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APPENDICES

Appendix A

Determination of Platelet Aggregation

Determination of Platelet aggregation

Optical platelet aggregation is a method which measures change in light transmission through stirred plasma containing platelets. As the platelets in the plasma aggregate in the presence of various reagents, light transmission through the specimen increases. The change in light transmission is recorded on graph. This method is routinely used to assess platelet function and to measure the antiplatelet effects of aspirin.

In this study, platelet aggregations in response to both arachidonic acid and ADP as aggregating agents were performed in platelet rich plasma (PRP) and PRP diluted with platelet poor plasma (PPP) to a platelet concentration of 250,000 cell/ μ l.

1. Equipments

- Plastic tubes
- Plastic pipets and glass pipets
- Automatic pipets with plastic tip
- A stop watch
- A centrifuge
- Siliconized stirred magnetics
- Siliconized glass cuvettes
- An aggregometer (Chrono-log model 560 Ca)

2. Reagents

- 2.1. 3.2% trisodium citrate dehydrate (w/v)
- 2.2. Distilled water to prepare aggregating agents.
- 2.3. Aggregating agents:

- 1) ADP

- 1.1) 10 mM ADP stock solution

Dissolved 0.01708 g ADP (sodium salt from equine muscle, Sigma chemical Co., cat no. A8146) with 4 ml. of 0.9% NSS.

Aliquots of 100 ul solution were stored in 5 ml plastic tube at -20°C for three months.

1.2) 1000 uM ADP intermediate stock solution

Diluted 100 ul stock solution with 900 ul of 0.9% NSS to make the concentration 1 mM or 1000 uM ADP.

1.3) Working solution

Diluted 100 ul of 1000 uM ADP with 900 ul of 0.9% NSS to make the concentration of 100 uM ADP. When added 50 ul of 100 uM ADP to 450 ul PRP, final concentration in PRP (in the cuvette) were 10 uM.

2) Arachidonic acid

2.1) 100 mg/ml arachidonic acid stock solution I

Dissolved 100 mg arachidonic (sodium salt, Sigma chemical Co., cat no. A8798) with 1 ml. of distilled water. Mixed gently. Aliquots of 81.625 ul were stored in 1.5 microtube at -80°C .

2.2) 100 mM arachidonic acid stock solution II

Diluted 81.625 ul stock solution I with 168.375 ul of distilled water to make the concentration 100 mM arachidonic acid. Aliquots of 20 ul were stored in 5 ml plastic tube at -20°C .

2.3) Working solution

Diluted 20 ul of 100 mM arachidonic acid with 180 ul of distilled water to make the concentration of 10 uM arachidonic acid. When added 50 ul of 10 mM arachidonic acid to 450 ul PRP, final concentration in PRP (in the cuvette) were 1 mM.

3. Procedure

3.1. Preparation of platelet-rich plasma (PRP) and platelet-poor plasma (PPP).

- 3.1.1. The venous blood specimen in 3.2% trisodium citrate dehydrate solution was centrifuged at 1,000 rpm for 10 minutes at 25°C.
- 3.1.2. Carefully removed about 7 ml of supernatant PRP with plastic pipet. Stored PRP in a 13 x 100 mm. plastic tube and immediately capped it with parafilm.
- 3.1.3. The remaining specimen were recentrifuged at 3,000 rpm for 20 minutes at 25°C to obtain PPP.
- 3.1.4. Removed supernatant PPP with plastic pipet. Stored in a 13 x 100 mm. plastic tube and immediately capped it with parafilm.
- 3.1.5. Platelet count was performed on the PRP, and was adjusted to 250,000 cell/ μ l by diluting with PPP. Kept at room temperature.
- 3.1.6. Removed 450 μ l of PPP into cuvette (P/N 317) in order to use as a blank.
- 3.1.7. Added 450 μ l of PRP in cuvette in order to use as test PRP samples.

3.2 Aggregometry

- 3.2.1. Warmed up aggregometer for 15 minutes. Set temperature of aggregometer at 37°C and stirring speed to 900 rpm.
- 3.2.2. Set baseline light transmission at 90% with 500 μ l PPP.
- 3.2.3. Set light transmission to 10% with 450 μ l PRP.
- 3.2.4. Pre-incubated 450 μ l PRP at 37°C for 2 minutes.

3.2.5 Added 50 ul of aggregating agent in PRP cuvette. Recorded continuously the change in percent light transmission (%T) continuously for 5 minutes.

3.2.6 Platelet aggregation was expressed as percent change in maximum light transmission at five minutes after adding aggregating agent.

