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APPENDICES

Appendix I

Solubility of Nifedipine in Co-solvent

Nifedipine was weight 50 mg into 15 ml wrapped aluminium foil test tube. The increased co-solvent was added gradually by dropper (25 drops = 1 ml) and shaken by vortex mixer until the drug was completely dissolved. The volume of these co-solvent used was shown in Table A

Table A : The volume of the co-solvent dissolved 50 mg of Nifedipine	
co-solvent	volume (ml)
30% v/v PEG 400 in water	> 15
PEG 400:Ethanol:Water (15:15:17)	> 15
PEG 400:Ethanol (1:1)	4.5

Appendix II

Table 11 The Average Percentages of Nifedipine Release from TDDS
Containing Various Concentration of Pluronic^(R) F 127

Time (hr)	% Drug Release* from Various Conc. of Pluronic ^(R) F 127		
	35%	40%	45%
0.5	0.708	0.898	0.329
1.0	2.125	2.576	1.020
1.5	4.100	3.908	1.909
2.0	5.689	5.191	2.553
3.0	8.746	6.512	3.623
4.0	10.287	8.833	4.468
5.0	15.962	10.566	4.987
6.0	19.884	11.493	5.543
7.0	25.954	13.817	6.845
8.0	27.921	15.523	7.600
9.0	31.164	19.846	10.536
10.0	35.802	-	12.131
11.0	38.774	-	14.092
12.0	42.084	-	17.933

* average of two samples

Appendix III

Table 12 The Average Percentages of Nifedipine Release of from
TDDS Containing Various Ratios of PEG 4000 : PEG 400

Time (hr)	% Drug Release* from Various Conc. of PEG 4000 : PEG 400		
	1:4	1:2	1:1
0.5	1.289	0.519	0.515
1.0	2.131	1.728	1.112
1.5	2.992	2.411	1.635
2.0	3.976	3.005	2.222
3.0	4.901	3.393	3.257
4.0	6.302	4.798	4.354
5.0	7.228	5.699	5.474
6.0	8.112	6.444	6.279
7.0	8.951	7.169	7.226
8.0	9.668	8.184	9.984
9.0	11.554	8.886	8.924
10.0	11.688	9.457	9.686
11.0	12.422	9.987	10.456
12.0	13.194	10.539	11.232

* average of two samples

Appendix IV

Table 13 The Average Percentages of Nifedipine Release from TDDS Containing Various Concentration of PVA-PVP Copolymers

Time (hr)	% Drug Release* from Various Conc. of PVA-PVP Copolymers		
	30%	40%	50%
0.5	1.563	1.244	0.685
1.0	5.754	4.156	3.719
1.5	18.425	10.877	10.561
2.0	25.191	14.690	15.558
3.0	41.695	25.674	25.540
4.0	53.708	35.191	31.732
5.0	62.424	40.779	35.241
6.0	72.354	47.906	38.837
7.0	76.027	53.389	41.140
8.0	80.445	55.679	43.686
9.0	83.723	57.340	45.299
10.0	86.222	57.387	46.468
11.0	87.543	27.734	47.460
12.0	88.167	59.195	48.051

* average of two samples

Appendix V

Table 14 The Average Percentages of Nifedipine Release from TDDS Containing Various Concentration of Methocel^(R) A4M

Time (hr)	% Drug Release* from Various Conc. of Methocel ^(R) A4M		
	5%	10%	15%
0.5	0.274	0.401	0.208
1.0	2.041	1.650	1.398
1.5	4.337	4.068	2.601
2.0	5.096	5.721	3.842
3.0	6.215	9.150	6.011
4.0	12.449	10.587	8.021
5.0	13.201	12.014	8.853
6.0	13.289	12.133	9.776
7.0	14.985	13.651	10.591
8.0	21.979	20.987	10.932
9.0	22.684	21.940	11.231
10.0	24.943	22.430	13.378
11.0	27.839	25.640	13.590
12.0	30.099	28.060	13.708

* average of two samples

Appendix VI

Table 15 The Average Percentages of Nifedipine Release from TDDS Containing Various Concentration of Methocel^(R) K4M.

Time (hr)	% Drug Release* from Various Conc. of Methocel ^(R) K4M		
	5%	10%	15%
0.5	0.389	0.190	0.409
1.0	1.490	1.112	0.797
1.5	2.522	2.225	1.442
2.0	3.889	3.435	1.810
3.0	6.620	5.655	3.347
4.0	8.740	7.238	4.668
5.0	10.559	8.913	5.818
6.0	12.231	12.242	9.062
7.0	14.619	13.632	8.676
8.0	17.302	16.409	9.907
9.0	19.298	17.733	11.206
10.0	20.825	19.055	12.570
11.0	22.682	20.523	13.778
12.0	14.277	21.856	14.883

* average of two samples

Appendix VII

Table 16. The Averages Percentage of Nifedipine Release from TDDS Containing Various Concentration of Methocel^(R) K100M.

Time (hr)	% Drug Release* from Various Conc. of Methocel ^(R) K100M		
	3%	4%	5%
0.5	0.219	0.095	0.105
1.0	1.828	2.228	2.711
1.5	2.309	3.744	4.427
2.0	5.148	4.728	6.161
3.0	8.168	5.419	9.912
4.0	10.482	6.725	10.486
5.0	13.809	10.605	11.590
6.0	16.911	13.398	12.585
7.0	20.119	15.230	13.868
8.0	22.318	18.183	15.449
9.0	24.640	20.488	16.735
10.0	27.287	22.158	18.599
11.0	29.101	23.763	19.982
12.0	31.328	26.058	21.465

* average of two samples



VITAE

Miss Gunyarat Viratyosin was born on November 14, 1962. She got her degree in Bachelor of Science in Pharmacy in 1985 from Faculty of Pharmaceutical Science, Chulalongkorn University, Bangkok, Thailand.