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APPENDICES

APPENDIX A

Table A1 Peak area ratio (PAR) of MPA to IS at different concentrations

No.	onc (mcg/mL	MPA1	IS1	PAR1	MPA2	IS2	PAR2	X
1	0.5	1316	51502	0.02555	2986	52209	0.05719	0.04137
2	2	4473	54116	0.0827	4575	50894	0.08989	0.08627
3	5	12348	52564	0.2349	13055	62180	0.2100	0.2224
4	10	33957	53566	0.6339	41850	52742	0.7935	0.7137
5	20	75341	53899	1.3978	62797	53531	1.1731	1.2855
6	30	113621	54152	2.0982	98473	58027	1.6970	1.8976
7	60	204942	52062	3.9365	234043	52861	4.4275	4.1820
8	80	423641	75762	5.5917	399666	73981	5.4023	5.4970

Abbreviations ; MPA = peak area of MPA plasma levels ; IS = peak area of Internal standard

PAR = peak area ratio ; X = the average of PAR

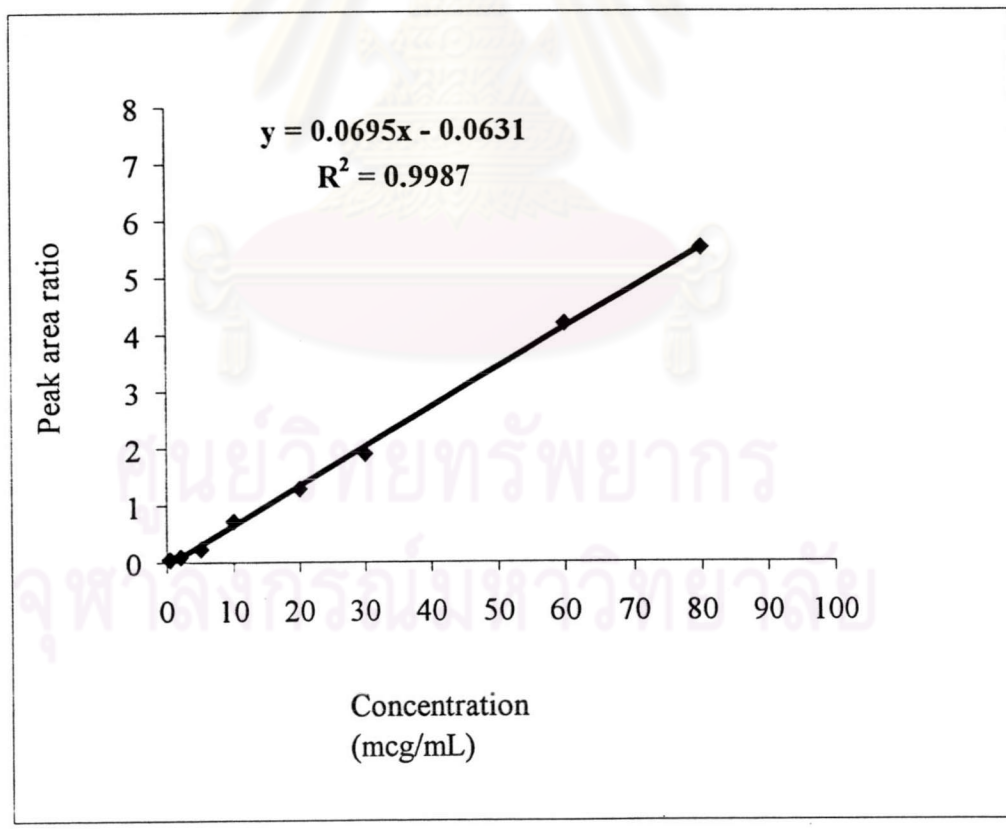

Figure A1 : The standard curve of MPA

APPENDIX B

Table B1 Actual collected 23 plasma samples complete profiles (9 points)

