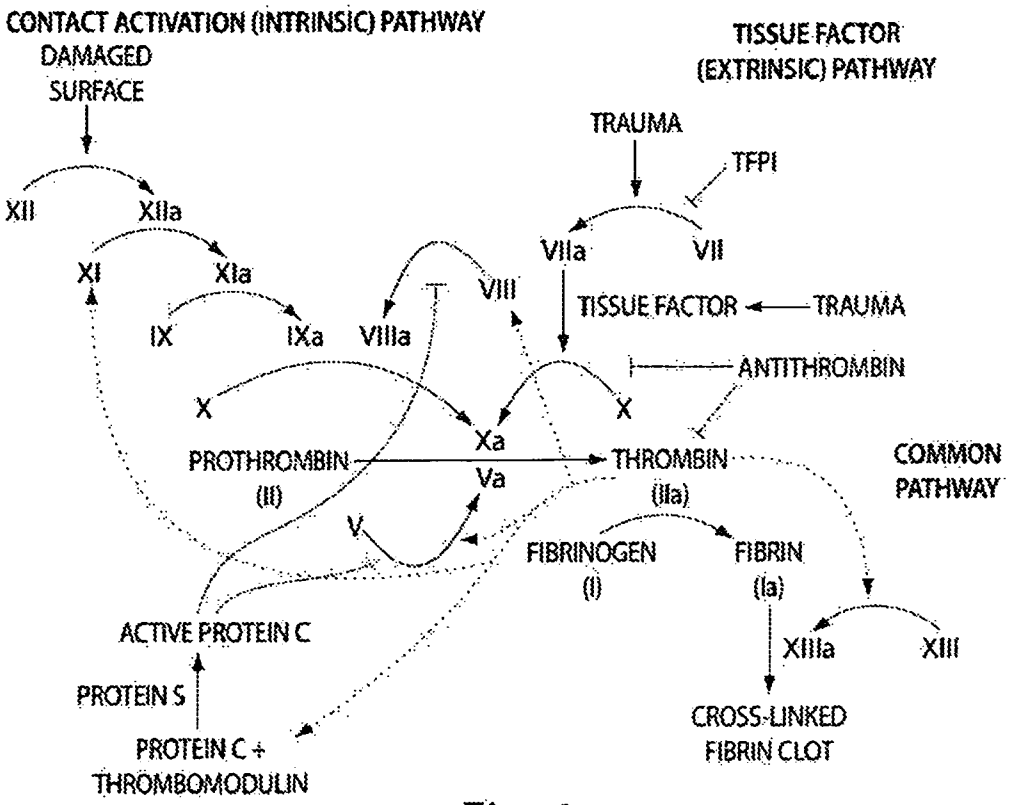

CONTACT ACTIVATION (INTRINSIC) PATHWAY
DAMAGED SURFACE
XII
XIIa
XI
XIa
IX
IXa
VIIIa
VIII
X
Xa
PROTHROMBIN (II)
THROMBIN (IIa)
Va
V
ACTIVE PROTEIN C
PROTEIN S
PROTEIN C + THROMBOMODULIN
TISSUE FACTOR (EXTRINSIC) PATHWAY
TRAUMA
TFPI
VIIa
VII
TISSUE FACTOR
TRAUMA
ANTITHROMBIN
COMMON PATHWAY
FIBRINOGEN (I)
FIBRIN (Ia)
XIIIa
XIII
CROSS-LINKED FIBRIN CLOT

Fig. 1

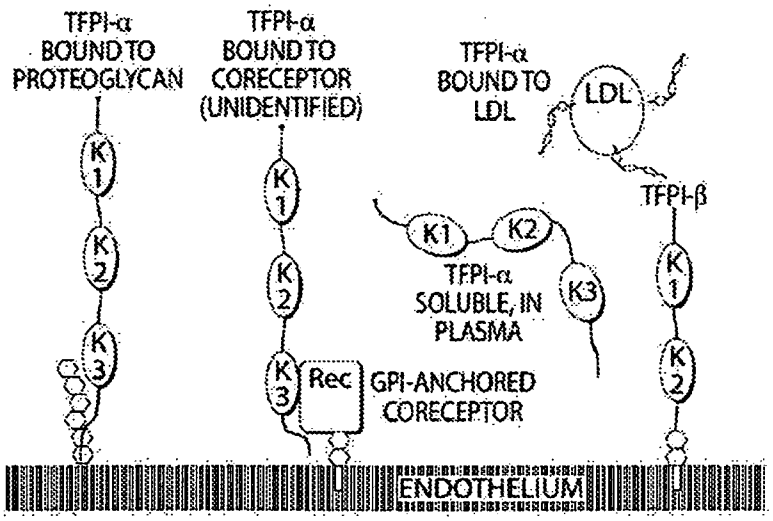

TFPI-α BOUND TO PROTEOGLYCAN
TFPI-α BOUND TO CORECEPTOR (UNIDENTIFIED)
TFPI-α BOUND TO LDL
LDL
TFPI-β
K1
K2
K3
TFPI-α SOLUBLE, IN PLASMA
Rec
GPI-ANCHORED CORECEPTOR
ENDOTHELIUM

Fig. 2

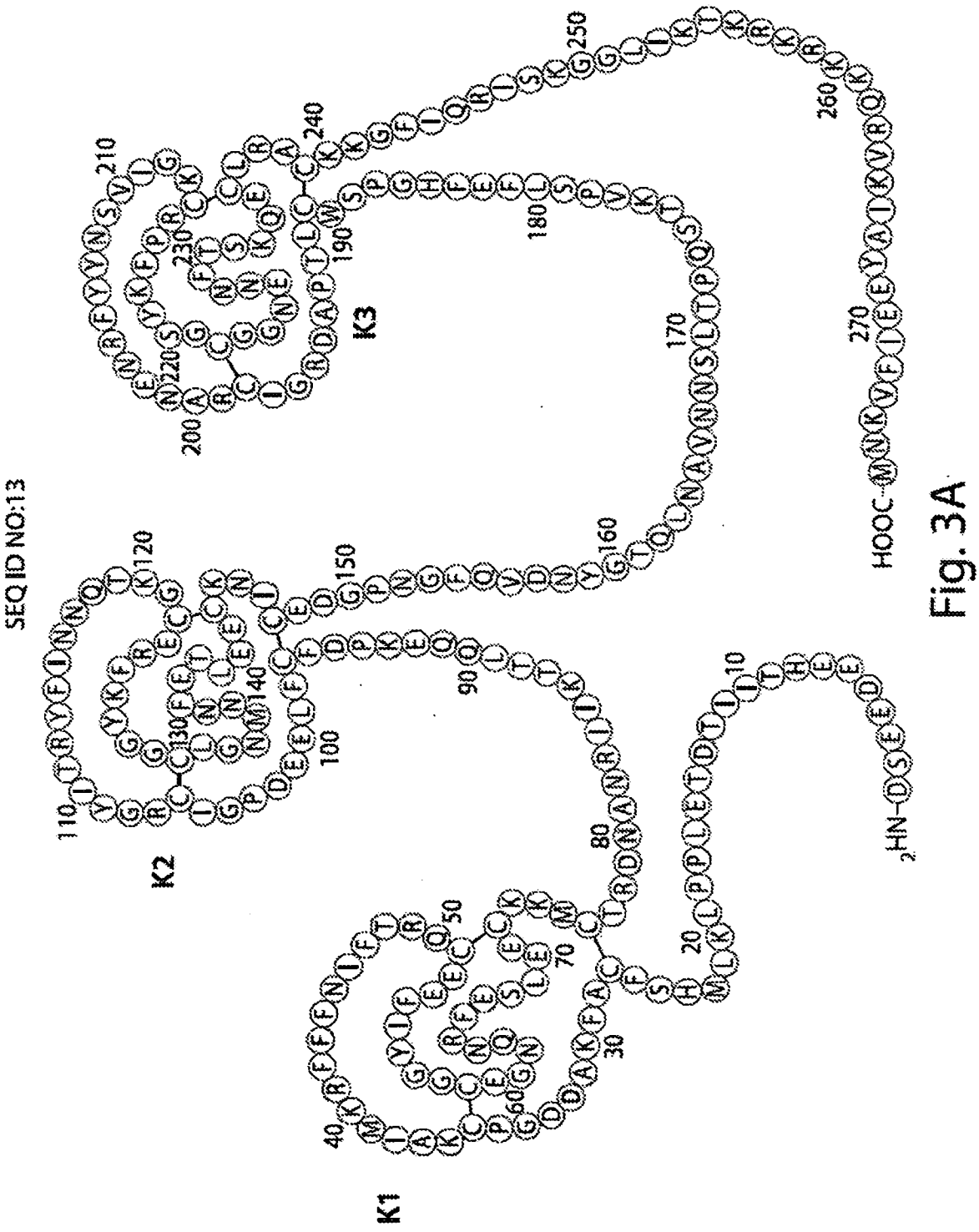


Fig. 3A

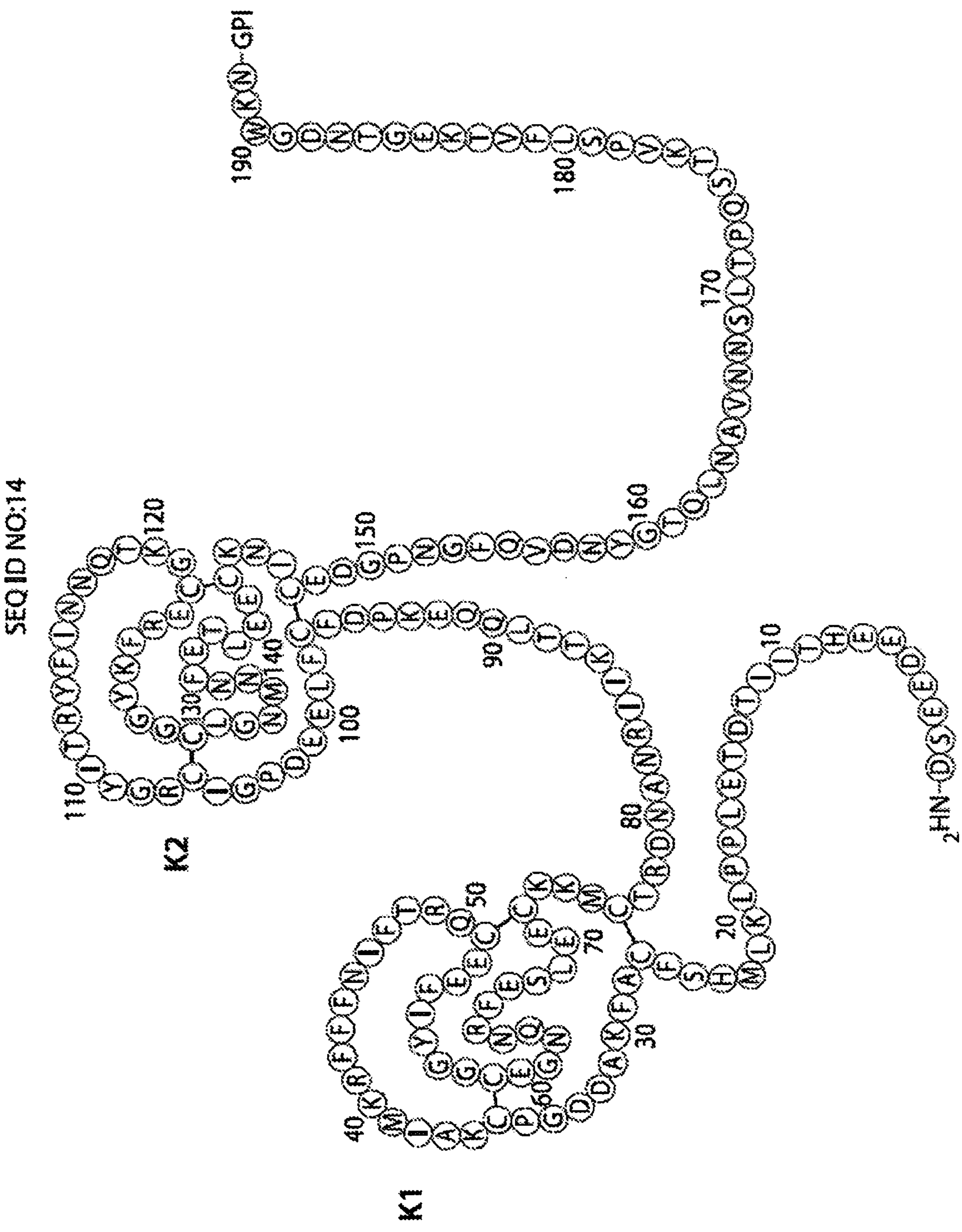


Fig. 3B

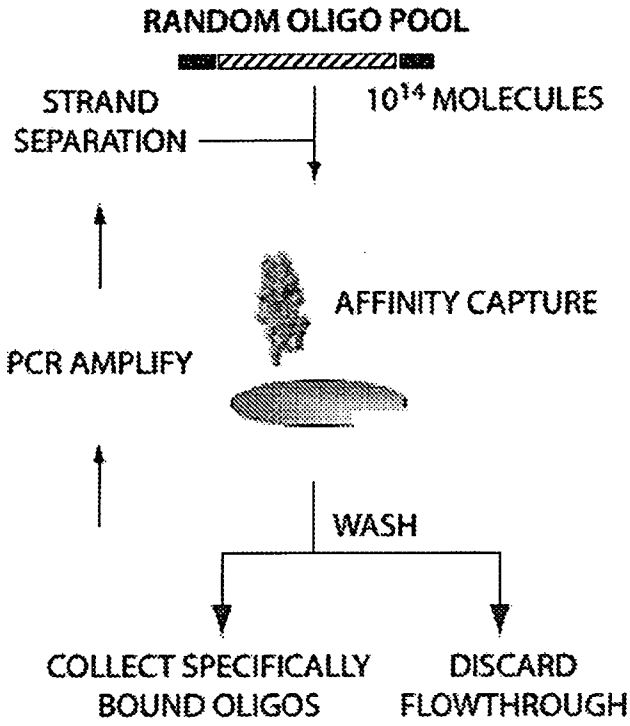


Fig. 4

DSEEDEEHTIITDTELPPLKLMHSFCAFKADDGPCKAIMKRFFFNIFTRQCEEFIYGGCEGNQNRFESLEECKK
MCTRDNANRIIKTTLQQEKPDFCFLEEDPGICRGYITRYFYNNQTKQCERFKYGGCLGNMNNFETLEECKNICE
DGPNGFQVDNYGTQLNAVNNSLTPQSTKVPSLFEFHGPSWCLTPADRGLCRANENRFYYNSVIGKCRPFKYSGC
GGNENNFTSKQECLRACKKGFIQRISKGGLIKTKRKRKKQRVKIAYEEIFVKNM (SEQ ID NO:11)

Fig. 5

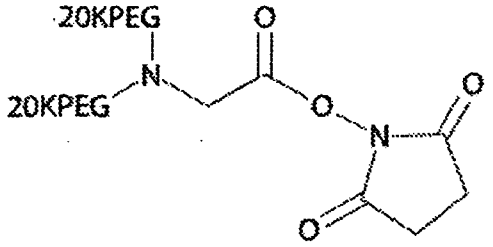


Fig. 6

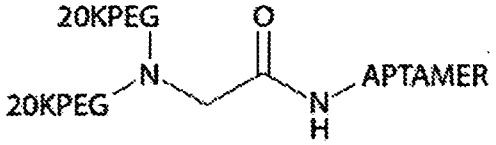


Fig. 7

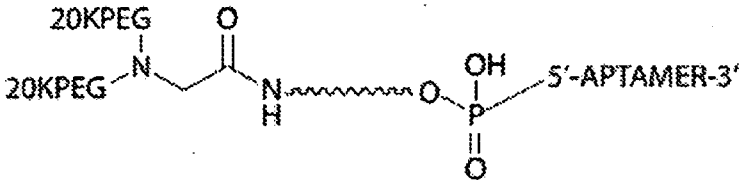


Fig. 8



Fig. 9A

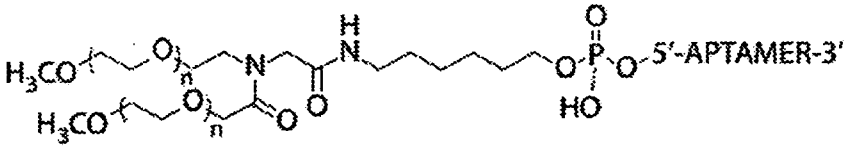
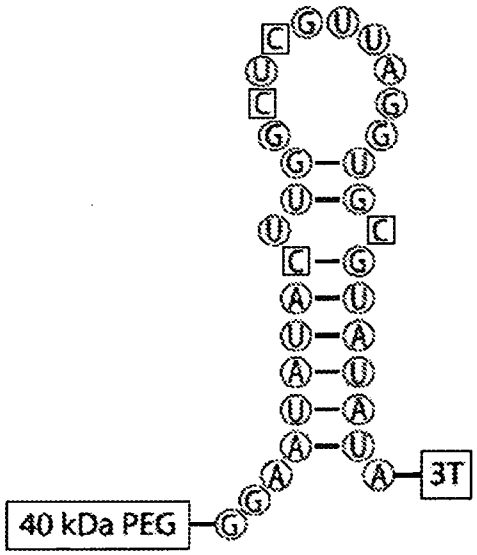


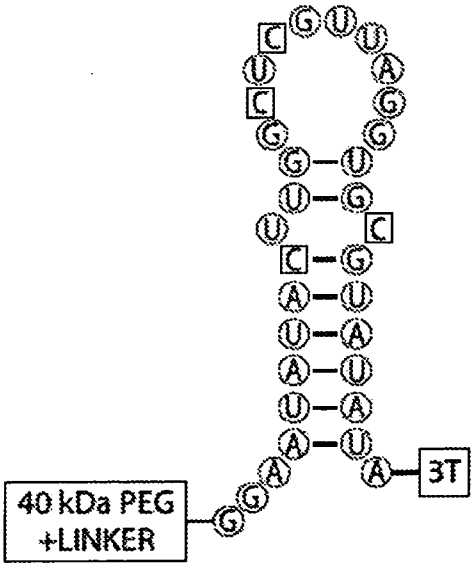
Fig. 9B

REPLACEMENT SHEET



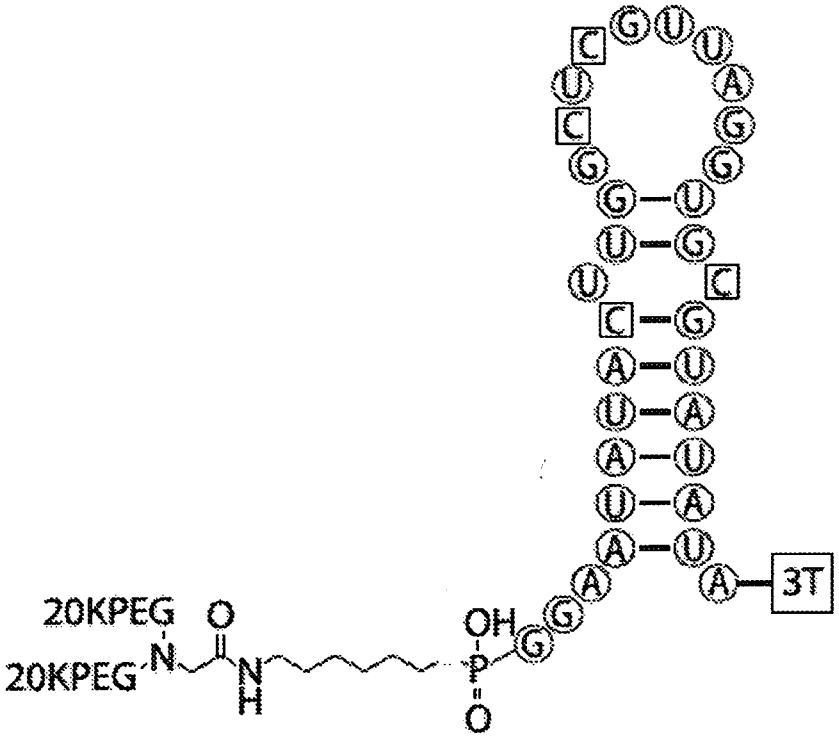
SEQ ID NO:2 WITH A 40 kDa PEG MOIETY

Fig. 10A



SEQ ID NO:2 WITH A LINKER AND A 40 kDa PEG MOIETY

Fig. 10B



SEQ ID NO:4

Fig. 10C

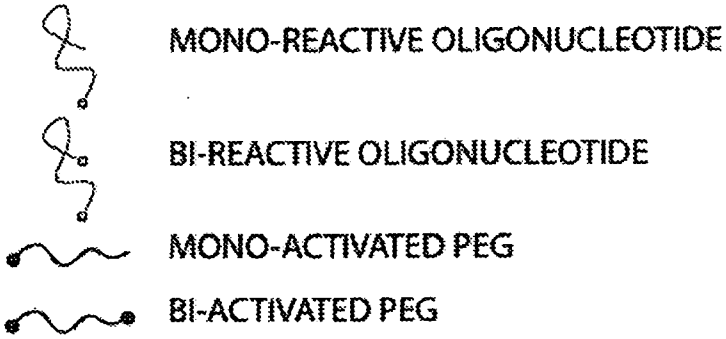

MONO-REACTIVE OLIGONUCLEOTIDE
BI-REACTIVE OLIGONUCLEOTIDE
MONO-ACTIVATED PEG
BI-ACTIVATED PEG
STANDARD PEGYLATION
MULTIPLE PEGYLATION
DIMERIZATION VIA PEGYLATION

Fig. 11

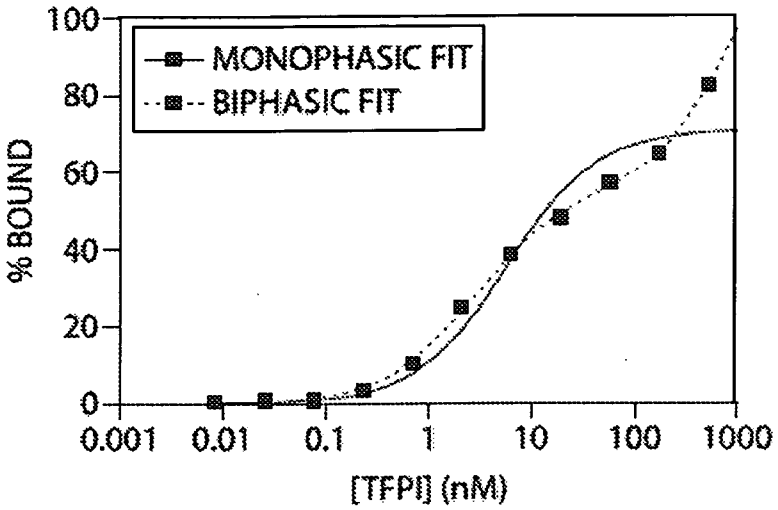


Fig. 12A

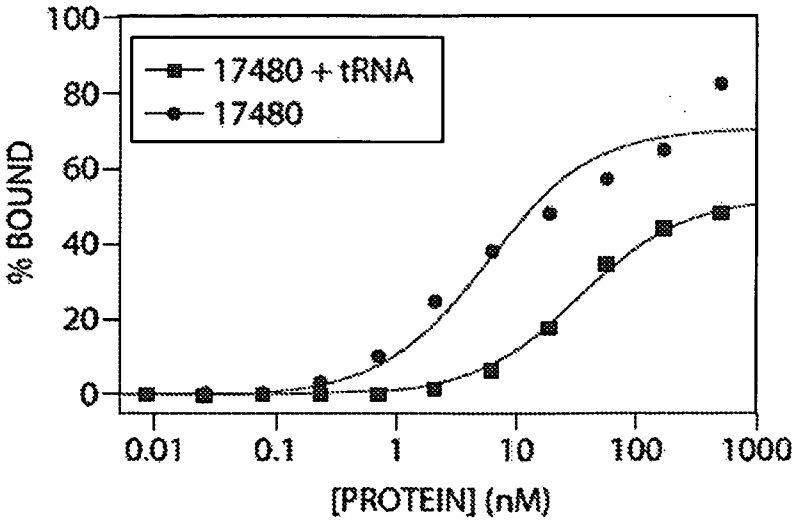


Fig. 12B

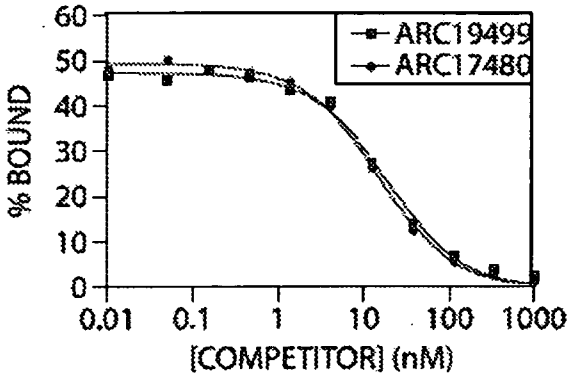


Fig. 13A

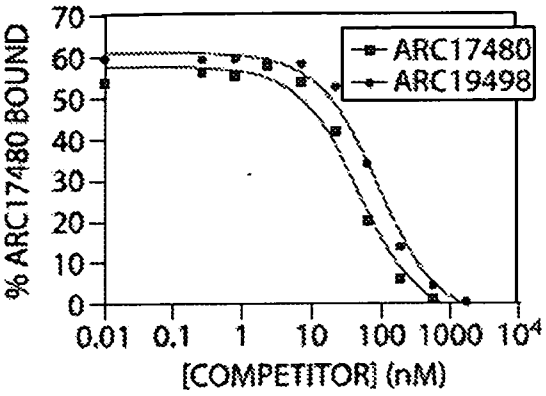


Fig. 13B

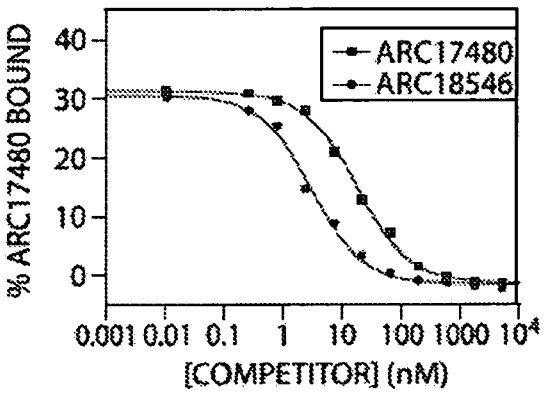


Fig. 13C

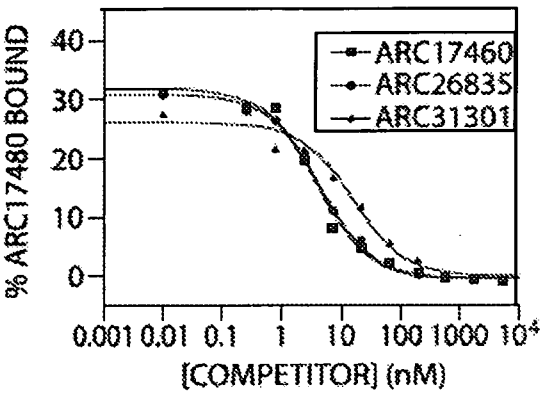


Fig. 13D

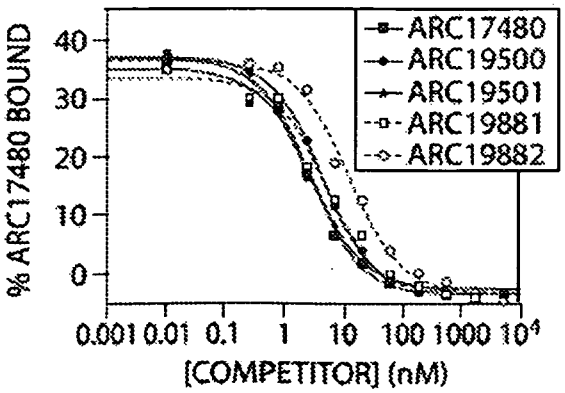


Fig. 13E

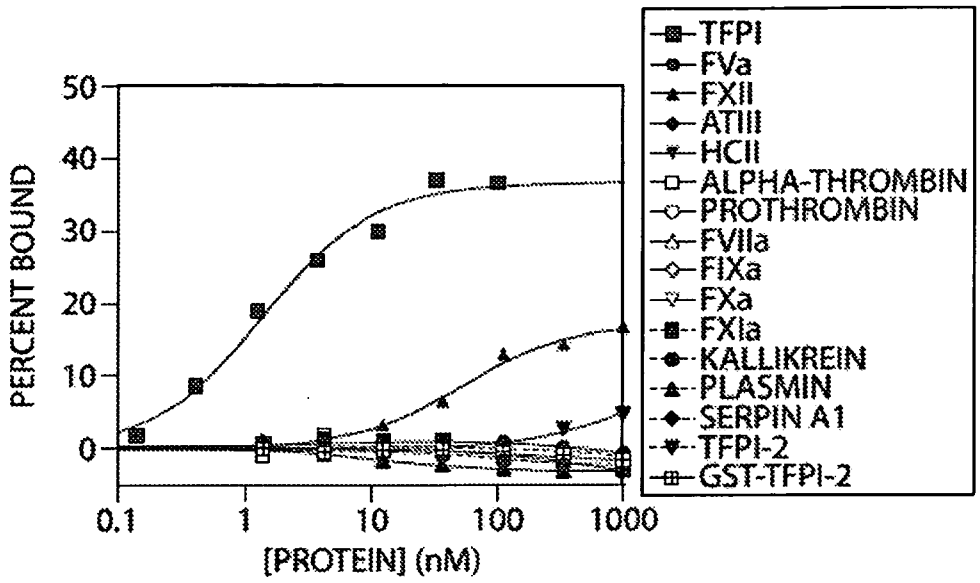


Fig. 14A

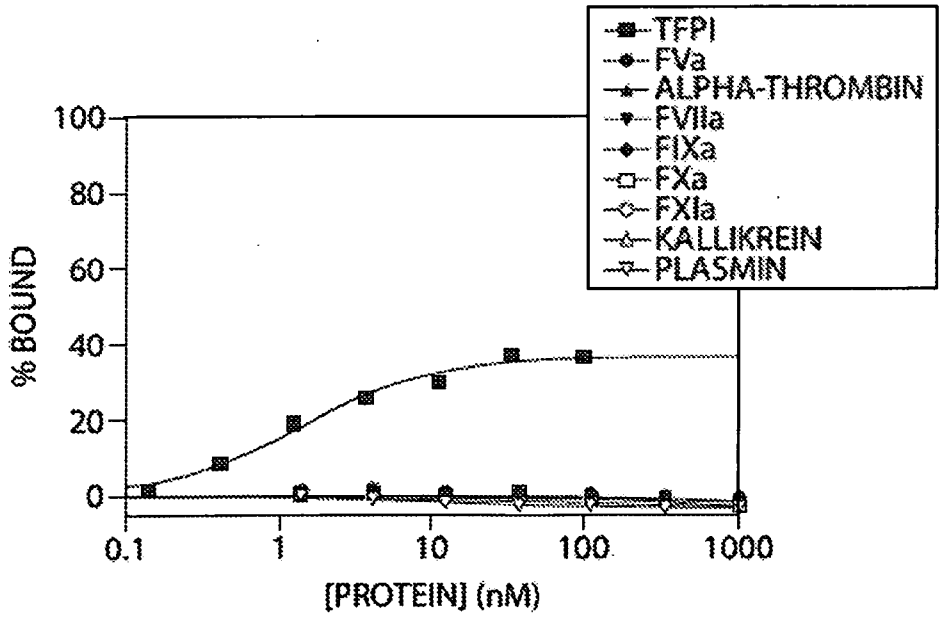


Fig. 14B

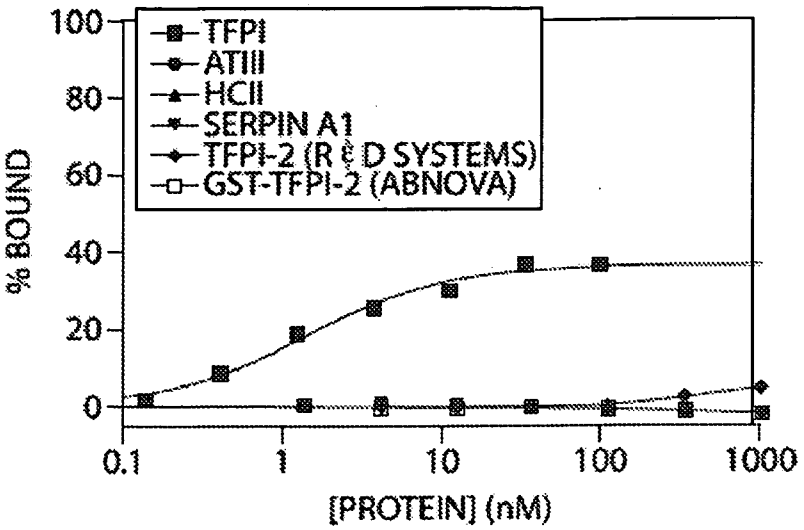


Fig. 14C

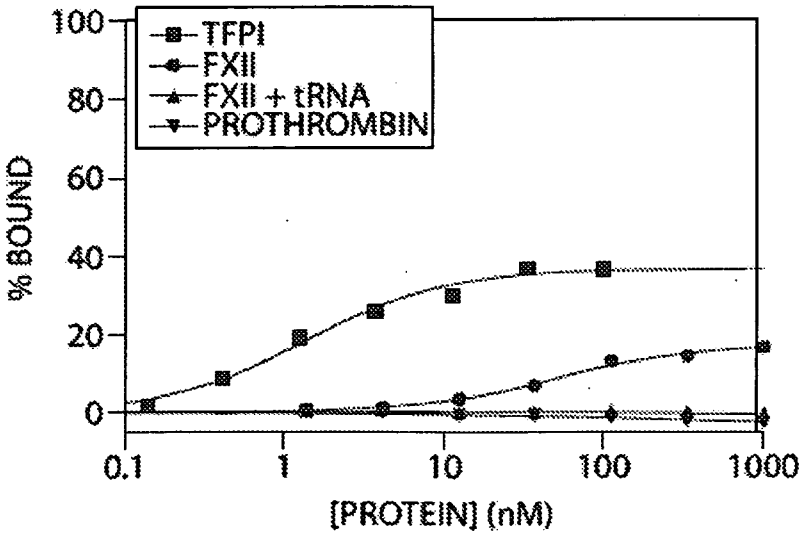


Fig. 14D

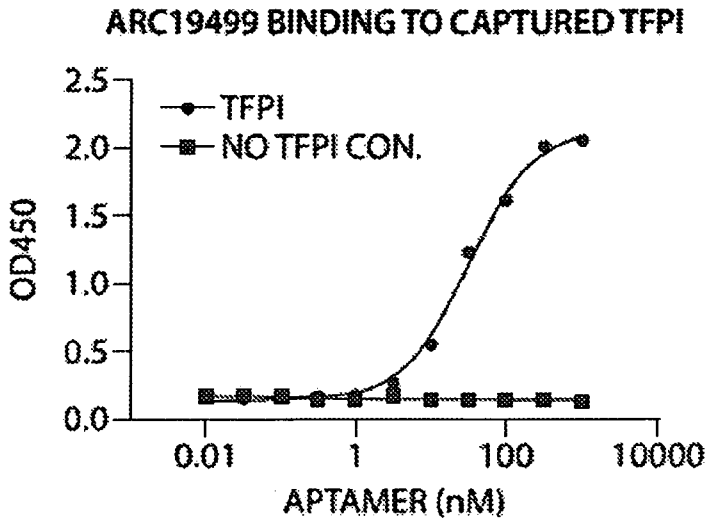

ARC19499 BINDING TO CAPTURED TFPI
TFPI
NO TFPI CON.
OD450
2.5
2.0
1.5
1.0
0.5
0.0
0.01
1
100
10000
APTAMER (nM)

Fig. 15

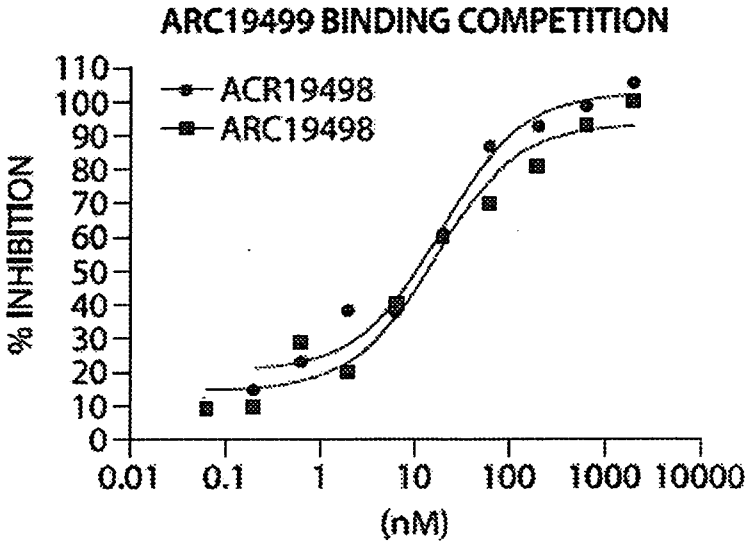

ARC19499 BINDING COMPETITION
ACR19498
ARC19498
% INHIBITION
110
100
90
80
70
60
50
40
30
20
10
0
0.01
0.1
1
10
100
1000
10000
(nM)

Fig. 16

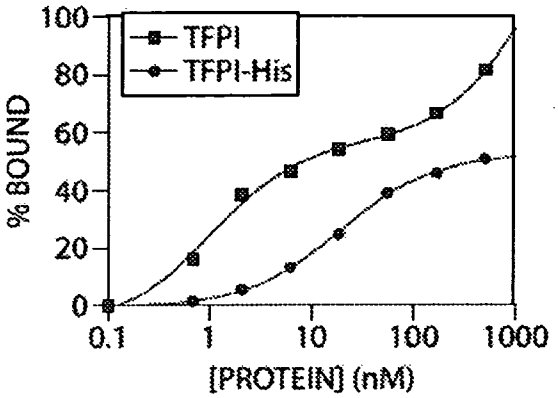


Fig. 17A

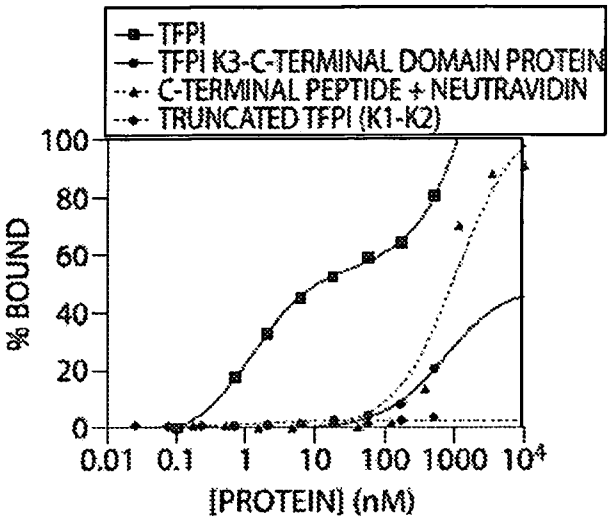


Fig. 17B

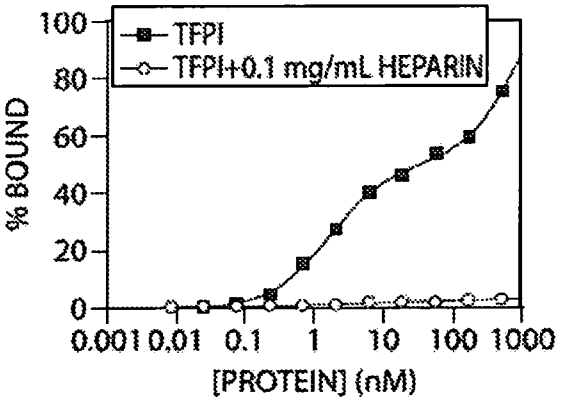


Fig. 18A

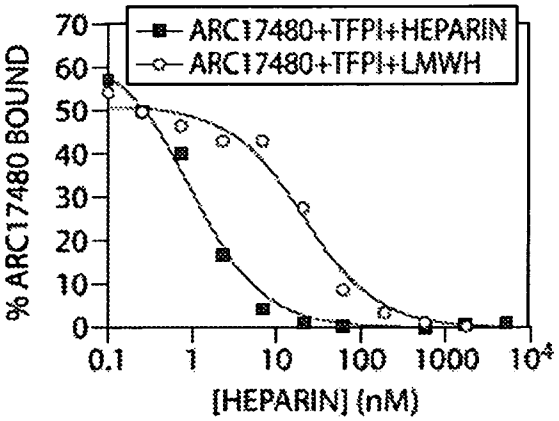


Fig. 18B

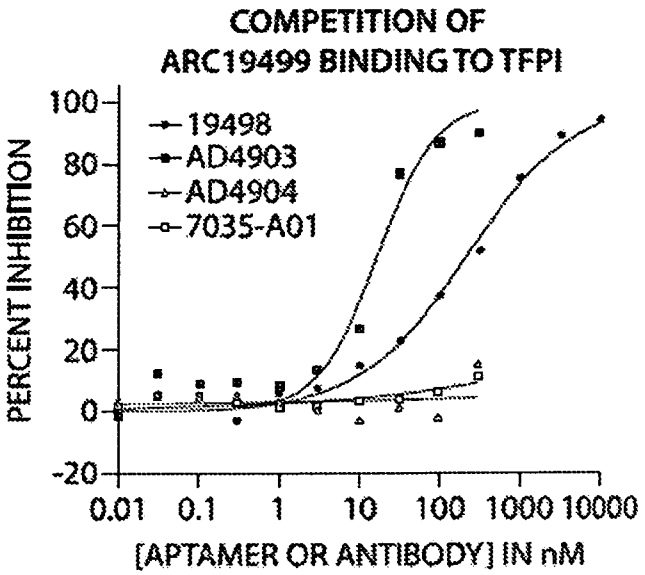


Fig. 19A

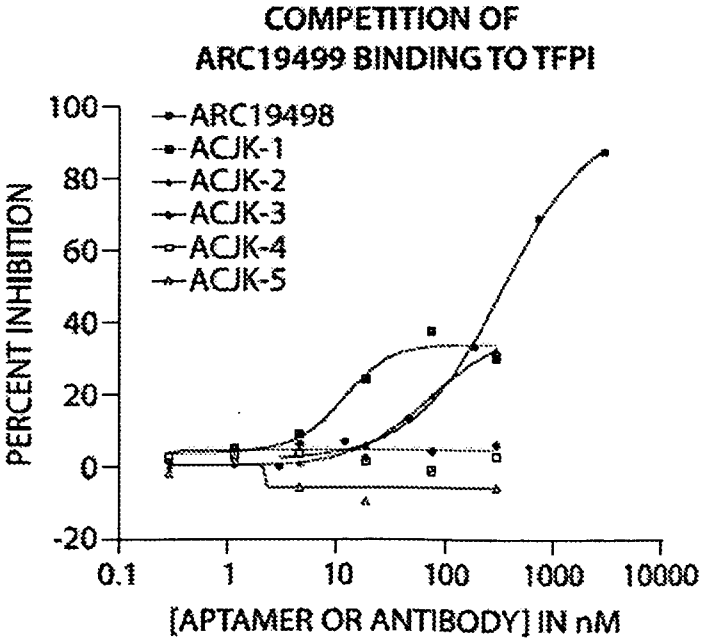


Fig. 19B

REPLACEMENT SHEET

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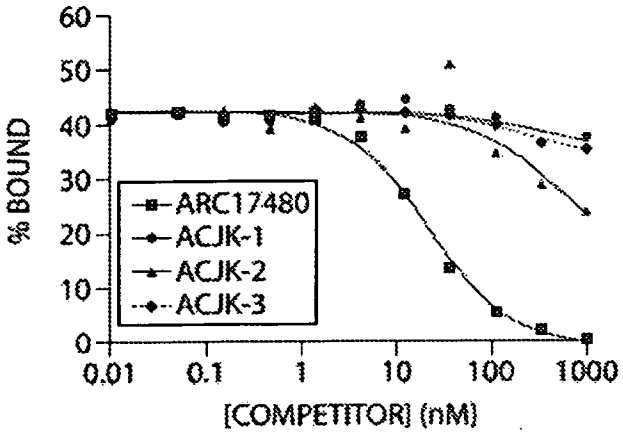