Appendix B

Determination of Serum Thromboxane B2 Level

Determination of Serum Thromboxane B₂ Level

Thromboxane A₂ is produced from arachidonic acid and causes irreversible platelet aggregation. TXA₂ is rapidly hydrolyzed non-enzymatically to form TXB₂. Serum TXB₂ in this study was determined by enzyme immunoassay (EIA) technique (Thromboxane B₂ EIA Kit, Cayman chemical Co., cat no. 519031.1). This assay is based on the competition between TXB₂ and TXB₂-acetylcholinesterase (AChE) conjugate (TXB₂ tracer) for a limited number of TXB₂-specific rabbit antiserum binding sites. Because the concentration of the TXB₂ tracer is held constant while the concentration of TXB₂ varies, the amount of TXB₂ tracer that is able to bind to the rabbit antiserum will be inversely proportional to the concentration of TXB₂ in the well. This rabbit antiserum-TXB₂ (either free or tracer) complex binds to the mouse monoclonal anti-rabbit IgG that has been previously attached to the well. The plate is washed to remove any unbound reagents and then Ellman's Reagent (which contains the substrate to AChE) is added to the well. The product of this enzymatic reaction has a distinct yellow color and absorbs strongly at 412 nm. The intensity of this color, determined spectrophotometrically, is proportional to the amount of TXB₂ tracer bound to the well, which is inversely proportional to the amount of free TXB₂ present in the well during the incubation; or

$$\text{Absorbance} \propto [\text{Bound TX B}_2 \text{ Tracer}] \propto 1/[\text{TX B}_2]$$

1. Equipments

- Mouse Anti-rabbit IgG coated plate (96 wells)
- Plastic tubes
- Automatic pipets with plastic tip
- A plate reader

2. Reagents

- Thromboxane B₂ EIA antiserum
- Thromboxane B₂ AChE tracer
- Thromboxane B₂ EIA standard
- EIA Buffer
- Wash Buffer
- Tween 20
- Ellman's reagent
- Water (deionized and free of trace-organic contaminants)

3. Procedure

3.1 Preparation of Thromboxane B₂ Standard

3.1.1. Transferred 100 ul of the Tx B₂ standard into a clean test tube, then diluted with 900 ul water. The concentration of this solution (the bulk standard) was 10 ng/ml.

3.1.2 To prepare the standard for use in EIA: Obtained 8 clean test tubes and number them #1 through #8 . Aliquoted 900 ul EIA buffer to tube #1 and 500 ul EIA buffer to tube #2-8. Transferred 100 ul of the bulk standard by removing 500 ul from tube #1 and placing in tube #2; mixed thoroughly. Next, removed 500 ul from tube #2 and place it into tube #3; mixed thoroughly. Repeated the process for tubes #4-8. The concentrations of these standards were 1,000, 500, 250, 125, 62.5, 31.3, 15.6, and 7.8 pg/ml, respectively.

3.2. Performing the assay

- 3.2.1. Each plate contained 2 blanks, two non-specific binding wells (NSB), two maximum binding wells (B_0), and eight point standard curve run in duplicate.
- 3.2.2. Added 100 ul EIA buffer to Non-Specific Binding (NSB) wells. Add 50 ul EIA buffer to Maximum Binding (B_0) wells.
- 3.2.3. Added 50 ul of TxB_2 standard tube #1-8 to the standard wells (S1-S8, respectively)
- 3.2.4. Added 50 ul of sample per well.
- 3.2.5. Added 50 ul to each well except the Total Activity (TA) and the Blank (Blk) wells.
- 3.2.6. Added 50 ul to each well except the Total Activity (TA), the Non-Specific Binding (NSB), and the Blank (Blk) wells.
- 3.2.7. Covered each plate with plastic film and incubate for 18 hours at room temperature.
- 3.2.8. Rinsed the well 5 times with wash buffer.
- 3.2.9. Added 200 ul of Ellman's reagent to each well and 5 ul of tracer to the Total Activity wells.
- 3.2.10. Covered the plate with plastic film. Developed the plate in the dark on an orbital shaker for 60 minutes.
- 3.2.11. Read the plat at wavelength between 405 and 420 nm.
- 3.2.12. Calculated the assay results by a computer spreadsheet for data analysis of Cayman Chemical.