Name	MMF dose mg/day	C0 mcg/mL	C0.25 mcg/mL	C0.5 mcg/mL	C1 mcg/mL	C2 mcg/mL	C3 mcg/mL	C4 mcg/mL	C6 mcg/mL	C12 mcg/mL	MPA AUC mcg*hr/mL
1. PROJ	1000	1.1774	0.8200	0.7250	10.9497	6.1190	2.0182	0.5416	1.4272	nd	23.4947
2. TP	2000	3.7895	14.2912	48.2767	22.1750	5.5230	4.0811	3.7492	7.2070	3.5225	93.4048
3. AN	2000	5.8795	17.3063	36.6196	34.8207	9.2397	4.0882	4.1818	3.3182	2.8434	86.3130
4. SW	1000	2.3881	3.3190	7.4335	19.9816	7.4622	3.7149	3.0634	1.9387	2.4458	49.7664
5. PIRAT	2000	5.1890	26.2948	54.2648	29.4250	11.5063	4.5551	2.2514	5.3673	4.5412	104.1716
6. SPN	1500	0.8324	7.2053	65.9166	10.4715	2.3890	1.2327	1.1871	1.9827	0.5955	49.5951
7. JVD	1000	2.3402	38.4896	69.0053	27.9927	6.4593	2.7973	2.8333	2.0396	1.2496	82.7237
8. NVR	1500	6.8704	41.5925	46.4746	41.8508	4.0743	1.0520	1.6723	nd	8.0564	104.9503
9. AR	1500	3.5255	6.4862	25.3862	23.3081	16.3684	6.8280	5.7920	4.2238	2.2475	84.5851
10. VN	2000	5.7212	19.9520	46.3292	40.4296	8.9068	5.4809	4.6125	3.5779	4.6270	102.8979
11. JR	1000	2.6806	2.5036	11.6975	22.3548	14.5810	6.4643	5.5386	1.9629	4.0029	71.3272
12. VB	1500	4.5948	4.8982	2.7919	37.9542	13.7443	4.3800	3.0317	2.6795	3.5882	75.4664
13. JP	1000	3.1179	3.1451	3.6038	30.3249	9.8796	3.9330	3.4512	3.8879	1.9113	65.5461
14. PCN	1000	1.6442	1.6592	2.5304	25.9100	12.0688	4.9422	2.4837	1.1890	2.4699	53.9078
15. BM	1000	0.8637	18.0503	22.8037	20.4894	3.9169	1.4792	2.8140	2.4973	0.8637	50.5501

Table B1 Actual collected 23 plasma sample complete profiles (9 points) (continue)

Name	MMF dose mg/day	C0 mcg/mL	C0.25 mcg/mL	C0.5 mcg/mL	C1 mcg/mL	C2 mcg/mL	C3 mcg/mL	C4 mcg/mL	C6 mcg/mL	C12 mcg/mL	MPA AUC mcg*hr/mL
16. CHAN	1500	1.6696	19.0487	64.3390	67.4017	12.6307	4.5963	4.8362	1.7191	(-)	114.9413
17. NP	1000	1.0103	5.7146	14.3869	37.4995	3.5499	1.2111	1.1358	1.5935	0.8662	50.5119
18. DK	1000	1.0583	1.3918	11.4534	19.1658	4.6904	1.8875	1.3299	1.2560	0.9280	35.5306
19. PCR	1500	3.5310	40.1578	66.5028	32.3837	6.1365	2.5511	1.1494	1.7112	3.8914	88.6376
20. ANS	1000	2.8626	4.5032	11.2137	30.4081	6.1423	2.5364	1.1765	0.9281	1.0384	45.7661
21. PP	1000	6.4591	25.2012	33.9696	16.3518	6.0420	5.0325	3.1891	1.7876	6.6366	72.8737
22. SK	1500	4.0525	17.8849	27.5664	17.4673	13.7414	2.5686	2.9189	3.0631	4.8003	75.7574
23. NRL	1500	2.1837	2.2834	3.6025	7.6672	5.6835	2.5577	2.5343	2.3698	2.2986	36.3629

Abbreviati (-) = missing data ; nd = not detectable

APPENDIX C

Table C1 Mean MPA plasma levels at different times and various doses

Time (hr)	MMF dose (mg/day)		
	1000 (N=11)	1500 (N=8)	2000 (N=4)
0	2.2442	2.7748	3.7709
0.25	9.5271	17.4446	19.4611
0.5	20.6868	30.6517	44.6470
1	23.5481	27.5277	31.4574
2	7.3556	9.3460	8.7940
3	3.0530	3.8305	6.6590
4	2.3381	3.0545	3.7999
6	1.7778	2.6314	4.1488
12	2.0375	3.3487	3.8835