Fig. 20A

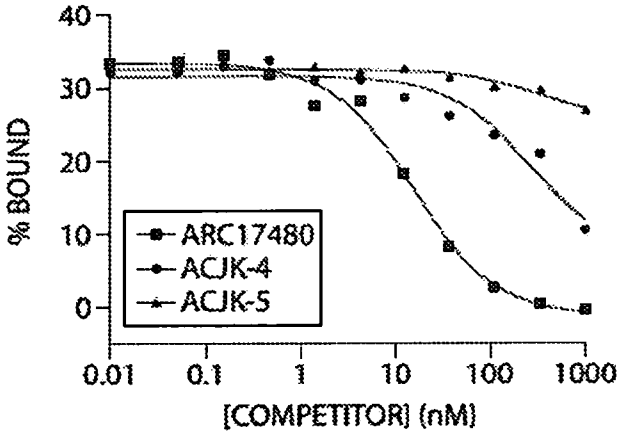


Fig. 20B

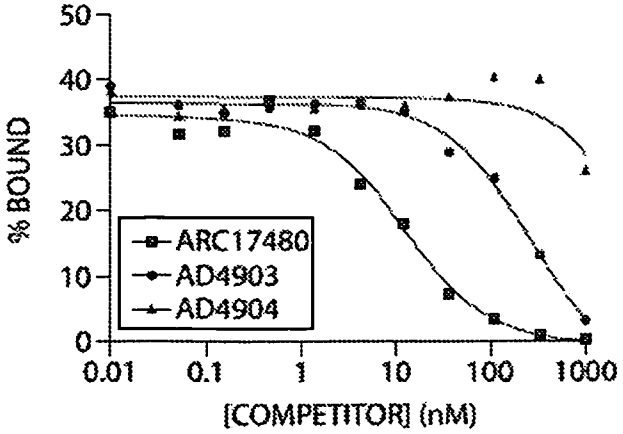


Fig. 20C

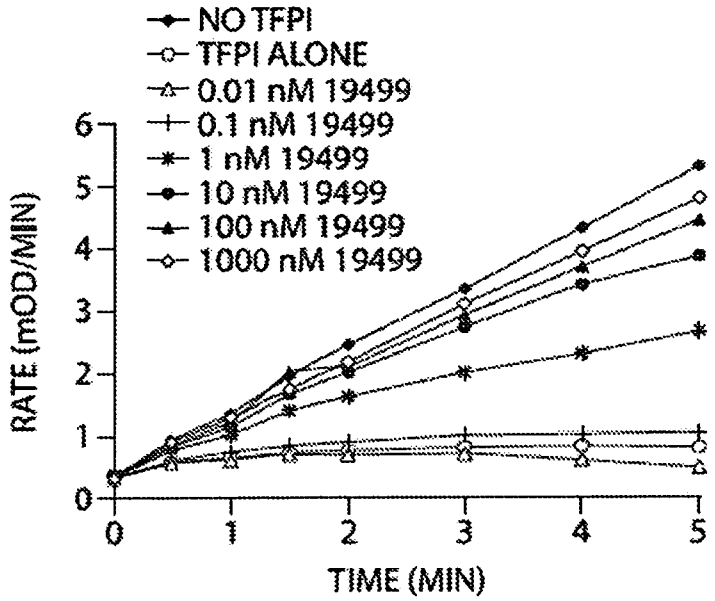


Fig. 21A

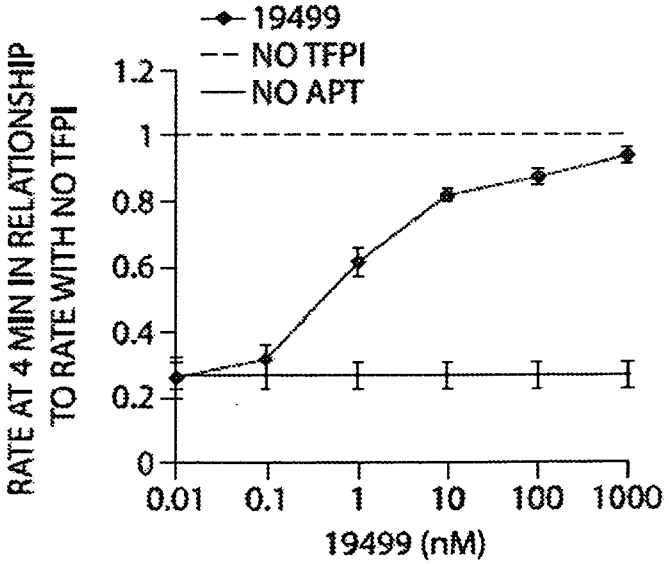


Fig. 21B

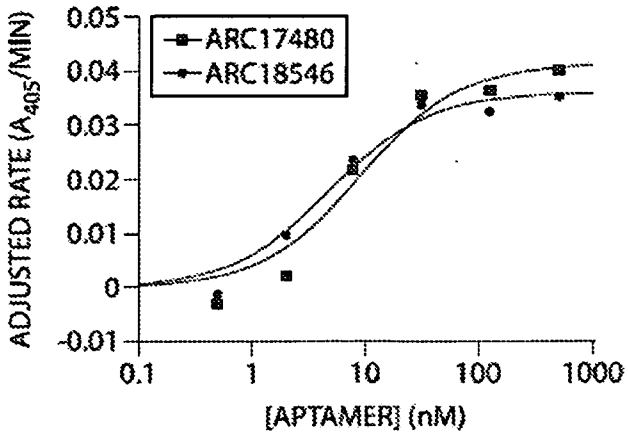


Fig. 22A

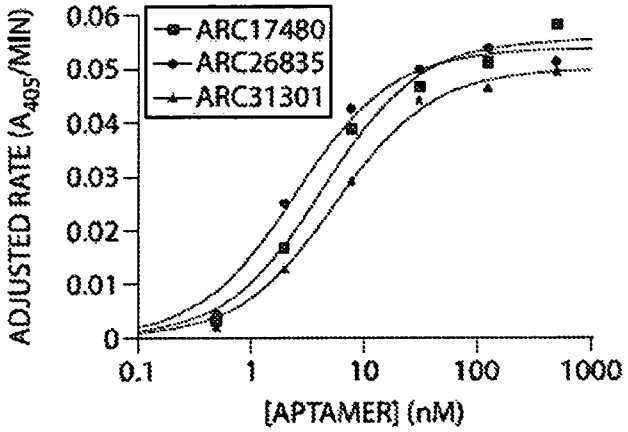


Fig. 22B

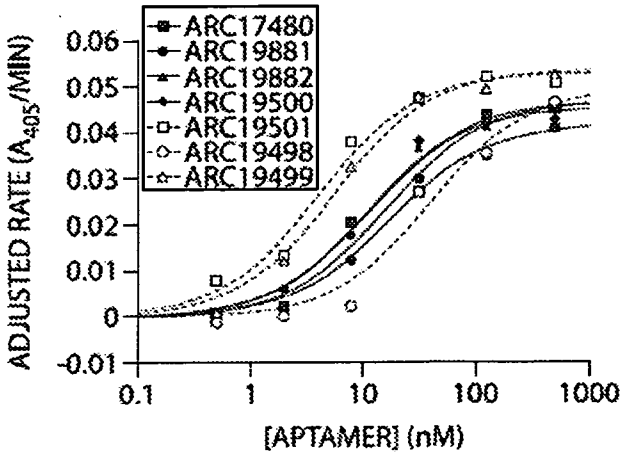


Fig. 22C

REPLACEMENT SHEET

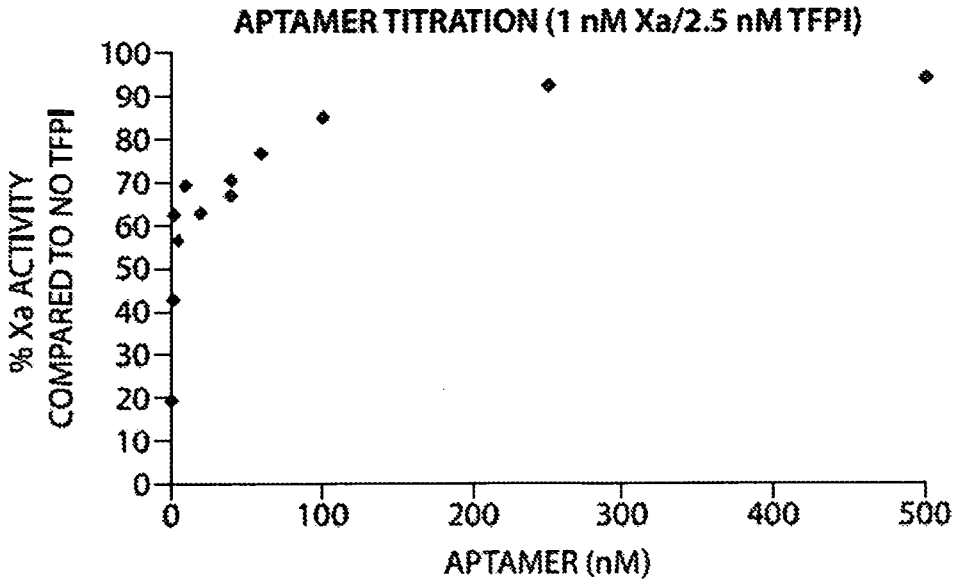


Fig. 23

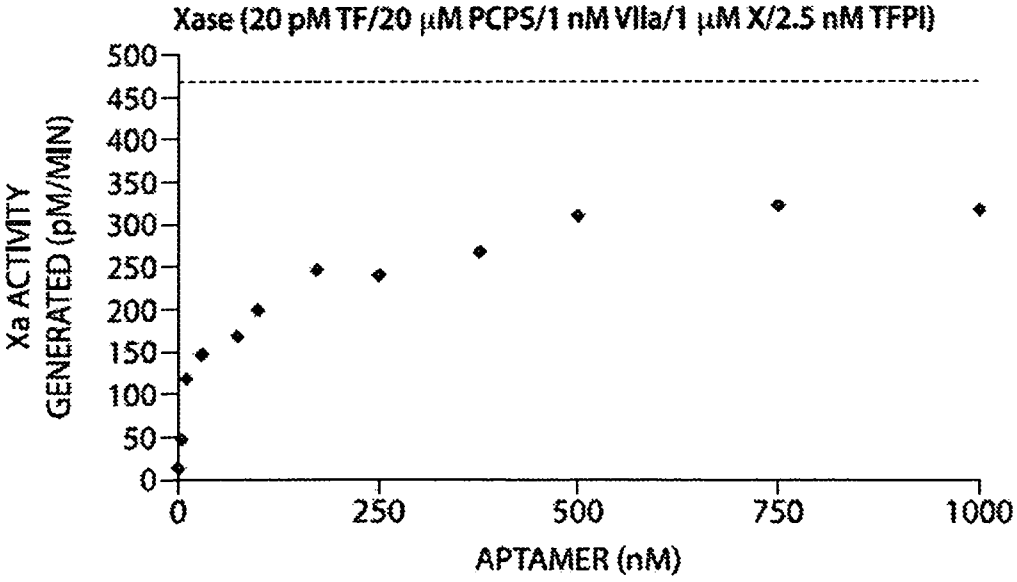


Fig. 24

REPLACEMENT SHEET

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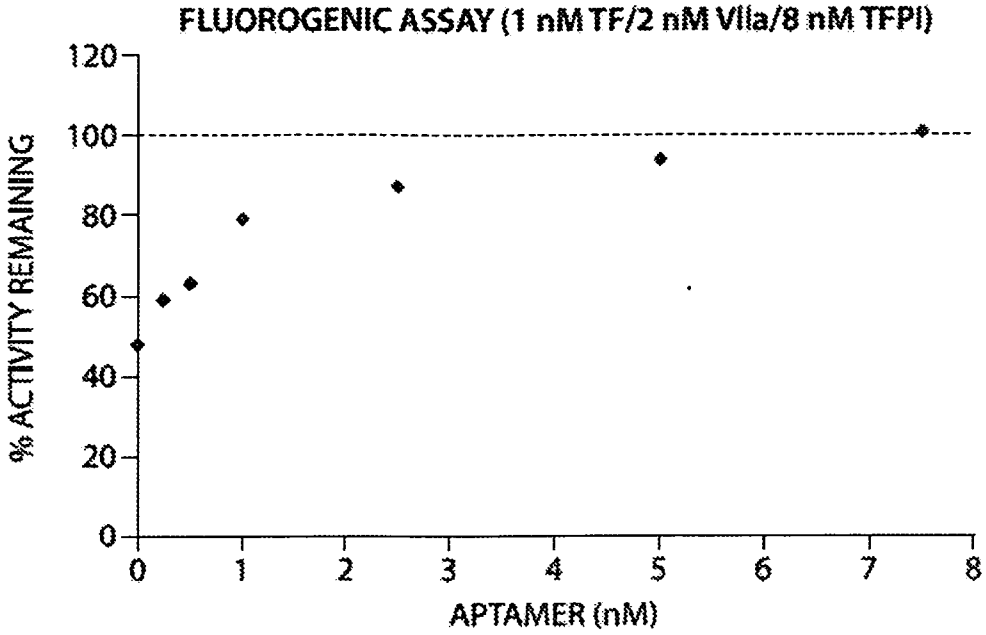


Fig. 25

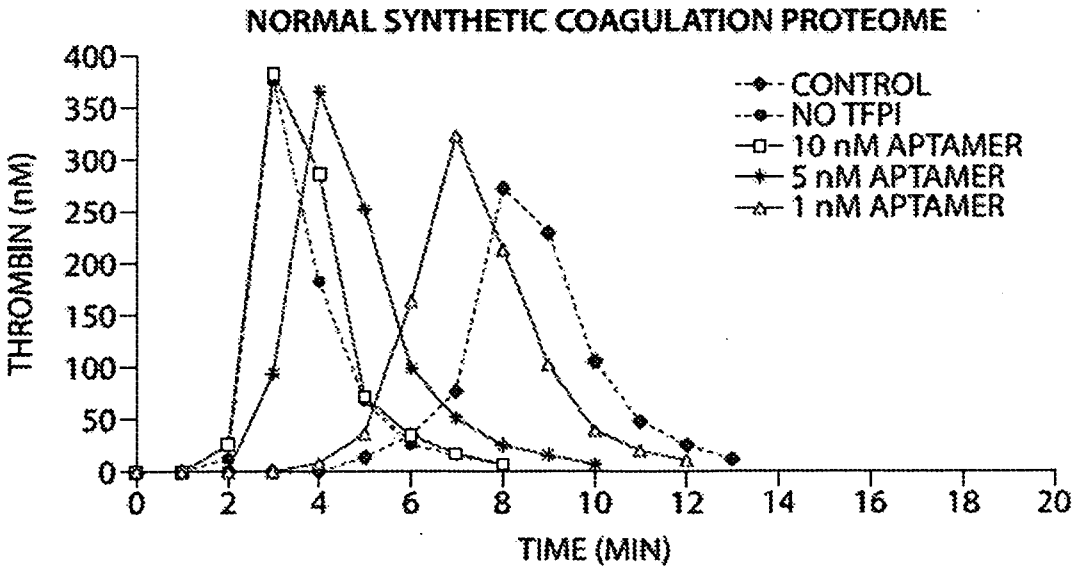


Fig. 26

REPLACEMENT SHEET

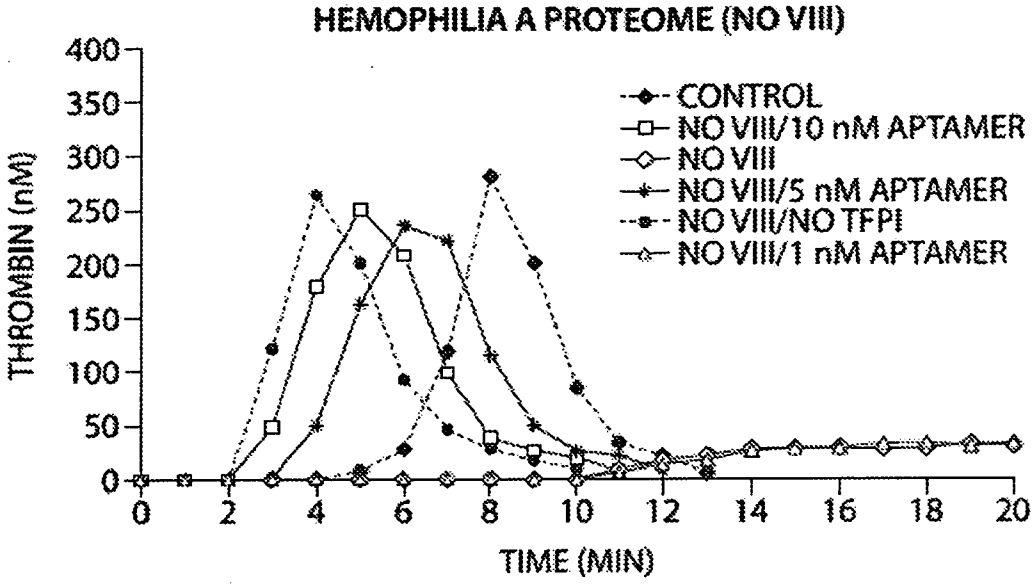


Fig. 27

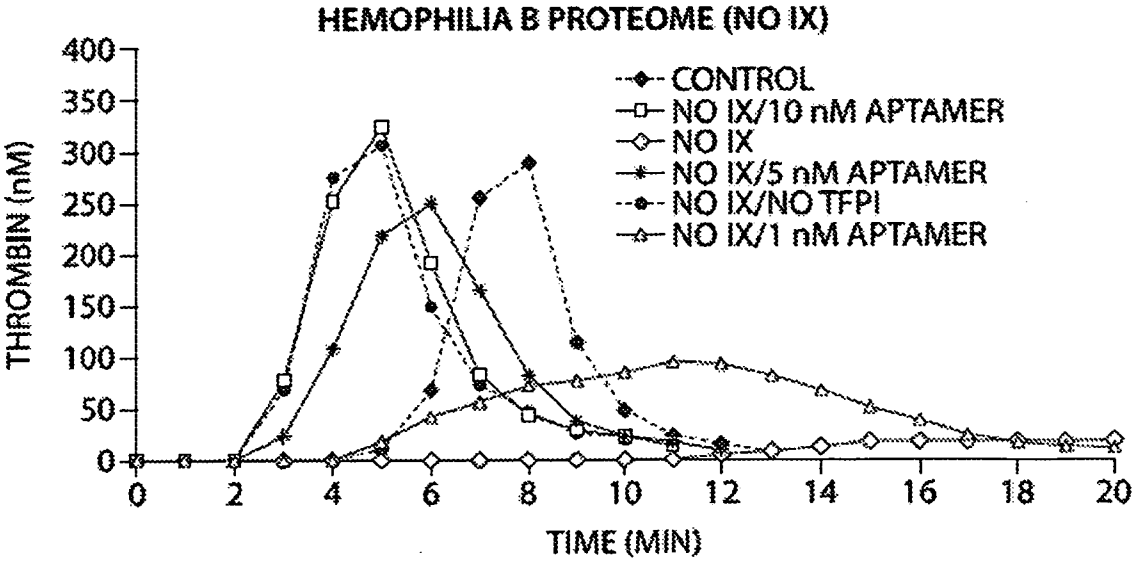


Fig. 28

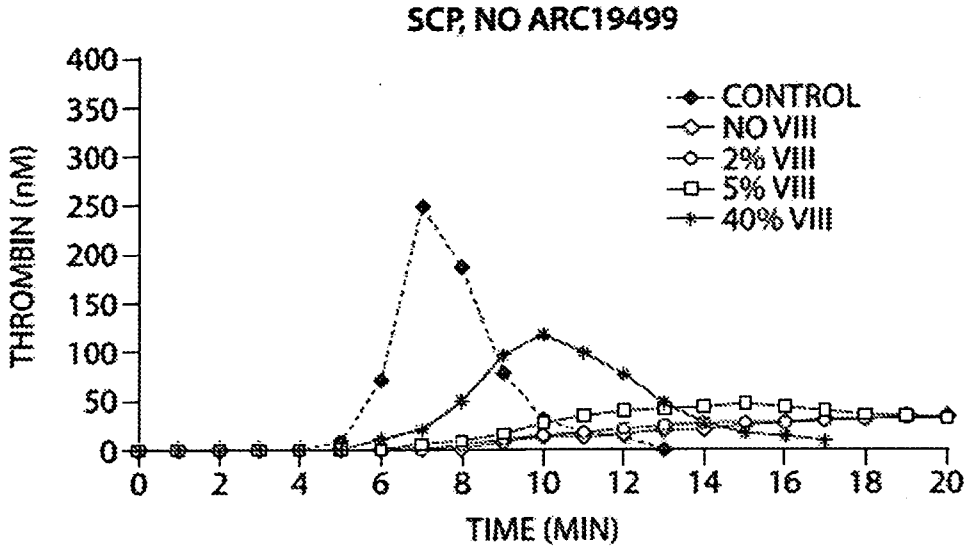

SCP, NO ARC19499
THROMBIN (nM)
TIME (MIN)
CONTROL
NO VIII
2% VIII
5% VIII
40% VIII

Fig. 29

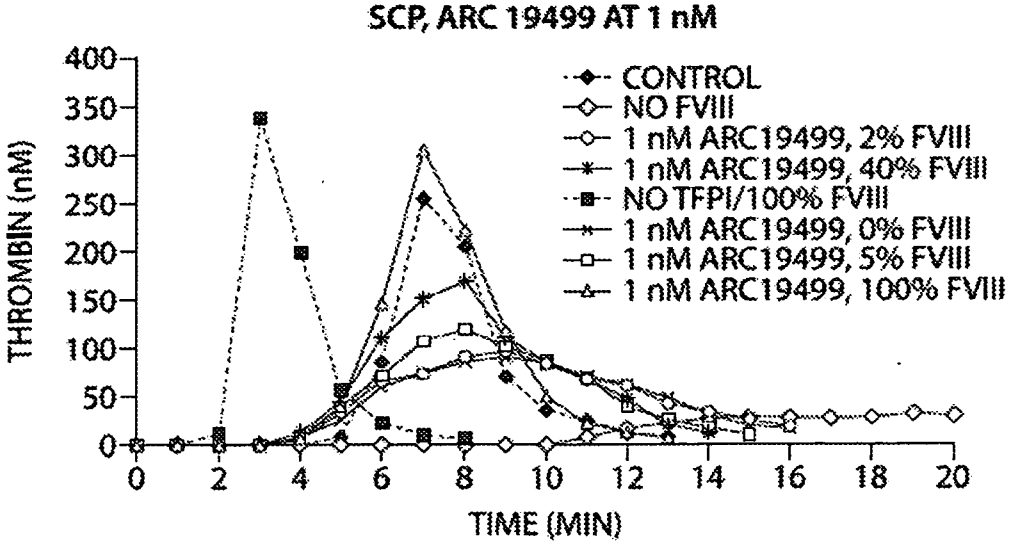

SCP, ARC 19499 AT 1 nM
THROMBIN (nM)
TIME (MIN)
CONTROL
NO FVIII
1 nM ARC19499, 2% FVIII
1 nM ARC19499, 40% FVIII
NO TFPI/100% FVIII
1 nM ARC19499, 0% FVIII
1 nM ARC19499, 5% FVIII
1 nM ARC19499, 100% FVIII

Fig. 30

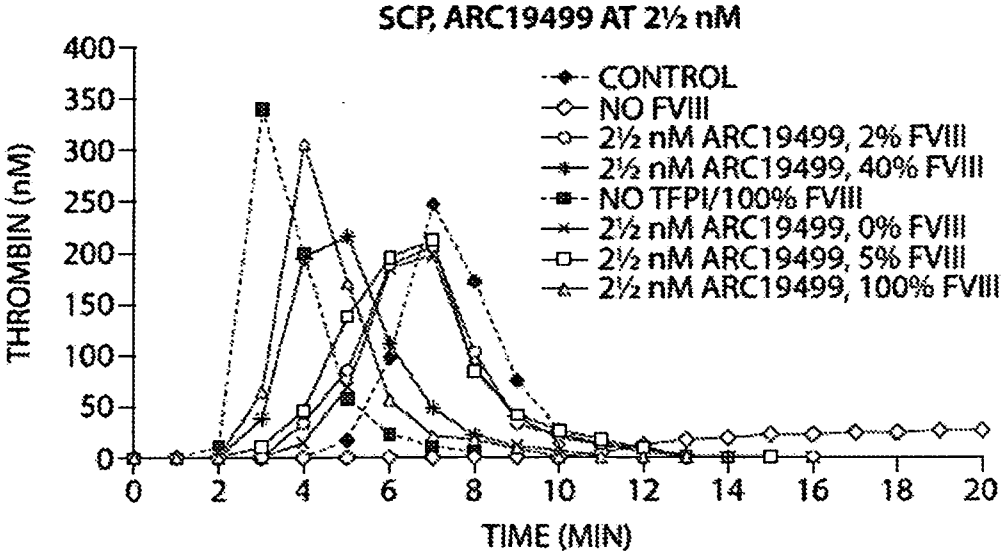

SCP, ARC19499 AT 2½ nM
THROMBIN (nM)
TIME (MIN)
CONTROL
NO FVIII
2½ nM ARC19499, 2% FVIII
2½ nM ARC19499, 40% FVIII
NO TFPI/100% FVIII
2½ nM ARC19499, 0% FVIII
2½ nM ARC19499, 5% FVIII
2½ nM ARC19499, 100% FVIII

Fig. 31

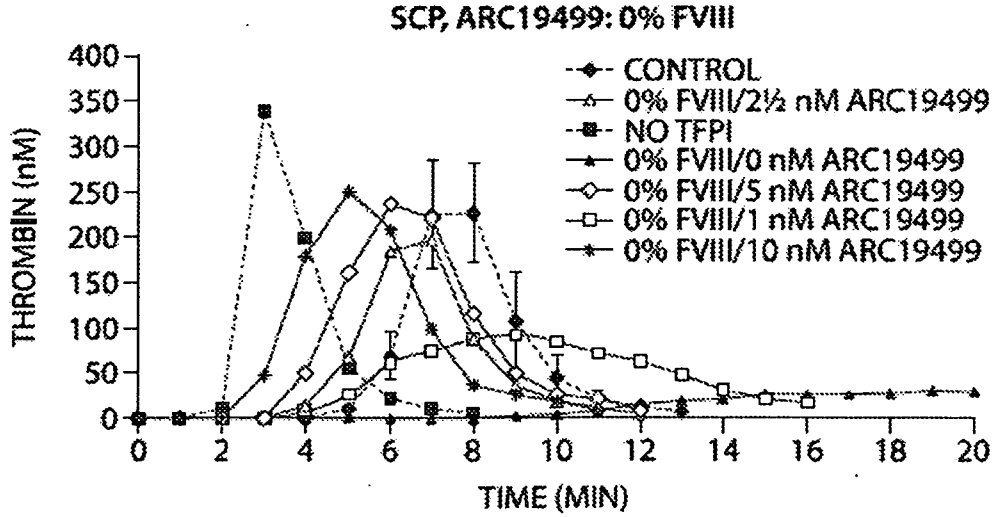

SCP, ARC19499: 0% FVIII
THROMBIN (nM)
TIME (MIN)
CONTROL
0% FVIII/2½ nM ARC19499
NO TFPI
0% FVIII/0 nM ARC19499
0% FVIII/5 nM ARC19499
0% FVIII/1 nM ARC19499
0% FVIII/10 nM ARC19499

Fig. 32

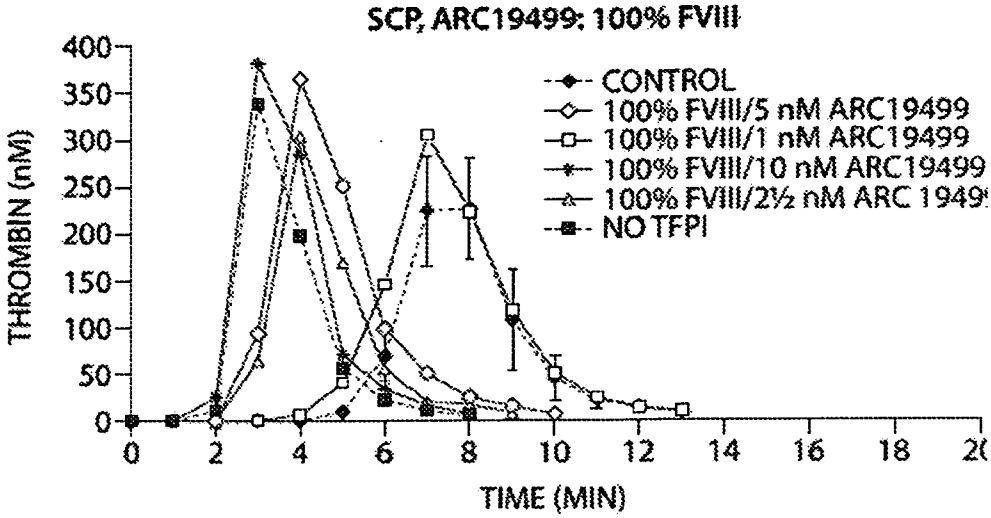

SCP, ARC19499: 100% FVIII
THROMBIN (nM)
TIME (MIN)
CONTROL
100% FVIII/5 nM ARC19499
100% FVIII/1 nM ARC19499
100% FVIII/10 nM ARC19499
100% FVIII/2½ nM ARC 1949
NO TFPI

Fig. 33

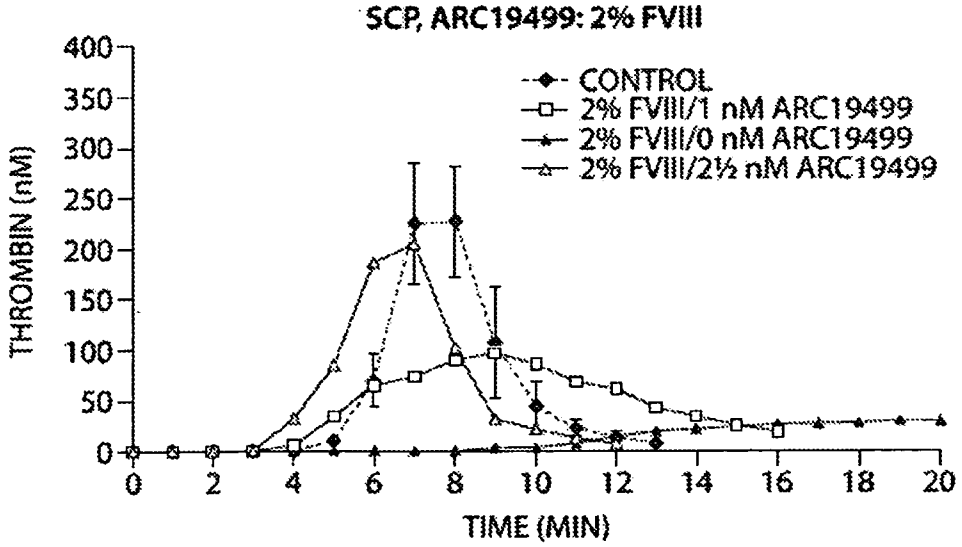

SCP, ARC19499: 2% FVIII
THROMBIN (nM)
TIME (MIN)
CONTROL
2% FVIII/1 nM ARC19499
2% FVIII/0 nM ARC19499
2% FVIII/2½ nM ARC19499

Fig. 34

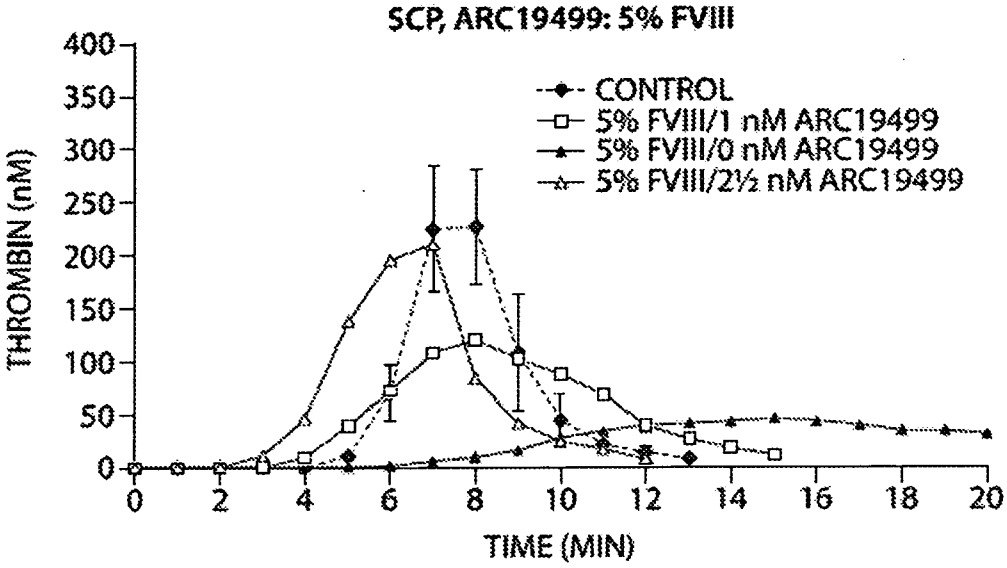

SCP, ARC19499: 5% FVIII
CONTROL
5% FVIII/1 nM ARC19499
5% FVIII/0 nM ARC19499
5% FVIII/2½ nM ARC19499
THROMBIN (nM)
TIME (MIN)
0
50
100
150
200
250
300
350
400
0
2
4
6
8
10
12
14
16
18
20

Fig. 35

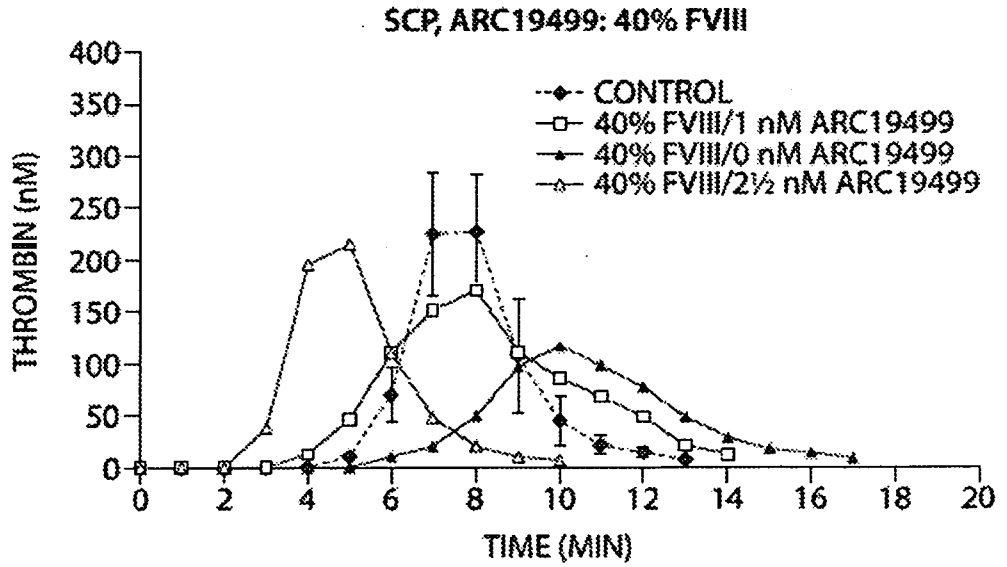

SCP, ARC19499: 40% FVIII
CONTROL
40% FVIII/1 nM ARC19499
40% FVIII/0 nM ARC19499
40% FVIII/2½ nM ARC19499
THROMBIN (nM)
TIME (MIN)
0
50
100
150
200
250
300
350
400
0
2
4
6
8
10
12
14
16
18
20

Fig. 36

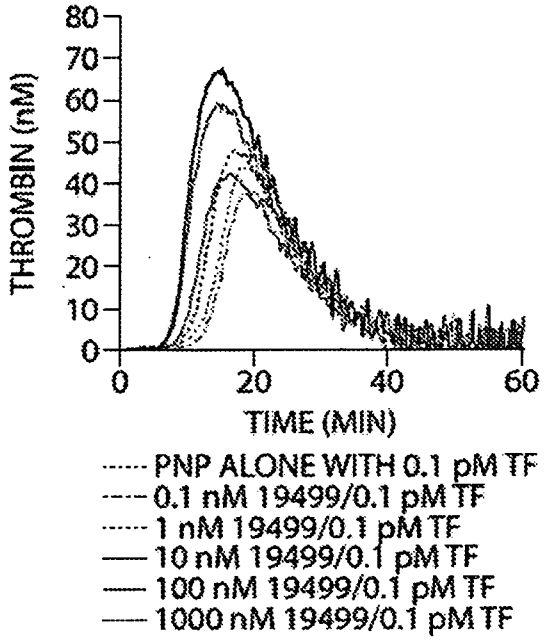


Fig. 37A

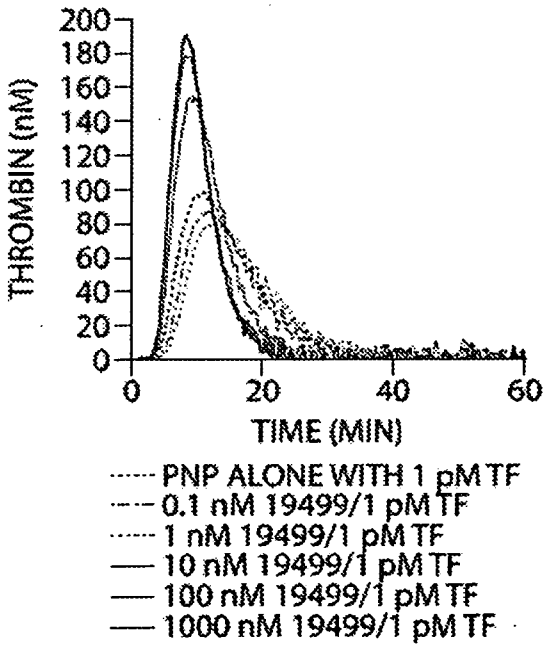


Fig. 37B

REPLACEMENT SHEET

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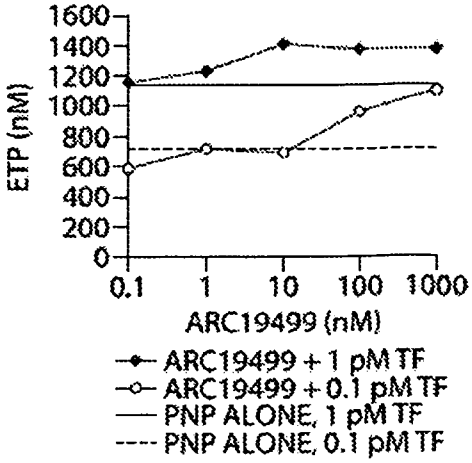