Appendix C

Characteristics of Individual Patients

Appendix C

Characteristics of Individual Patients

Table 33 Demographic and clinical data of the individual T2DM with aspirin

Subject No.	Gender	Age (year)	BMI (kg/m ²)	CAD	Inter-vention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)	Dose of	
																ASA (mg/d)	
1	F	74	24.93	Y	N	N	110	7	19.4	2.95	171	44	107	104	12	300	
2	F	69	16.89	Y	N	N	112	6.5	3.0	0.48	144	51	78	78	12.2	60	
3	M	71	26.09	Y	Y	N	132	6.8	6.1	1.02	219	29	168	108	14.4	60	
4	F	61	27.35	Y	Y	N	115	7.1	3.6	0.58	202	45	117	203	11.8	60	
5	F	52	27.35	Y	Y	N	236	10.7	13.1	2.67	293	23	207	314	14.5	60	
6	M	63	24.19	Y	N	N	112	7.6	3.8	0.6	169	55	100	70	12.9	300	
7	M	62	27.68	Y	N	N	92	6	13.0	1.9	170	42	100	142	12.6	300	
8	M	49	30.72	Y	N	N	178	8.5	22.6	3.97	180	40	101	197	14.6	150	
9	M	57	27.77	Y	Y	N	218	8.1	10.8	2.12	197	37	124	177	14.6	60	
10	M	56	31.77	Y	Y	N	198	7.9	7.1	1.35	188	52	104	166	12.7	60	
11	F	55	26.73	N	Y	N	177	6.7	8.7	1.58	228	68	116	219	12.0	300	
12	0	61	21.51	Y	Y	N	137	7.0	6.5	1.09	176	28	105	218	13.1	300	
13	F	73	25.43	N	N	N	124	7.8	12.3	1.98	164	45	92	135	12.9	60	
14	M	52	25.82	N	N	N	103	6.7	4.5	0.7	199	33	131	175	14.7	60	
15	M	71	17.14	N	N	N	128	7.8	1.8	0.3	182	71	103	44	11.5	60	
16	F	49	32.31	N	N	M	135	7.6	19.4	2.95	151	44	85	112	13.3	60	

Table 33 Demographic and clinical data of the individual T2DM with aspirin (continued)

Subject No.	Gender	Age (year)	BMI (kg/m ²)	CAD	Inter-vention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)	Dose of ASA (mg/d)
17	F	54	27.05	N	N	N	103	6.7	24.3	3.89	201	50	122	148	13.1	60
18	F	53	24.69	N	N	N	171	7.5	8.5	1.3	148	26	62	304	12.3	60
19	F	68	23.22	N	N	N	105	6.6	7.9	1.42	133	28	75	148	12	60
20	M	65	31.53	Y	N	N	142	8.8	6.0	0.93	158	25	94	195	10.2	60
21	M	67	23.88	N	N	N	121	6.4	13.4	2.24	126	39	76	58	13.4	60
22	F	59	25.93	N	N	N	168	8.4	4.6	0.75	192	39	120	163	12.2	60
23	F	70	26.23	N	N	N	88	7.1	6.3	1.13	186	46	92	245	10.4	60
24	M	54	24.74	N	N	N	115	7.2	12.1	1.75	143	35	85	119	13.6	60
25	F	49	30.56	N	N	N	90	6	3.9	0.63	173	37	108	140	11	60
26	M	60	26.73	N	N	N	128	7.4	12.6	1.83	168	40	114	65	13.8	60
27	F	54	21.82	N	N	N	126	6.1	14.1	2.28	160	45	103	58	13.5	60
28	M	65	32.28	N	N	N	146	7.1	10.5	1.7	161	33	89	194	13.1	60
29	F	57	24.71	N	N	N	121	7.2	34.6	5.56	176	34	110	164	13.8	60
30	M	74	30.82	N	N	N	144	7.4	4.9	0.8	123	18	63	213	13.4	60
31	F	55	29.43	N	N	N	169	7.5	9.5	1.61	183	51	98	174	13.4	100
32	F	60	25.64	N	N	N	133	7.2	9.1	1.63	229	62	124	215	12.3	300
33	F	67	24.32	Y	N	N	148	7.6	5.3	0.89	156	42	105	48	13.7	60

Table 33 Demographic and clinical data of the individual T2DM with aspirin (continued)

