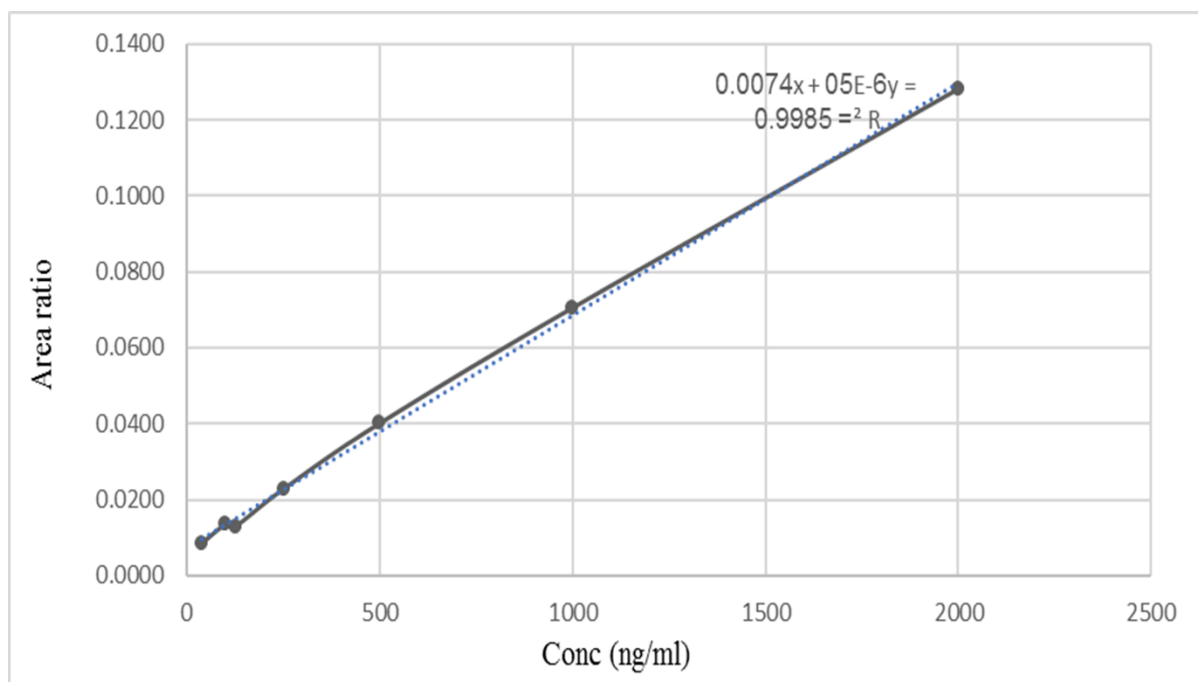


Figure 2. Calibration curve (2) for rosuvastatin.

Calibration curve (3)				
# Cal	Conc (ng/ml)	Rosuvastatin	Atorvastatin	Area Ratio
cal 1	2000	41902	284452	0.1473
cal 2	1000	23582	295415	0.0798
cal3	500	13254	297851	0.0445
cal 4	250	7115	265728	0.0268
cal 5	125	3945	265442	0.0149
cal 6	100	2991	274542	0.0109
cal 7	40	1987	263545	0.0075

Table 3: Calibration curve (3) for rosuvastatin.