Fig. 37C

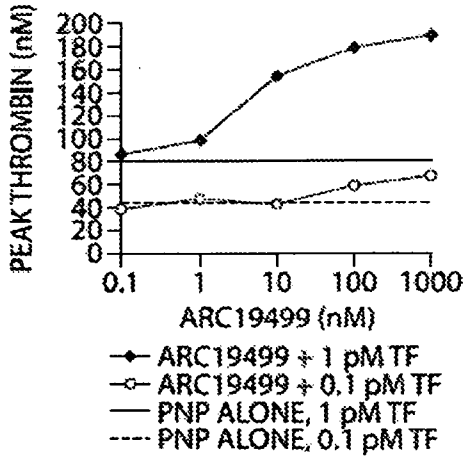


Fig. 37D

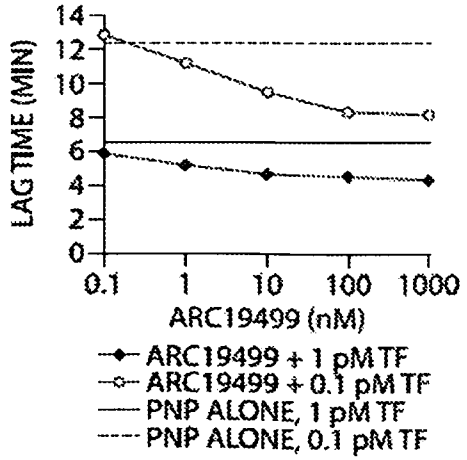


Fig. 37E

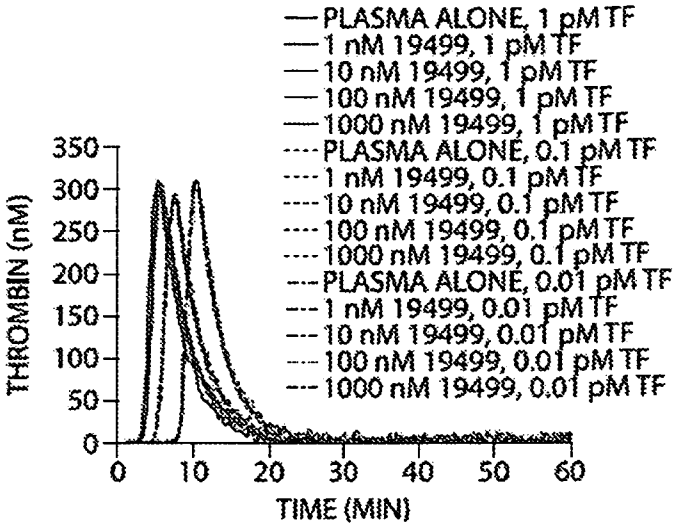


Fig. 38A

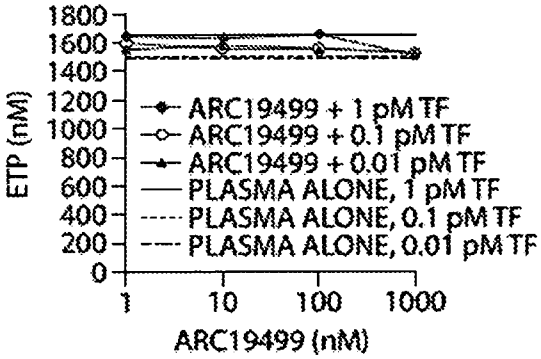


Fig. 38B

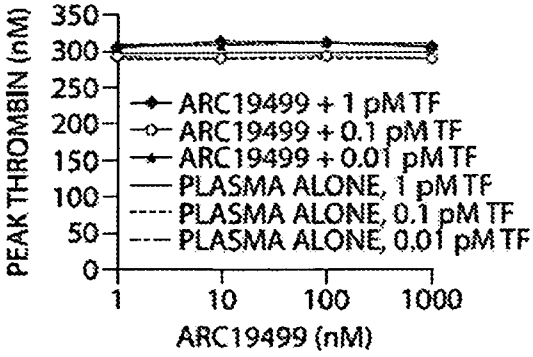


Fig. 38C

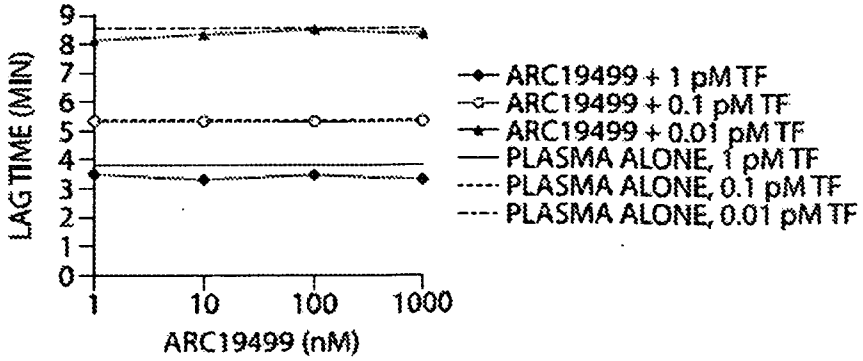


Fig. 38D

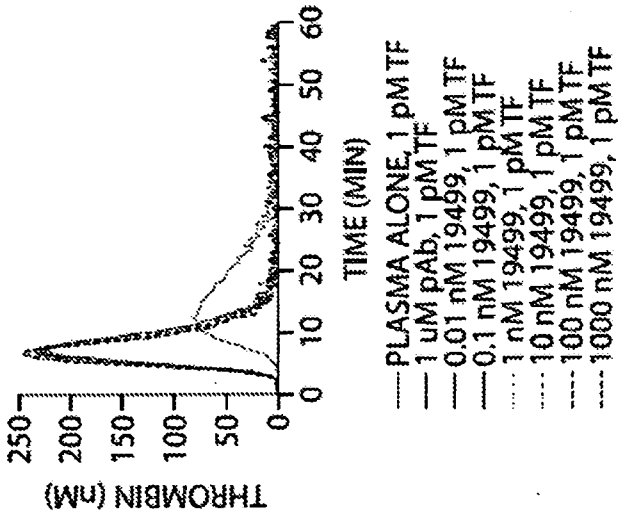


Fig. 39C

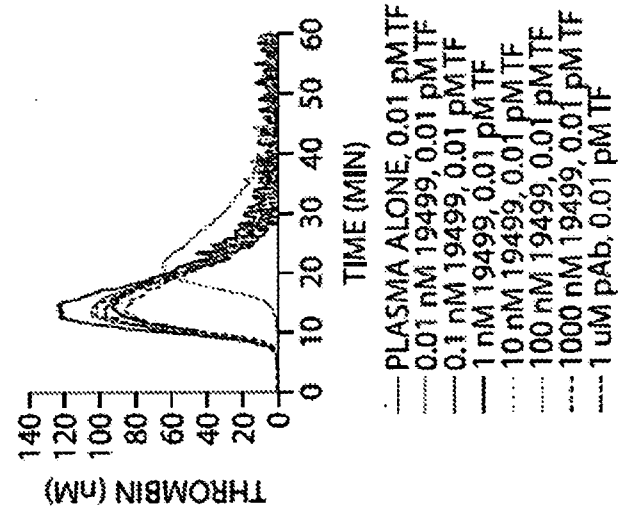


Fig. 39B

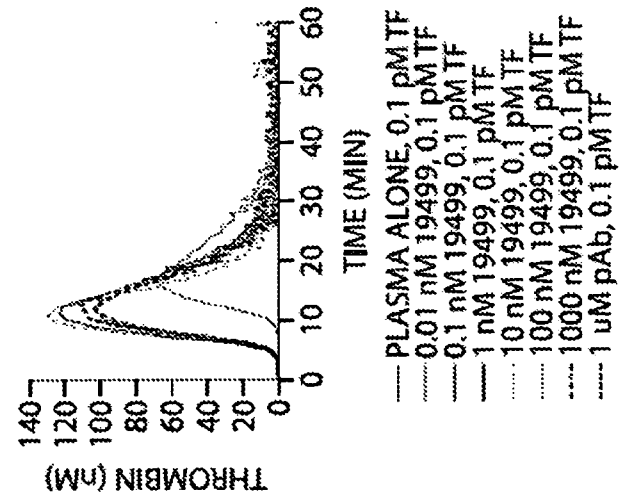


Fig. 39A

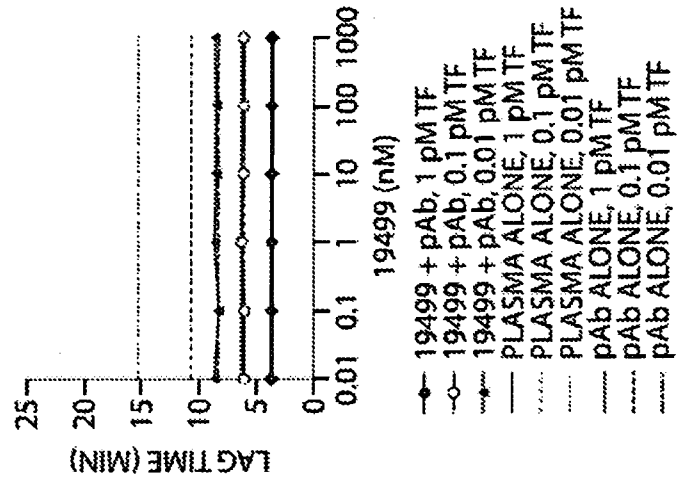


Fig. 39F

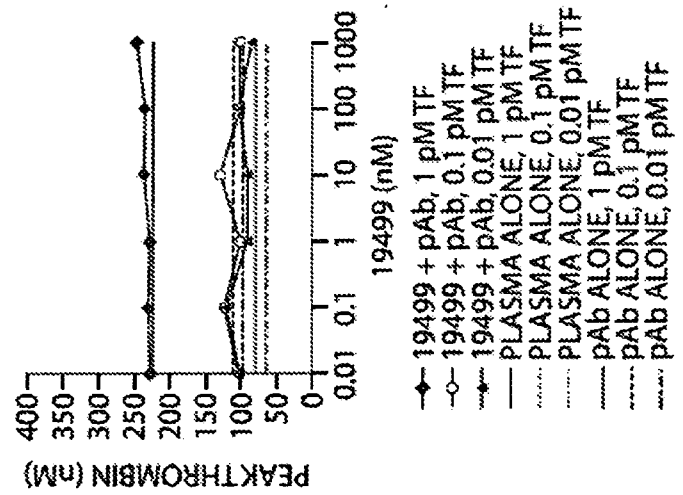


Fig. 39E

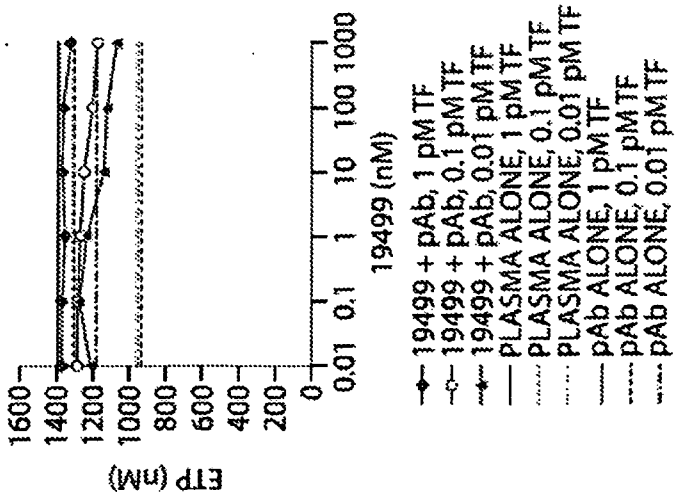


Fig. 39D

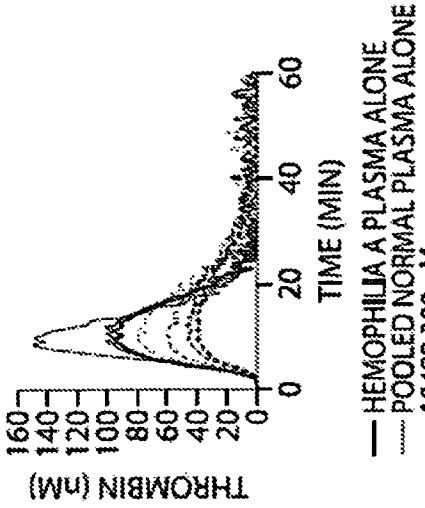


Fig. 40C

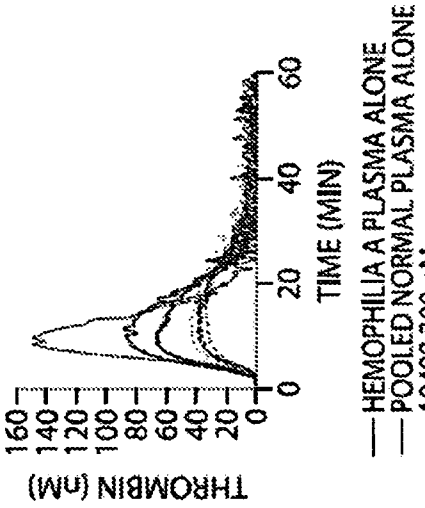


Fig. 40B

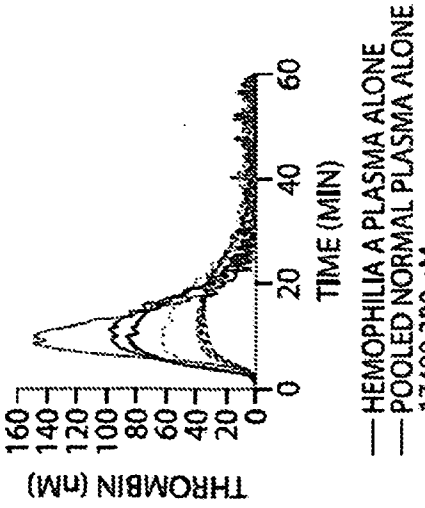


Fig. 40A

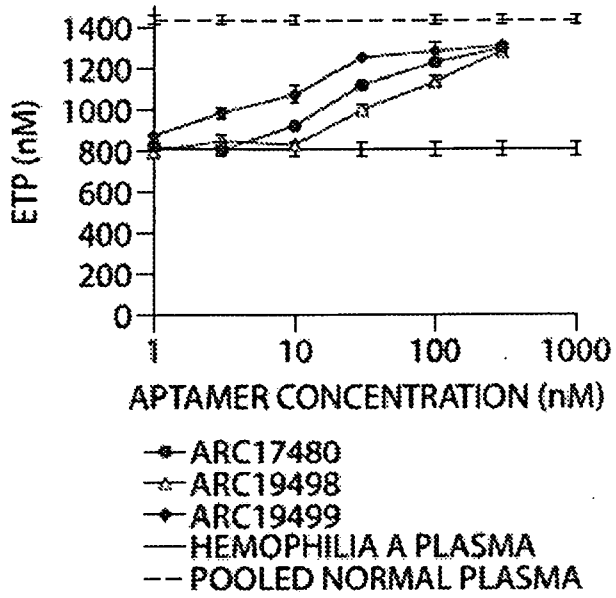


Fig. 40D

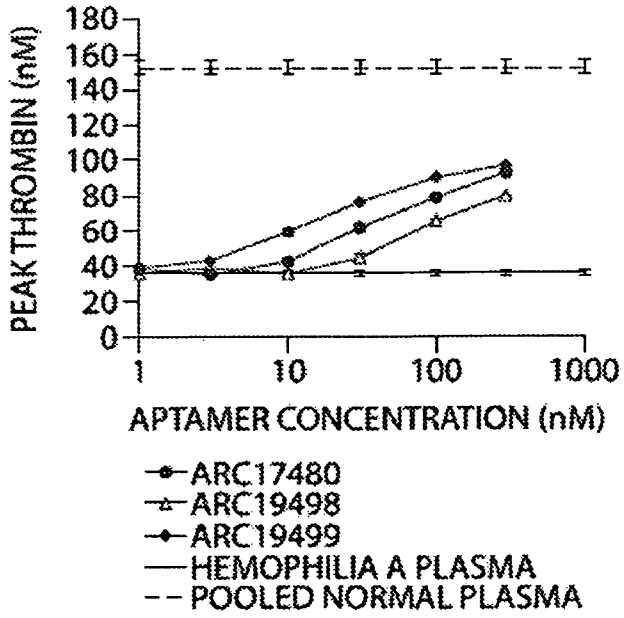


Fig. 40E

REPLACEMENT SHEET

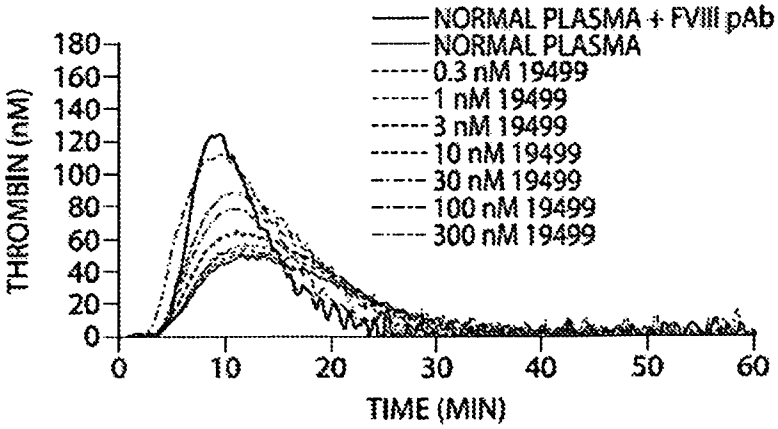


Fig. 41

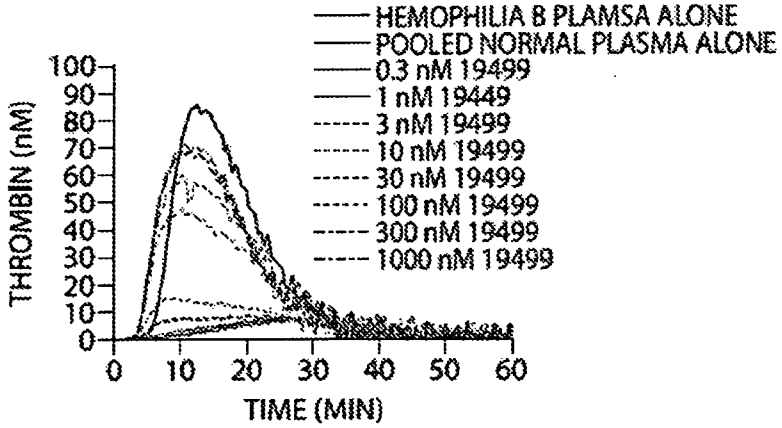


Fig. 42A

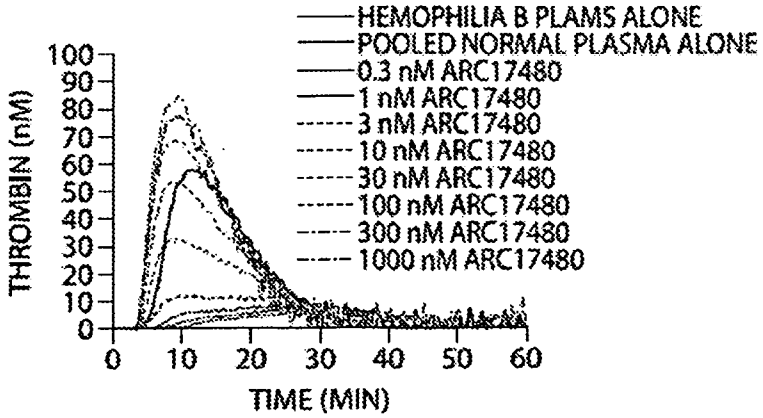


Fig. 42B

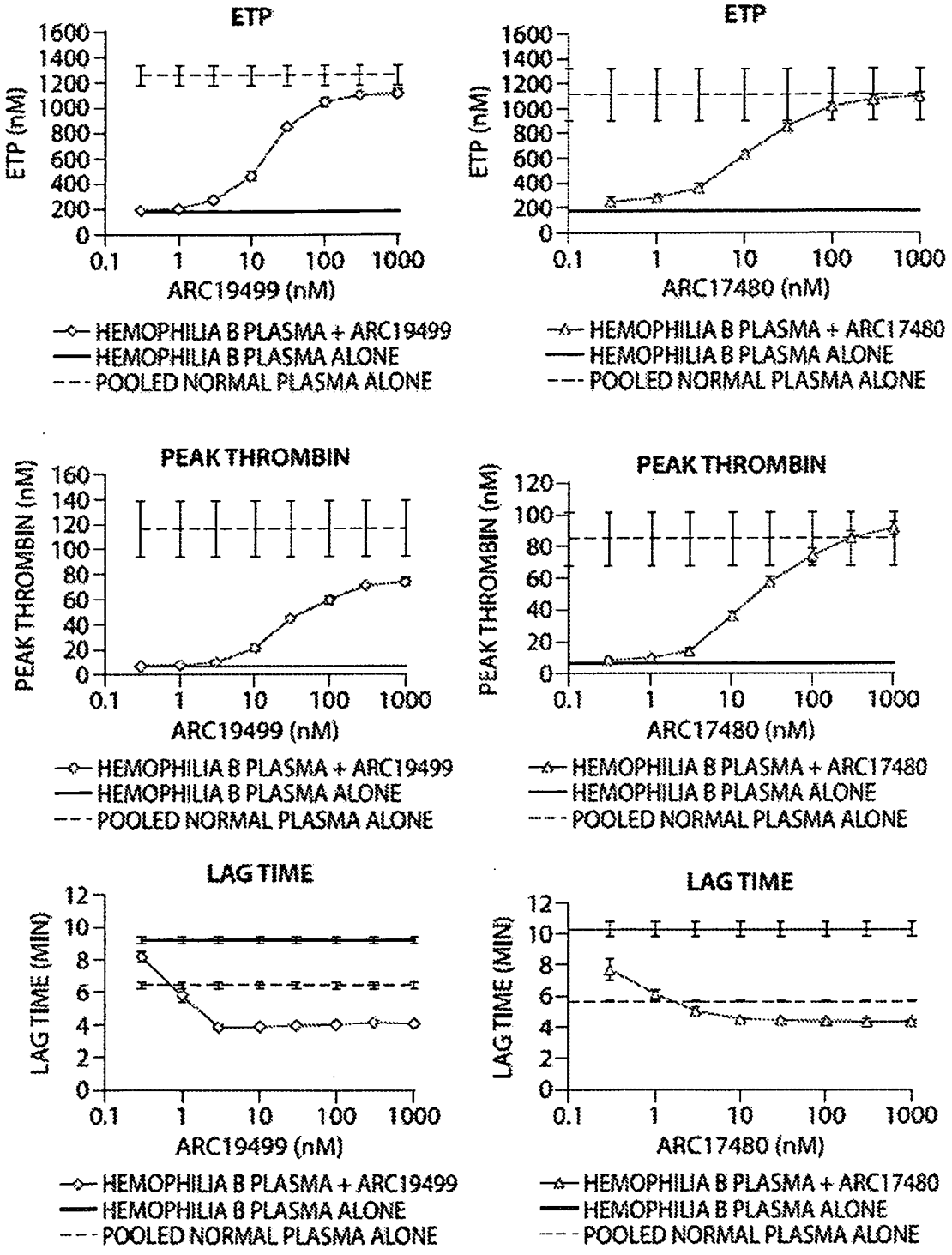

ETP
ETP (nM)
ARC19499 (nM)
HEMOPHILIA B PLASMA + ARC19499
HEMOPHILIA B PLASMA ALONE
POOLED NORMAL PLASMA ALONE
ETP
ETP (nM)
ARC17480 (nM)
HEMOPHILIA B PLASMA + ARC17480
HEMOPHILIA B PLASMA ALONE
POOLED NORMAL PLASMA ALONE
PEAK THROMBIN
PEAK THROMBIN (nM)
ARC19499 (nM)
HEMOPHILIA B PLASMA + ARC19499
HEMOPHILIA B PLASMA ALONE
POOLED NORMAL PLASMA ALONE
PEAK THROMBIN
PEAK THROMBIN (nM)
ARC17480 (nM)
HEMOPHILIA B PLASMA + ARC17480
HEMOPHILIA B PLASMA ALONE
POOLED NORMAL PLASMA ALONE
LAG TIME
LAG TIME (MIN)
ARC19499 (nM)
HEMOPHILIA B PLASMA + ARC19499
HEMOPHILIA B PLASMA ALONE
POOLED NORMAL PLASMA ALONE
LAG TIME
LAG TIME (MIN)
ARC17480 (nM)
HEMOPHILIA B PLASMA + ARC17480
HEMOPHILIA B PLASMA ALONE
POOLED NORMAL PLASMA ALONE

Fig. 43

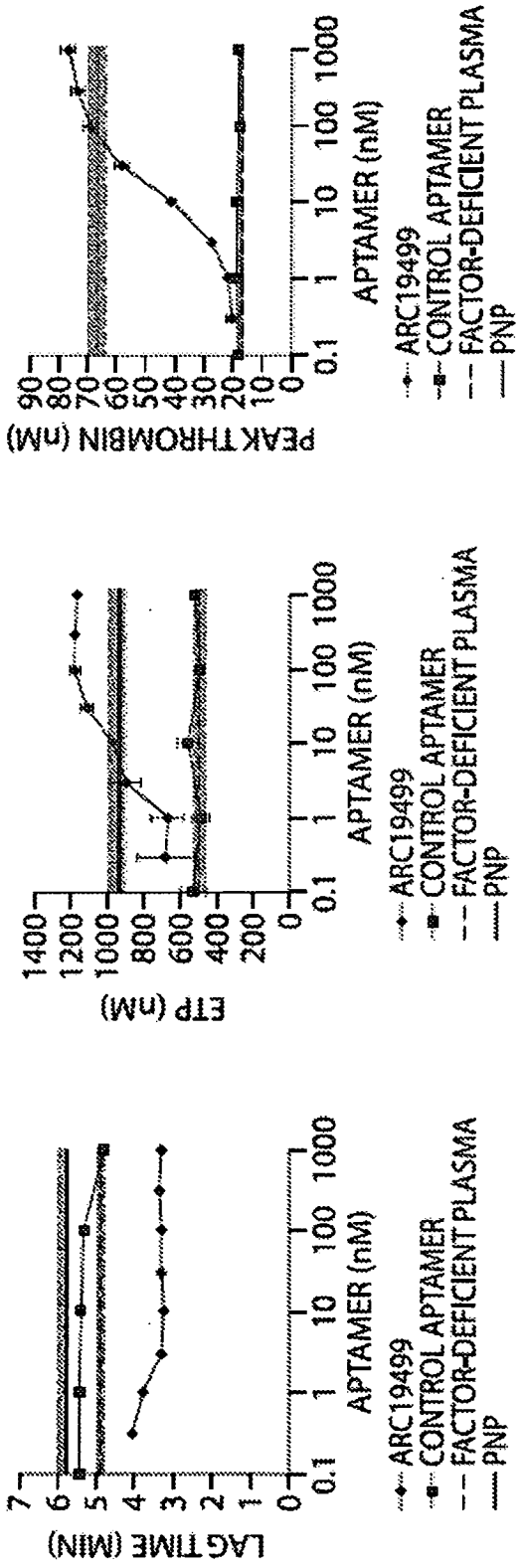

PEAK THROMBIN (nM)
90
80
70
60
50
40
30
20
10
0
0.1
1
10
100
1000
APTAMER (nM)
ARC19499
CONTROL APTAMER
FACTOR-DEFICIENT PLASMA
PNP
ETP (nM)
1400
1200
1000
800
600
400
200
0
LAG TIME (MIN)
7
6
5
4
3
2
1
0

Fig. 44A

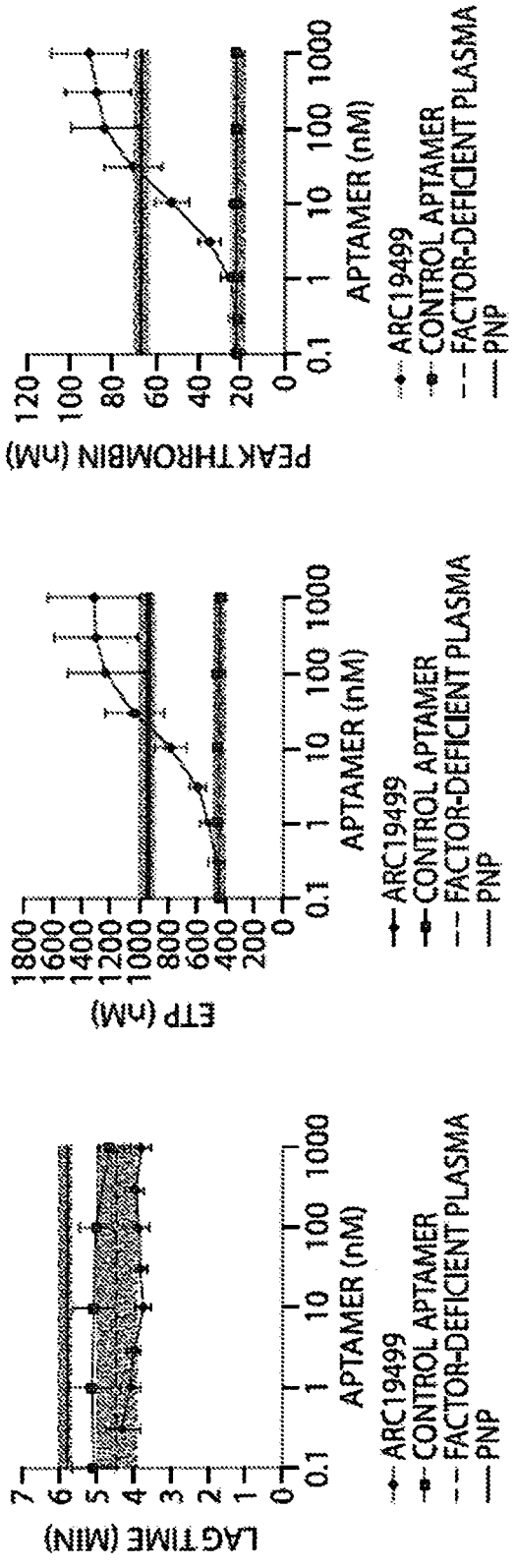

PEAK THROMBIN (nM)
120
100
80
60
40
20
0
0.1
1
10
100
1000
APTAMER (nM)
ARC19499
CONTROL APTAMER
FACTOR-DEFICIENT PLASMA
PNP
ETP (nM)
1800
1600
1400
1200
1000
800
600
400
200
0
LAG TIME (MIN)
7
6
5
4
3
2
1
0

Fig. 44B

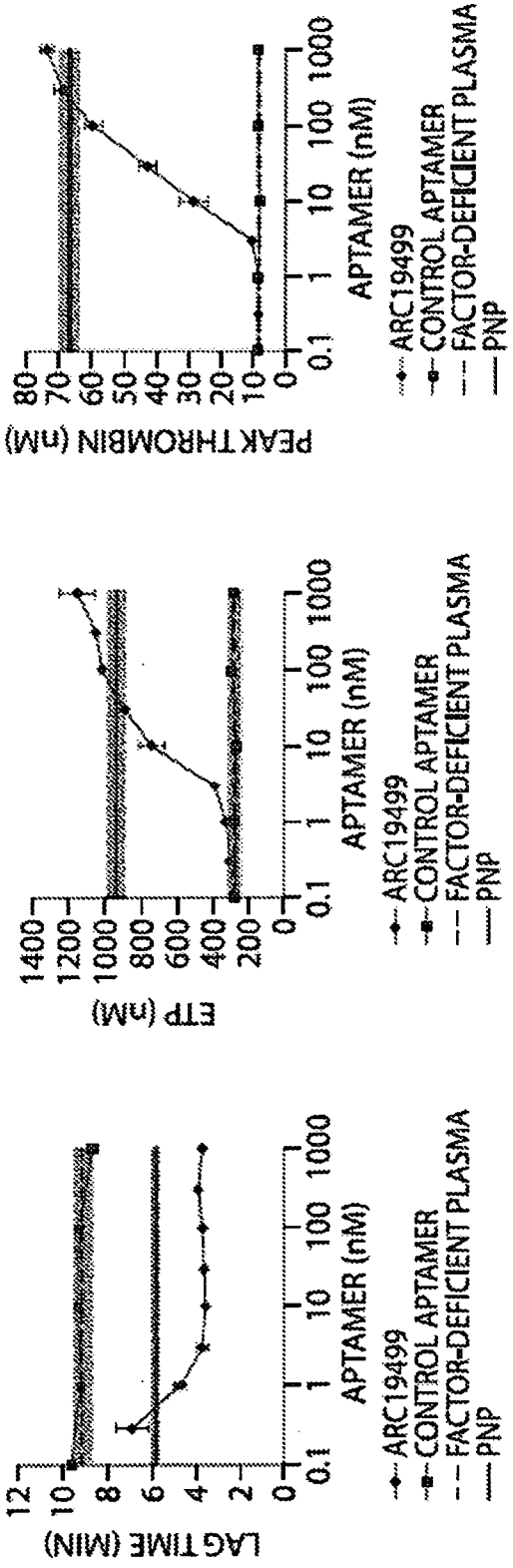

PEAK THROMBIN (nM)
80
70
60
50
40
30
20
10
0
0.1
1
10
100
1000
APTAMER (nM)
ARC19499
CONTROL APTAMER
FACTOR-DEFICIENT PLASMA
PNP
ETP (nM)
1400
1200
1000
800
600
400
200
0
LAG TIME (MIN)
12
10
8
6
4
2
0