Subject No.	Sex	Age (year)	BMI (kg/m ²)	CAD	Inter-vention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)	Dose of ASA (mg/d)
34	M	63	18.79	N	N	N	189	8	5.2	0.9	195	73	114	38	13.7	60
35	M	49	27.71	N	N	N	121	6.7	11.7	2.16	176	43	112	103	13.5	60
36	M	49	27.42	N	N	N	117	7.4	17.5	2.75	177	32	68	389	14.6	60
37	M	48	28.21	Y	N	N	135	8.8	10.1	1.6	182	39	113	152	13.7	60
38	F	57	25.04	Y	N	N	139	7.6	5.6	0.94	180	32	122	135	12.4	60
39	F	60	26.53	N	N	N	141	6.4	5.9	1.00	198	53	123	109	14.2	60
40	F	52	27.86	N	N	N	117	7	6.5	1.10	119	23	61	174	13.4	300
41	F	65	20.98	N	N	N	110	6.5	15.3	2.4	247	69	151	131	11.9	60
42	F	43	35.66	N	N	N	128	6.5	4.0	0.63	137	51	77	46	9.2	60
43	F	63	29.74	N	N	N	115	6.3	5.6	0.93	209	48	138	116	12.7	60
44	M	70	25.48	N	N	N	124	6.5	9.9	1.56	181	51	105	129	13.9	60
45	F	69	29.28	N	N	Y	191	8.1	5.3	0.87	185	36	118	158	13.9	60
46	F	59	27.77	N	N	N	141	7.6	8.9	1.66	205	49	108	245	11.9	60
47	M	52	29.49	N	N	N	144	8	26.7	4.31	246	40	137	349	13.3	60
48	M	65	25.17	N	N	Y	160	7.9	6.2	1.06	157	27	97	167	11.3	60
49	F	67	21.39	Y	N	N	121	6.3	6.6	1.17	177	41	107	148	12.9	60
50	M	56	30.82	N	N	N	189	7.8	8.0	1.29	150	25	85	204	13.3	300

Table 33 Demographic and clinical data of the individual T2DM with aspirin (continued)

Subject No.	Sex	Age (year)	BMI (kg/m ²)	CAD	Intervention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)	Dose of ASA (mg/d)
51	F	58	31.2	N	N	N	157	6.2	9.4	1.75	207	37	151	90	11.9	60
52	F	62	33.25	N	N	N	151	6.9	25.4	4.26	163	52	90	103	10.4	60
53	M	59	24.49	Y	N	N	157	7.3	26	4.29	168	66	95	39	14	60
54	F	47	29.52	N	N	N	231	10.8	5.7	1.00	273	76	179	89	12	60
55	F	39	32.76	N	N	N	139	7.1	18.6	3.69	179	42	83	270	14.5	60
56	M	46	23.46	N	N	N	150	7.8	24.3	3.92	48	35	100	63	14.4	60
57	F	57	23.16	N	N	N	86	6.3	30.5	4.98	163	35	97	153	10.3	60
58	F	66	26.47	N	N	N	97	6.1	3.8	0.55	168	52	91	126	13.6	60
59	F	52	26.22	N	N	N	182	12.7	6.6	1.00	251	44	172	175	13.4	60
60	M	59	26.44	N	N	N	177	6.5	13.4	2.43	179	44	117	91	16.5	60
61	M	49	33.74	N	N	N	86	6	4.2	0.77	193	28	134	158	14.4	60
62	M	37	26.73	N	N	N	141	8.4	4.4	0.64	212	41	136	179	13.3	60
63	F	35	23.59	N	N	N	105	6.4	6.7	1.14	158	60	88	47	13.5	60
64	M	65	25.14	N	N	N	119	6.4	16.8	2.54	202	31	132	203	13.4	300
65	F	53	27.44	N	N	N	151	8.1	7.7	1.24	148	59	71	90	13.5	60
66	M	57	32.01	N	N	N	133	6.8	18.6	3.13	119	25	89	27	14	60

Table 33 Demographic and clinical data of the individual T2DM with aspirin (continued)