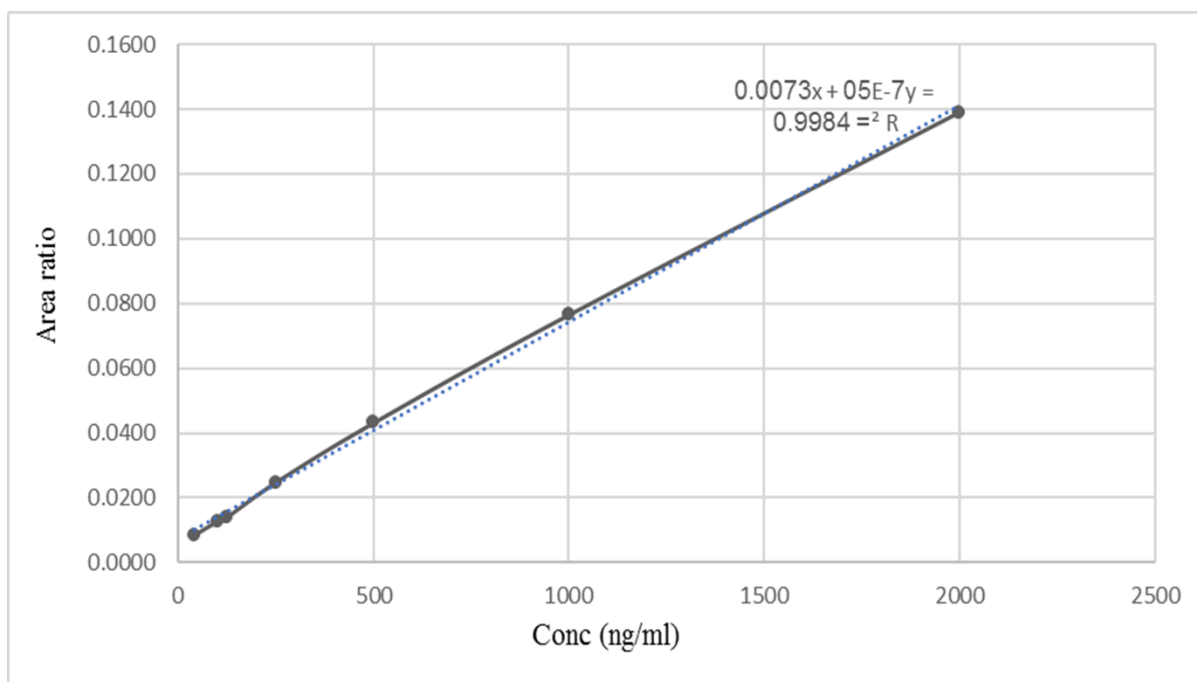


Figure 3. Calibration curve (3) for rosuvastatin.

Table 4: QC test procedure data (high, medium, low).

QCH								
Point		Atorvastatin	Rosuvastatin	Area ratio	Actual Conc.	Theoretical Conc.	Assay stability	Average
initial	Rep1	282124	25487	0.0903	1705	1700	100.28	98
	Rep2	285893	24915	0.0871	1641	1700	96.53	
12Hr	Rep1	275421	25042	0.0909	1716	1700	100.97	100
	Rep2	285421	25456	0.0892	1682	1700	98.93	
24HR	Rep1	289114	26247	0.0908	1714	1700	100.81	101
	Rep2	280246	25416	0.0907	1712	1700	100.70	
48	Rep1	279541	23956	0.0857	1612	1700	94.82	96

HR	Rep2	281547	24554	0.0872	1642	1700	96.60
	Rep2	303341	3796	0.0125	148	150	98.85

QCM								
Point		Atorvastatin	Rosuvastatin	Area ratio	Actual Conc.	Theoretical Conc.	Assay stability	Average
initial	Rep1	272214	7542	0.0277	452	450	100.47	98
	Rep2	285423	7624	0.0267	432	450	96.05	
12Hr	Rep1	280246	7544	0.0269	436	450	96.97	97
	Rep2	275413	7445	0.0270	439	450	97.48	
24HR	Rep1	265442	7125	0.0268	435	450	96.63	97
	Rep2	274551	7365	0.0268	435	450	96.56	
48 HR	Rep1	280241	7356	0.0262	423	450	93.99	95
	Rep2	278554	7412	0.0266	430	450	95.59	

QCL								
Point		Atorvastatin	Rosuvastatin	Area ratio	Actual Conc.	Theoretical Conc.	Assay stability	Average
initial	Rep1	289180	3685	0.0127	153	150	101.91	107
	Rep2	279867	3778	0.0135	168	150	111.99	
12Hr	Rep1	267267	3458	0.0129	157	150	104.51	100
	Rep2	299691	3665	0.0122	143	150	95.06	
24HR	Rep1	269367	3455	0.0128	155	150	103.02	102
	Rep2	282292	3590	0.0127	152	150	101.56	
48 HR	Rep1	313477	3854	0.0123	144	150	95.92	97
	Rep2	303341	3796	0.0125	148	150	98.85	

Table 5: Pharmacokinetics parameters for group #1 and #2.

Group 1 (Rosuvastatin low dose)					
Rat#	t0.5 (h)	Kel (h ⁻¹)	Tmax(hr)	Cmax (ng/ml)	AUC (ng.h/ml)
1	1.6806	0.4124	2.5	1491	6562.0439
2	1.4052	0.4933	2	1650	4653.6706
3	0.7929	0.8742	2	1556	5404.6646
4	1.5883	0.4364	2	2311	11098.8103
5	2.0137	0.3442	2.5	1427	5663.4953

6	1.4023	0.4943	2	2180	7564.8751
7	1.1768	0.589	2.5	1202	4310.4148
8	1.1599	0.5976	2.5	737	2555.6697
Average	1.4024625	0.530175	2.25	1569.25	5976.705538
STD	0.371645265	0.163120418	0.267261242	504.8020121	2556.689397
Group 2 (Artichoke with rosuvastatin low dose)					
Rat#	t0.5 (h)	Kel (h ⁻¹)	Tmax(hr)	Cmax (ng/ml)	AUC (ng.h/ml)
1	2.5566	0.2711	3.5	951	4314.9249
2	1.3672	0.507	3.5	599	2514.0386
3	1.1445	0.6056	2.5	751	3463.3937
4	0.4336	1.5986	3.5	825	2222.4161
5	1.0702	0.6477	3.5	1033	3496.9463
6	0.4981	1.3915	3.5	1290	3575.7353
7	1.1773	0.5888	3.5	1425	5373.5413
8	0.7332	0.9454	3.5	830	2574.6053
Average	0.318829848	0.115396389	4.71286E-06	0.010009358	0.021124093
STD	0.669622093	0.459335134	0.353553391	277.6405693	1043.009546