Fig. 44C

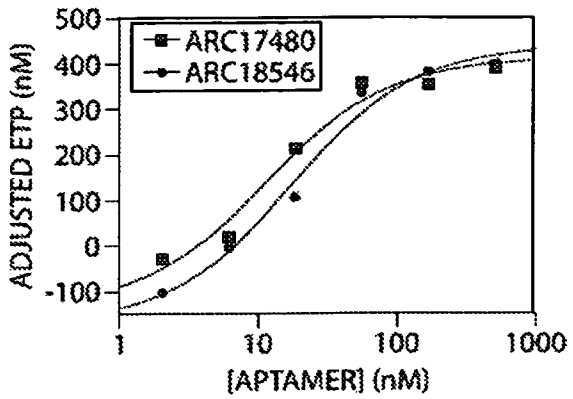


Fig. 45A

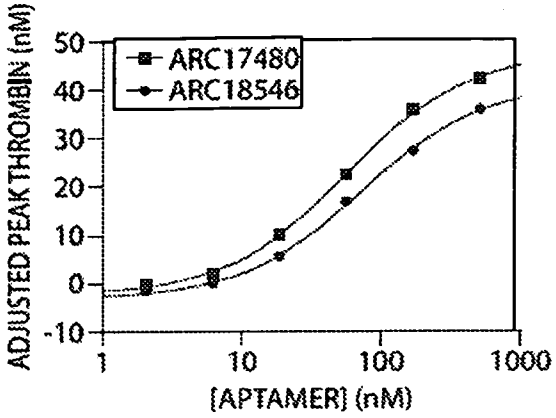


Fig. 45B

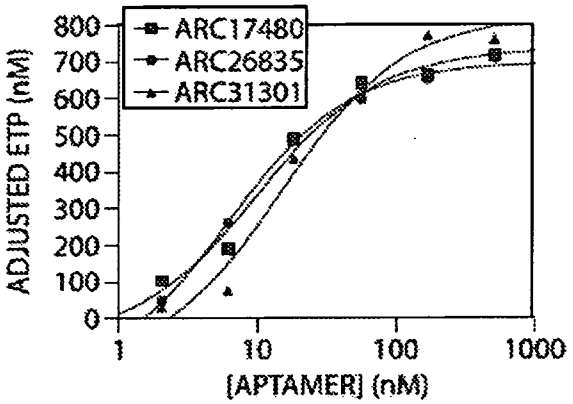


Fig. 45C

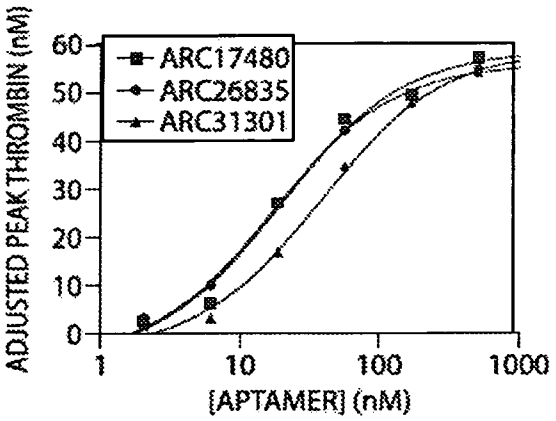


Fig. 45D

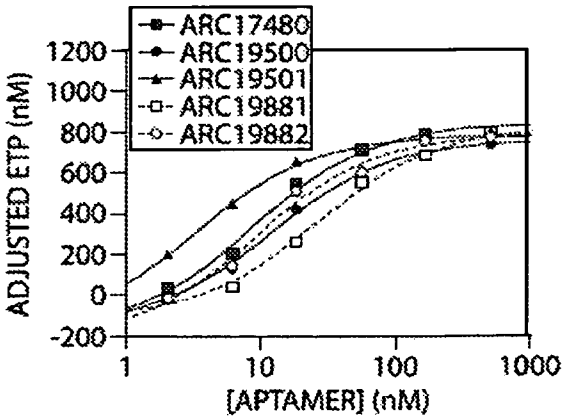


Fig. 46A

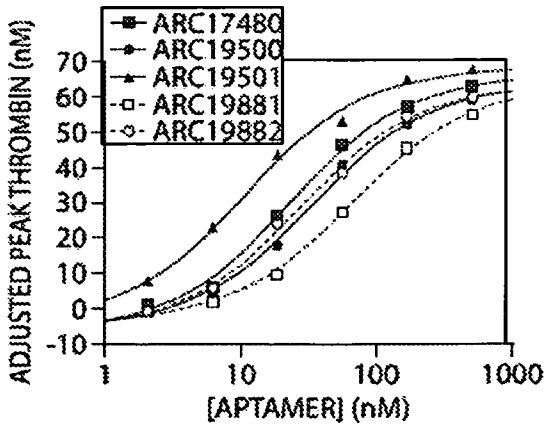


Fig. 46B

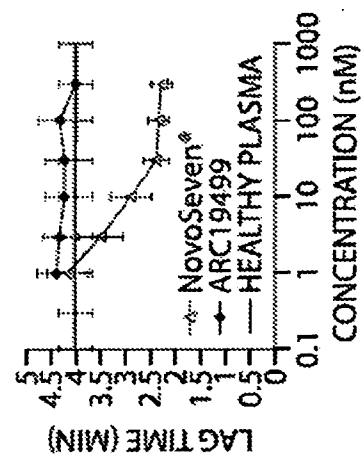


Fig. 47C

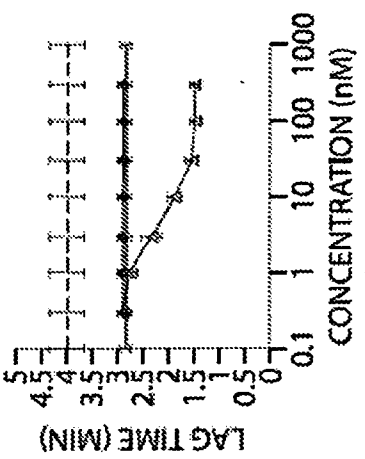


Fig. 48C

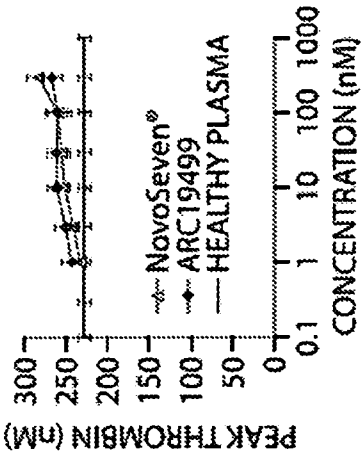


Fig. 47B

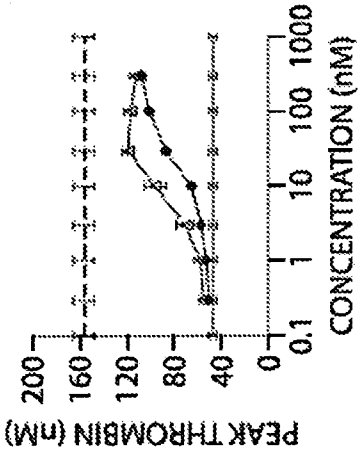


Fig. 48B

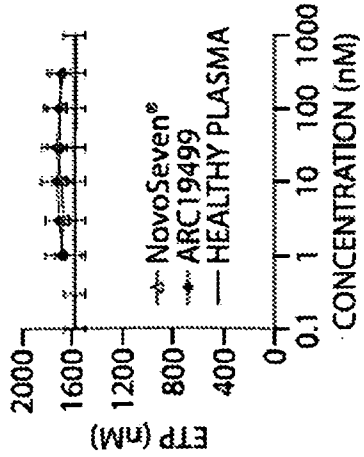


Fig. 47A

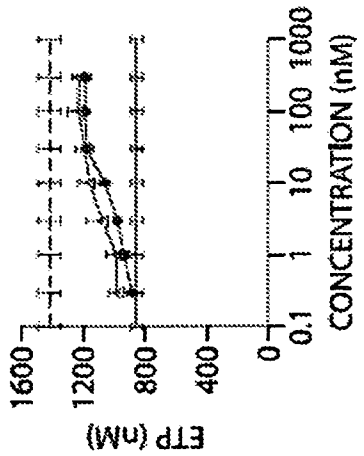


Fig. 48A

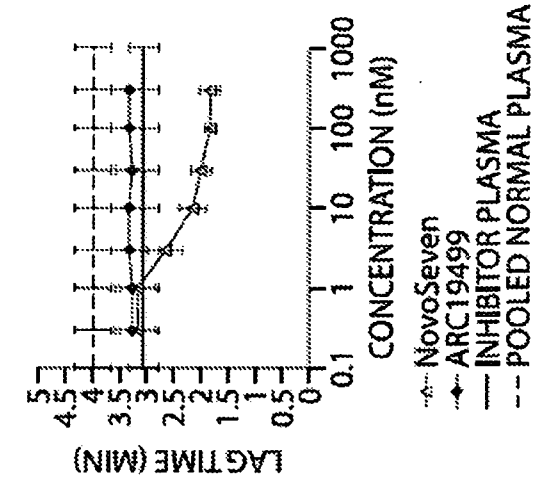


Fig. 49C

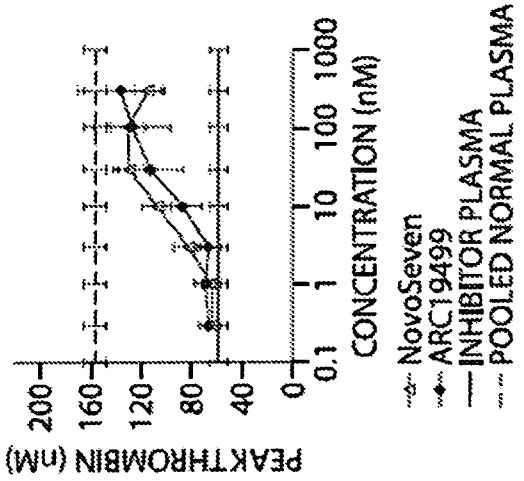


Fig. 49B

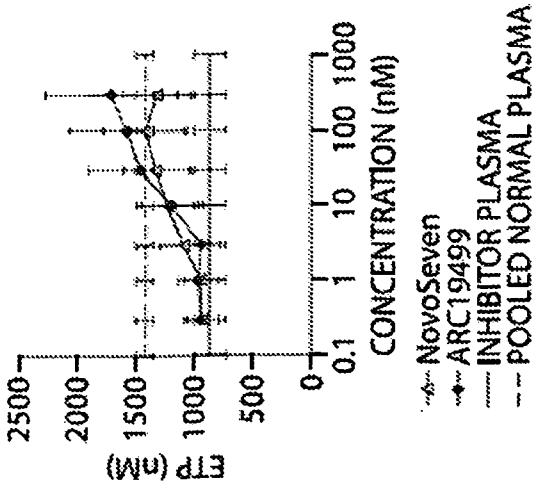


Fig. 49A

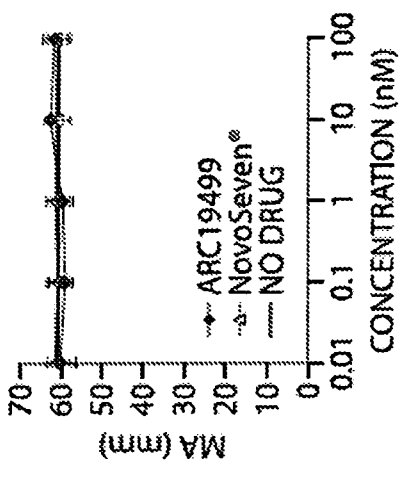


Fig. 50C

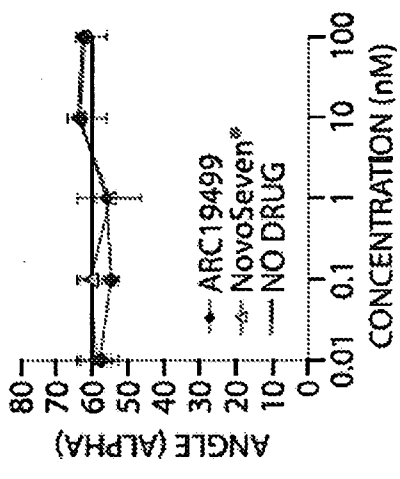


Fig. 50B

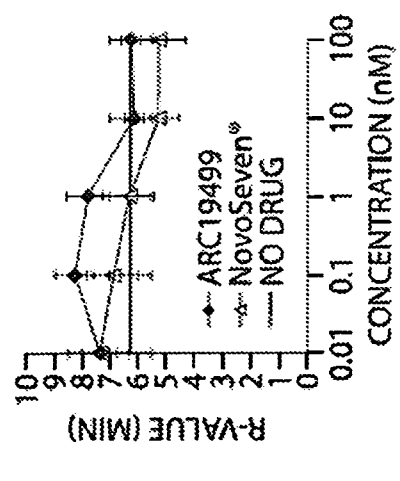


Fig. 50A

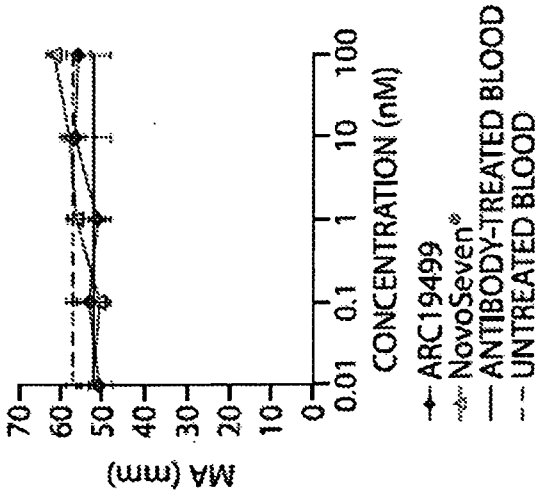


Fig. 51C

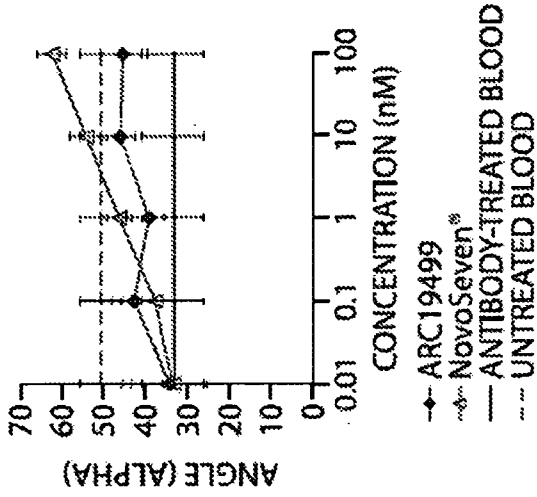


Fig. 51B

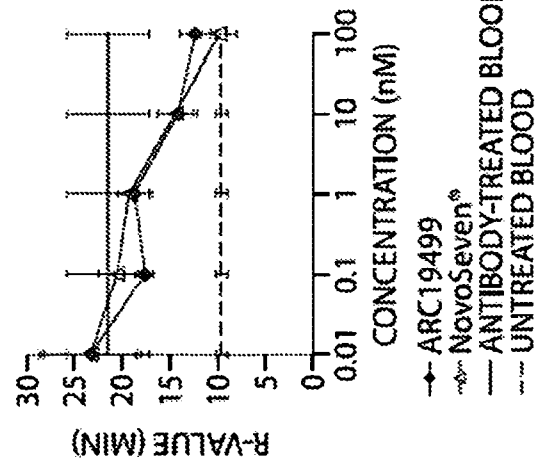


Fig. 51A

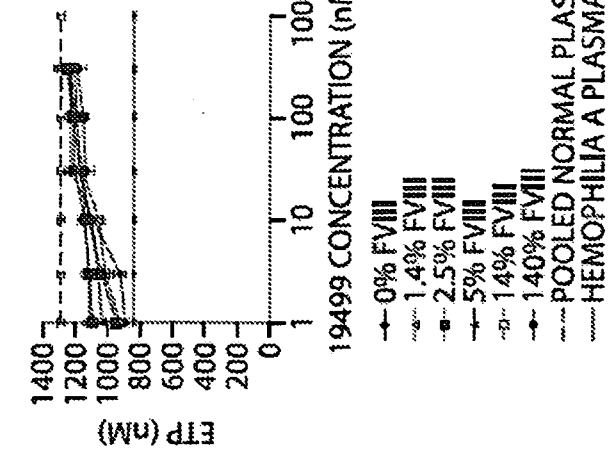


Fig. 52C

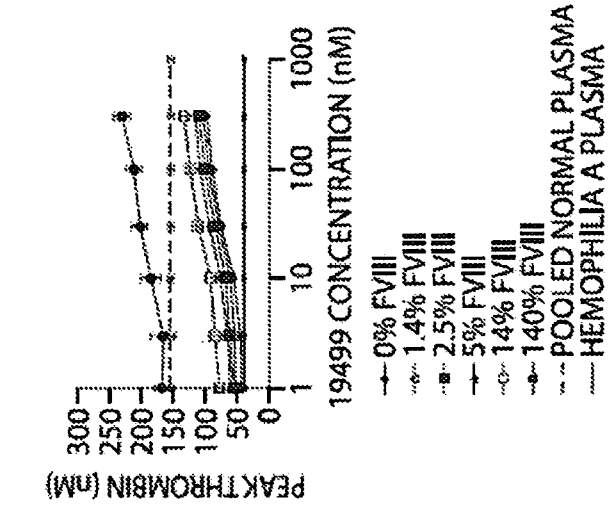


Fig. 52B

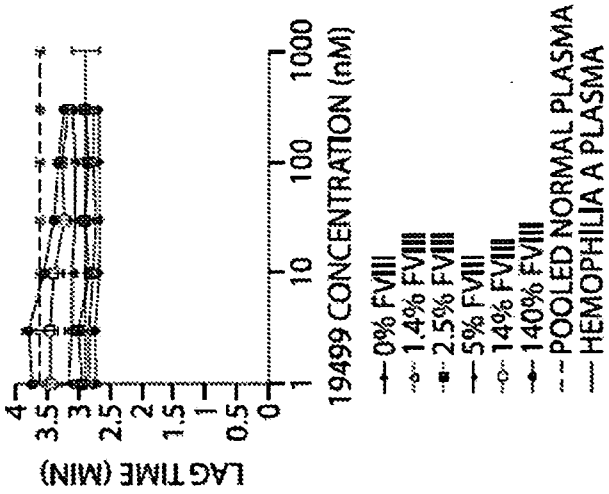


Fig. 52A

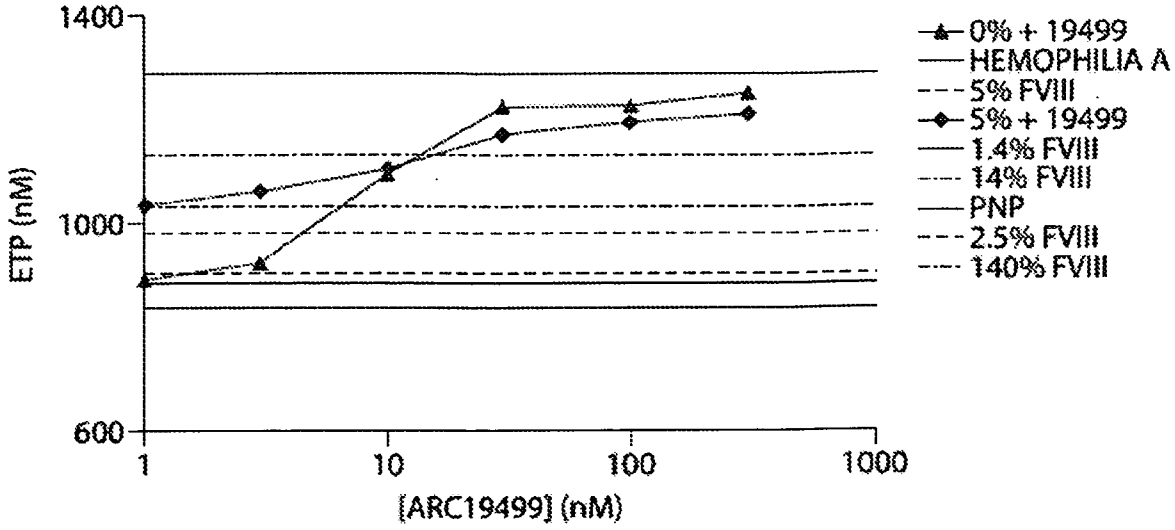


Fig. 53A

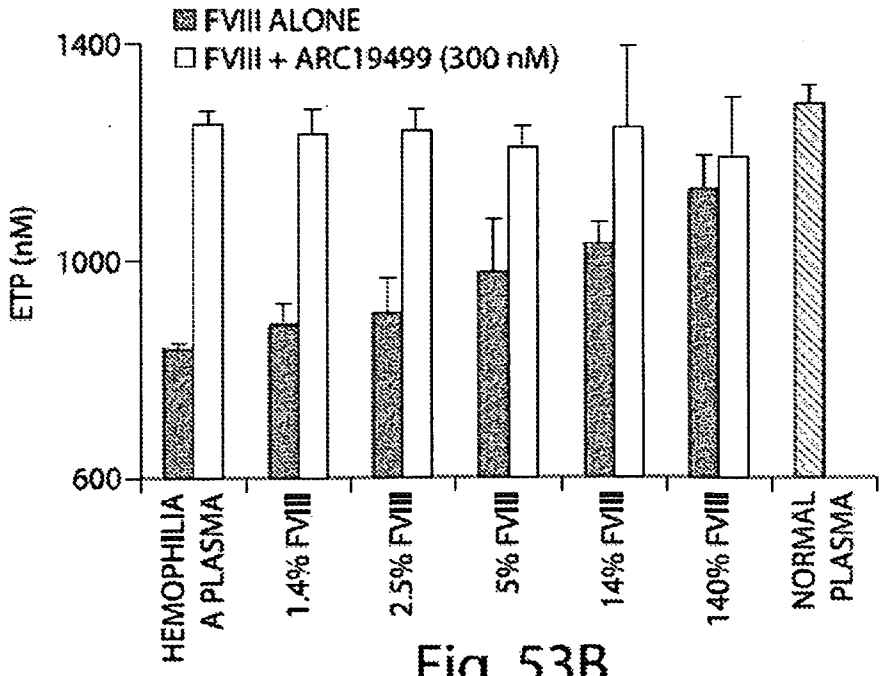


Fig. 53B

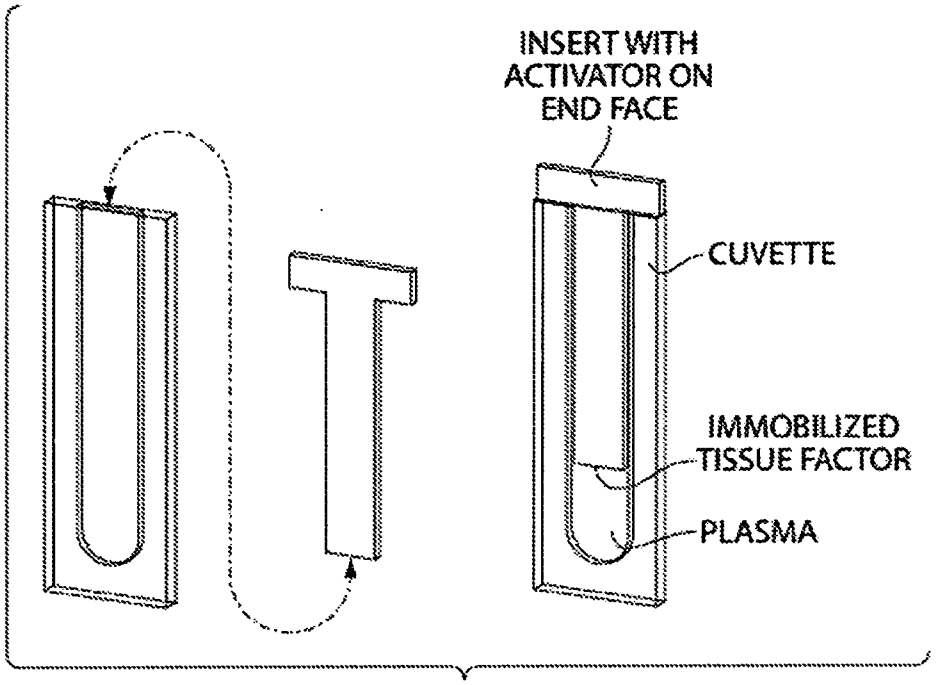


Fig. 54A

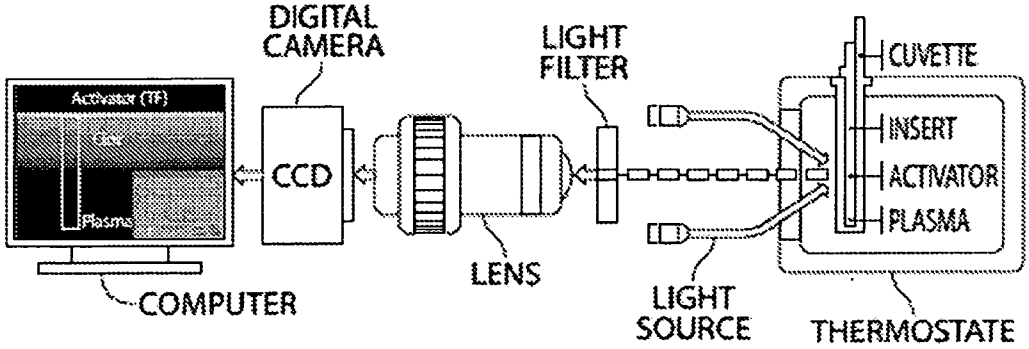


Fig. 54B

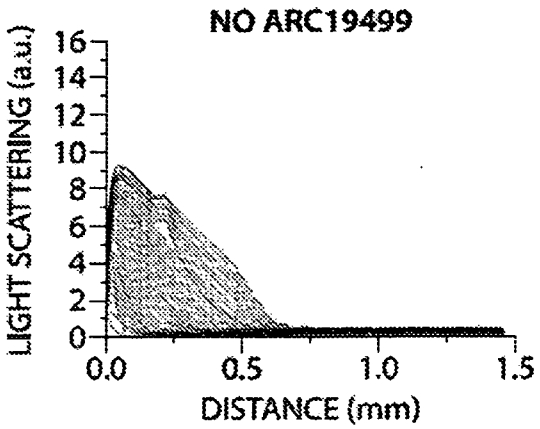


Fig. 55A

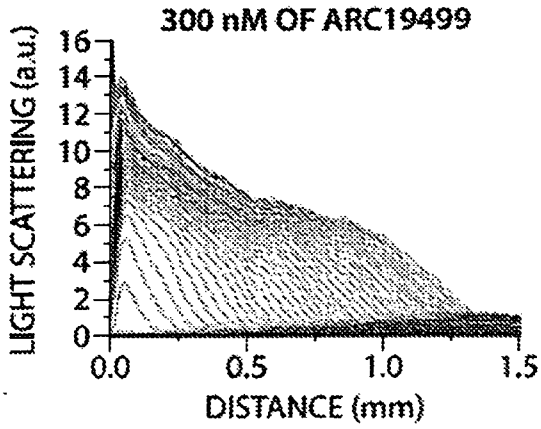


Fig. 55B

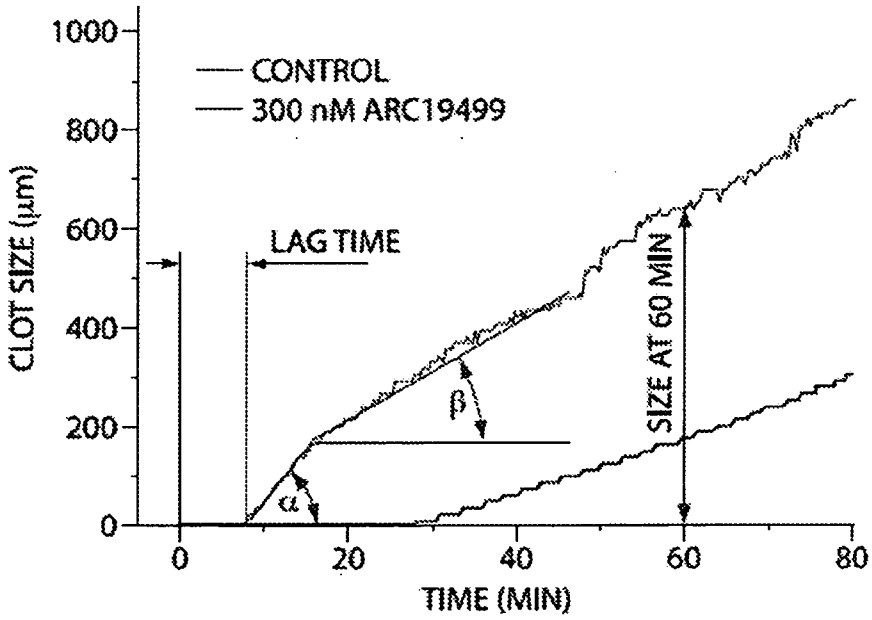


Fig. 56

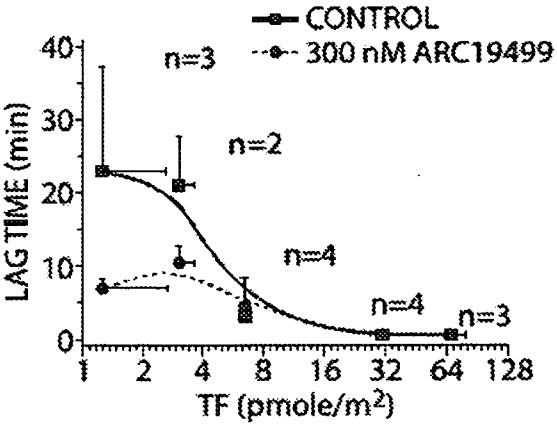


Fig. 57A

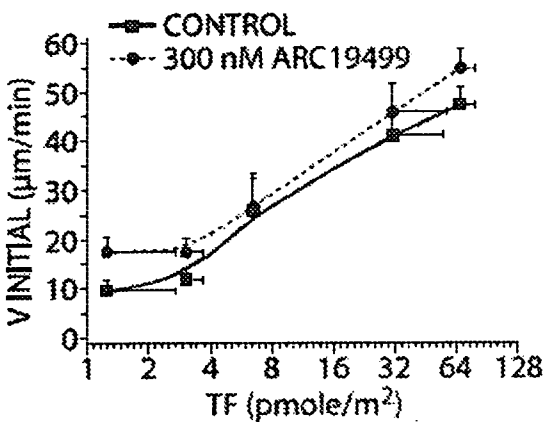


Fig. 57B

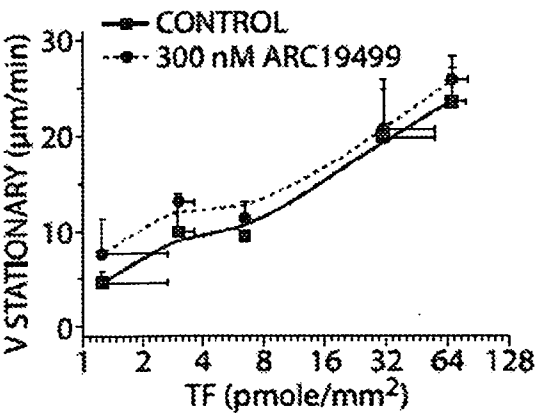


Fig. 57C

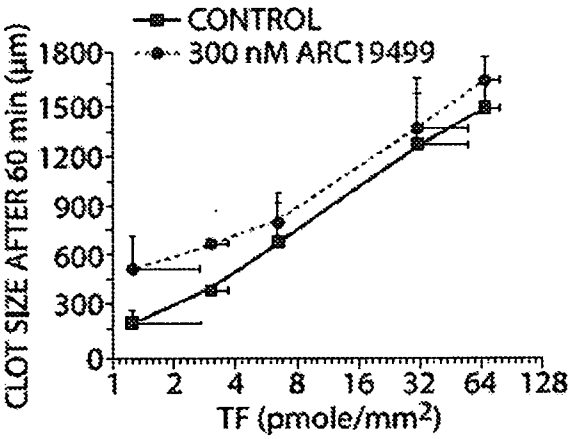


Fig. 57D

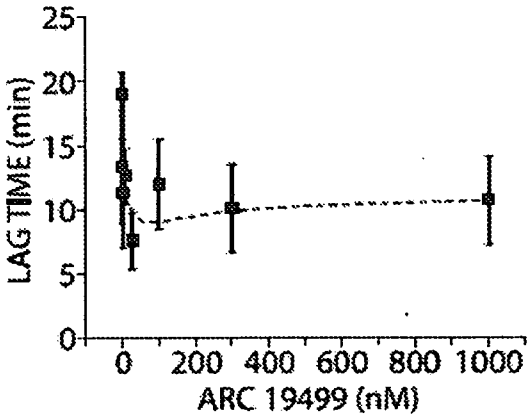


Fig. 58A

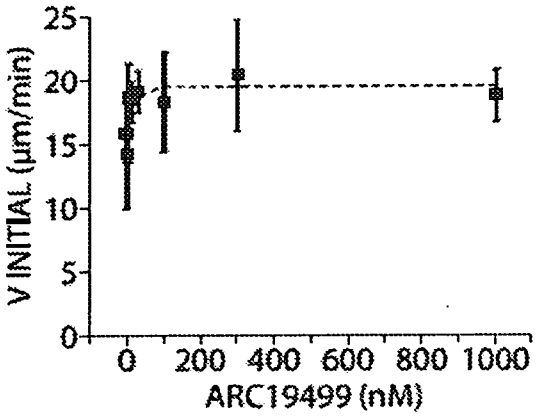


Fig. 58B

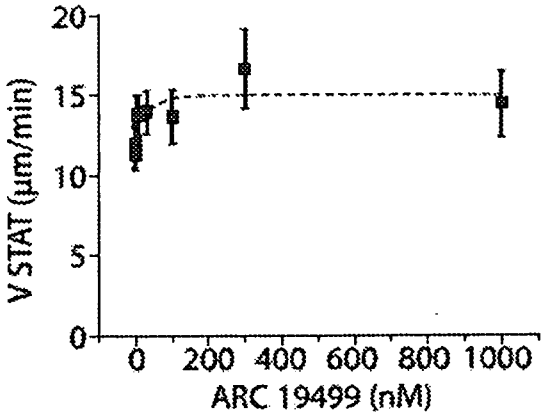


Fig. 58C

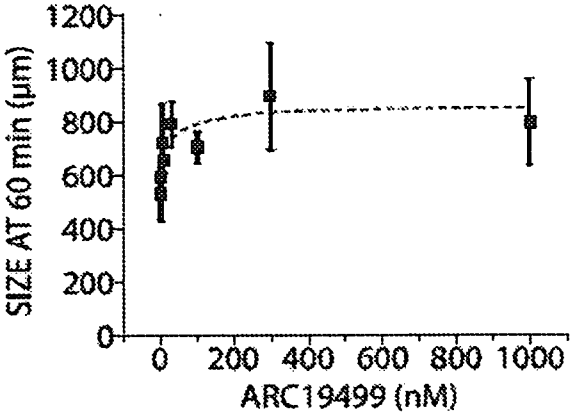


Fig. 58D

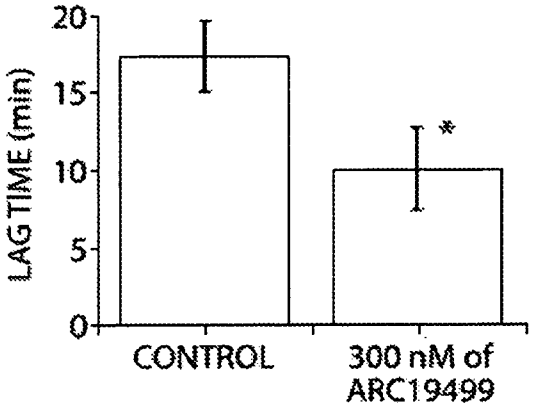


Fig. 59A

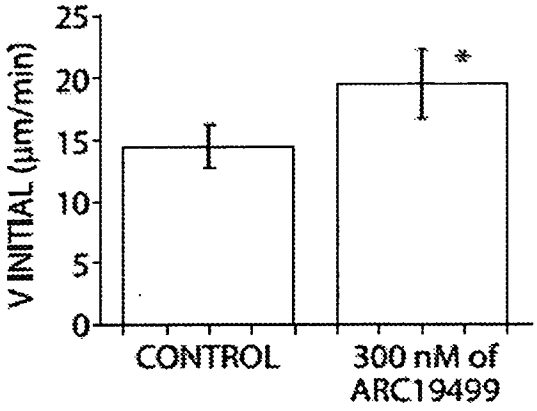


Fig. 59B

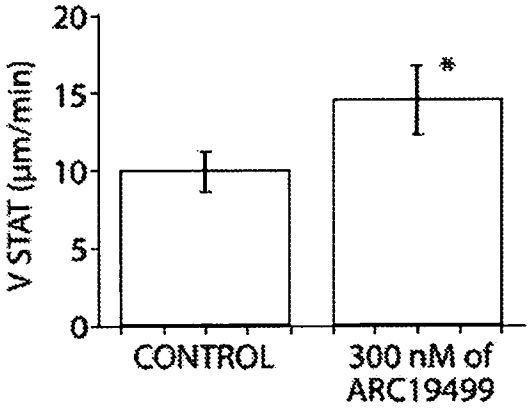


Fig. 59C

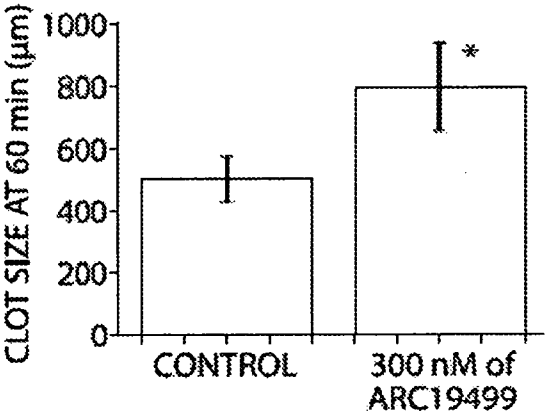


Fig. 59D

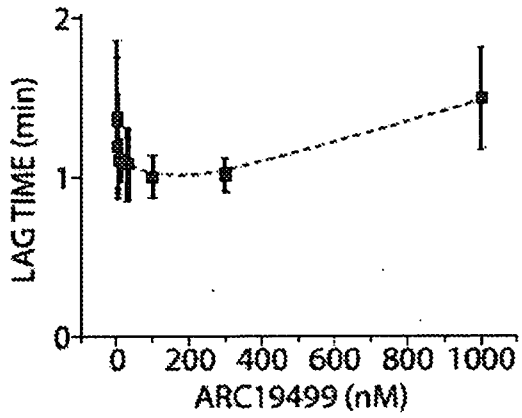


Fig. 60A

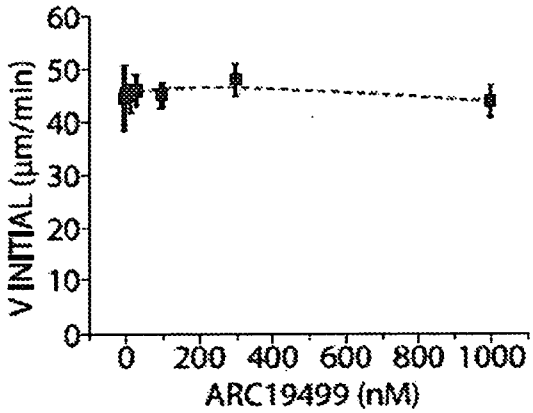


Fig. 60B

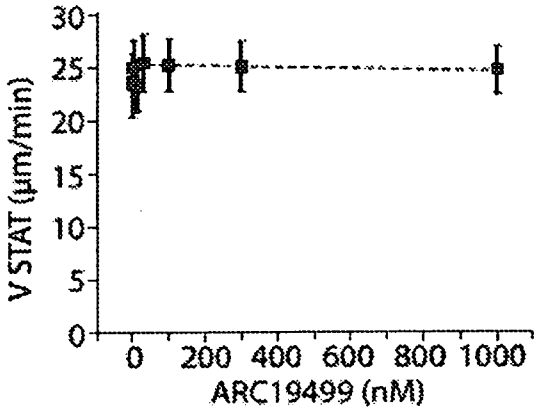


Fig. 60C

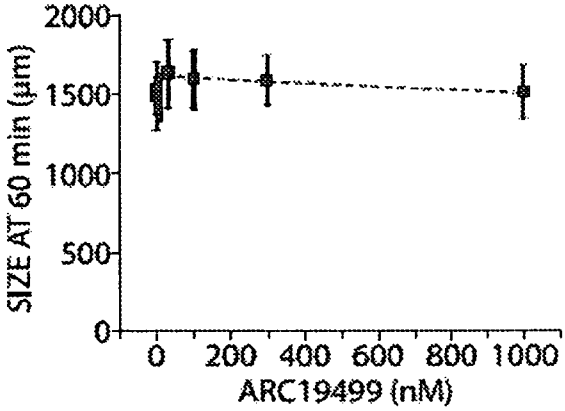


Fig. 60D

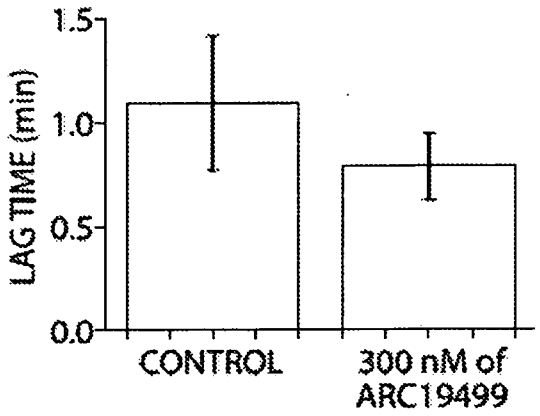


Fig. 61A

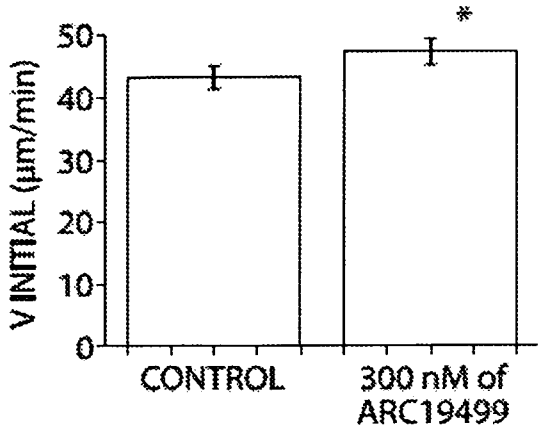


Fig. 61B

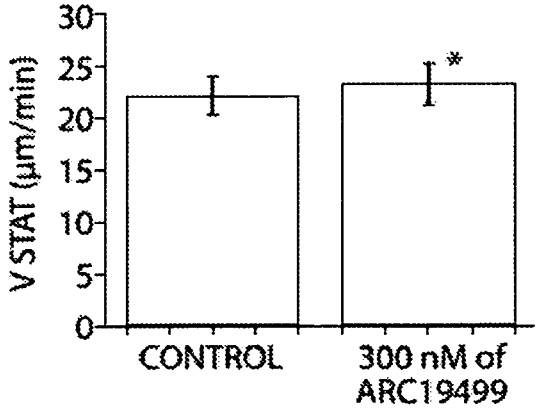


Fig. 61C

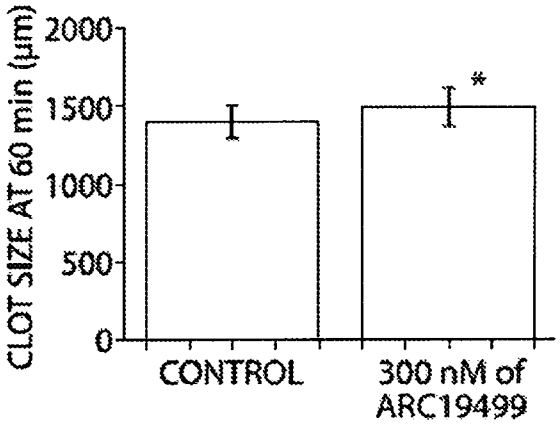


Fig. 61D

REPLACEMENT SHEET

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CONTROL

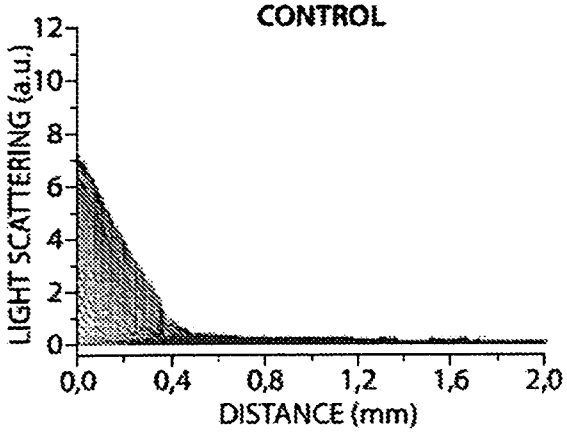


Fig. 62A

ARC19499 (100 nM)

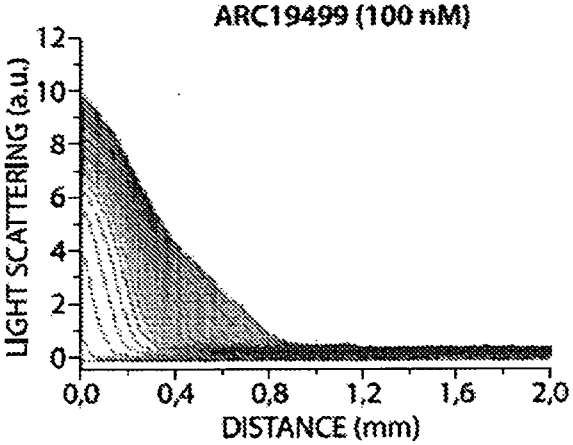


Fig. 62B

NOVOSEVEN (100 nM)

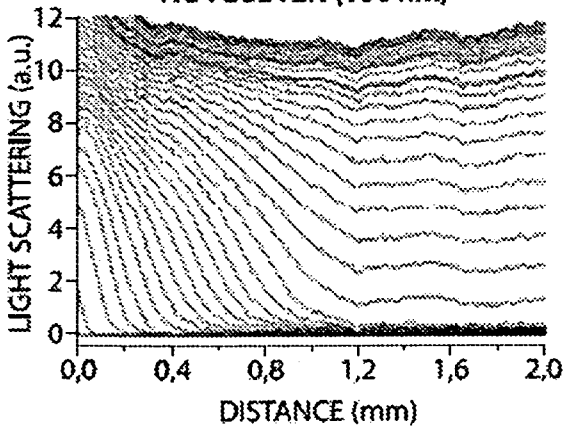


Fig. 62C

REPLACEMENT SHEET

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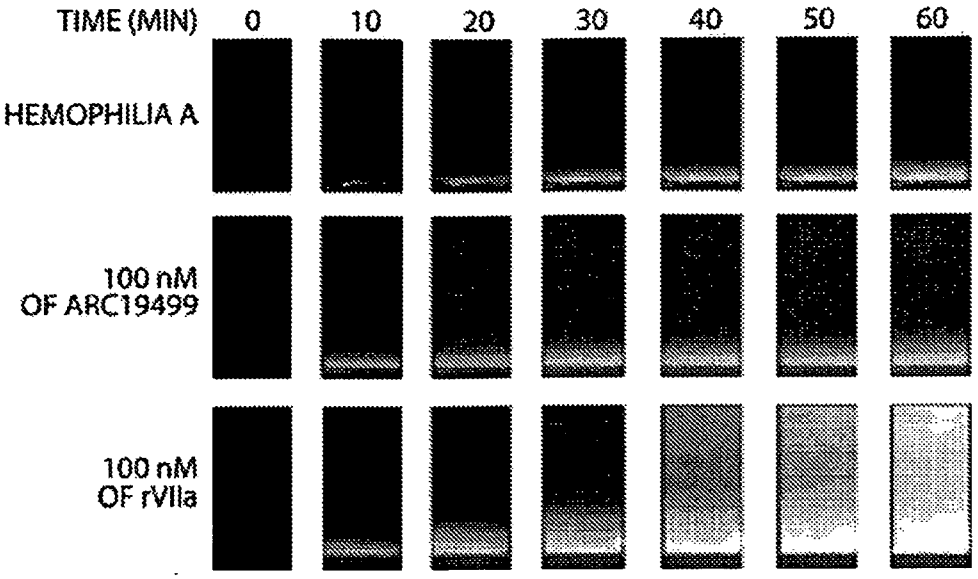


Fig. 63

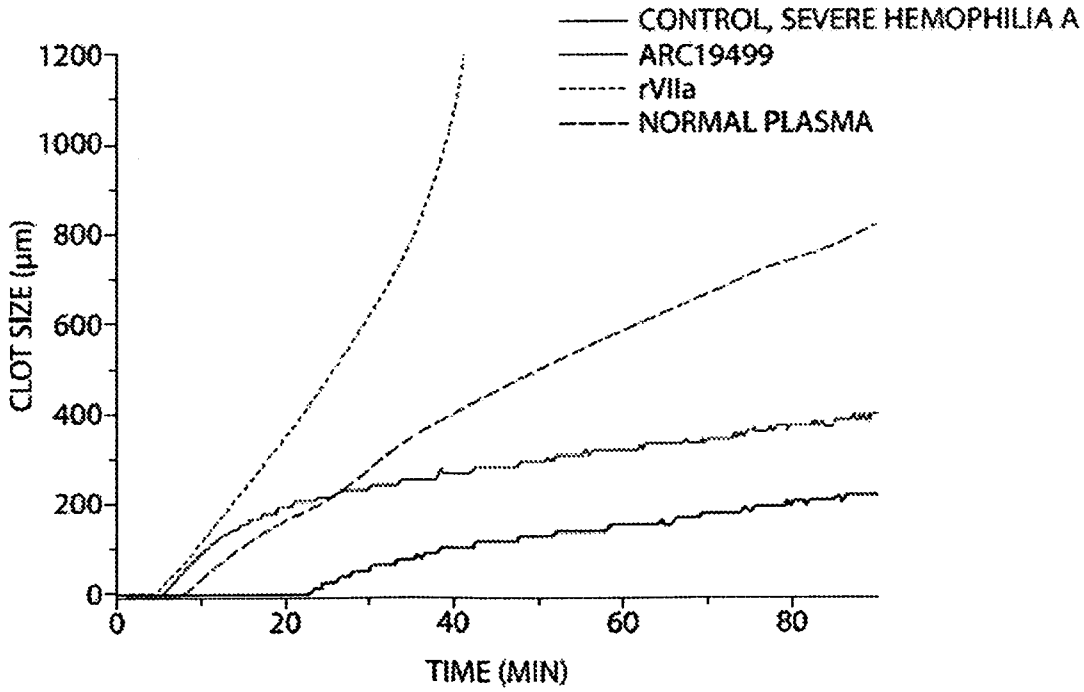


Fig. 64

PATIENT NUMBER	AGE	MONTHLY BLEEDING EVENTS	FACTOR VIII LEVEL IN THE DAY OF EXPERIMENT, %	APTT, sec
1	21	0-1	<1	103
2	24	1-2	2.1	82
3	43	1-2	1.2	86
4	48	1-2	1.4	80
5	21	1-2	<1	120
6	36	2-3	<1	102
7	19	3-5	2.8	99
8	30	0-1	<1	124

Fig. 65

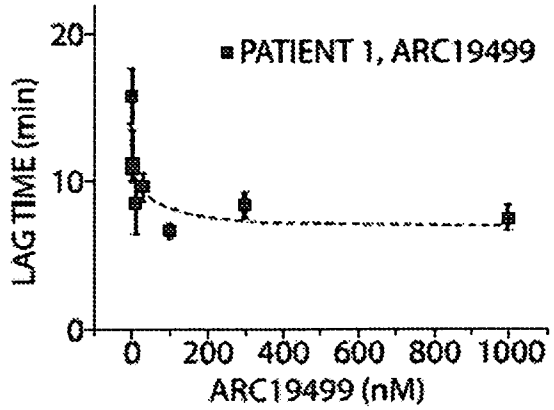


Fig. 66A

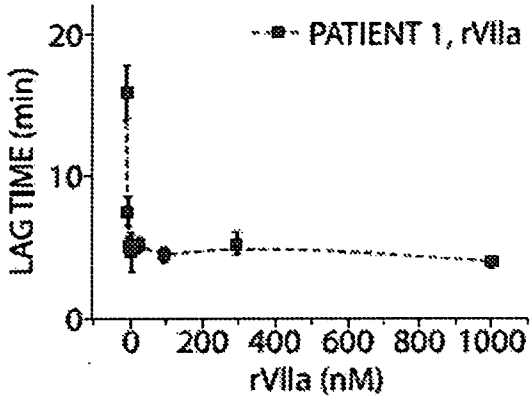


Fig. 66B

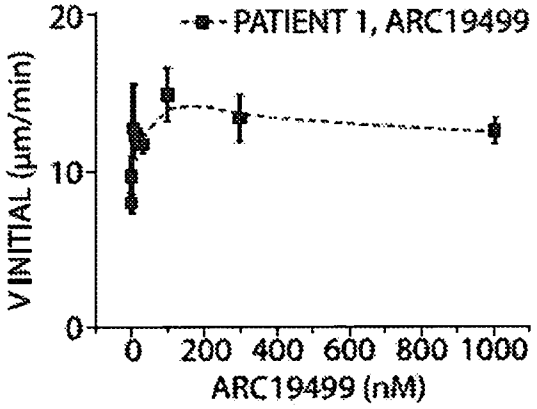


Fig. 66C

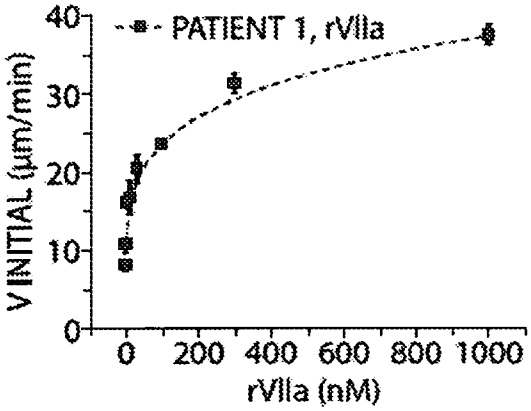


Fig. 66D

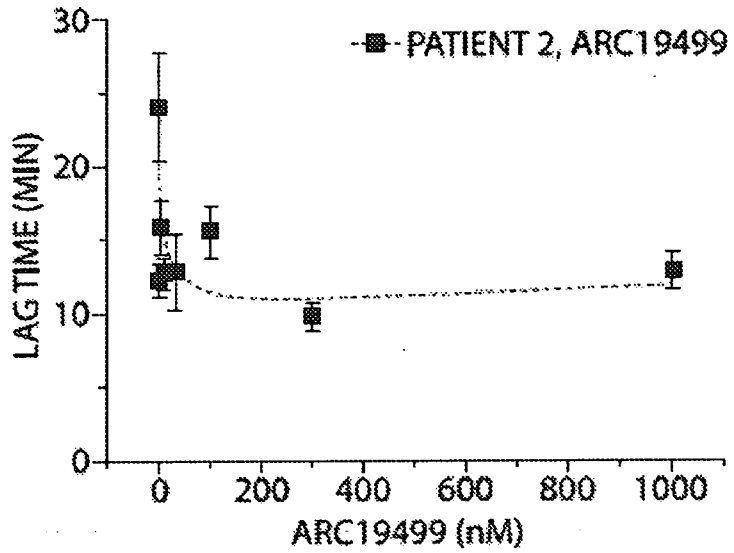


Fig. 67A

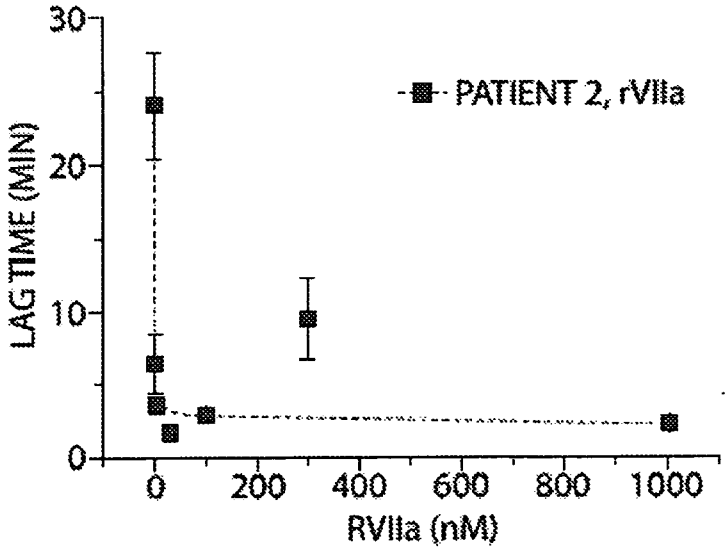


Fig. 67B

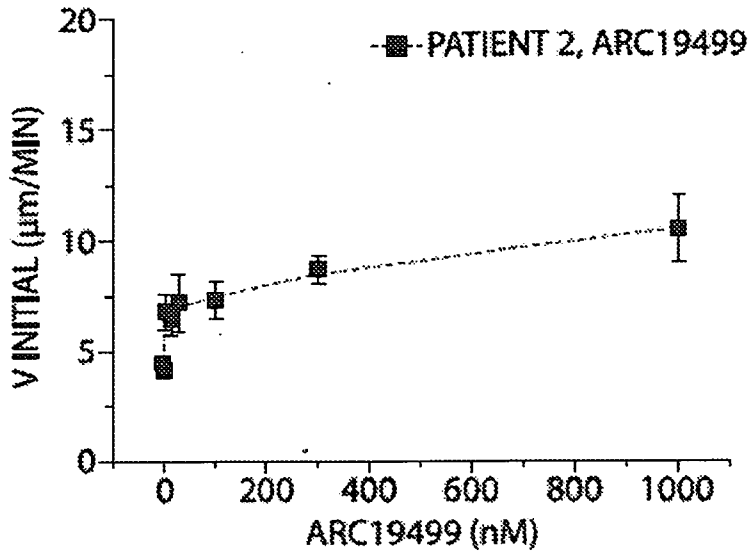


Fig. 67C

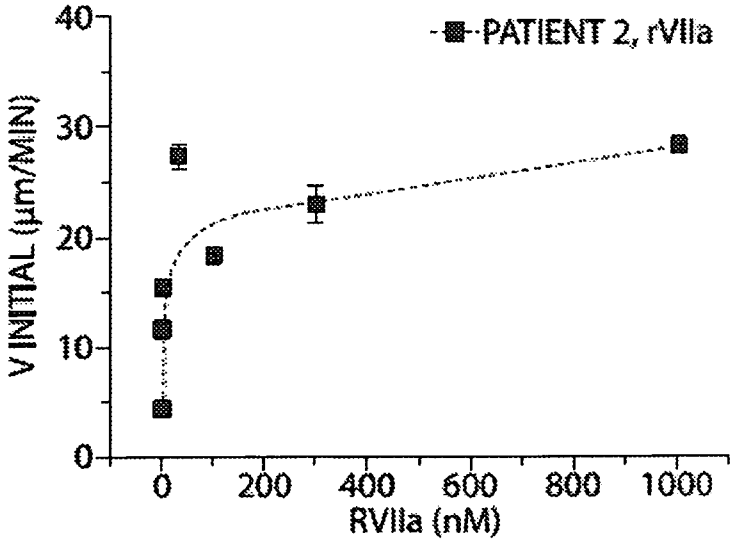


Fig. 67D

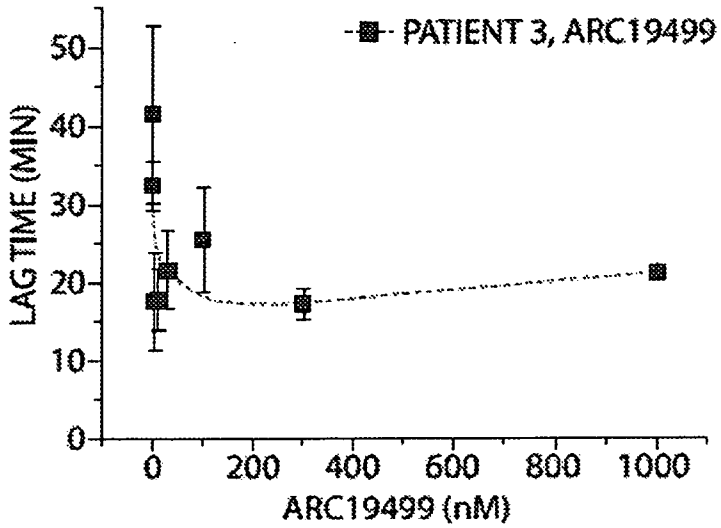


Fig. 68A

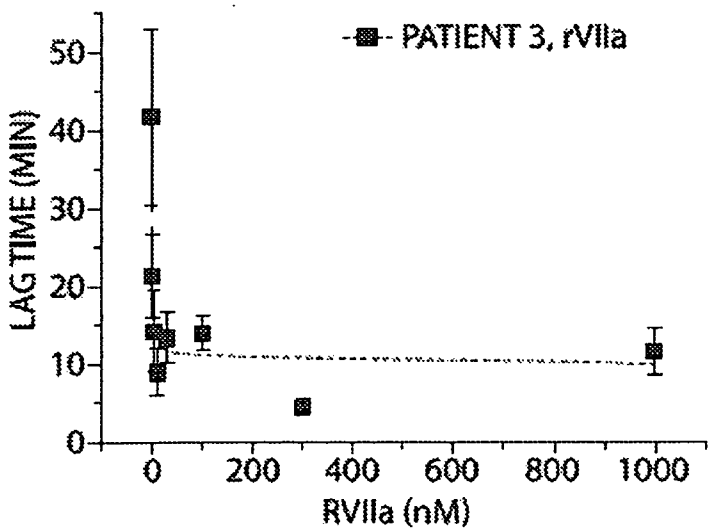


Fig. 68B

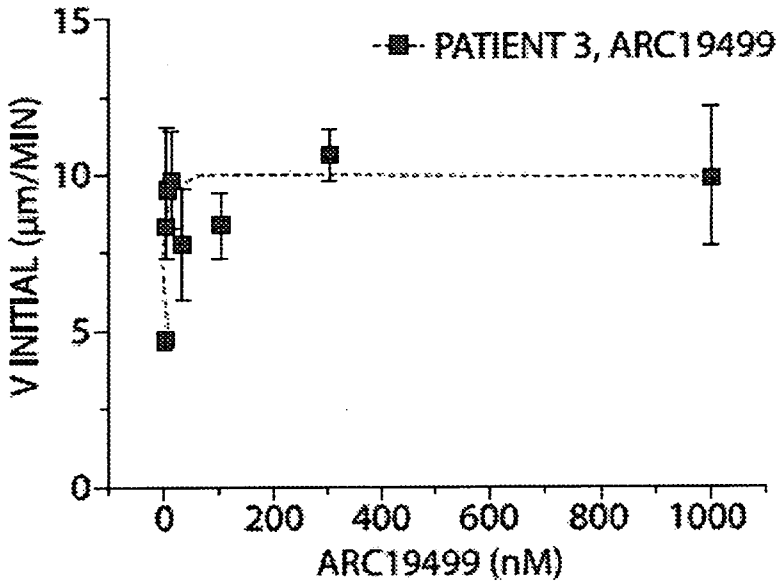


Fig. 68C

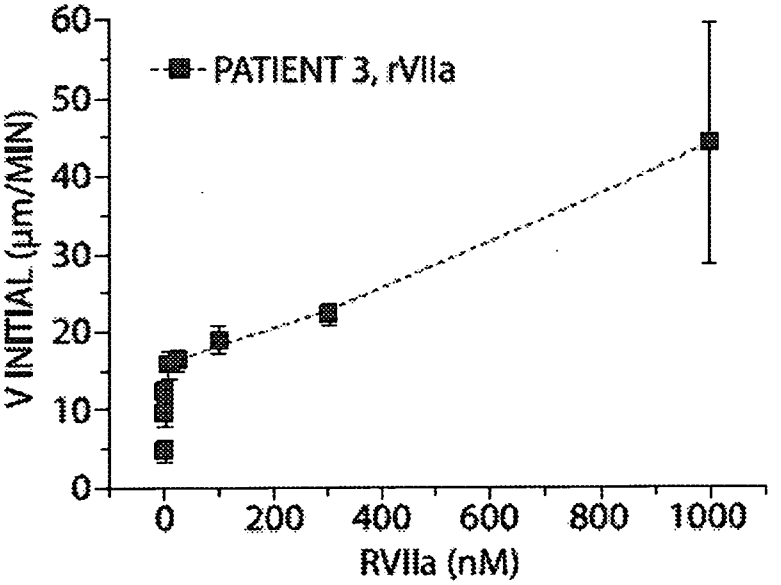


Fig. 68D

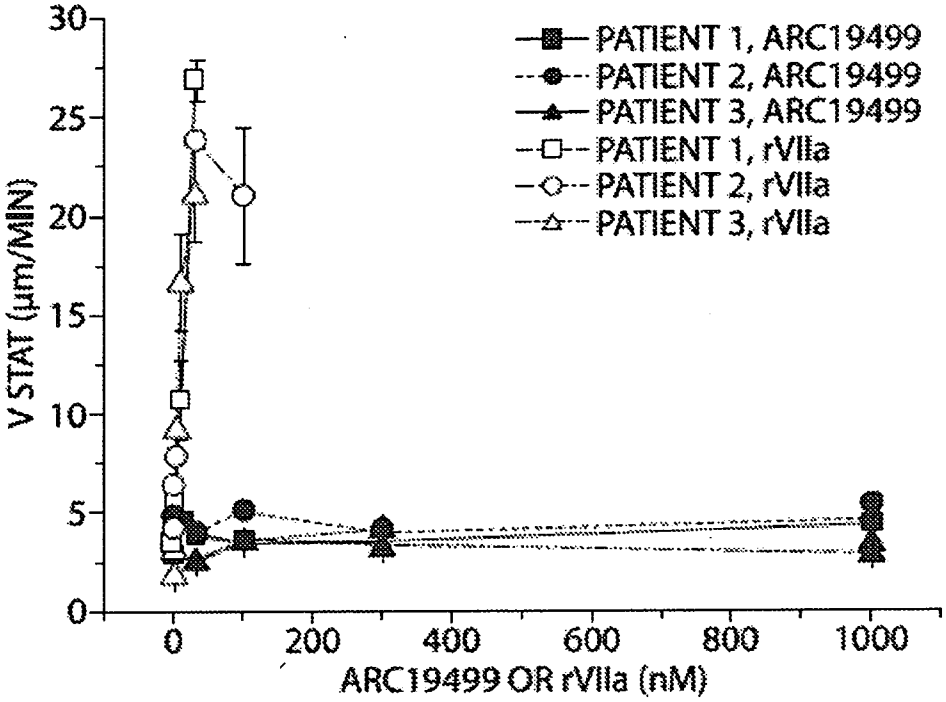

PATIENT 1, ARC19499
PATIENT 2, ARC19499
PATIENT 3, ARC19499
PATIENT 1, rVIIa
PATIENT 2, rVIIa
PATIENT 3, rVIIa
V STAT (µm/MIN)
30
25
20
15
10
5
0
0
200
400
600
800
1000
ARC19499 OR rVIIa (nM)