Subject No.	Sex	Age (year)	BMI (kg/m ²)	CAD	Inter-vention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)	Dose of ASA (mg/d)
67	M	60	30.12	N	N	N	142	7.7	7.4	1.23	113	21	62	152	14.3	60
68	F	55	25.21	N	N	N	108	6.4	11.8	1.98	135	44	75	82	12.7	60
69	F	59	24.95	N	N	N	112	6.5	10.5	1.62	144	29	80	180	12.6	60
70	M	57	27.29	N	N	N	97	6.7	9.2	1.44	146	46	72	137	13.3	60
71	M	65	31.54	N	N	N	132	6.9	12	1.79	133	30	79	121	16.2	60
72	F	61	25.21	N	N	Y	97	6.2	37.4	5.78	138	47	73	92	11.4	300
73	M	71	29.24	Y	Y	N	133	7.3	14.5	2.15	233	48	148	183	16.4	60
74	M	48	27.34	N	N	N	150	8.5	47.5	7.19	195	38	127	150	15.3	120
75	F	65	30.48	N	N	N	139	6.8	15.6	2.64	200	49	129	107	11.2	60
76	F	63	26.97	N	N	N	117	6.5	9.6	1.61	190	41	123	130	12.8	60
77	M	66	32.49	Y	N	N	108	5.3	4.9	0.79	161	40	98	114	14.3	300
78	M	60	23.95	Y	N	N	117	7.4	17.9	2.72	174	33	105	180	12.9	300
79	M	44	30.76	N	N	N	178	8.3	2.2	0.36	226	32	158	185	14.9	300
80	F	44	21.73	N	N	Y	77	6	17.2	3.07	160	37	94	150	9.8	300
81	F	67	27.73	Y	Y	N	137	6.6	22.1	2.98	238	56	149	165	12.4	150
82	M	51	36.49	N	N	N	139	8.3	7.7	1.29	136	26	136	192	14.3	120
83	F	67	23.83	N	N	N	85	6.8	36.5	5.75	197	73	104	99	12.4	60

Table 33 Demographic and clinical data of the individual T2DM with aspirin (continued)

Subject No.	Sex	Age (year)	BMI (kg/m ²)	CAD	Intervention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)	Dose of ASA (mg/d)
84	F	67	29.43	N	N	N	151	7.1	8.5	1.22	185	52	112	107	12.7	60
85	F	53	20.84	N	N	N	135	7.6	6.9	1.2	204	46	137	104	11.2	60
86	M	35	22.62	N	N	N	114	6.3	1.8	0.31	169	58	103	43	11.4	300
87	M	63	28.5	N	N	N	139	6.4	1.8	0.29	164	45	101	92	13.3	60
88	F	73	23.23	Y	Y	N	175	6.7	5.7	0.97	97	32	56	49	12.9	60
89	F	64	25.67	Y	N	N	92	6.1	11.1	2	153	37	92	119	12.2	60
90	F	52	25.74	Y	N	N	128	9.3	3.1	0.46	114	42	62	56	10.6	60
91	F	52	39.93	Y	N	N	133	7.0	7.6	1.25	151	32	102	84	13	60
92	F	71	28.74	Y	N	N	117	10.0	8.5	1.41	164	46	96	118	13.4	300
93	M	66	23.79	N	N	N	128	6.4	6.6	1.06	139	27	60	262	12	60
94	F	58	27.62	N	N	N	133	6.7	10.6	1.73	184	37	108	196	14.2	60
95	F	65	25.39	N	N	N	126	7.8	17.6	2.86	127	39	62	39	11.6	60
96	F	57	33.73	N	N	N	112	7.3	15.2	2.44	146	52	57	189	13.5	60
97	M	79	-	Y	Y	Y	135	6.1	16.9	2.6	141	34	76	157	12.5	150

Table 34 Demographic and clinical data of the individual T2DM with no aspirin

Subject No.	Sex	Age (year)	BMI (kg/m ²)	CAD	Inter-vention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)
1	M	52	25.42	1	2	0	184	9.3	13	2.37	224	44	136	217	14.5
2	F	48	24.03	0	0	0	110	8	12.9	2	208	35	130	221	12.5
3	M	53	22.01	2	1	0	70	6.3	14.4	1.91	144	35	78	156	15.5
4	F	74	21.41	0	1	0	135	9.3	5.8	0.97	239	59	165	76	11.5
5	M	52	34.75	0	1	0	137	7.5	10.6	1.77	194	41	129	120	15.5
6	M	62	26.73	0	1	2	142	7.3	6.3	1.07	225	64	151	55	14.9
7	F	58	25.92	0	0	0	155	7.4	10.5	1.82	164	42	88	173	11.7
8	F	69	27.96	0	0	0	117	6.4	17.5	2.72	188	64	104	97	14.7
9	F	69	30.45	0	0	2	124	8.1	13.7	2.19	164	46	90	141	13
10	F	65	23.5	0	0	2	112	7.3	4.1	0.65	210	51	137	110	12.4
11	M	61	26.9	1	0	0	106	6.4	9.9	1.52	176	27	95	274	13.8
12	F	63	23.01	0	0	1	123	7.1	9.9	1.6	206	43	139	120	11.5
13	M	50	22.75	0	1	2	175	8	4.3	0.79	154	44	90	100	13
14	F	69	22.58	0	0	1	101	6.1	10.6	1.61	230	37	153	201	12.1
15	F	59	27.25	0	0	0	288	14.1	8.9	2.29	217	59	140	87	12.7
16	F	39	22.07	0	0	0	184	6.9	4.4	0.82	249	52	173	123	10.7