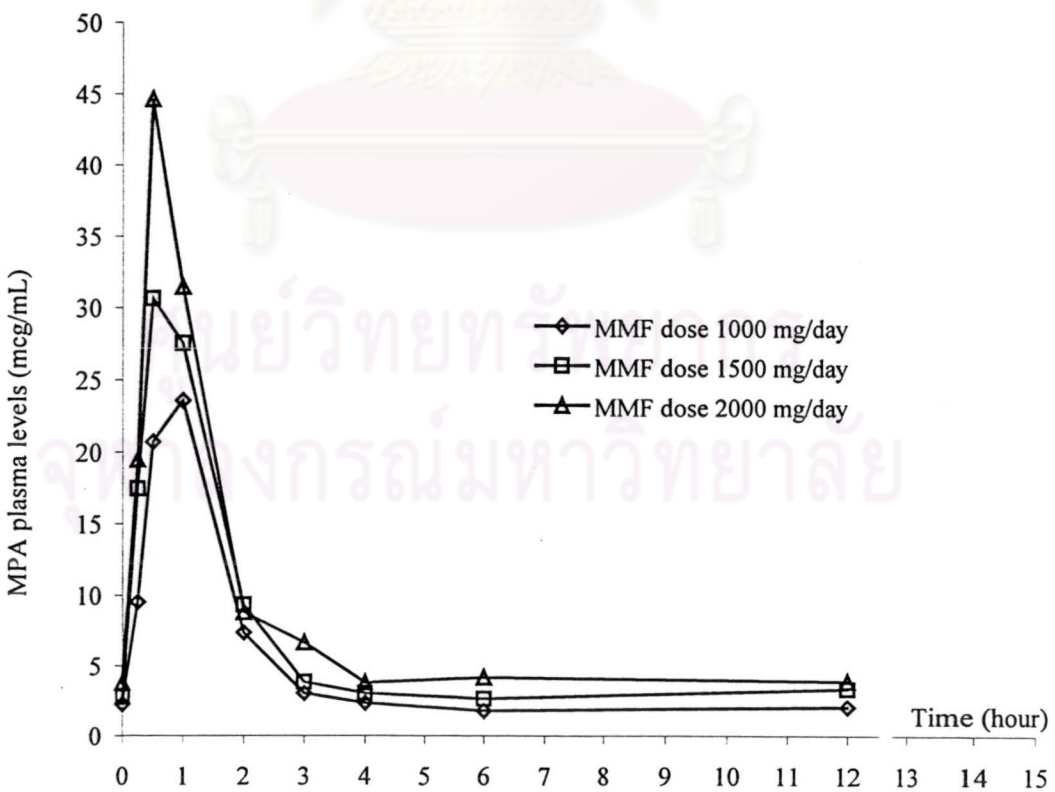

Figure C1: Mean plasma MPA concentrations-time profiles after administering different MMF doses

APPENDIX D

Predicted data

Since some patients had not been completed actual collected three profiles therefore, we will be estimated MPA plasma concentrations which were not drawn in these patients by using individual linear regression equation. Assumption that when double dose then double MPA plasma concentrations or double MPA AUC (linearity property) followed below:

MMF dose (mg/day)	C0 mcg/mL	C0.25 mcg/mL	C0.5 mcg/mL	C1 mcg/mL	C2 mcg/mL	C3 mcg/mL	C4 mcg/mL	C6 mcg/mL	C12 mcg/mL	MPA AUC mcg*hr/mL
0	0	0	0	0	0	0	0	0	0	0
1000	2.2442	9.5271	20.6868	23.5481	7.3556	3.053	2.3381	1.7777	2.0375	56.1315
1500	2.8362	17.4446	30.9137	27.5277	9.346	3.8305	3.0111	2.6314	3.3487	74.8421
2000	3.7709	19.4611	45.7358	31.4574	8.794	6.658	3.74	4.1488	3.8835	96.3607
equation; =	0.0019* D+ 0.1132	0.0102* D+ 0.0988	0.0224* D- 0.8791	0.016* D+ 2.6824	0.0047* D+ 1.087	0.0031* D- 0.1532	.0019* D+ 0.1589	0.002* D- 0.1207	0.002* D+ 0.055	0.0482* D+ 2.6459
(R square)	0.9878	0.9750	0.9927	0.9299	0.8584	0.9628	0.9812	0.9824	0.9868	0.9918

Abbreviations ; D = MMF dose

VITAE

Ms. Kessada Tunwongsa was born on December 21, 1974 in Thali District of Loei Province, Thailand. She graduated with Bachelor Degree in Pharmaceutical Sciences in 1997 from Faculty of Pharmaceutical Sciences, Khon Kaen University (second class honors.). June 2000, she had been enrolled in the Master Degree Program of Clinical Pharmacy at Faculty of Pharmaceutical Sciences, Chulalongkorn University (CU). Currently, she is the staff clinical pharmacist at Department of Pharmacy Service in the Queen of Sawangwattana Memorial Hospital, the Thai Red Cross Society, Chonburi.