Fig. 69

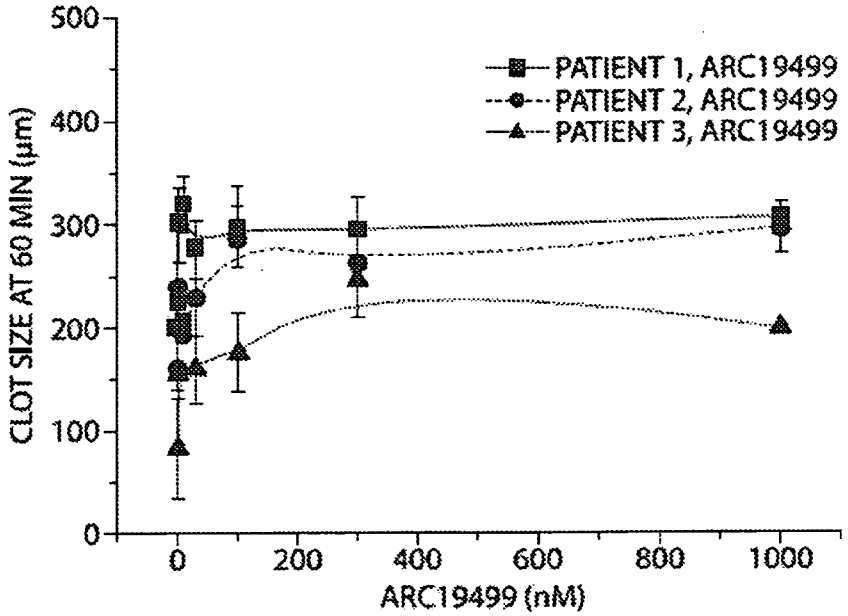


Fig. 70A

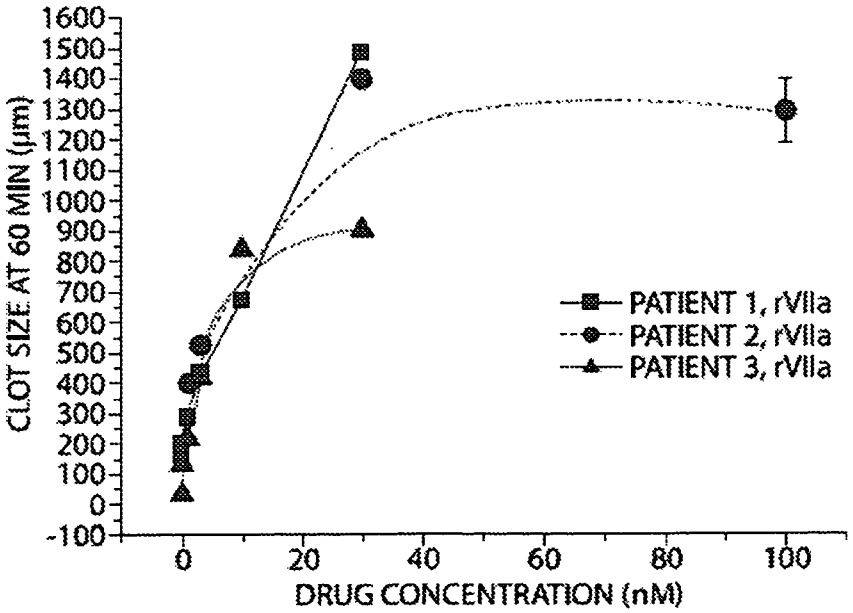


Fig. 70B

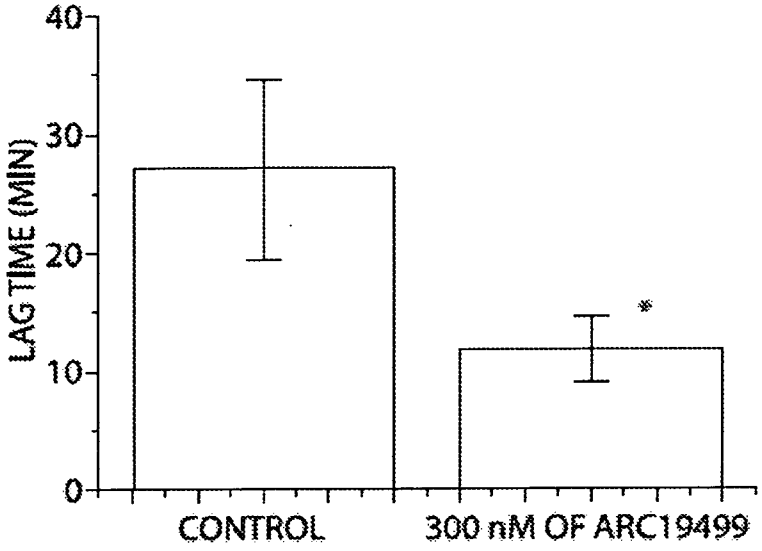


Fig. 71A

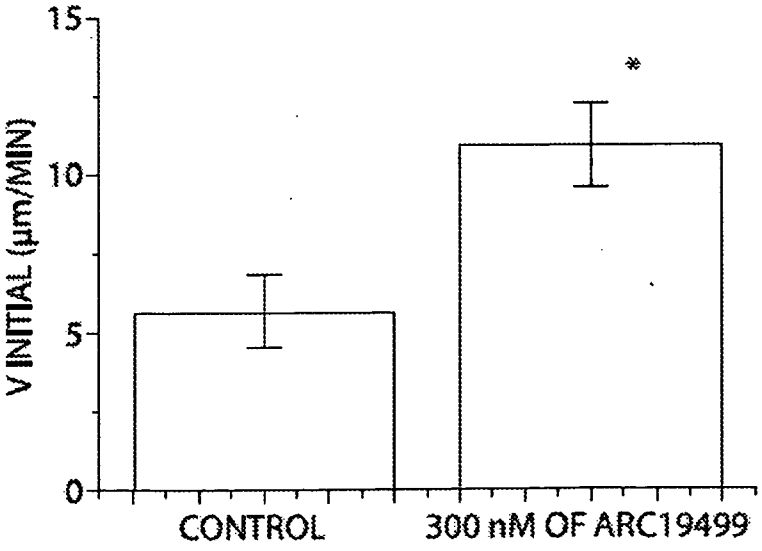


Fig. 71B

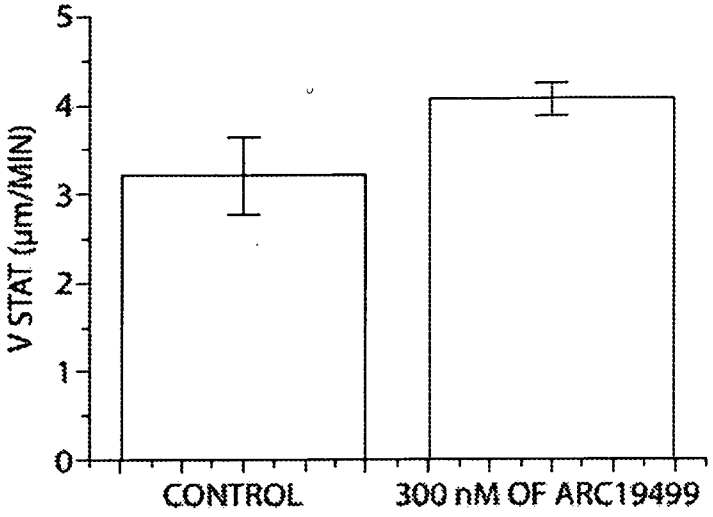


Fig. 71C

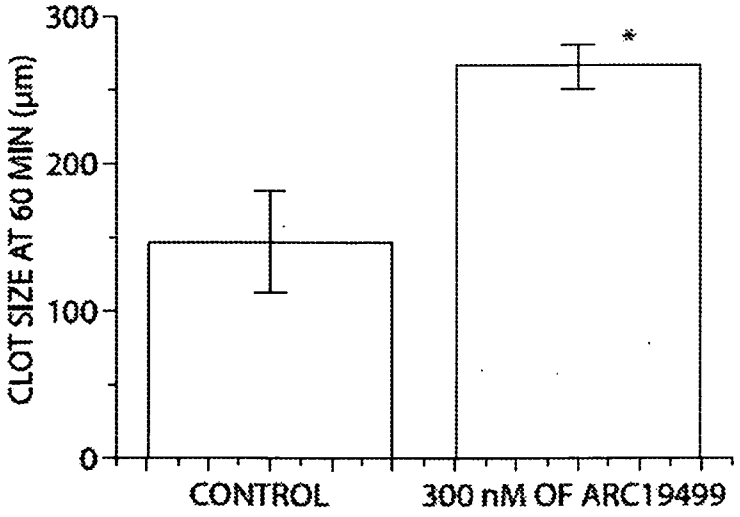


Fig. 71D

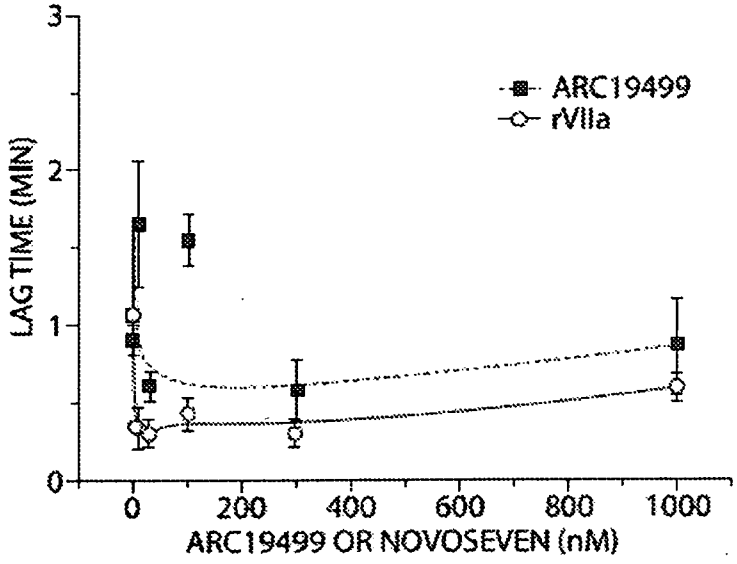


Fig. 72A

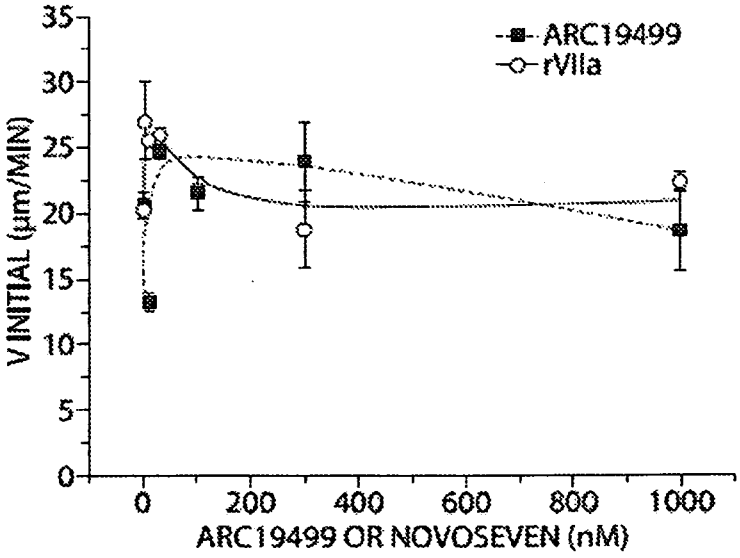


Fig. 72B

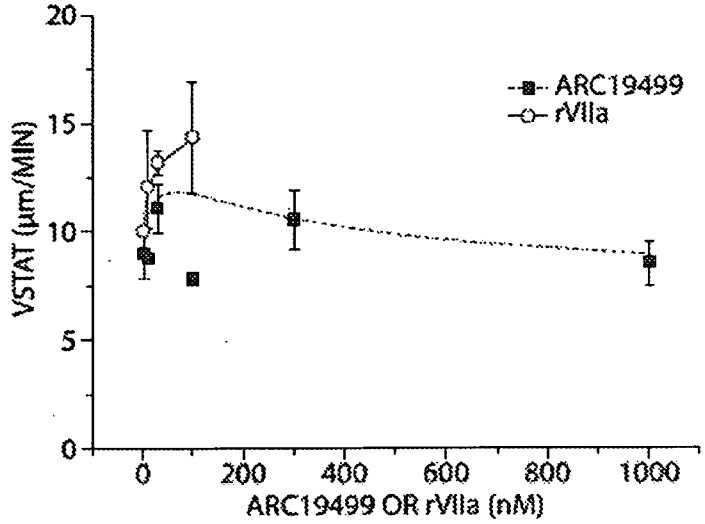


Fig. 72C

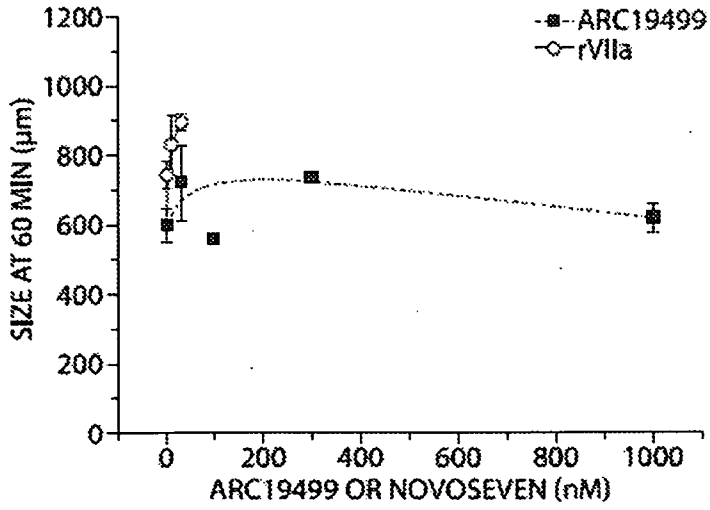


Fig. 72D

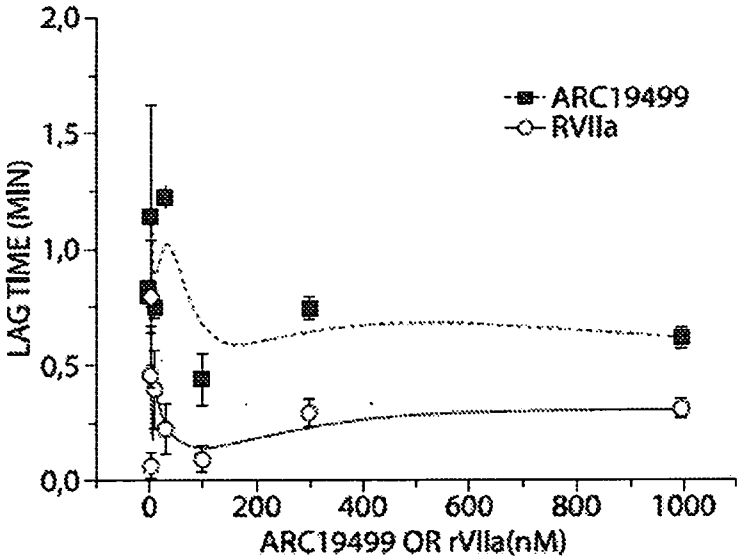


Fig. 73A

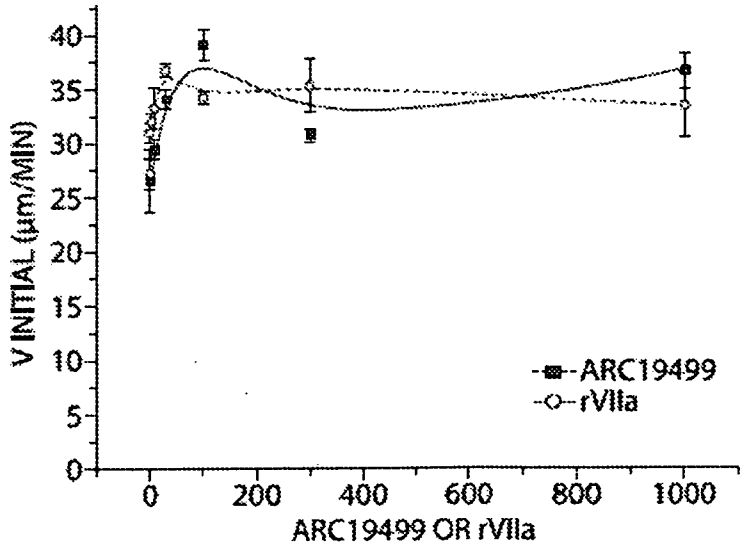


Fig. 73B

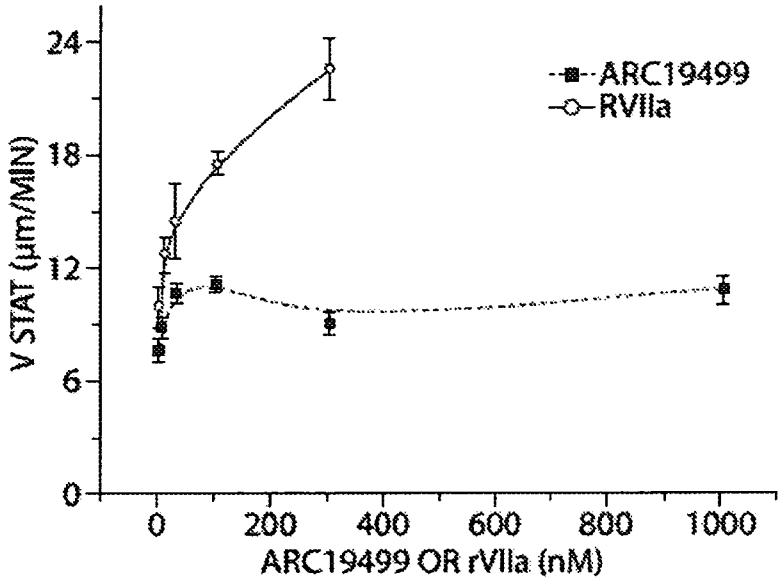


Fig. 73C

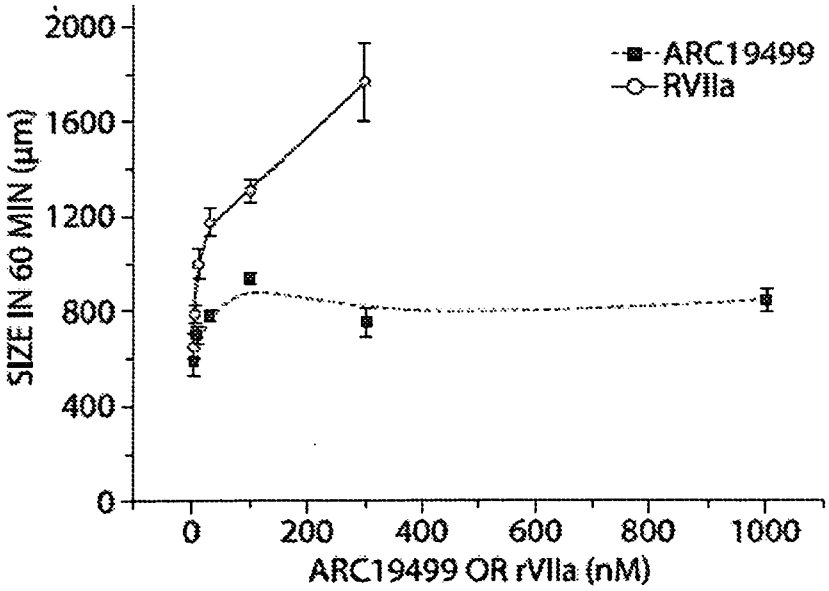


Fig. 73D

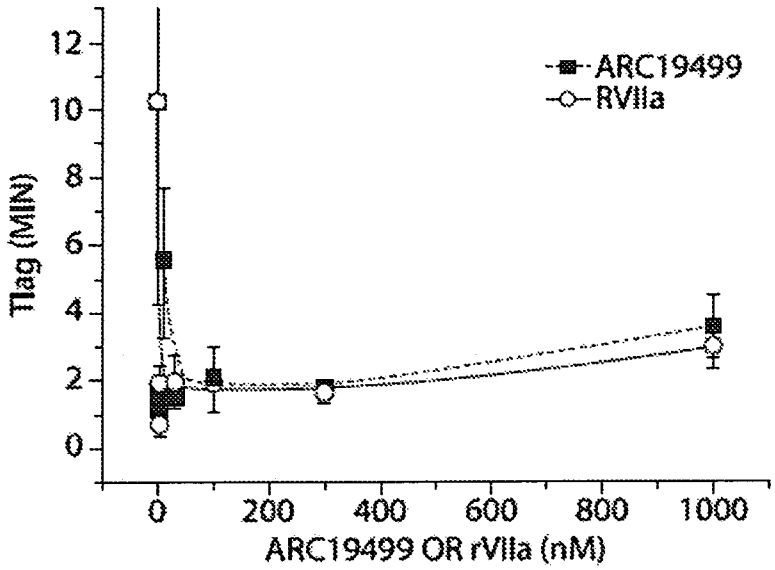


Fig. 74A

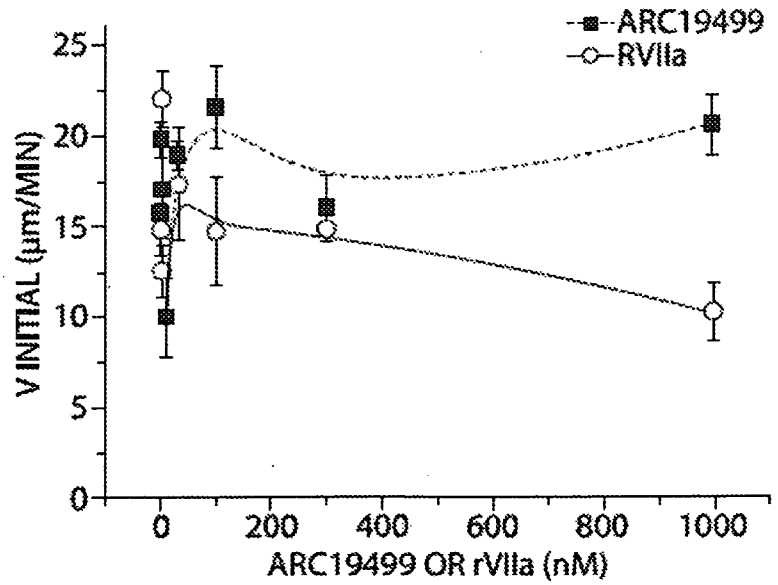


Fig. 74B

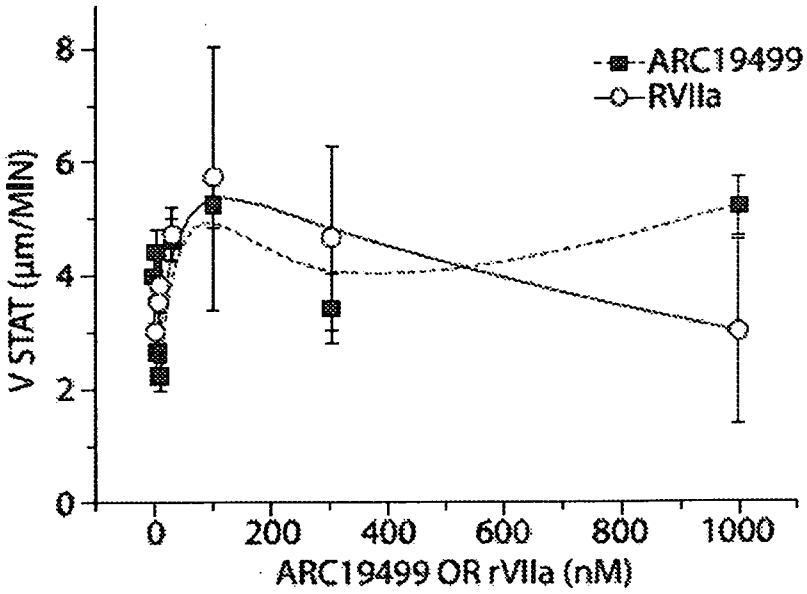


Fig. 74C

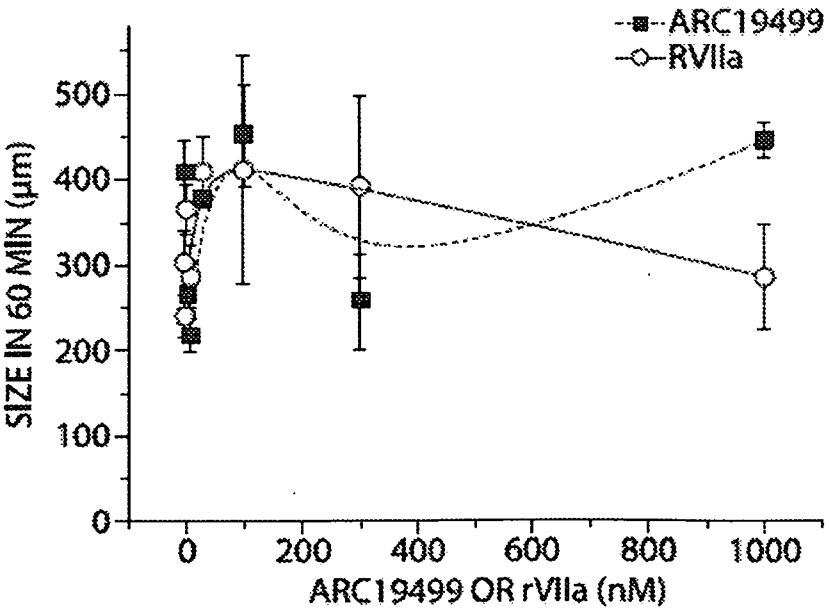


Fig. 74D

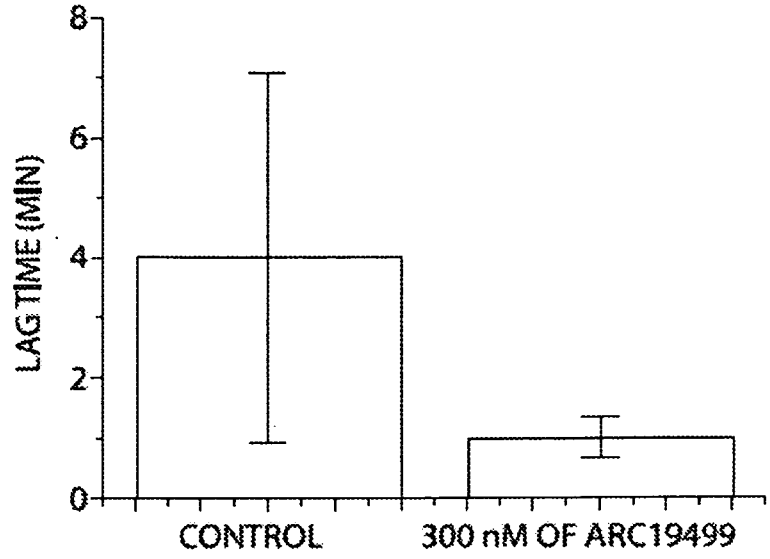


Fig. 75A

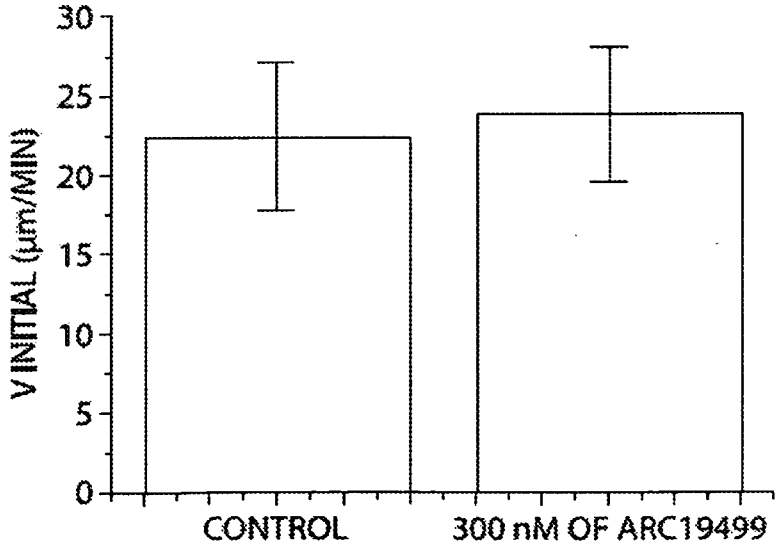


Fig. 75B

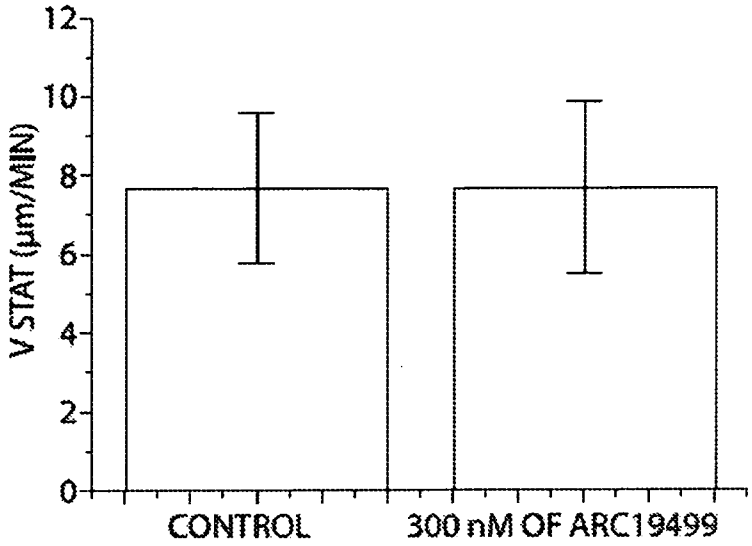


Fig. 75C

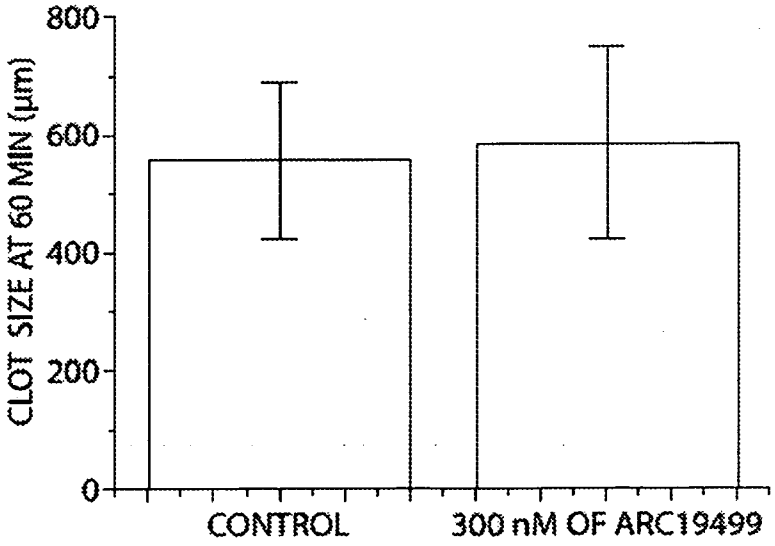


Fig. 75D

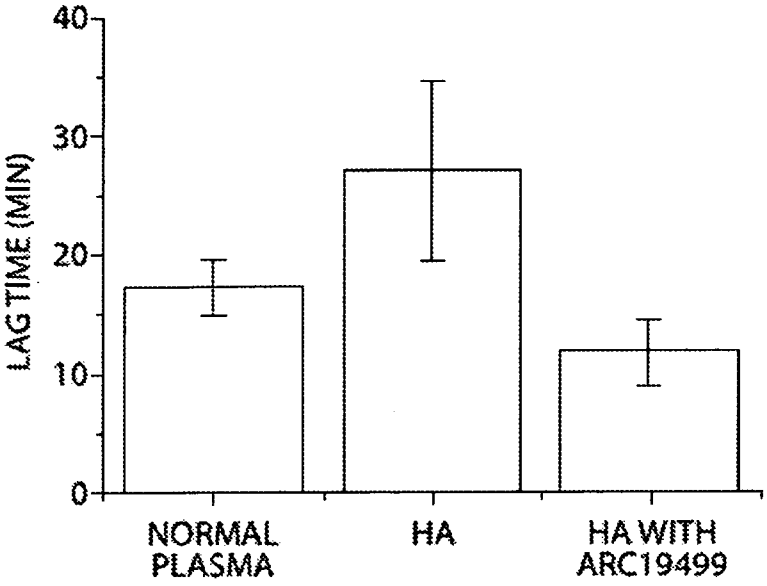


Fig. 76A

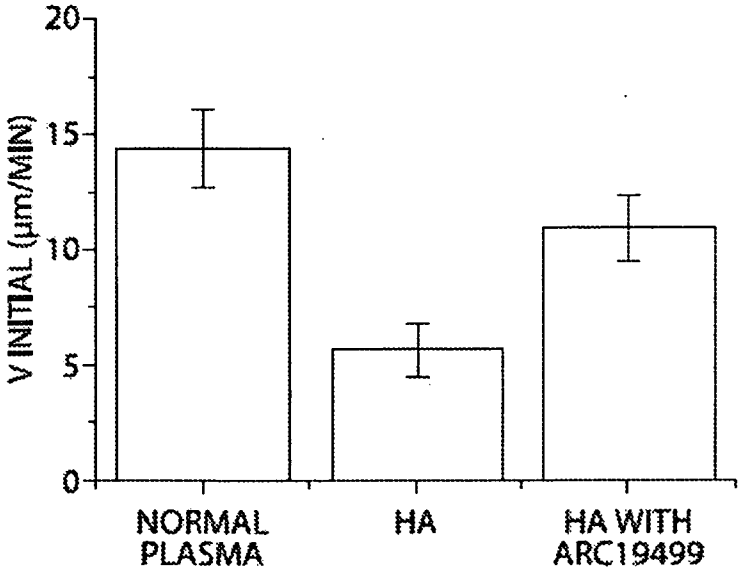


Fig. 76B

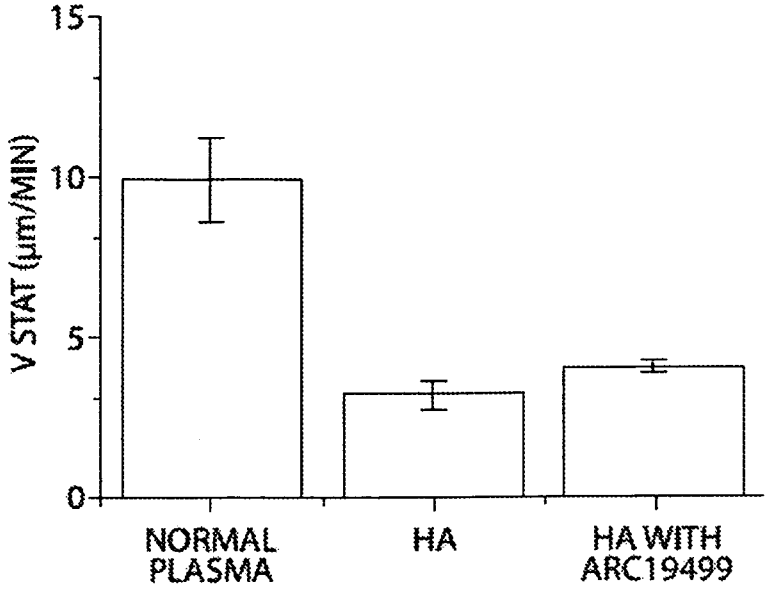


Fig. 76C

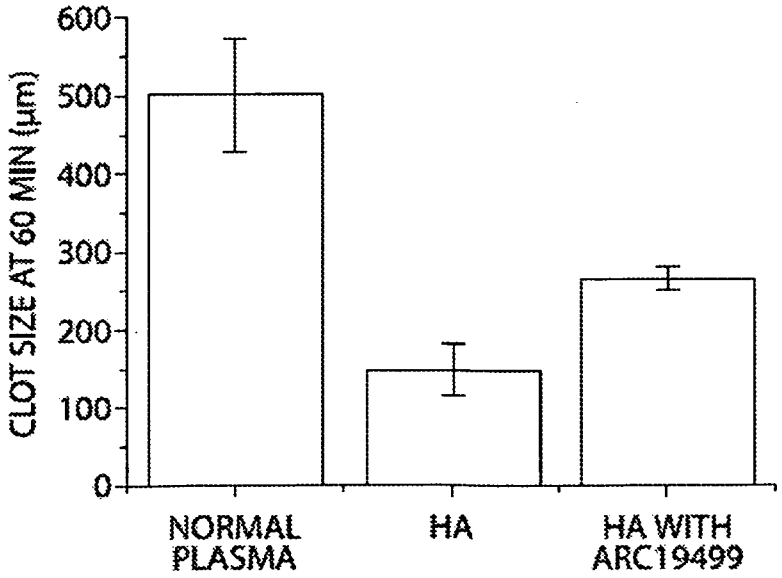


Fig. 76D

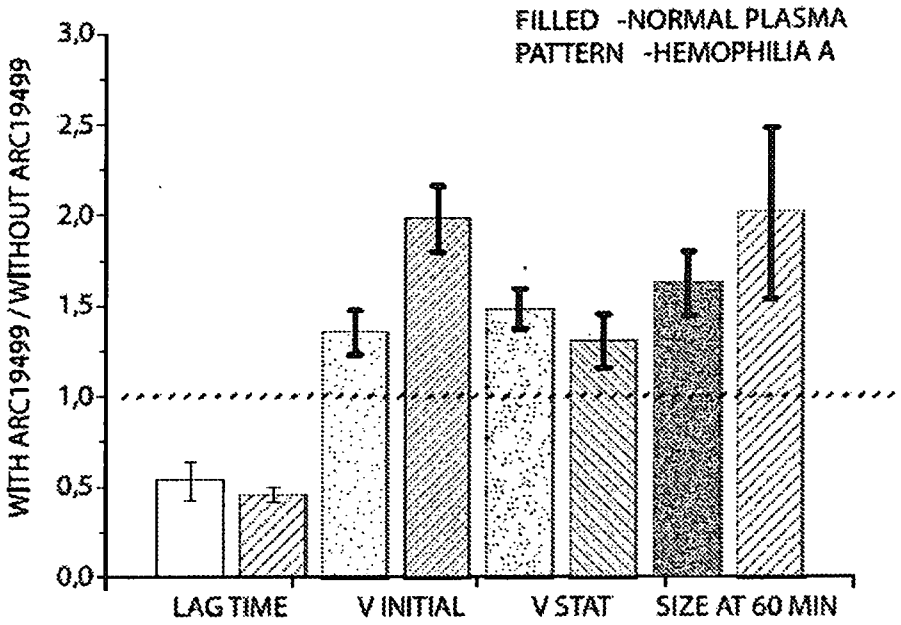
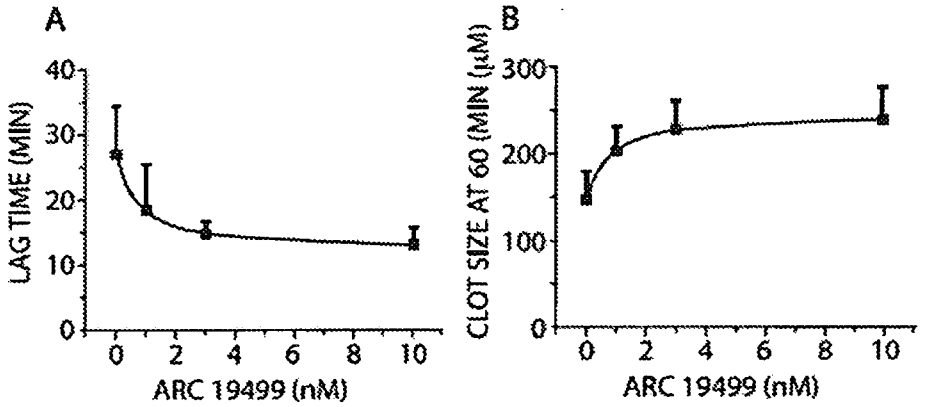