Table 34 Demographic and clinical data of the individual T2DM with no aspirin (continued)

Subject No.	Sex	Age (year)	BMI (kg/m ²)	CAD	Inter-vention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)
17	F	68	19.41	0	0	1	173	7.6	4.5	0.82	171	44	83	219	12.3
18	F	68	26.91	0	0	2	285	12.9	13.1	3.27	185	37	122	133	13.9
19	F	65	22.66	0	0	2	67	6.7	6.3	0.84	189	33	125	158	11.2
20	F	54	30.76	0	0	0	119	7	8.1	1.3	146	24	93	147	13.2
21	M	50	30.4	1	0	1	117	6.8	13	2.05	143	38	107	192	13.8
22	F	68	23.48	0	0	1	135	7.3	2.4	0.41	154	40	83	153	12.5
23	F	53	26.13	0	2	0	139	6	5.3	0.9	228	45	172	56	12.3
24	F	54	35.23	0	0	0	141	7.7	8.4	1.42	142	32	90	98	12.5
25	M	54	24.35	1	1	0	85	6.6	12.9	1.83	143	36	94	66	13.7
26	M	47	24.74	0	0	0	110	8.7	9.4	1.47	170	39	107	119	10.6
27	F	57	22.11	0	0	0	123	6.8	12.3	1.97	187	43	81	316	13
28	F	36	26.84	1	1	2	160	11.6	6.2	1.1	222	63	121	196	12.6
29	F	39	28	0	0	0	121	6.6	17.2	2.71	103	44	40	100	12.1
30	M	65	22.42	0	1	2	112	6.3	9.5	1.49	115	36	58	107	10.4
31	M	57	23.38	0	0	2	114	5.9	6.3	1	197	49	140	38	14.4
32	M	40	24.22	2	2	1	222	10.4	8.6	1.71	203	41	116	235	15.3

Table 35 Demographic and clinical data of the individual T2DM with aspirin with platelet aggregation induced by AA $\geq 20\%$ (n=15)

Subject No.	Sex	Age (year)	BMI (kg/m ²)	CAD	Inter-vention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)	TXB ₂ (ng/ml)	AA (%)	ADP (%)
16	F	49	32.31	N	N	N	135	7.6	19.4	2.95	151	44	85	112	13.3	3.059	72	68
19	F	68	23.22	N	N	N	105	6.6	7.9	1.42	133	28	75	148	12	0.286	23	55
20	M	65	31.53	Y	N	N	142	8.8	6.0	0.93	158	25	94	195	10.2	0.314	20	50
21	M	67	23.88	N	N	N	121	6.4	13.4	2.24	126	39	76	58	13.4	2.444	75	74
22	F	59	25.93	N	N	N	168	8.4	4.6	0.75	192	39	120	163	12.2	10.088	71	62
29	F	57	24.71	N	N	N	121	7.2	34.6	5.56	176	34	110	164	13.8	1.685	81	65
35	M	49	27.71	N	N	N	121	6.7	11.7	2.16	176	43	112	103	13.5	0.259	41	75
43	F	63	29.74	N	N	N	115	6.3	5.6	0.93	209	48	138	116	12.7	0.206	24	63
59	F	52	26.22	N	N	N	182	12.7	6.6	1.00	251	44	172	175	13.4	4.752	70	66
64	M	65	25.14	N	N	N	119	6.4	16.8	2.54	202	31	132	203	13.4	0.009	20	70
71	M	65	31.54	N	N	N	132	6.9	12	1.79	133	30	79	121	16.2	0.023	69	74
79	M	44	30.76	N	N	N	178	8.3	2.2	0.36	226	32	158	185	14.9	0.226	45	73
83	F	67	23.83	N	N	N	85	6.8	36.5	5.75	197	73	104	99	12.4	0.205	66	49
85	F	53	20.84	N	N	N	135	7.6	6.9	1.2	204	46	137	104	11.2	.	35	67
95	F	65	25.39	N	N	N	126	7.8	17.6	2.86	127	39	62	39	11.6	0.372	82	78

Table 36 Demographic and clinical data of the individual T2DM with aspirin with platelet aggregation induced by ADP $\geq 70\%$ (n=22)