Fig. 77



PARAMETER	IC_{50} (nM)	S.E. (nM)
LAG TIME	0.7	0.04
SIZE	0.7	0.06

Fig. 78

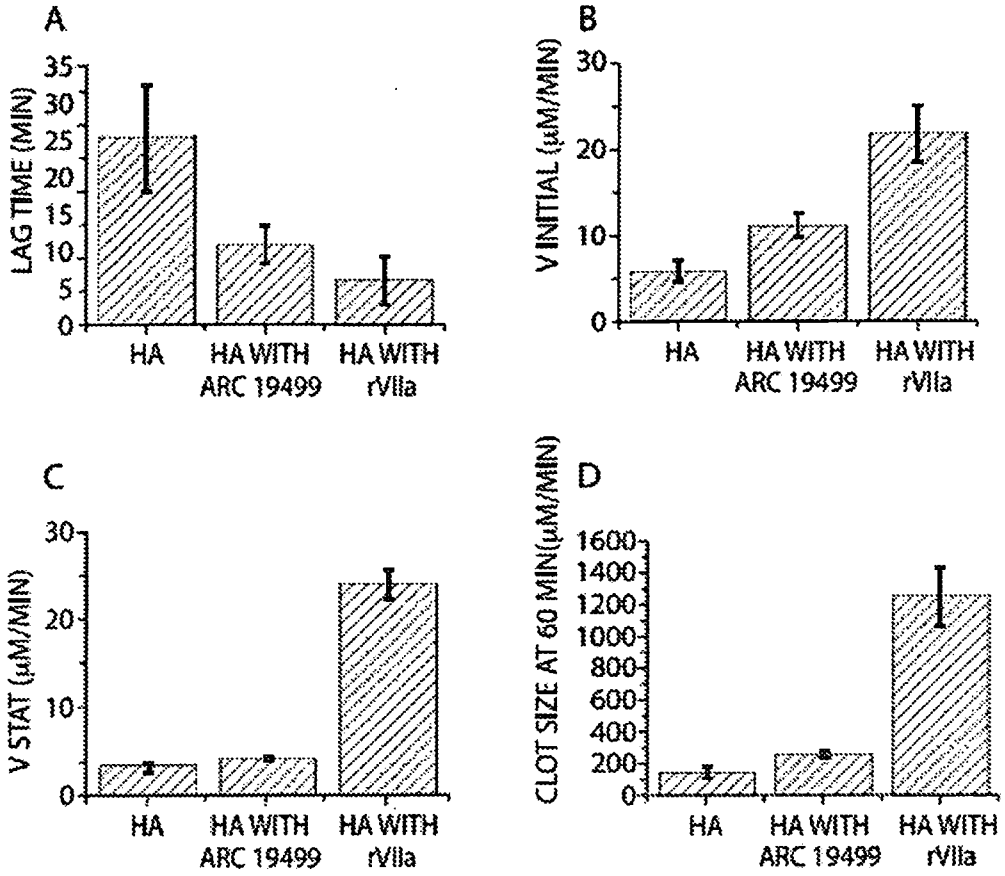

A
LAG TIME (MIN)
35
30
25
20
15
10
5
0
HA
HA WITH ARC 19499
HA WITH rVIIa
B
V INITIAL (µM/MIN)
30
20
10
0
HA
HA WITH ARC 19499
HA WITH rVIIa
C
V STAT (µM/MIN)
30
20
10
0
HA
HA WITH ARC 19499
HA WITH rVIIa
D
CLOT SIZE AT 60 MIN(µM/MIN)
1600
1400
1200
1000
800
600
400
200
0
HA
HA WITH ARC 19499
HA WITH rVIIa

Fig. 79

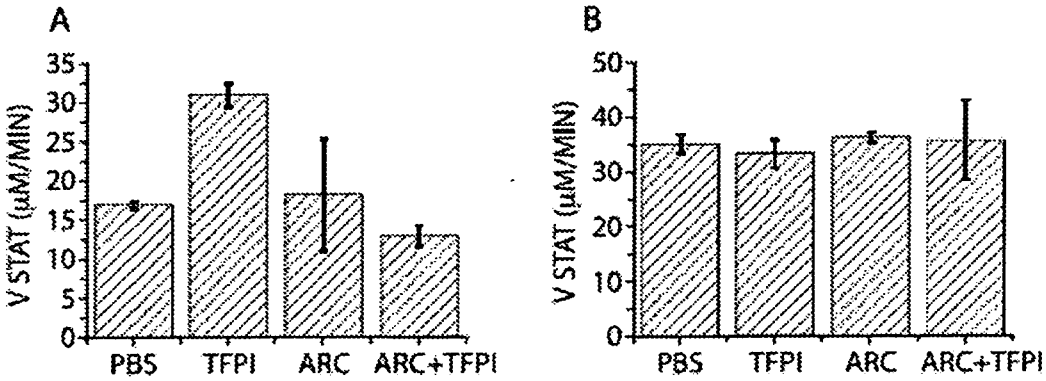

A
V STAT (µM/MIN)
35
30
25
20
15
10
5
0
PBS
TFPI
ARC
ARC+TFPI
B
V STAT (µM/MIN)
50
40
30
20
10
0
PBS
TFPI
ARC
ARC+TFPI

Fig. 80

TF-ACT IN WHOLE BLOOD FROM NORMAL SUBJECTS			
[ARC19499] (nM)	#2 (N) (SECONDS)	#6 (N) (SECONDS)	#7 (N) (SECONDS)
700		311	
350	317	287	277
175	278	295	293
88	319	305	258
44			267
0	353	342	311

TF-ACT IN WHOLE BLOOD FROM HEMOPHILIA B SUBJECTS		
[ARC19499] (nM)	#4 (B) (SECONDS)	#9 (B) (SECONDS)
350	438	522
175	435	457/510
88	323	420
44	460	510
0	528	580

TF-ACT IN WHOLE BLOOD FROM HEMOPHILIA A SUBJECTS							
[ARC19499] (nM)	#1 (A) (SECONDS)	#3 (A) (SECONDS)	#5(A) (SECONDS)	#8(A) (SECONDS)	#10(A) (SECONDS)	#11(A) (SECONDS)	#12(A) (SECONDS)
3115	264						
1558	313						
1400						455	299
800	256						
700		551/500	489		416	634	281
350		444	434	483	418	347	295
175		457	392	453	456	491	291
88			468	464		456	306
44					477		
0	578	651	540	642	527	783	328

Fig. 81

DILUTE PT IN PLASMA FROM NORMAL SUBJECTS			
[ARC19499] (nM)	#2 (N) (SECONDS)	#6 (N) (SECONDS)	#7 (N) (SECONDS)
500	179	185	174
125	183	225	168
32	181	242	170
8	191	246	176
2	294	274	265
0	>360	>360	>360

DILUTE PT IN PLASMA FROM HEMOPHILIA B SUBJECTS		
[ARC19499] (nM)	#4 (B) (SECONDS)	#9 (B) (SECONDS)
500	215	185
125	227	189
32	225	192
8	241	210
2	>360	>360
0	>360	>360

DILUTE PT IN PLASMA FROM HEMOPHILIA A SUBJECTS							
[ARC19499] (nM)	#1 (A) (SECONDS)	#3 (A) (SECONDS)	#5(A) (SECONDS)	#8(A) (SECONDS)	#10(A) (SECONDS)	#11(A) (SECONDS)	#12(A) (SECONDS)
500	163	162	162	156	154	162	>360
125	167	164	163	157	156	168	>360
32	171	168	164	163	157	171	>360
8	185	193	175	192	163	195	>360
2	>360	>360	>360	>360	169	>360	>360
0	>360	>360	>360	>360	169	>360	>360

Fig. 82

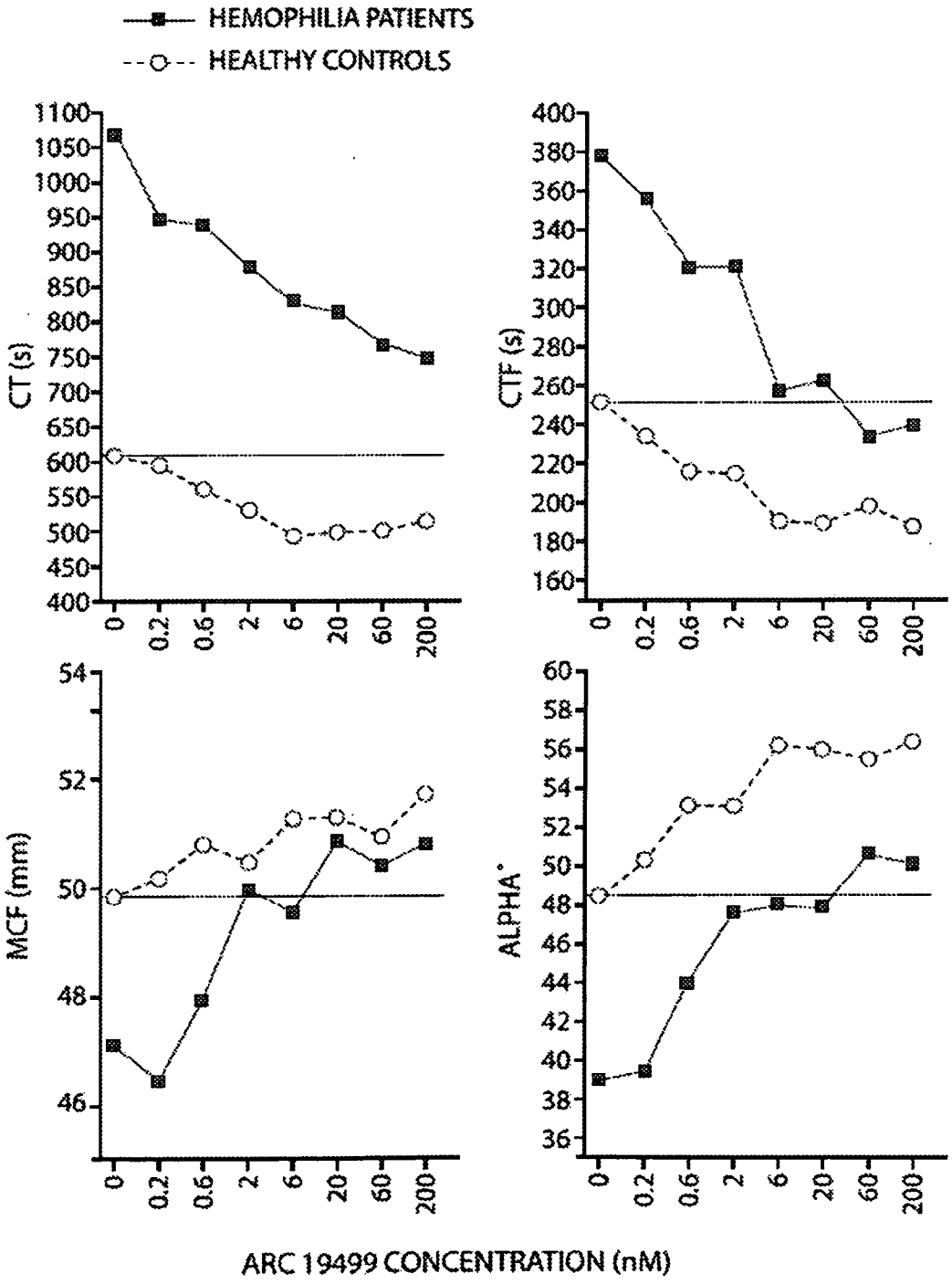

HEMOPHILIA PATIENTS
HEALTHY CONTROLS
CT (s)
CTF (s)
MCF (mm)
ALPHA°
0
0.2
0.6
2
6
20
60
200
ARC 19499 CONCENTRATION (nM)

Fig. 83

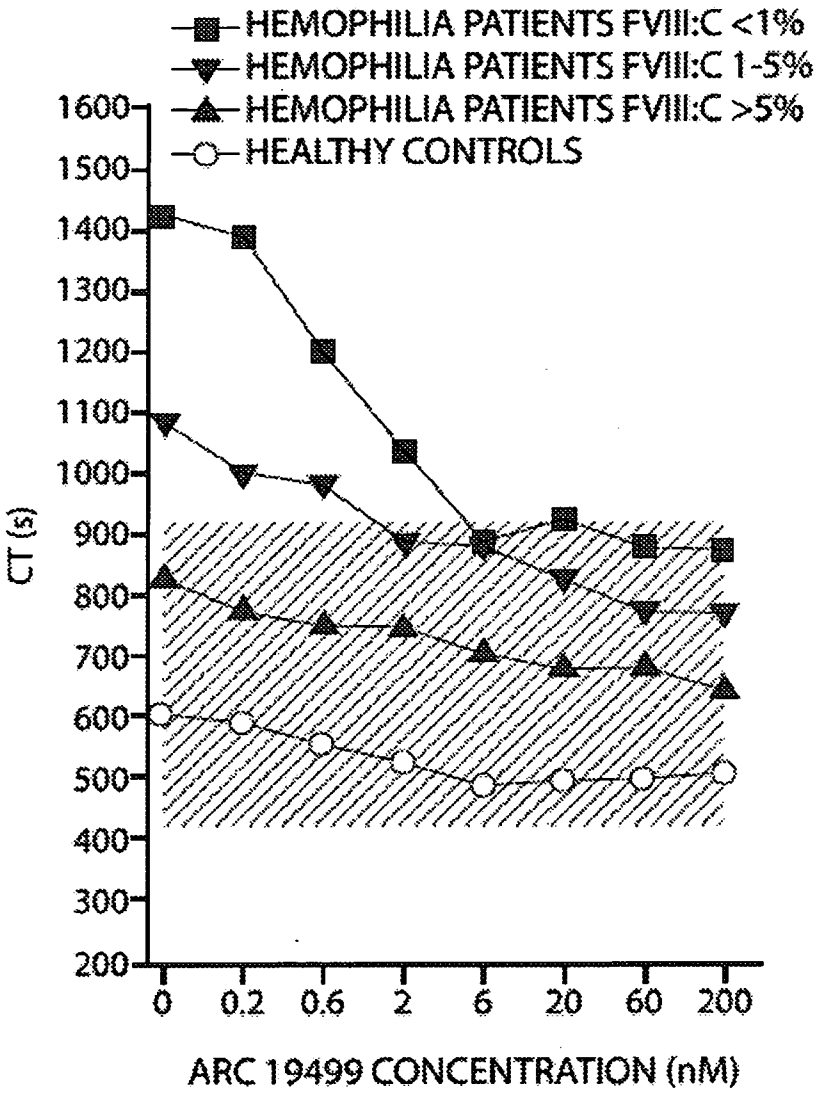

HEMOPHILIA PATIENTS FVIII:C <1%
HEMOPHILIA PATIENTS FVIII:C 1-5%
HEMOPHILIA PATIENTS FVIII:C >5%
HEALTHY CONTROLS
CT (s)
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
0
0.2
0.6
2
6
20
60
200
ARC 19499 CONCENTRATION (nM)

Fig. 84

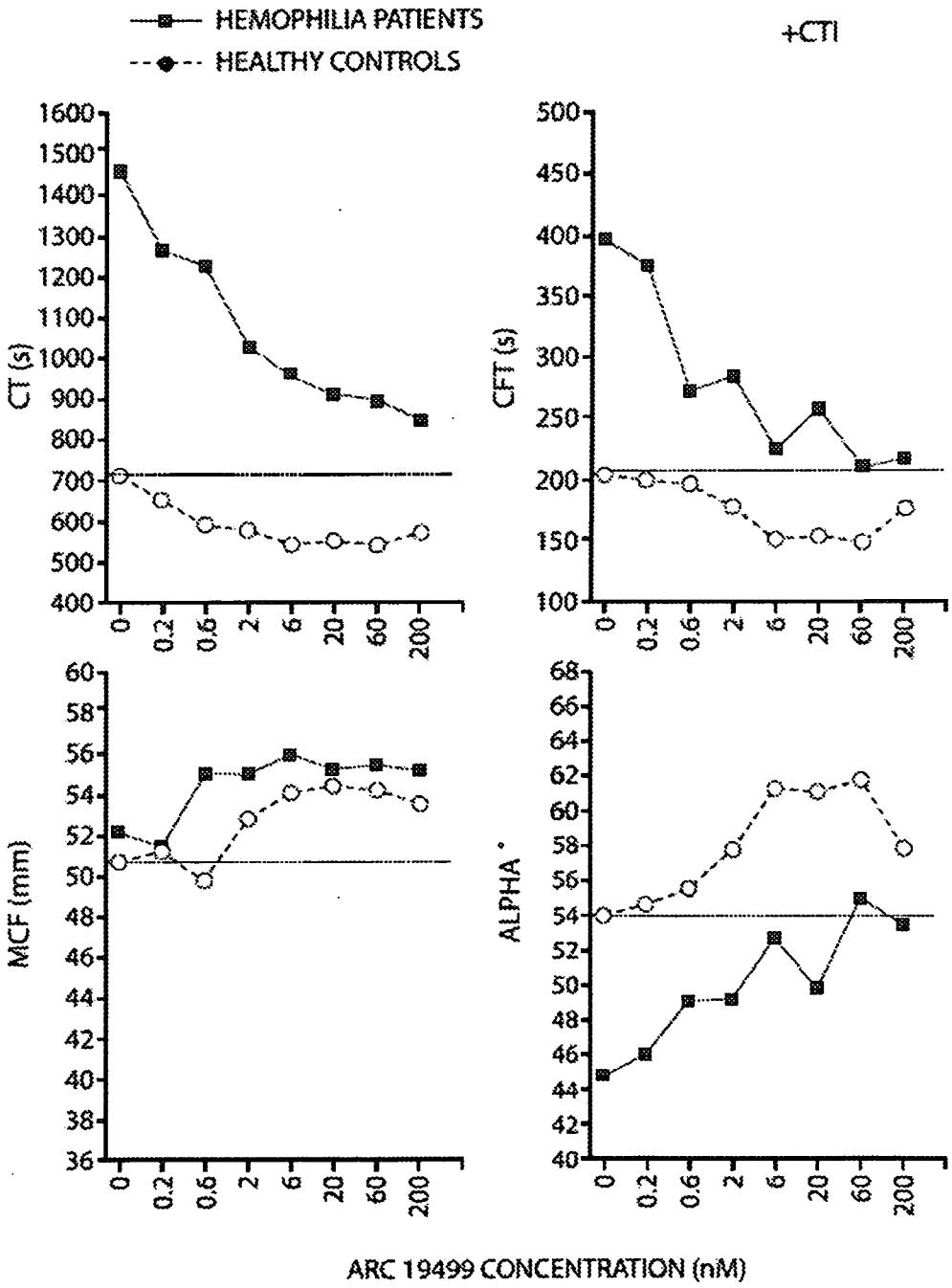

HEMOPHILIA PATIENTS
HEALTHY CONTROLS
+CTI
CT (s)
CFT (s)
MCF (mm)
ALPHA °
ARC 19499 CONCENTRATION (nM)

Fig. 85

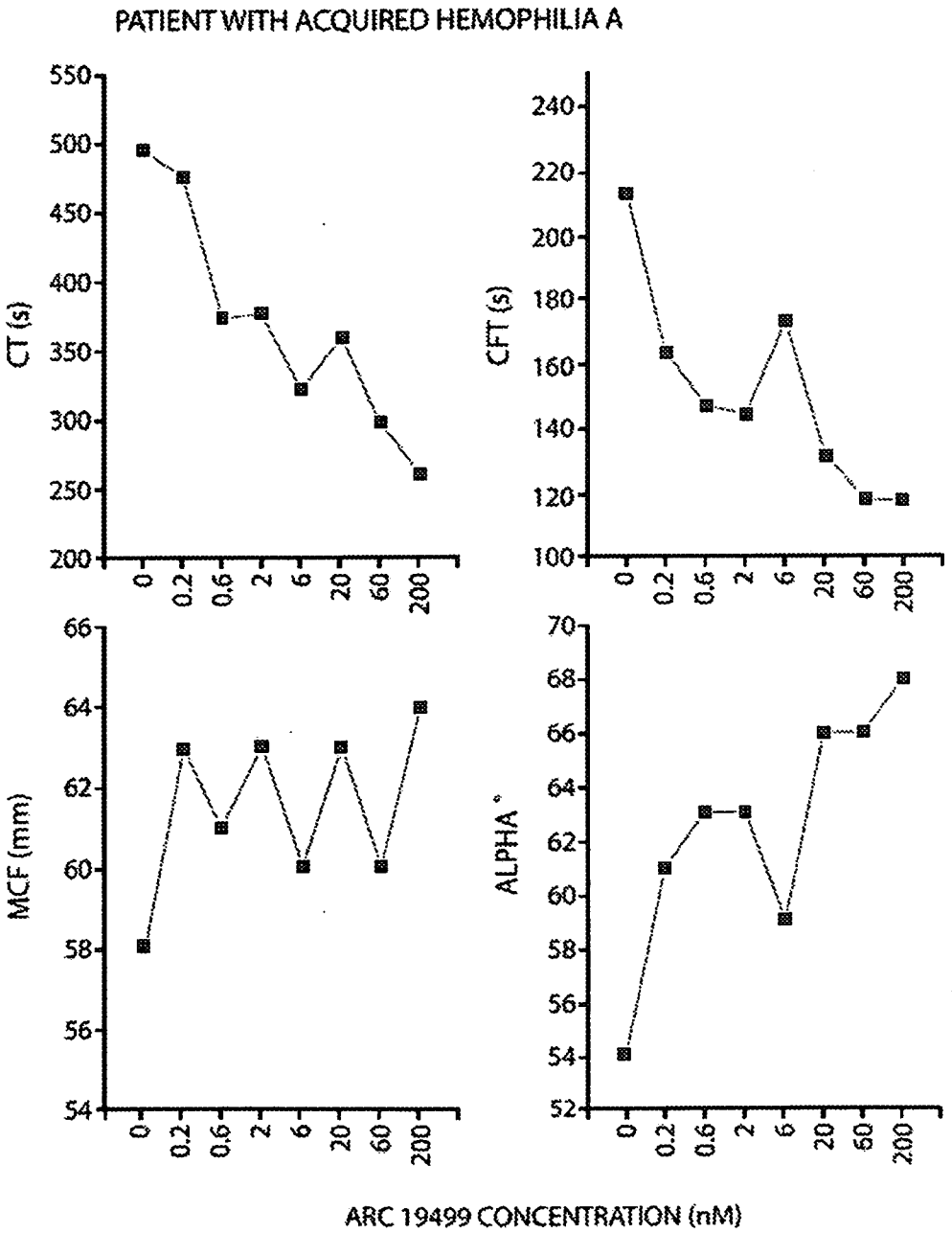

PATIENT WITH ACQUIRED HEMOPHILIA A
CT (s)
CFT (s)
MCF (mm)
ALPHA °
0
0.2
0.6
2
6
20
60
200
ARC 19499 CONCENTRATION (nM)

Fig. 86

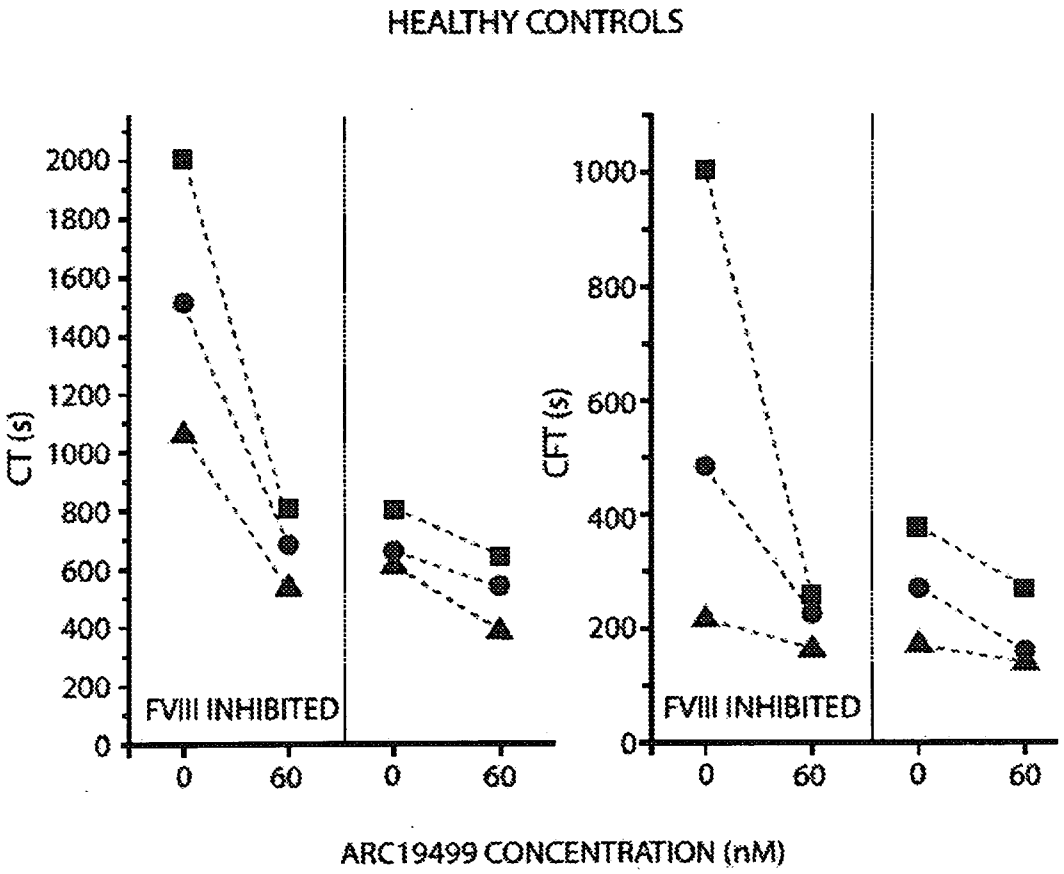

HEALTHY CONTROLS
CT (s)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
FVIII INHIBITED
0
60
0
60
CFT (s)
1000
800
600
400
200
0
FVIII INHIBITED
0
60
0
60
ARC19499 CONCENTRATION (nM)

Fig. 87

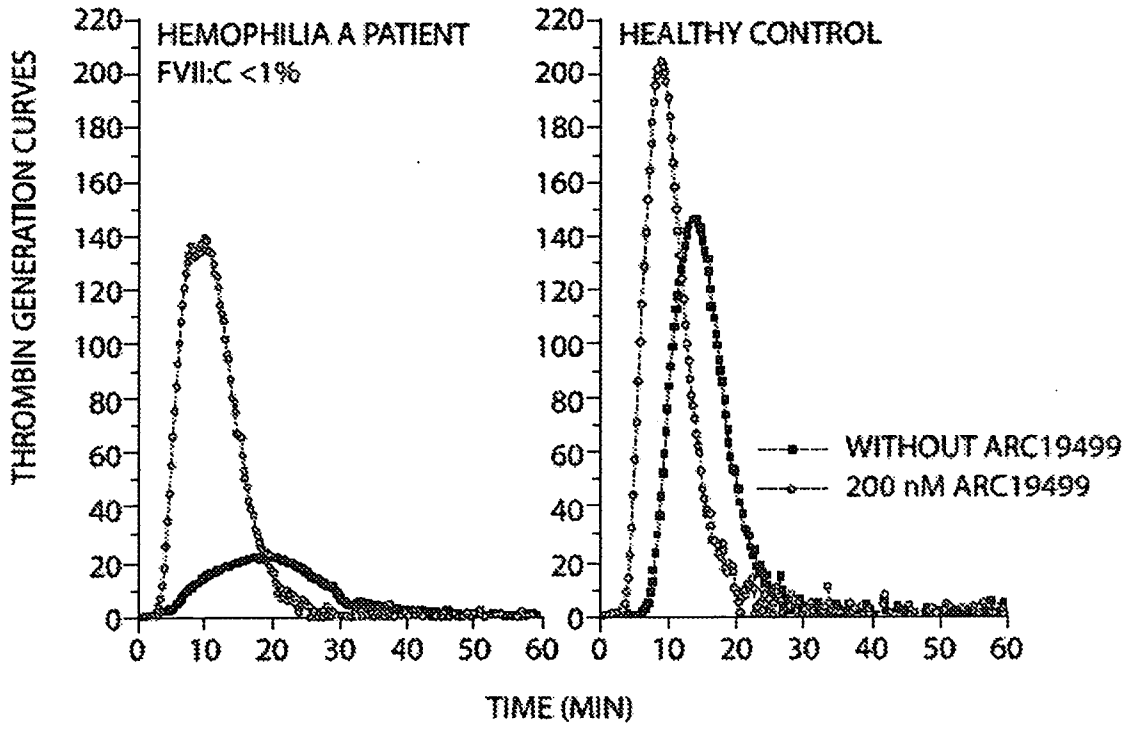

HEMOPHILIA A PATIENT
FVII:C <1%
HEALTHY CONTROL
THROMBIN GENERATION CURVES
TIME (MIN)
WITHOUT ARC19499
200 nM ARC19499
0
20
40
60
80
100
120
140
160
180
200
220
0
10
20
30
40
50
60

Fig. 88

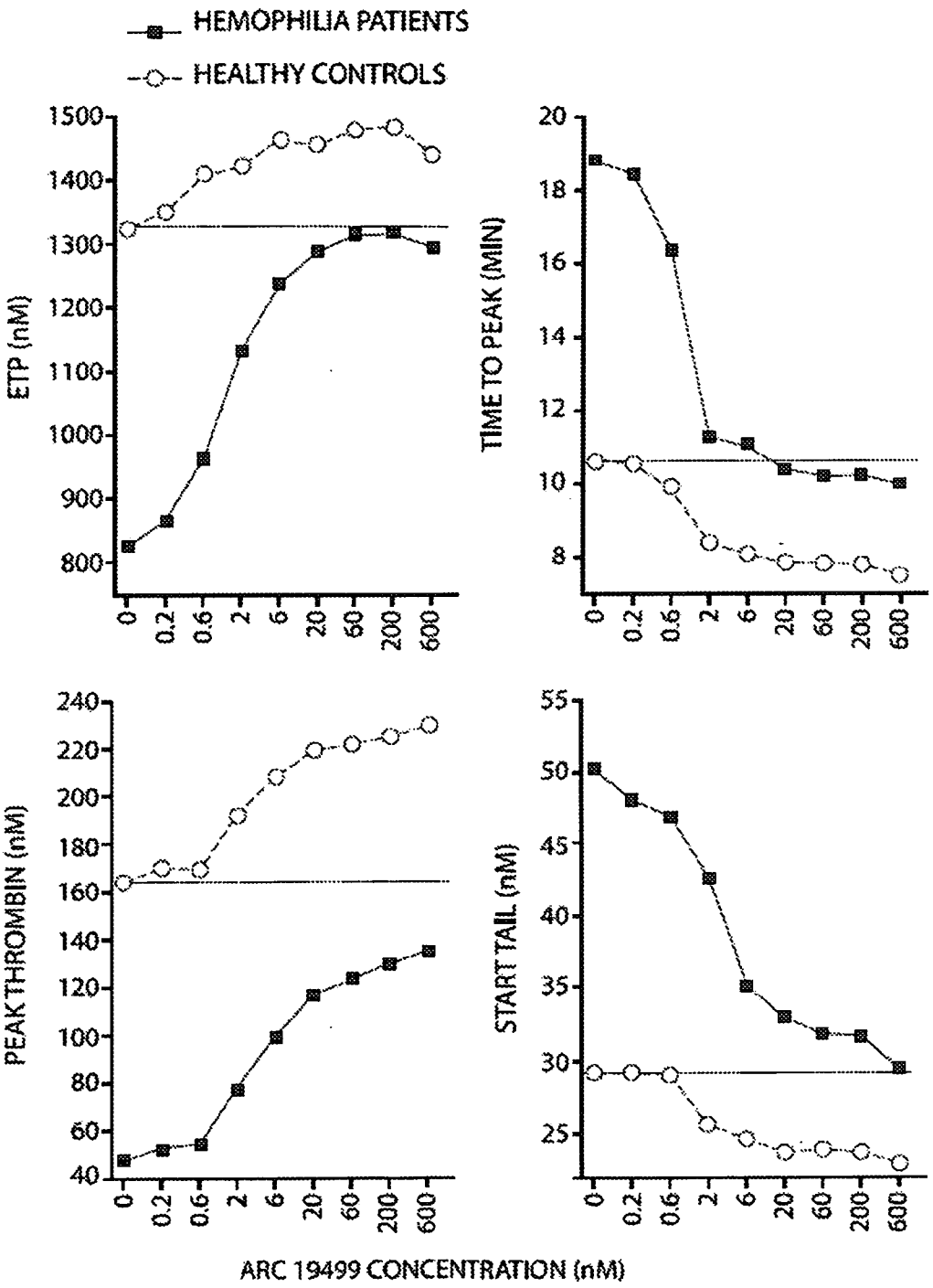

HEMOPHILIA PATIENTS
HEALTHY CONTROLS
ETP (nM)
TIME TO PEAK (MIN)
PEAK THROMBIN (nM)
START TAIL (nM)
ARC 19499 CONCENTRATION (nM)
0
0.2
0.6
2
6
20
60
200
600

Fig. 89

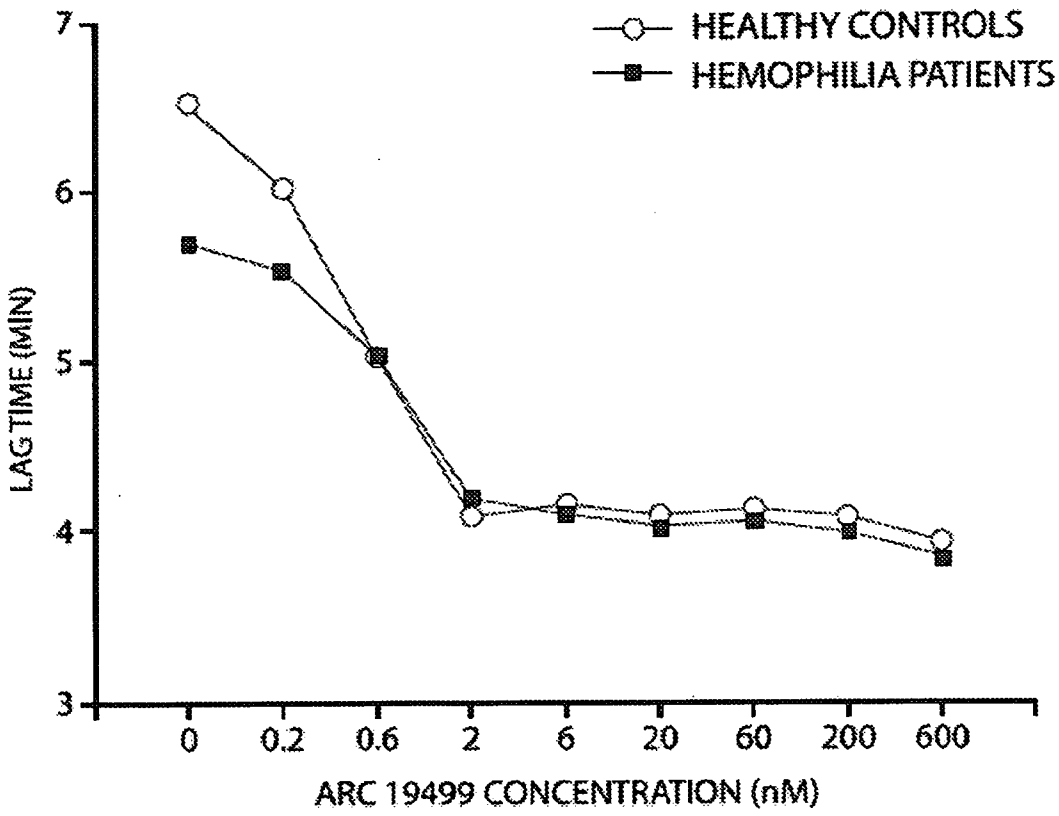

HEALTHY CONTROLS
HEMOPHILIA PATIENTS
LAG TIME (MIN)
7
6
5
4
3
0
0.2
0.6
2
6
20
60
200
600
ARC 19499 CONCENTRATION (nM)

Fig. 90

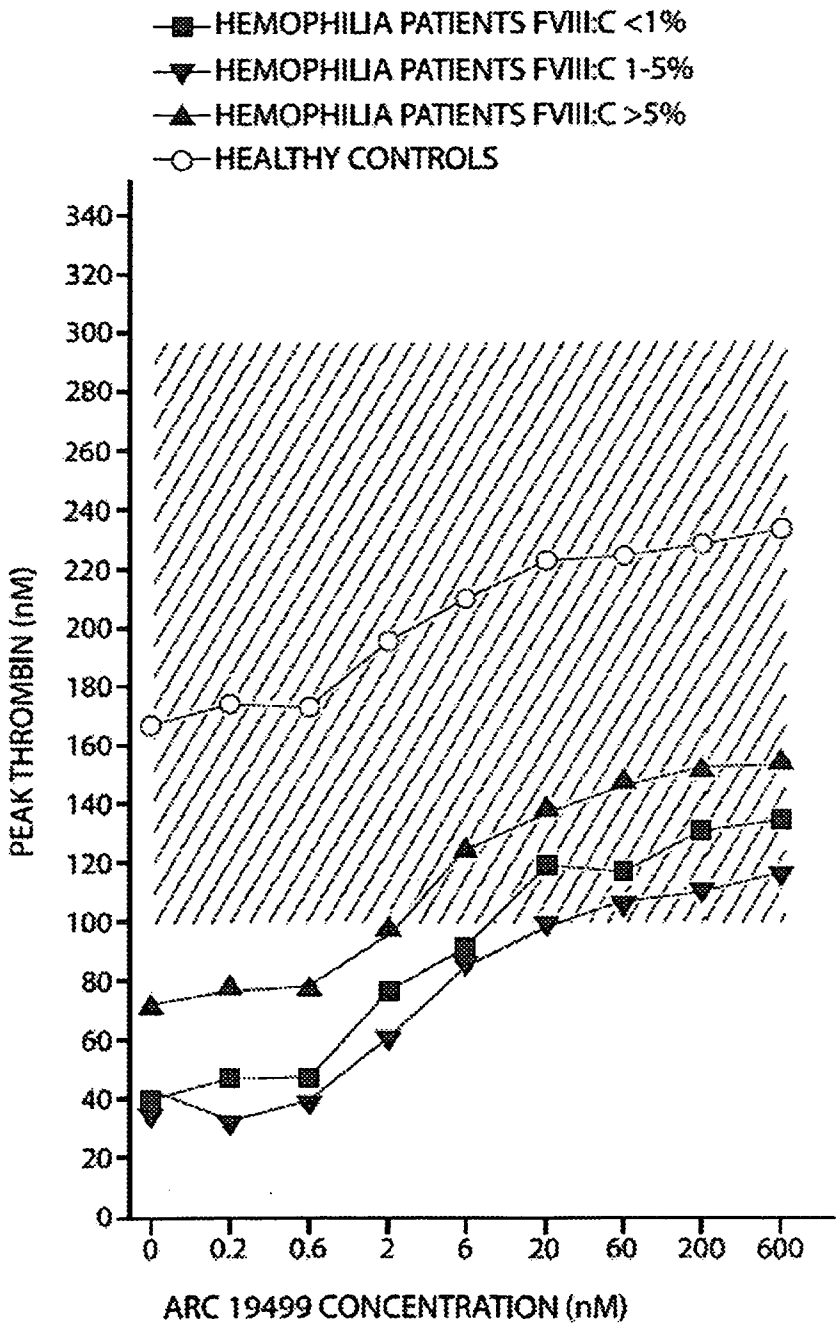

HEMOPHILIA PATIENTS FVIII:C <1%
HEMOPHILIA PATIENTS FVIII:C 1-5%
HEMOPHILIA PATIENTS FVIII:C >5%
HEALTHY CONTROLS
PEAK THROMBIN (nM)
340
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
0
0.2
0.6
2
6
20
60
200
600
ARC 19499 CONCENTRATION (nM)

Fig. 91

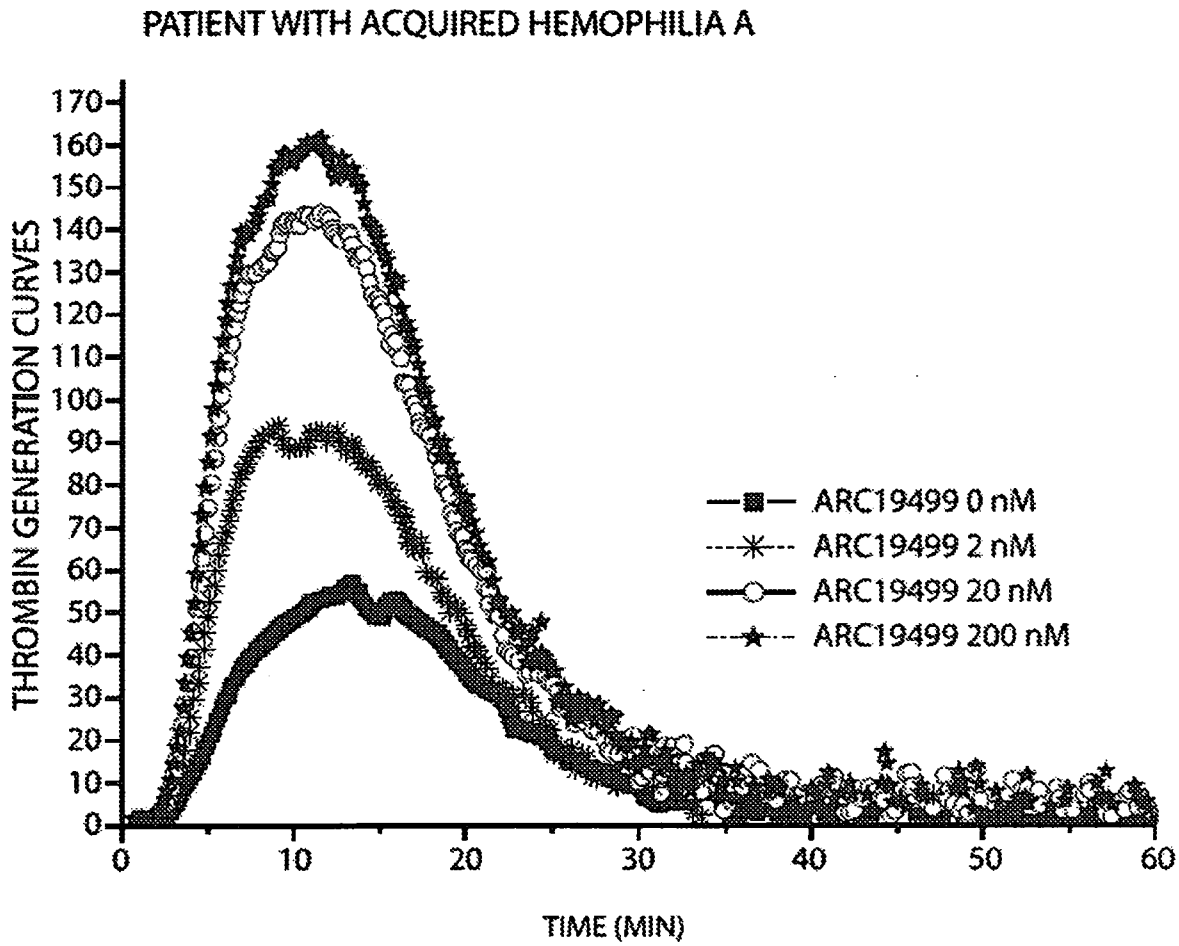

PATIENT WITH ACQUIRED HEMOPHILIA A
THROMBIN GENERATION CURVES
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
TIME (MIN)
ARC19499 0 nM
ARC19499 2 nM
ARC19499 20 nM
ARC19499 200 nM