Subject No.	Sex	Age (year)	BMI (kg/m ²)	CAD	Inter-vention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)	Dose of ASA (mg/d)	TXB ₂ (ng/ml)	AA (%)	ADP (%)
2	F	69	16.89	Y	N	N	112	6.5	3.0	0.48	144	51	78	78	12.2	60	0.103	17	77
6	M	63	24.19	Y	N	N	112	7.6	3.8	0.6	169	55	100	70	12.9	300	0.082	18	75
7	M	62	27.68	Y	N	N	92	6	13.0	1.9	170	42	100	142	12.6	300	0.079	11	73
13	F	73	25.43	N	N	N	124	7.8	12.3	1.98	164	45	92	135	12.9	60	0.523	12	74
17	F	54	27.05	N	N	N	103	6.7	24.3	3.89	201	50	122	148	13.1	60	0.354	10	70
21	M	67	23.88	N	N	N	121	6.4	13.4	2.24	126	39	76	58	13.4	60	2.444	75	74
31	F	55	29.43	N	N	N	169	7.5	9.5	1.61	183	51	98	174	13.4	100	0.210	9	70
35	M	49	27.71	N	N	N	121	6.7	11.7	2.16	176	43	112	103	13.5	60	0.259	41	75
36	M	49	27.42	N	N	N	117	7.4	17.5	2.75	177	32	68	389	14.6	60	0.344	16	73
37	M	48	28.21	Y	N	N	135	8.8	10.1	1.6	182	39	113	152	13.7	60	0.338	9	72
49	F	67	21.39	Y	N	N	121	6.3	6.6	1.17	177	41	107	148	12.9	60	0.005	10	71
64	M	65	25.14	N	N	N	119	6.4	16.8	2.54	202	31	132	203	13.4	300	0.009	20	70
66	M	57	32.01	N	N	N	133	6.8	18.6	3.13	119	25	89	27	14	60	0.985	7	74
68	F	55	25.21	N	N	N	108	6.4	11.8	1.98	135	44	75	82	12.7	60	0.313	11	70
71	M	65	31.54	N	N	N	132	6.9	12	1.79	133	30	79	121	16.2	60	0.023	69	74

Table 36 Demographic and clinical data of the individual T2DM with aspirin with platelet aggregation induced by ADP $\geq 70\%$ (n=22) (continued)

Subject No.	Sex	Age (year)	BMI (kg/m ²)	CAD	Inter-vention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)	Dose of ASA (mg/d)	TXB ₂ (ng/ml)	AA (%)	ADP (%)
73	M	71	29.24	Y	Y	N	133	7.3	14.5	2.15	233	48	148	183	16.4	60	0.096	6	76
74	M	48	27.34	N	N	N	150	8.5	47.5	7.19	195	38	127	150	15.3	120	0.018	17	70
75	F	65	30.48	N	N	N	139	6.8	15.6	2.64	200	49	129	107	11.2	60	0.552	7	76
76	F	63	26.97	N	N	N	117	6.5	9.6	1.61	190	41	123	130	12.8	60	0.004	7	79
77	M	66	32.49	Y	N	N	108	5.3	4.9	0.79	161	40	98	114	14.3	300	0.017	13	76
79	M	44	30.76	N	N	N	178	8.3	2.2	0.36	226	32	158	185	14.9	300	0.226	45	73
95	F	65	25.39	N	N	N	126	7.8	17.6	2.86	127	39	62	39	11.6	0.372	82	78	95

Table 37 Demographic and clinical data of the individual T2DM with aspirin resistance (n=6)

Subject No.	Sex	Age (year)	BMI (kg/m ²)	CAD	Intervention	CVA	FPG (mg/dl)	HbA1c (%A1c)	Insulin (uIU/ml)	HOMA IR	TC (mg/dl)	HDL (mg/dl)	LDL (mg/dl)	TG (mg/dl)	Hb (g/dl)	Dose of ASA (mg/d)	TXB ₂ (ng/ml)	AA (%)	ADP (%)
21	M	67	23.88	N	N	N	121	6.4	13.4	2.24	126	39	76	58	13.4	60	2.444	75	74
35	M	49	27.71	N	N	N	121	6.7	11.7	2.16	176	43	112	103	13.5	60	0.259	41	75
64	M	65	25.14	N	N	N	119	6.4	16.8	2.54	202	31	132	203	13.4	300	0.009	20	70
71	M	65	31.54	N	N	N	132	6.9	12	1.79	133	30	79	121	16.2	60	0.023	69	74
79	M	44	30.76	N	N	N	178	8.3	2.2	0.36	226	32	158	185	14.9	300	0.226	45	73
95	F	65	25.39	N	N	N	126	7.8	17.6	2.86	127	39	62	39	11.6	0.372	82	78	95

Table 38 Serum thromboxane B₂ level and percentage of platelet aggregation of the individual subjects with aspirin.

Subject No.	Serum TXB ₂ (ng/ml)	Maximum aggregation (%)	
		AA	ADP
1	0.023	19	51
2	0.103	17	77
3	0.311	12	53
4	0.505	19	50
5	0.204	9	41
6	0.082	18	75
7	0.079	11	73
8	0.415	10	49
9	0.590	10	55
10	0.163	3	69
11	0.189	9	47
12	0.084	13	51
13	0.523	12	74
14	1.187	9	63
15	0.168	9	64
16	3.059	72	68
17	0.353	10	70
18	0.742	11	53
19	0.287	23	55
20	0.314	20	50
21	2.444	75	74
22	10.087	71	62
23	0.729	9	58
24	0.789	11	67
25	0.519	11	61
26	0.127	9	62
27	0.275	9	61
28	0.729	4	38

Table 38 Serum thromboxane B₂ level and percentage of platelet aggregation of the individual subjects with aspirin. (continued)

Subject No.	Serum TXB ₂ (ng/ml)	Maximum aggregation (%)	
		AA	ADP
29	1.685	81	65
30	0.159	17	63
31	0.210	9	70
32	0.146	9	59
33	0.321	12	65
34	0.146	11	65
35	0.259	41	75
36	0.344	16	73
37	0.338	9	72
38	0.031	12	63
39	0.072	7	69
40	0.207	11	50
41	7.971	14	54
42	0.334	9	47
43	0.206	24	63
44	0.082	13	64
45	0.274	15	63
46	0.139	13	65
47	0.048	8	53
48	0.314	8	58
49	0.005	10	71
50	0.010	12	50
51	0.106	9	60
52	0.413	9	58
53	0.369	11	65
54	0.022	15	68
55	1.027	9	57
56	0.0004	9	55

Table 38 Serum thromboxane B₂ level and percentage of platelet aggregation of the individual subjects with aspirin. (continued)

Subject No.	Serum TXB ₂ (ng/ml)	Maximum aggregation (%)	
		AA	ADP
57	0.003	14	67
58	0.152	10	64
59	4.751	70	66
60	0.197	11	60
61	0.010	9	49
62	0.039	9	64
63	0.041	7	48
64	0.008	20	70
65	0.088	9	62
66	0.985	7	74
67	1.061	8	63
68	0.312	11	70
69	0.008	9	67
70	0.0008	8	61
71	0.023	69	74
72	0.014	16	54
73	0.096	6	76
74	0.018	17	70
75	0.552	7	76
76	0.004	7	79
77	0.016	13	76
78	0.012	9	50
79	0.226	45	73
80	0.004	15	64
81	0.024	13	62
82	0.146	19	62
83	0.205	66	49
84	0.041	19	52

Table 38 Serum thromboxane B₂ level and percentage of platelet aggregation of the individual subjects with aspirin. (continued)

Subject No.	Serum TXB ₂ (ng/ml)	Maximum aggregation (%)	
		AA	ADP
85	-	35	67
86	0.069	8	53
87	0.311	15	65
88	0.086	13	59
89	0.261	11	53
90	1.843	18	65
91	0.083	5	57
92	0.003	17	64
93	0.028	10	63
94	0.780	11	54
95	0.372	82	78
96	-	17	59
97	0.136	15	41

Table 39 Serum thromboxane B₂ level and percentage of platelet aggregation of the individual subjects with no aspirin.

Subject No.	Serum TXB ₂ (ng/ml)	Maximum aggregation (%)	
		AA	ADP
1	23.37224	83	82
2	5.29464	74	54
3	5.9785	61	60
4	10.13018	84	64
5	7.55967	73	77
6	3.05914	83	75
7	7.55967	85	70
8	6.84393	88	74
9	7.55967	75	61
10	8.93193	70	64
11	5.29464	75	81
12	2.98558	81	64
13	23.37224	94	88
14	5.29464	82	77
15	8.42651	79	76
16	0.69486	70	66
17	6.2436	77	76
18	2.55275	70	62
19	10.10351	67	71
20	9.32831	81	82
21	1.43888	75	70
22	5.3067	73	66
23	5.10911	84	79
24	5.7468	84	78
25	8.44919	79	66
26	4.75185	78	75
27	1.85725	86	82
28	7.99249	85	78
29	2.26066	88	67
30	1.98804	82	86
31	1.58892	81	69
32	3.58619	92	67

BIOGRAPHY

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