Fig. 92

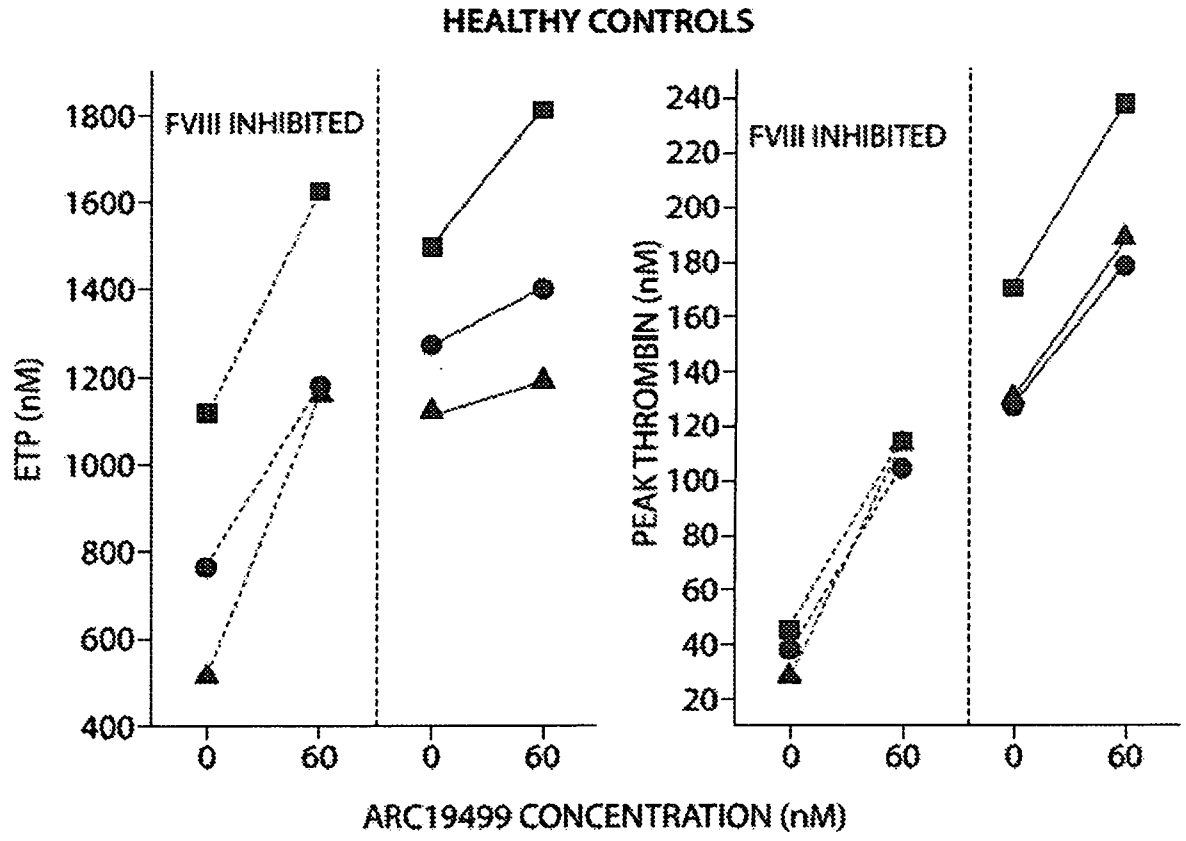
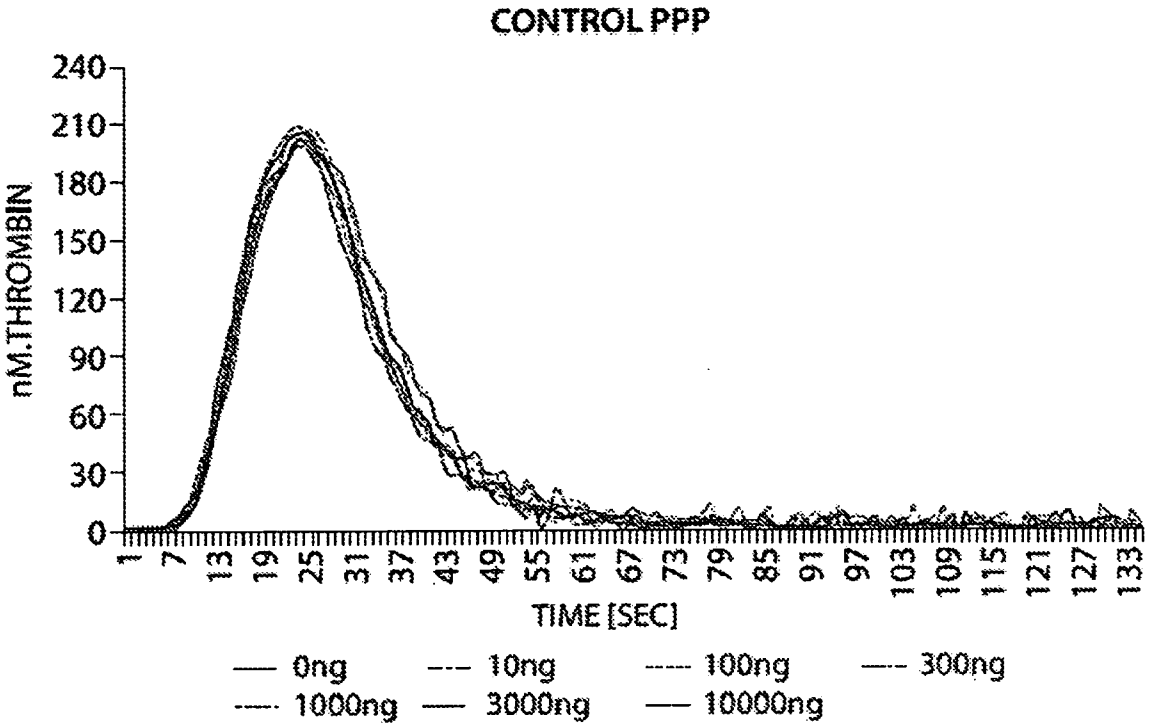
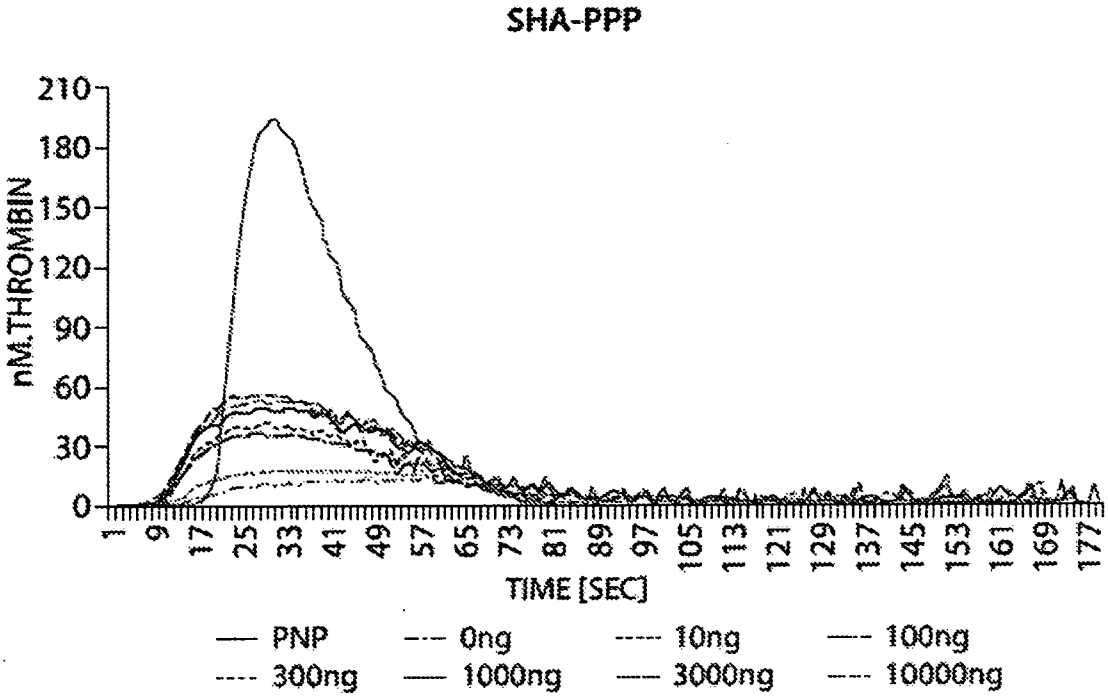

HEALTHY CONTROLS
FVIII INHIBITED
FVIII INHIBITED
ETP (nM)
PEAK THROMBIN (nM)
1800
1600
1400
1200
1000
800
600
400
240
220
200
180
160
140
120
100
80
60
40
20
0
60
0
60
0
60
0
60
ARC19499 CONCENTRATION (nM)

Fig. 93



19499 CONC ng/mL	EPT[nM. THROMBIN.MIN] 1341-2171	PEAK[nM. THROMBIN] 176-256
	1607.5	193.50
10000	1500.5	202.10
3000	1537.5	206.02
1000	1521.5	208.69
300	1448.5	203.53
100	1497.5	207.64
10	1640.0	208.28
0	1601.5	203.57

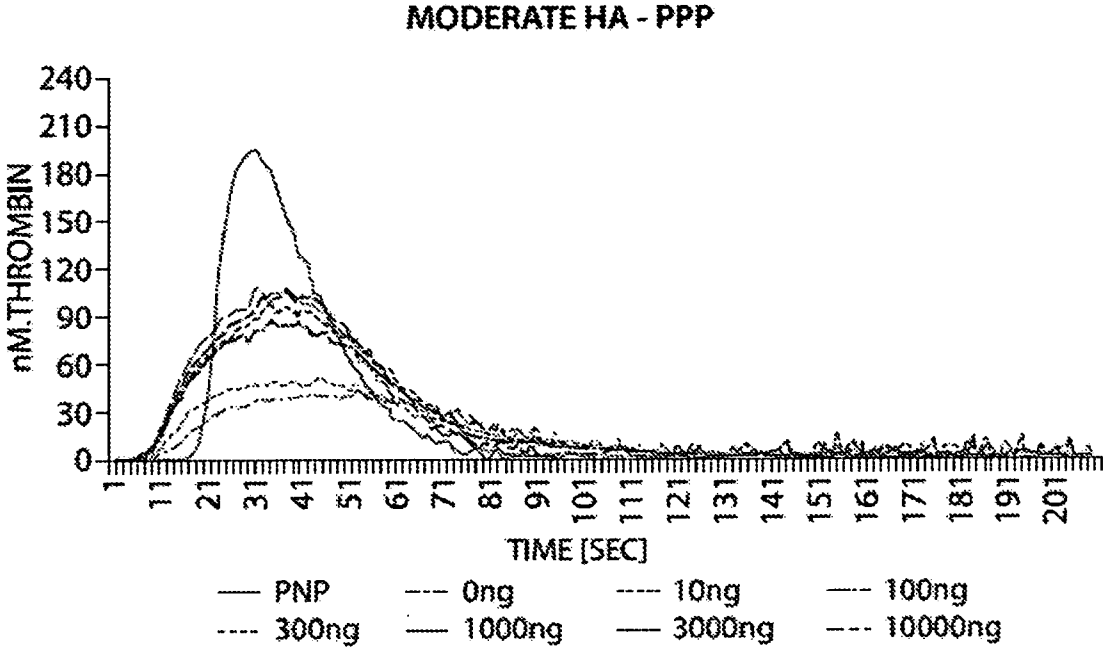
Fig. 94



FVIII:C -0.3 iu/dL

19499 CONC ng/mL	EPT[nM. THROMBIN.MIN] 1341-2171	PEAK[nM. THROMBIN] 176-256
	1607.5	193.50
10000	818.5	56.60
3000	815.0	53.69
1000	799.0	49.46
300	631.0	41.08
100	570.0	36.33
10	356.5	17.94
0	300.5	14.25

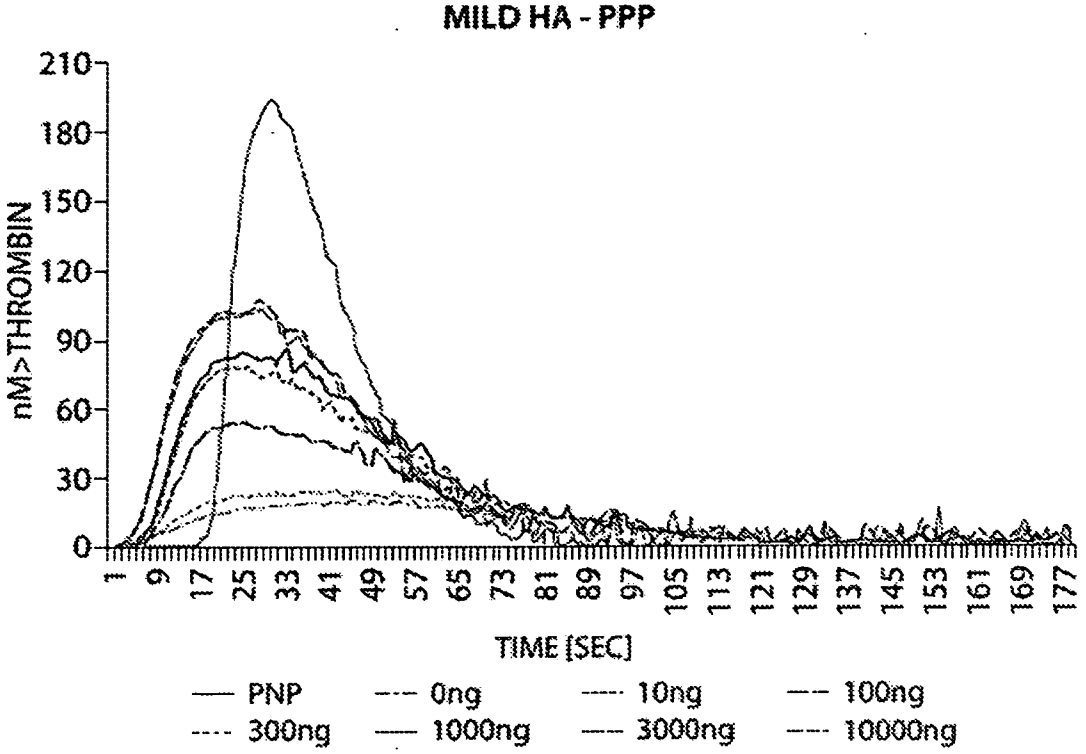
Fig. 95



FVIII:C - 2.9 iu/dL

19499 CONC ng/mL	EPT[nM. THROMBIN.MIN] 1341-2171	PEAK[nM. THROMBIN] 176-256
	1607.5	193.50
10000	1531.0	105.60
3000	1520.0	103.29
1000	1495.0	96.64
300	1492.5	94.66
100	1369.5	85.21
10	1013.5	48.64
0	954.0	40.62

Fig. 96



FVIII:C - 16.4 iu/dL

19499 CONC ng/mL	EPT[nM. THROMBIN.MIN] 1341-2171	PEAK[nM. THROMBIN] 176-256
	1607.5	193.50
10000	1648.0	84.02
3000	1427.0	81.26
1000	1396.0	73.46
300	1136.0	66.43
100	1052.0	49.53
10	692.8	30.04
0	457.5	19.22

Fig. 97

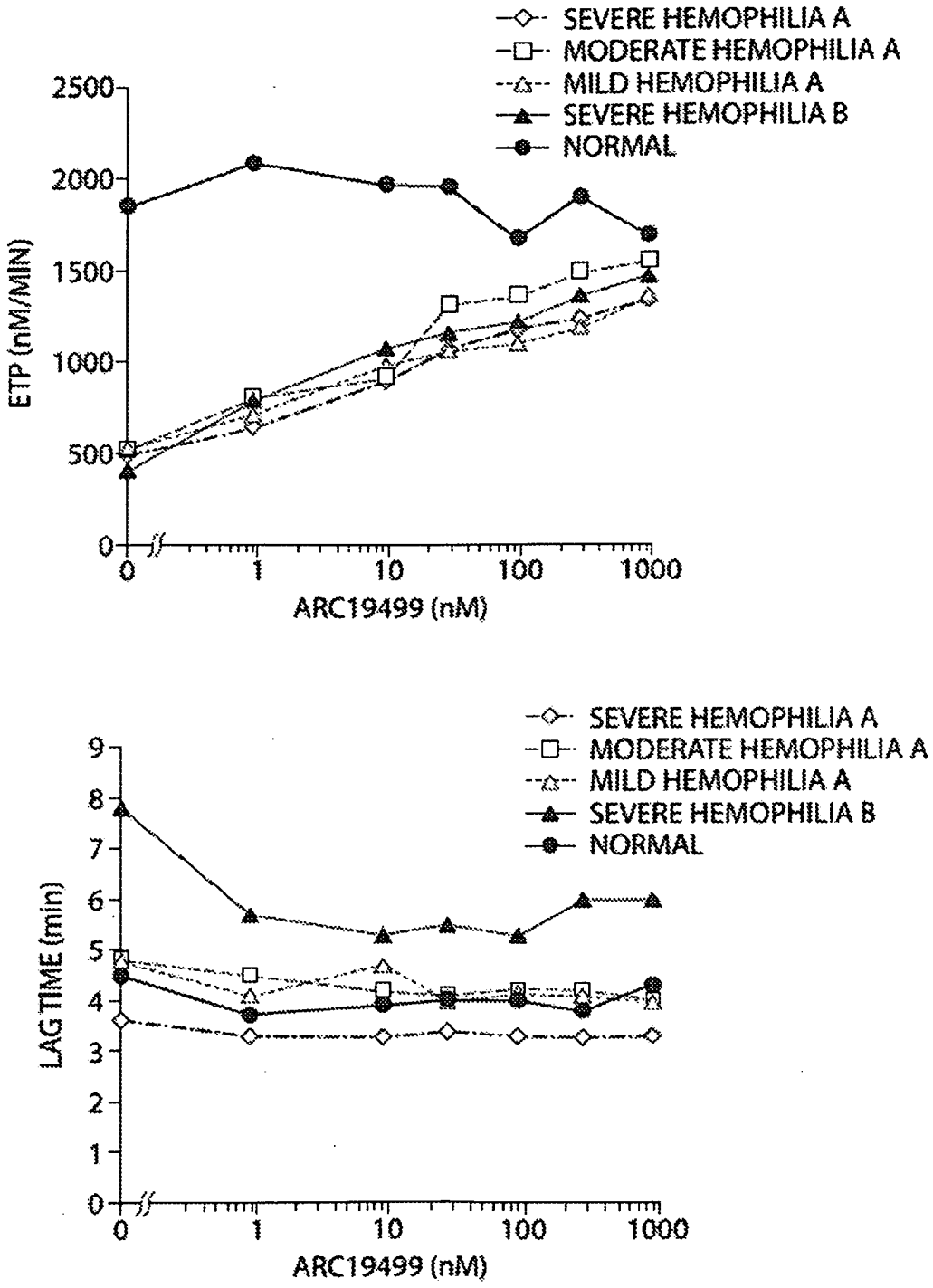

SEVERE HEMOPHILIA A
MODERATE HEMOPHILIA A
MILD HEMOPHILIA A
SEVERE HEMOPHILIA B
NORMAL
ETP (nM/MIN)
2500
2000
1500
1000
500
0
0
1
10
100
1000
ARC19499 (nM)
LAG TIME (min)
9
8
7
6
5
4
3
2
1
0
0
1
10
100
1000
ARC19499 (nM)

Fig. 98-1

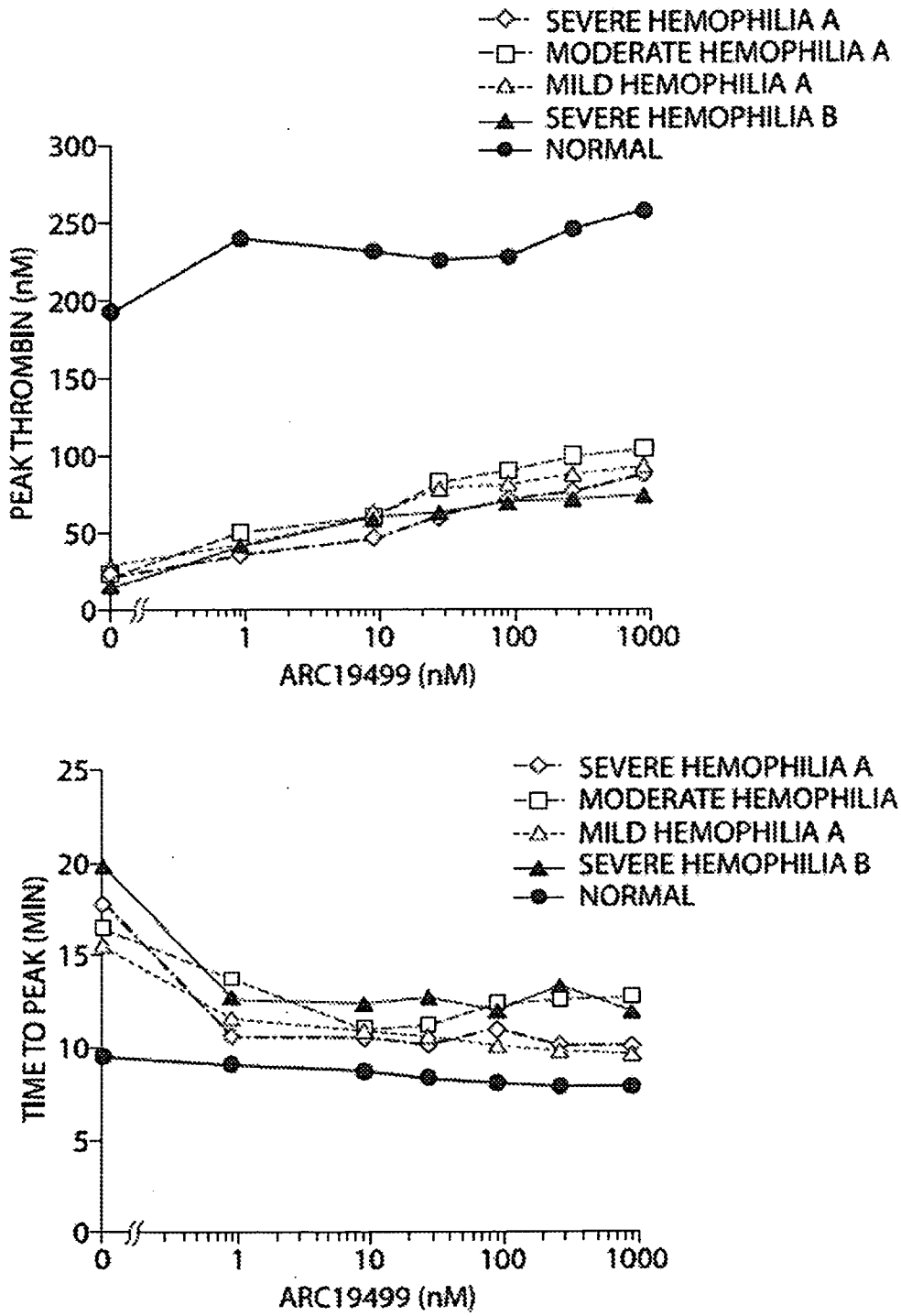

SEVERE HEMOPHILIA A
MODERATE HEMOPHILIA A
MILD HEMOPHILIA A
SEVERE HEMOPHILIA B
NORMAL
PEAK THROMBIN (nM)
300
250
200
150
100
50
0
0
1
10
100
1000
ARC19499 (nM)
TIME TO PEAK (MIN)
25
20
15
10
5
0
0
1
10
100
1000
ARC19499 (nM)

Fig. 98-2

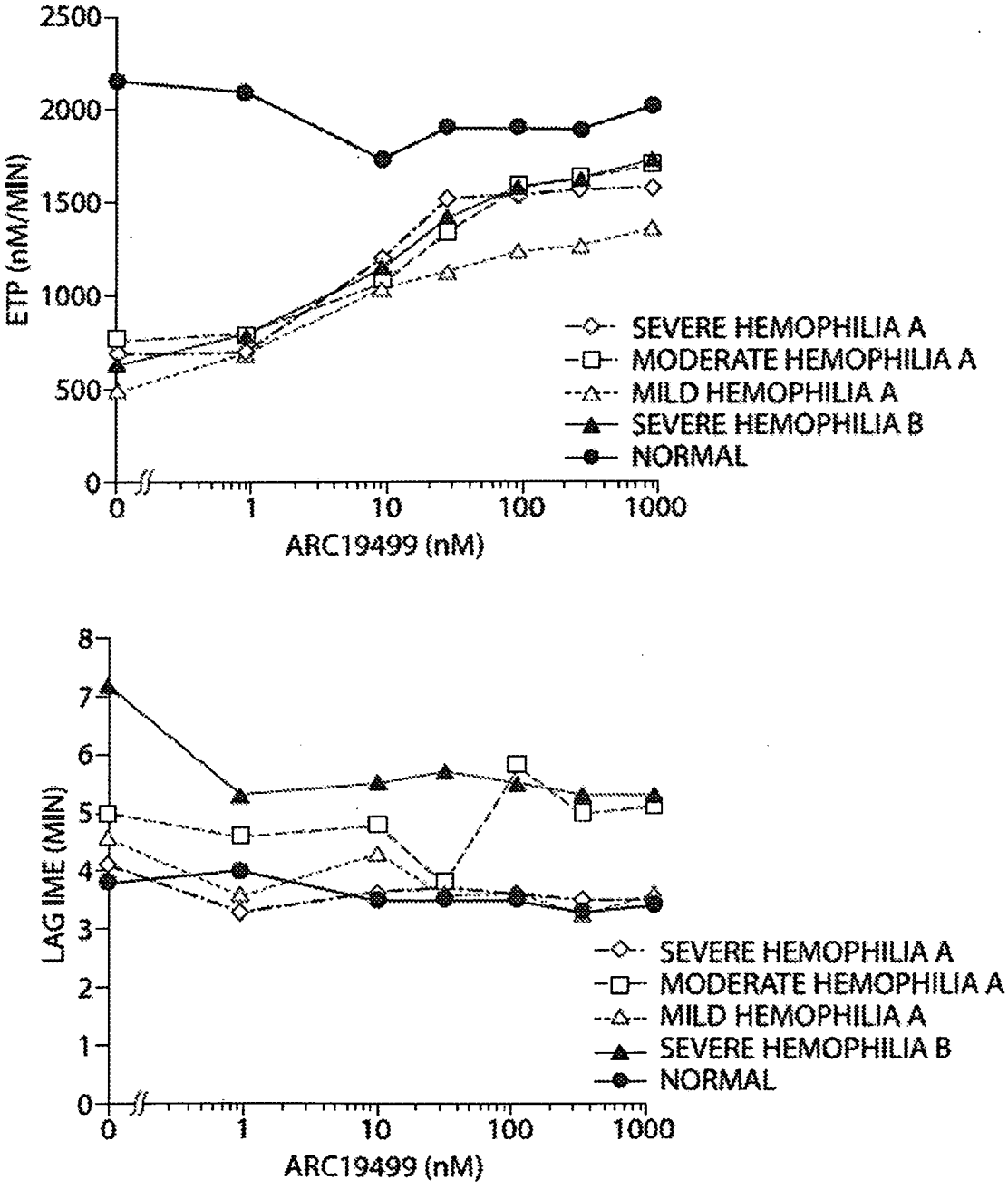
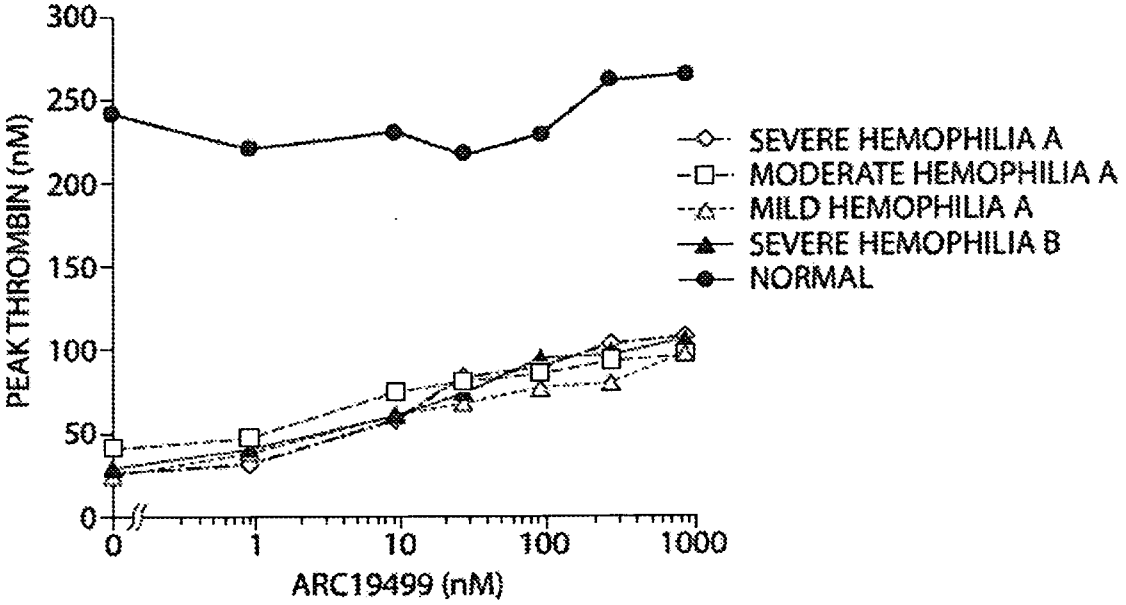

2500
2000
1500
1000
500
0
ETP (nM/MIN)
0
1
10
100
1000
ARC19499 (nM)
SEVERE HEMOPHILIA A
MODERATE HEMOPHILIA A
MILD HEMOPHILIA A
SEVERE HEMOPHILIA B
NORMAL
8
7
6
5
4
3
2
1
0
LAG IME (MIN)
0
1
10
100
1000
ARC19499 (nM)
SEVERE HEMOPHILIA A
MODERATE HEMOPHILIA A
MILD HEMOPHILIA A
SEVERE HEMOPHILIA B
NORMAL

Fig. 99-1


PEAK THROMBIN (nM)
300
250
200
150
100
50
0
0
1
10
100
1000
ARC19499 (nM)
SEVERE HEMOPHILIA A
MODERATE HEMOPHILIA A
MILD HEMOPHILIA A
SEVERE HEMOPHILIA B
NORMAL

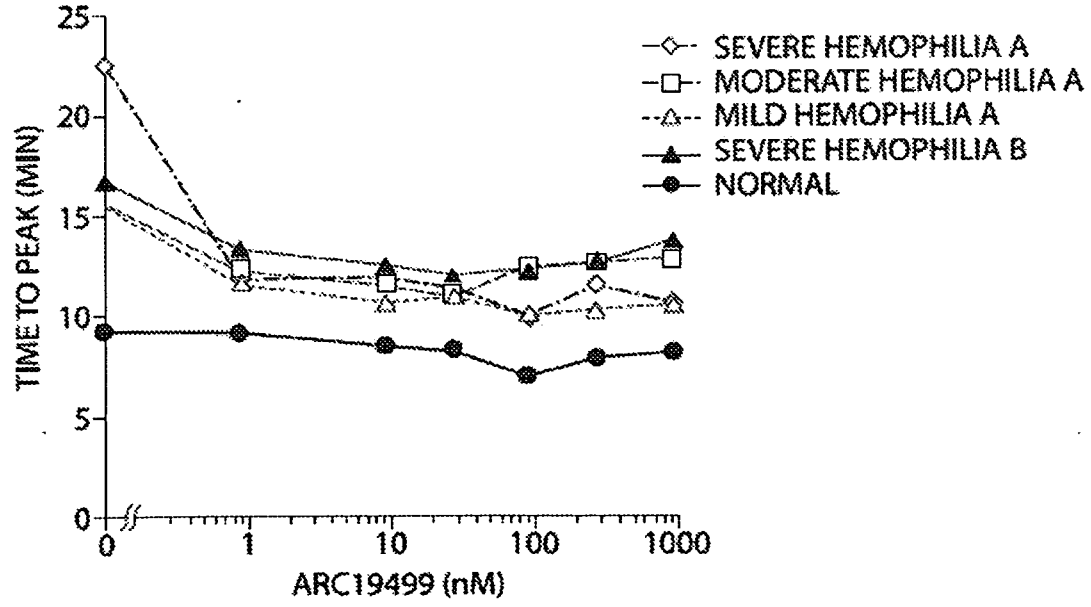
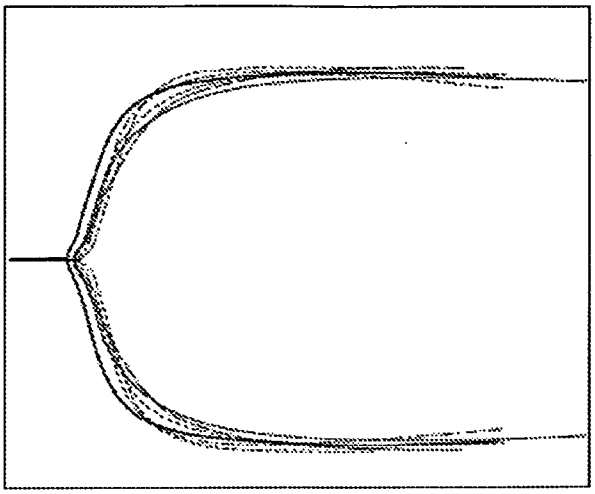

TIME TO PEAK (MIN)
25
20
15
10
5
0
0
1
10
100
1000
ARC19499 (nM)
SEVERE HEMOPHILIA A
MODERATE HEMOPHILIA A
MILD HEMOPHILIA A
SEVERE HEMOPHILIA B
NORMAL

Fig. 99-2

ARC HV 01

TEG - WB

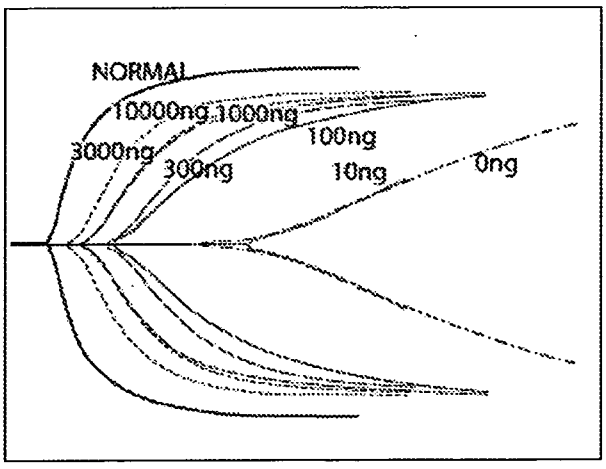


19499 CONC ng/mL	RTIME[min] 5.9 - 16.3	K[min] 1.7 - 5.3	ANGLE[deg] 48.5 - 67.9
	8.9	2.4	55.0
10000	9.3	2.6	61.4
3000	8.3	2.3	61.7
1000	8.5	2.8	57.9
300	8.4	2.7	61.9
100	7.1	2.4	64.4
10	7.9	3.3	56.2
0	8.7	2.4	63.7

Fig. 100

ARC SHA 02

TEG - WB



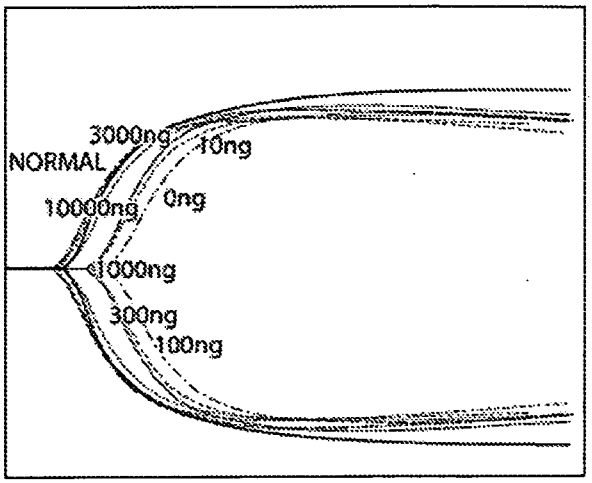
FVIII:C- 0.3 iu/dL

19499 CONC ng/mL	RTIME[min] 5.9 - 16.3	K[min] 1.7 - 5.3	ANGLE[deg] 48.5 - 67.9
	8.9	2.4	55.0
10000	11.3	6.3	34.1
3000	16.7	7.4	30.5
1000	16.5	7.4	30.5
300	21.6	9.4	24.7
100	22.7	12.0	18.8
10	50.5	26.3	11.2
0	58.3	22.7	10.8

Fig. 101

ARC MoHa 01

TEG - WB



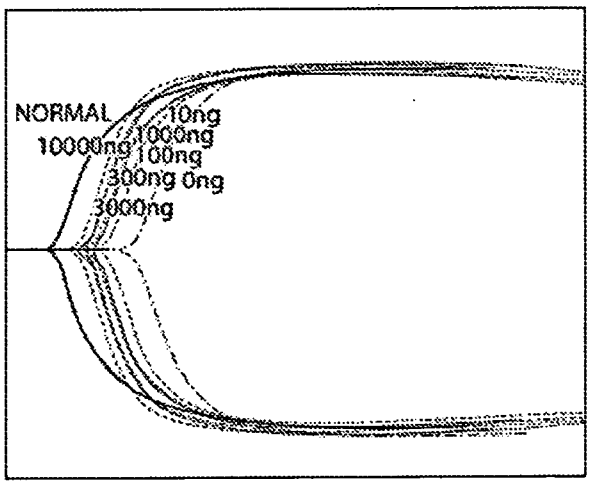
19499 CONC ng/mL	R TIME[min] 5.9 - 16.3	K[min] 1.7 - 5.3	ANGLE[deg] 48.5 - 67.9
	8.9	2.4	55.0
10000	7.3	3.5	52.0
3000	6.8	3.9	50.2
1000	8.1	3.9	51.1
300	8.1	3.9	48.0
100	11.3	4.0	49.5
10	11.3	4.5	47.0
0	13.2	4.4	39.4

FVIII:C- 2.9 iu/dL

Fig. 102

ARC MiHA 01

TEG - WB



19499 CONC ng/mL	R TIME[min] 5.9 - 16.3	K[min] 1.7 - 5.3	ANGLE[deg] 48.5 - 67.9
	8.9	2.4	55.0
10000	11.8	3.3	54.5
3000	12.8	3.4	52.6
1000	13.4	3.4	50.2
300	14.0	3.4	48.3
100	14.7	3.5	34.5
10	15.8	3.6	30.0
0	19.8	3.7	30.7

FVIII:C- 8.8 iu/dL

Fig. 103

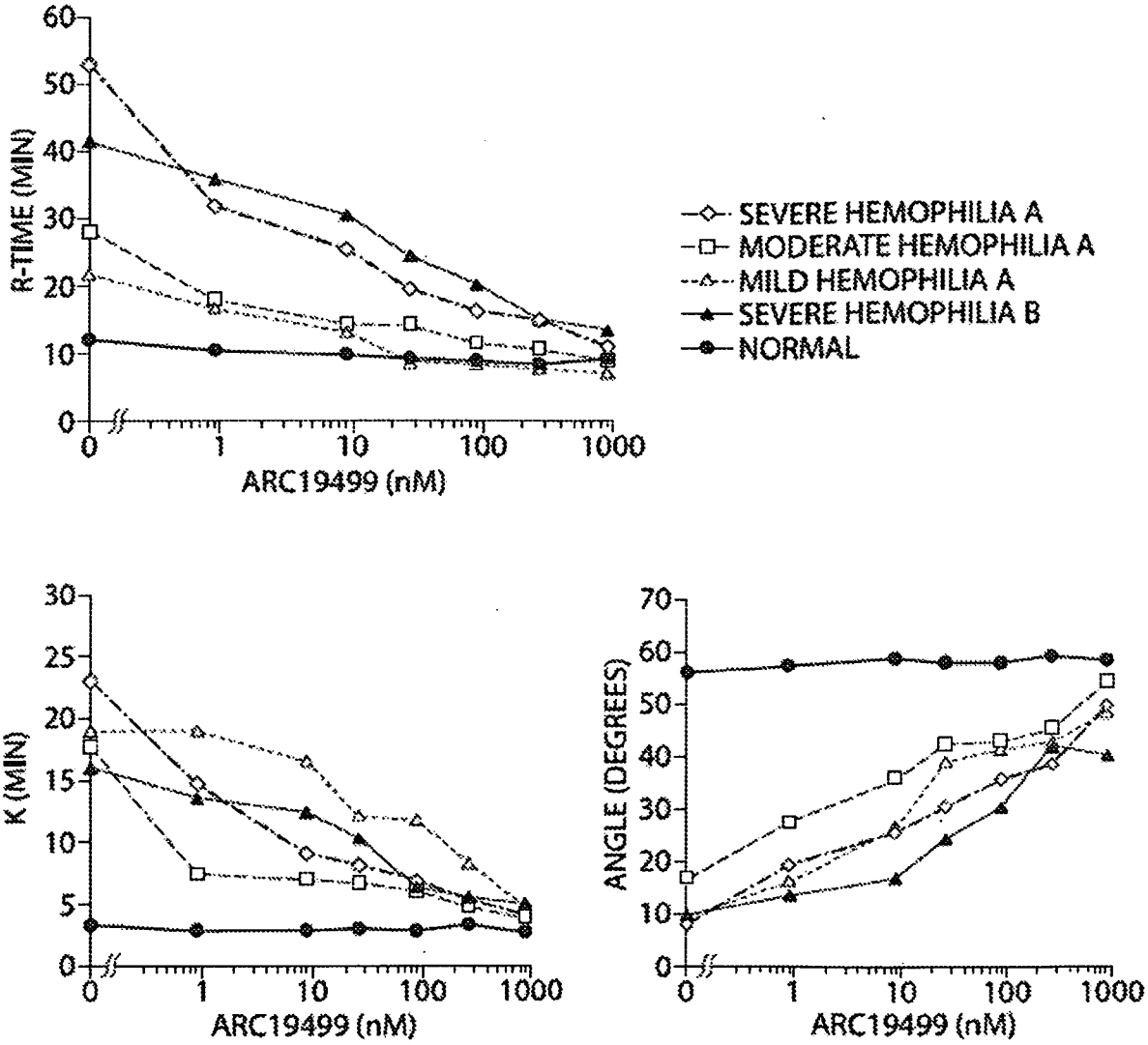

R-TIME (MIN)
ARC19499 (nM)
SEVERE HEMOPHILIA A
MODERATE HEMOPHILIA A
MILD HEMOPHILIA A
SEVERE HEMOPHILIA B
NORMAL
K (MIN)
ARC19499 (nM)
ANGLE (DEGREES)
ARC19499 (nM)

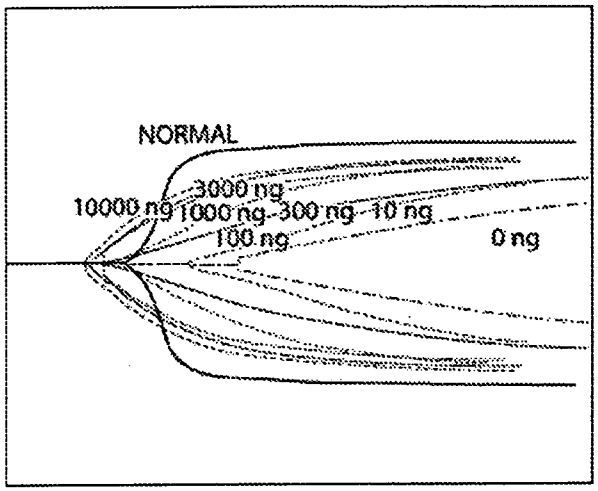
Fig. 104

REPLACEMENT SHEET

99 / 142

ARC SHA 02

TEG - PPP



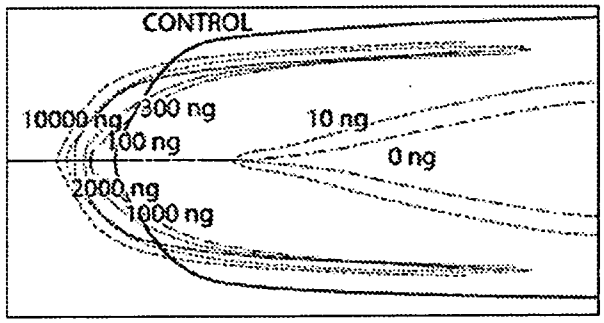
FVIII:C - 0.3

19499 CONC ng/mL	R TIME[min] 10.6 - 15.6	K[min] 1.2 - 14.8	ANGLE[deg] 32.1 - 56.7
	14.8	4.6	49.4
10000	9.6	12.9	38.8
3000	10.7	14.9	29.0
1000	11.4	18.0	25.0
300	14.2	21.0	14.4
100	14.6	21.0	14.2
10	23.6	22.0	9.9
0	26.7	23.0	8.2

Fig. 105

ARC MoHA 01

TEG - PPP



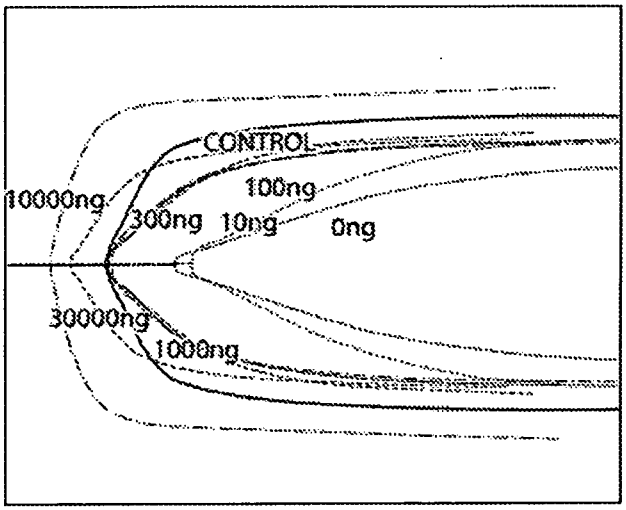
FVIII:C - 2.9

19499 CONC ng/mL	R TIME[min] 10.6 - 15.6	K[min] 1.2 - 14.8	ANGLE[deg] 32.1 - 56.7
	14.8	4.6	49.4
10000	12.8	13.2	21.9
3000	13.7	14.5	20.9
1000	10.6	20.1	18.3
300	12.8	21.3	16.4
100	15.6	22.5	15.2
10	16.5	25.3	10.2
0	25.2	30.1	4.2

Fig. 106

ARC MiHA 03

TEG - PPP



19499 CONC ng/mL	R TIME[min] 10.6 - 15.6	K[min] 1.2 - 14.8	ANGLE[deg] 32.1 - 56.7
	14.8	4.6	49.4
10000	3.8	2.1	69.7
3000	5.5	10.9	49.7
1000	8.0	12.1	46.3
300	7.7	15.0	39.4
100	13.3	15.6	38.2
10	13.6	19.0	16.9
0	35.8	22.0	10.2

FVIII:C - 16.4

Fig. 107

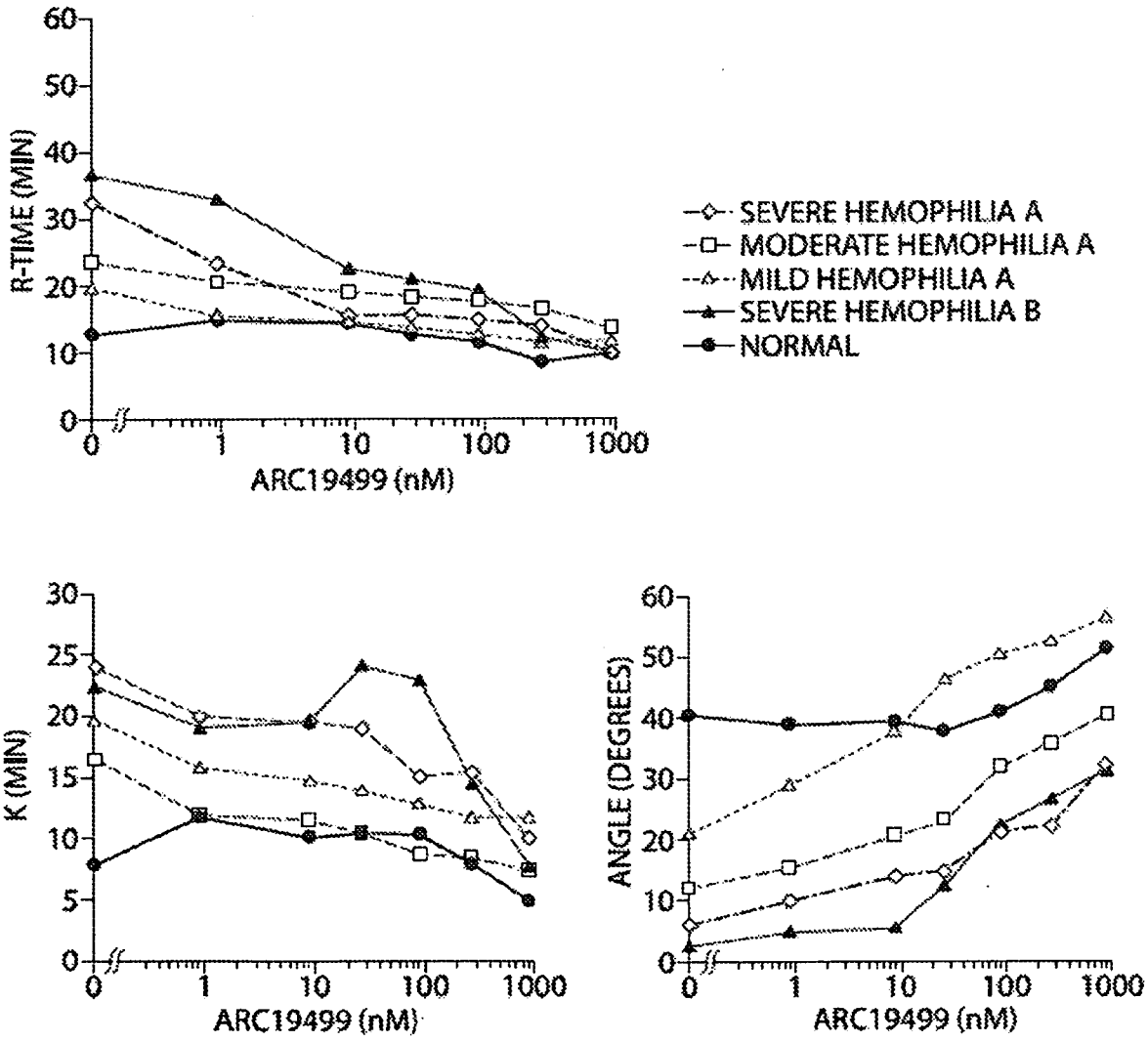

R-TIME (MIN)
ARC19499 (nM)
SEVERE HEMOPHILIA A
MODERATE HEMOPHILIA A
MILD HEMOPHILIA A
SEVERE HEMOPHILIA B
NORMAL
K (MIN)
ARC19499 (nM)
ANGLE (DEGREES)
ARC19499 (nM)

Fig. 108

REPLACEMENT SHEET

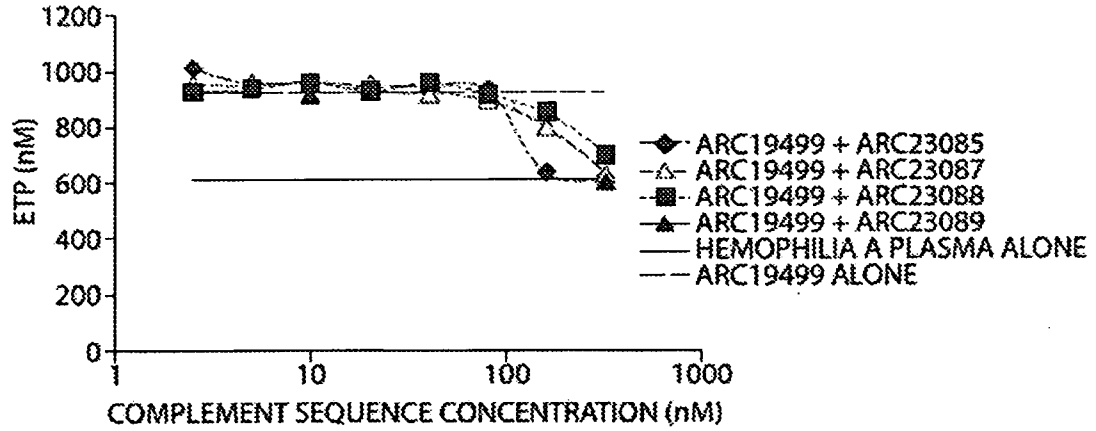


Fig. 109A

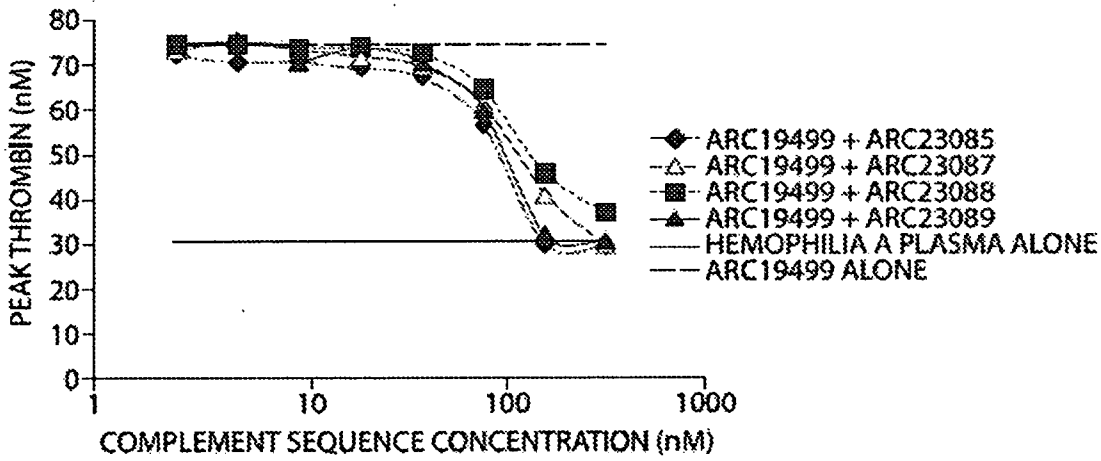


Fig. 109B

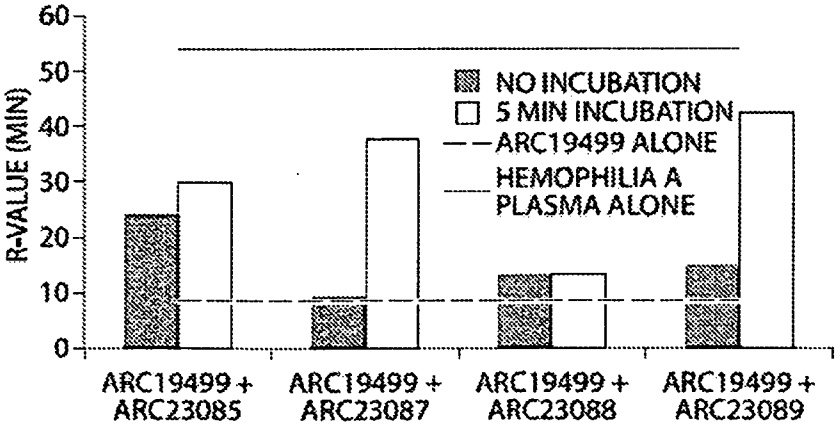


Fig. 109C

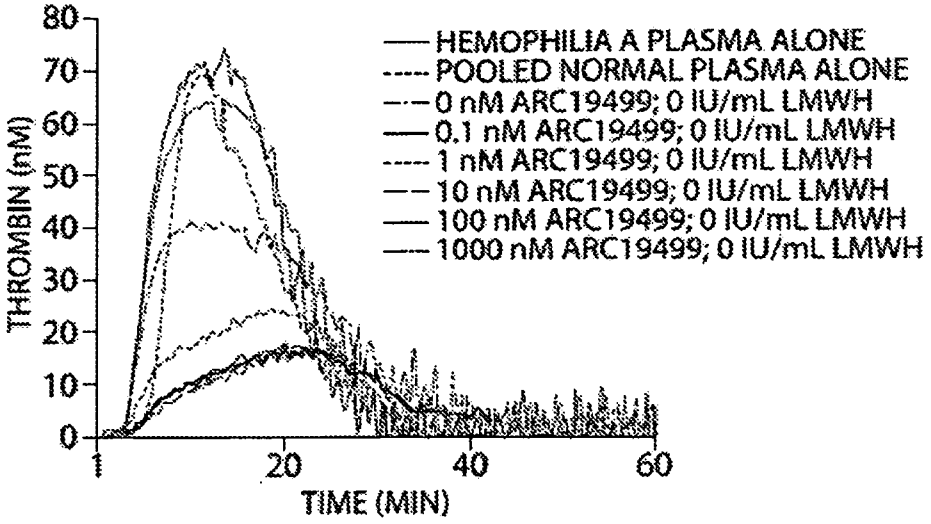


Fig. 110A

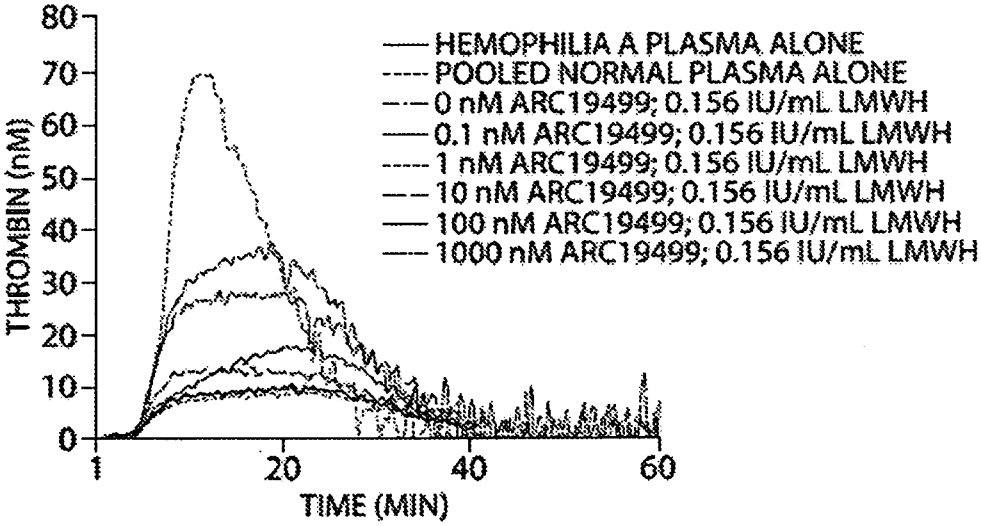


Fig. 110B

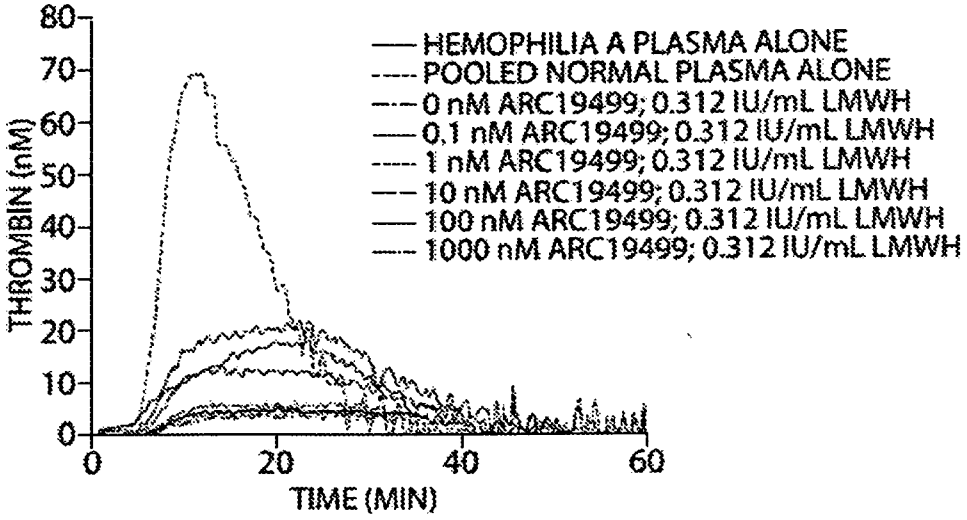


Fig. 110C

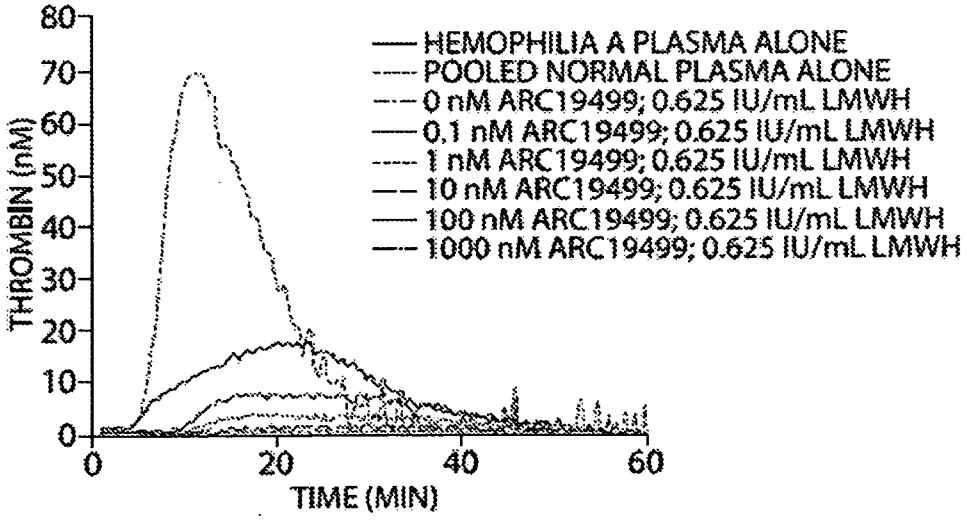


Fig. 110D

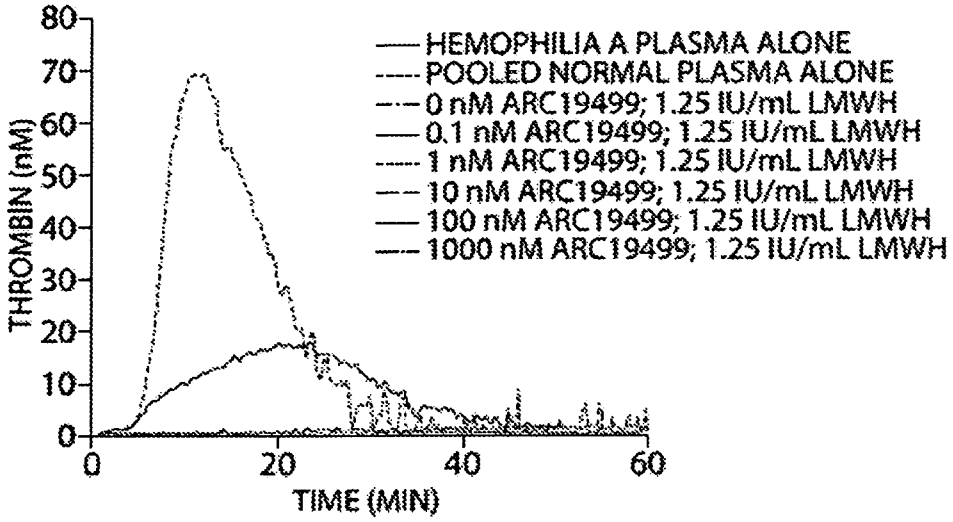


Fig. 110E

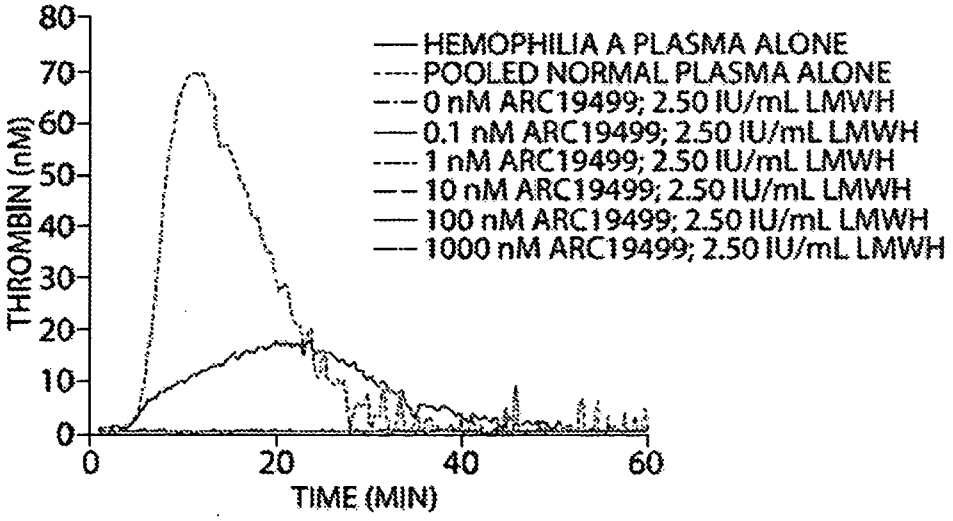


Fig. 110F

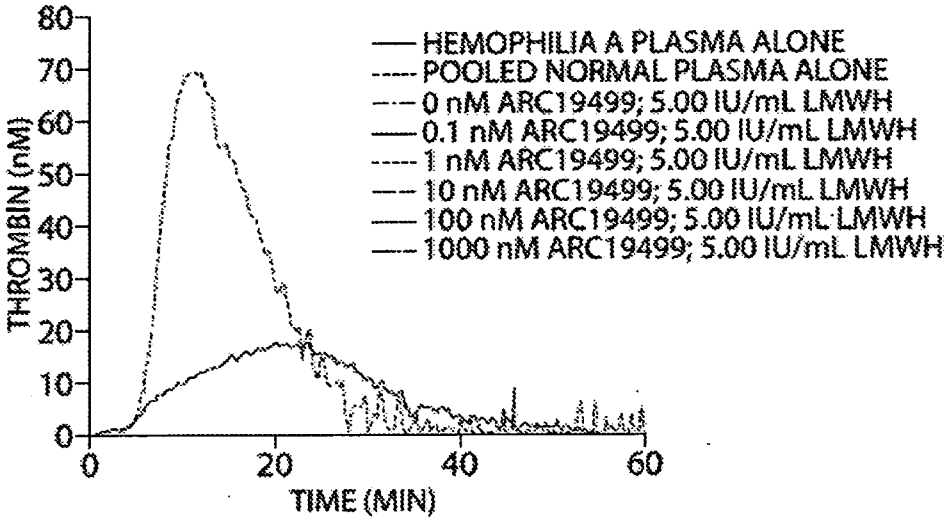

THROMBIN (nM)
80
70
60
50
40
30
20
10
0
0
20
40
60
TIME (MIN)
HEMOPHILIA A PLASMA ALONE
POOLED NORMAL PLASMA ALONE
0 nM ARC19499; 5.00 IU/mL LMWH
0.1 nM ARC19499; 5.00 IU/mL LMWH
1 nM ARC19499; 5.00 IU/mL LMWH
10 nM ARC19499; 5.00 IU/mL LMWH
100 nM ARC19499; 5.00 IU/mL LMWH
1000 nM ARC19499; 5.00 IU/mL LMWH

Fig. 110G

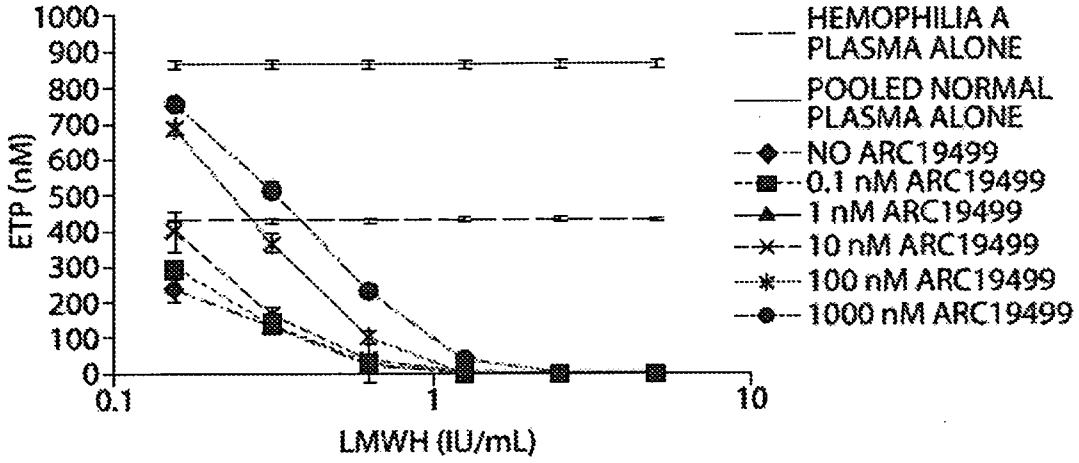


Fig. 111A

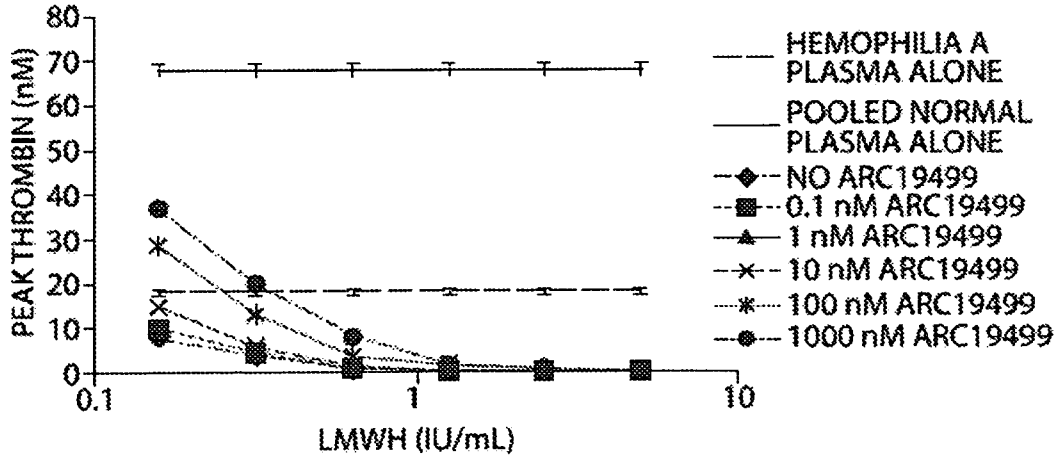
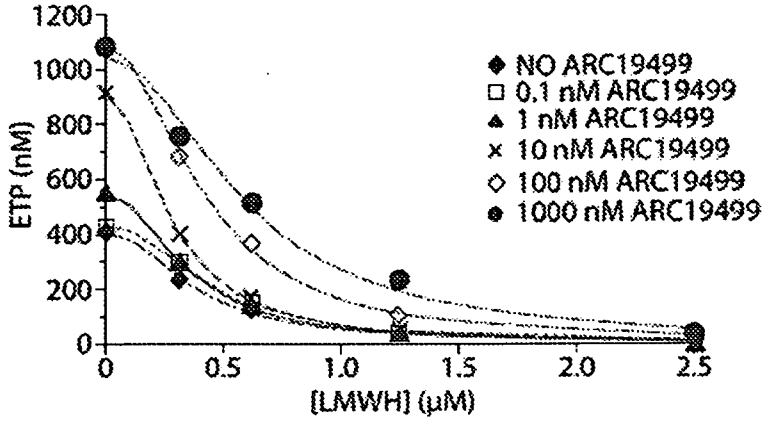
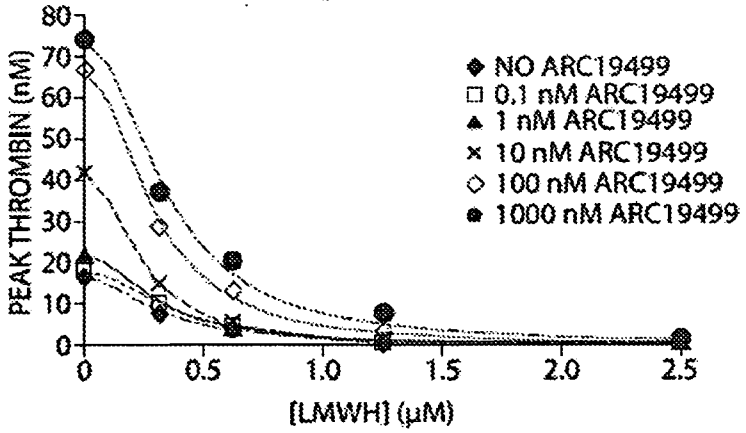


Fig. 111B



[ARC19499] nM	LMWH IC_{50}			
	ETP		PEAK THROMBIN	
	IC_{50} (nM)	Std ERROR	IC_{50} (nM)	Std ERROR
0	381	24.3	299	18.0
0.1	449	13.3	353	13.6
1.0	345	9.4	290	8.2
10	274	7.7	226	5.9
100	418	16.5	268	5.9
1000	561	36.2	318	10.6

Fig. 112A



[ARC19499] nM	LMWH IC_{50}			
	ETP		PEAK THROMBIN	
	IC_{50} (nM)	Std ERROR	IC_{50} (nM)	Std ERROR
0	381	24.3	299	18.0
0.1	449	13.3	353	13.6
1.0	345	9.4	290	8.2
10	274	7.7	226	5.9
100	418	16.5	268	5.9
1000	561	36.2	318	10.6

Fig. 112B

REPLACEMENT SHEET

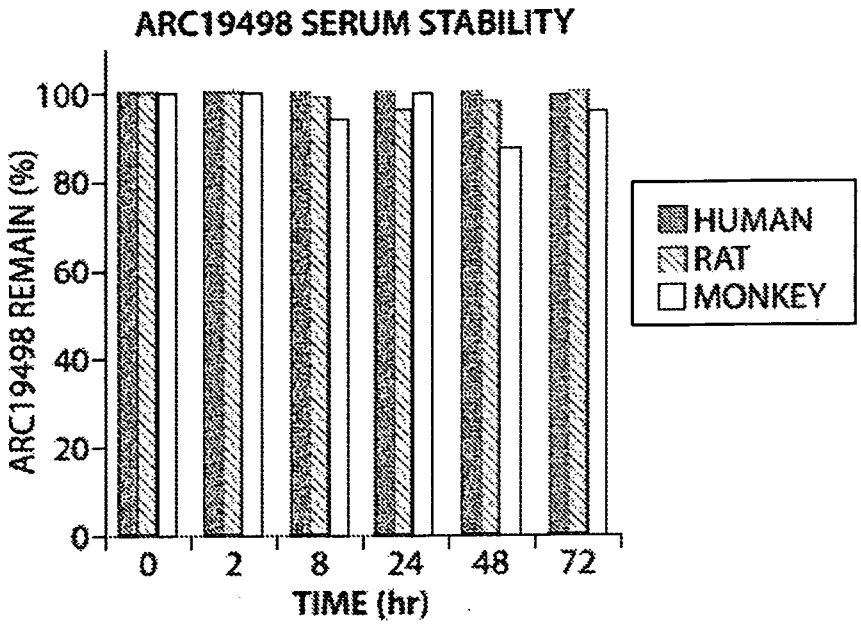


Fig. 113A

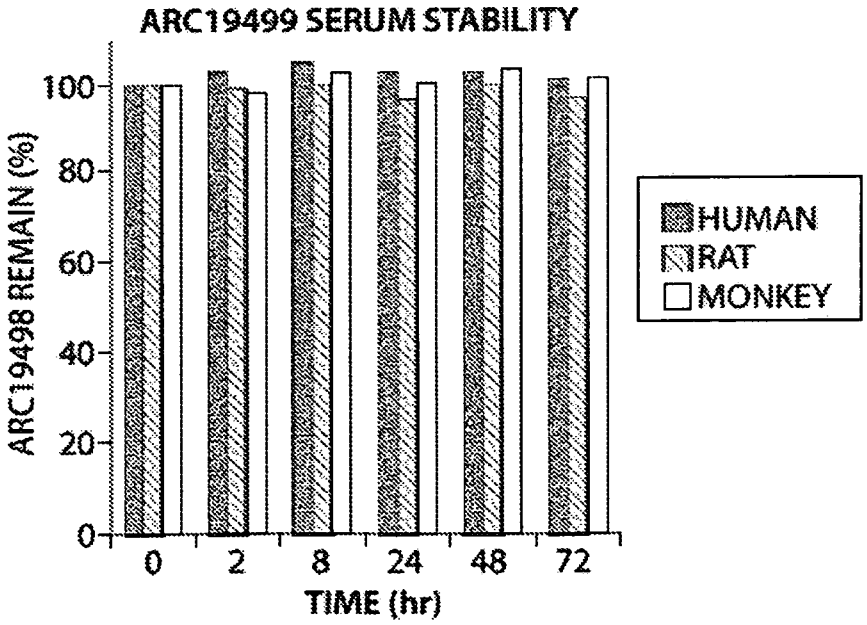


Fig. 113B

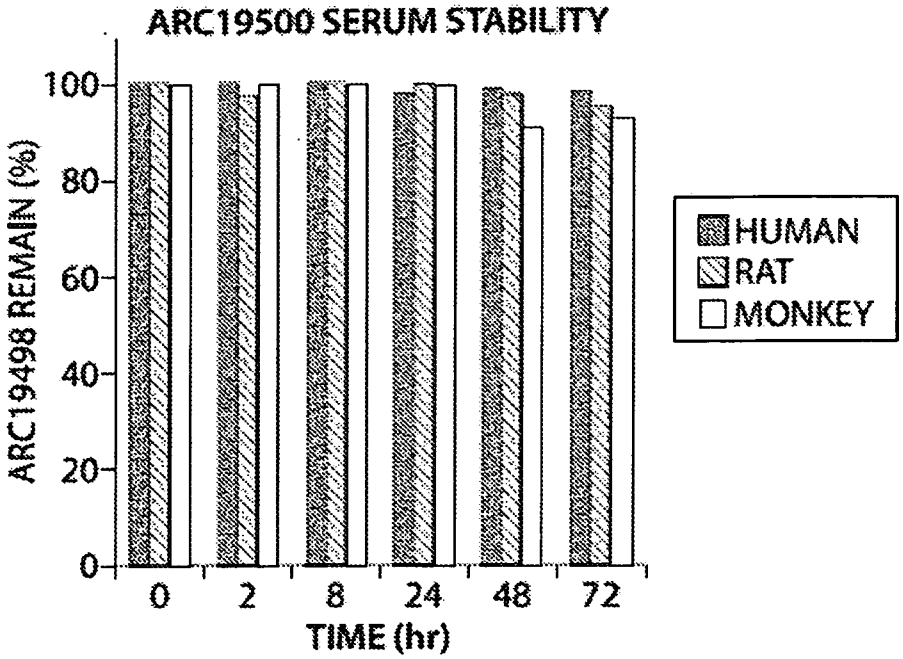


Fig. 113C

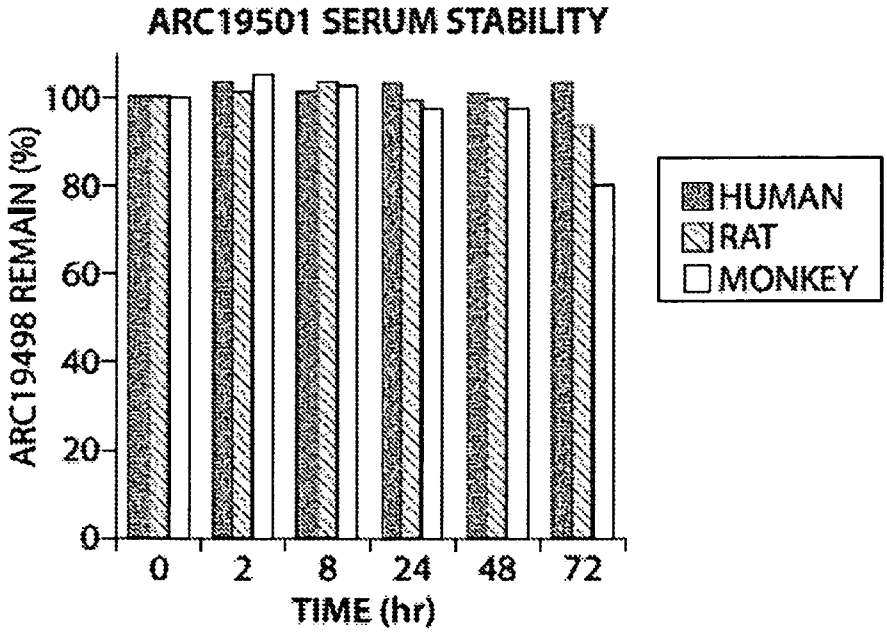


Fig. 113D

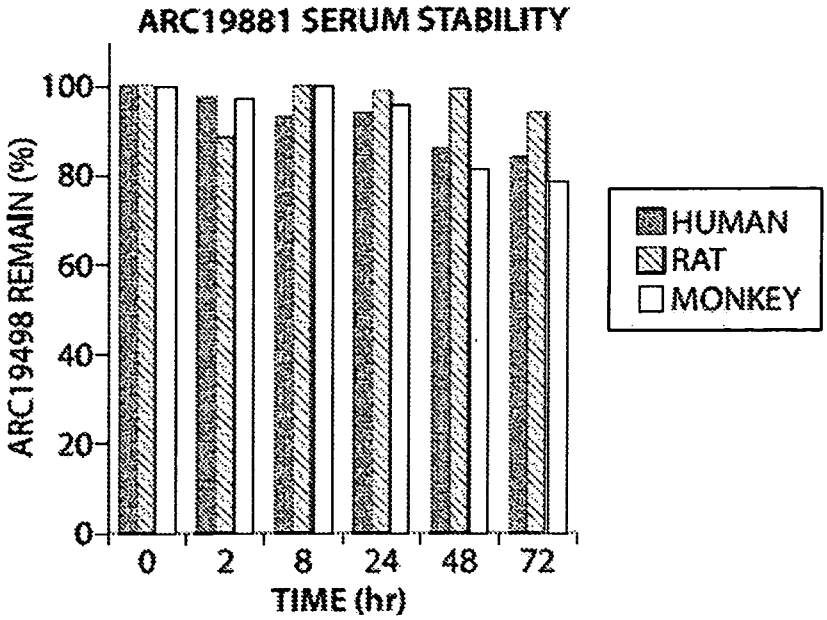


Fig. 113E

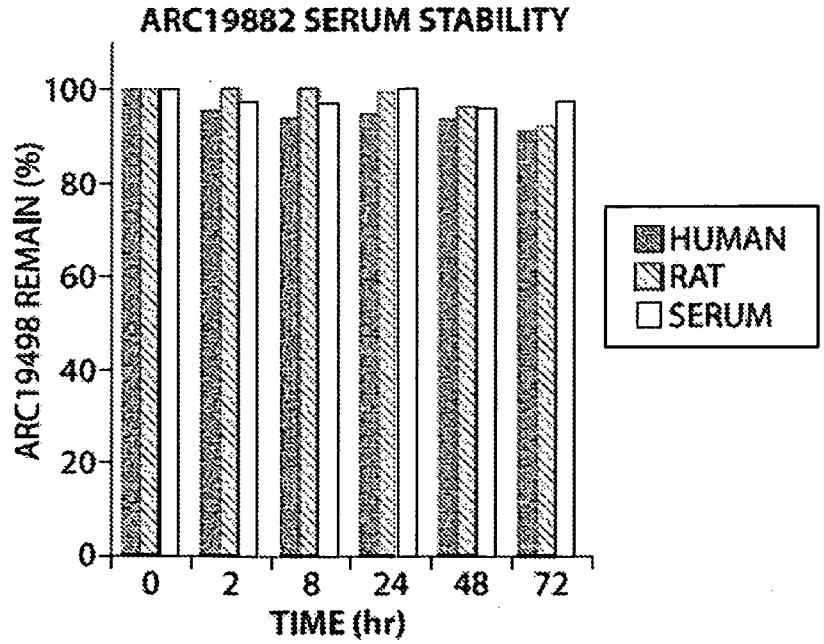


Fig. 113F

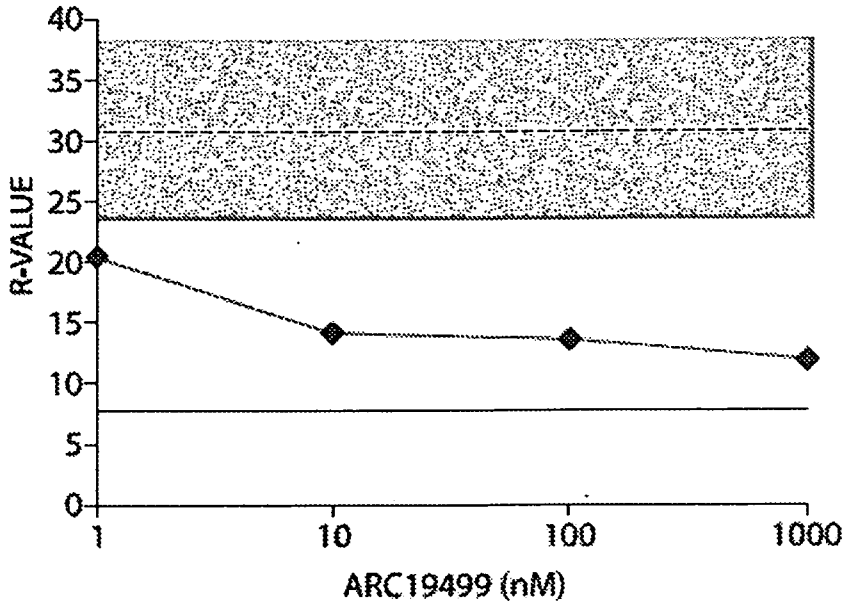


Fig. 114

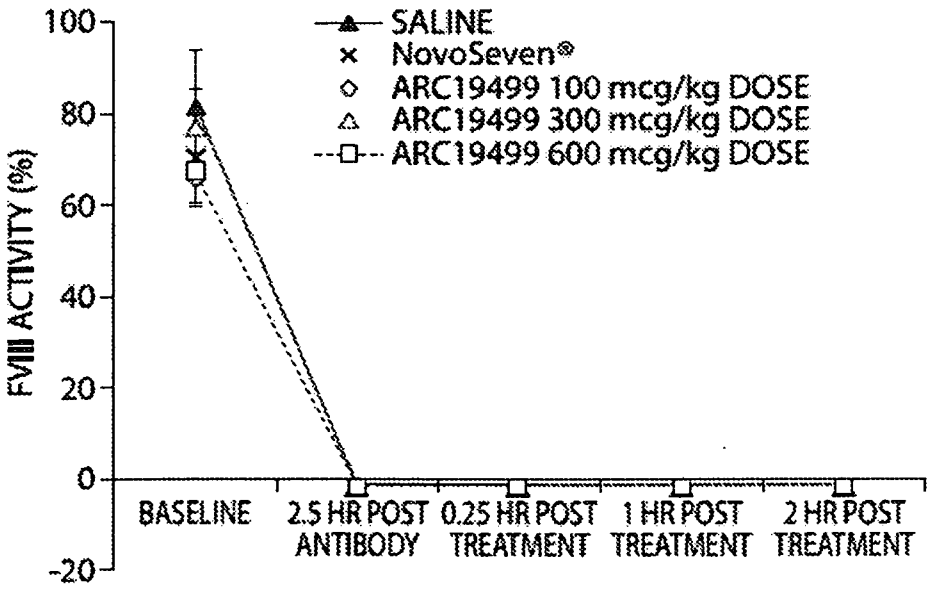
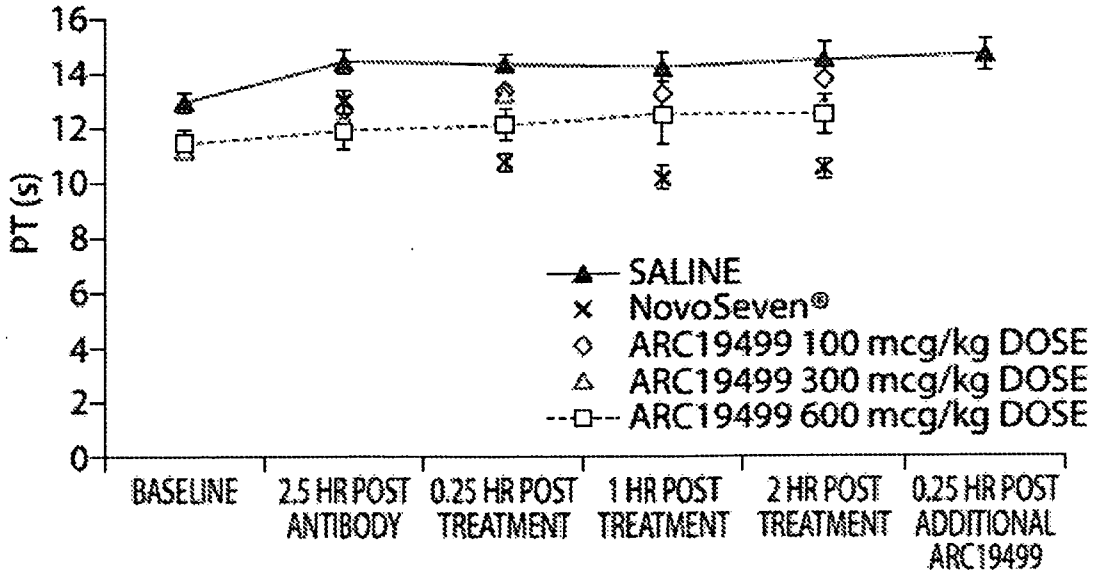


Fig. 115


PT (s)
16
14
12
10
8
6
4
2
0
SALINE
NovoSeven®
ARC19499 100 mcg/kg DOSE
ARC19499 300 mcg/kg DOSE
ARC19499 600 mcg/kg DOSE
BASELINE
2.5 HR POST ANTIBODY
0.25 HR POST TREATMENT
1 HR POST TREATMENT
2 HR POST TREATMENT
0.25 HR POST ADDITIONAL ARC19499

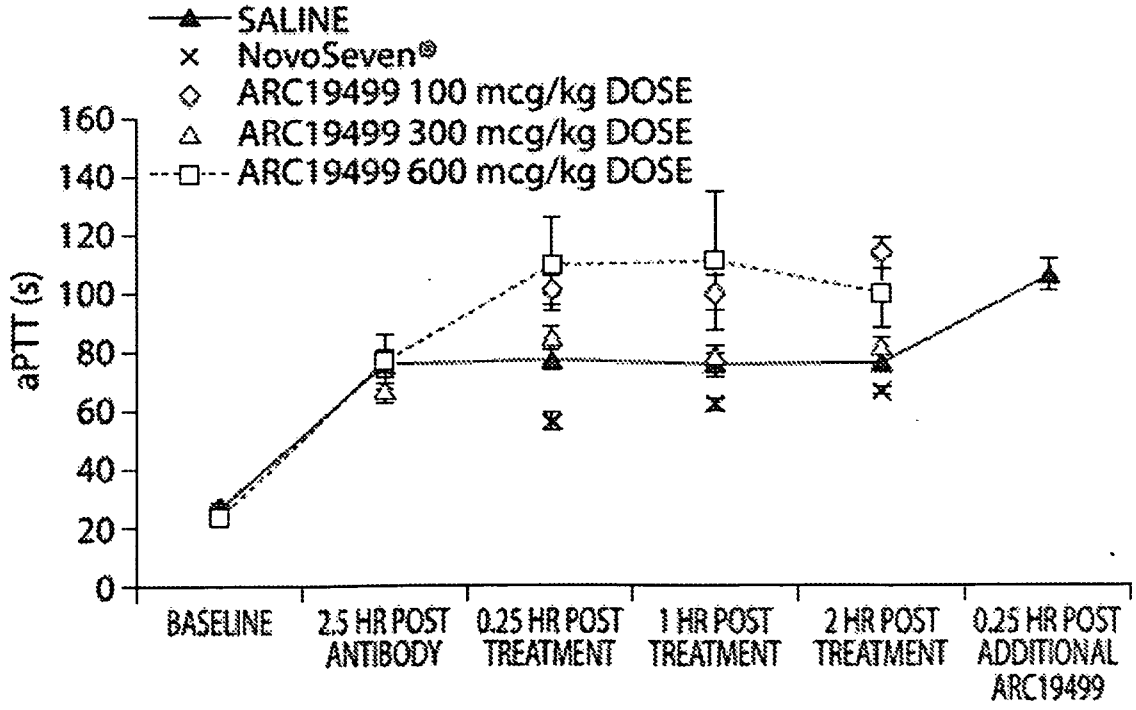

SALINE
NovoSeven®
ARC19499 100 mcg/kg DOSE
ARC19499 300 mcg/kg DOSE
ARC19499 600 mcg/kg DOSE
aPTT (s)
160
140
120
100
80
60
40
20
0
BASELINE
2.5 HR POST ANTIBODY
0.25 HR POST TREATMENT
1 HR POST TREATMENT
2 HR POST TREATMENT
0.25 HR POST ADDITIONAL ARC19499

Fig. 116

REPLACEMENT SHEET

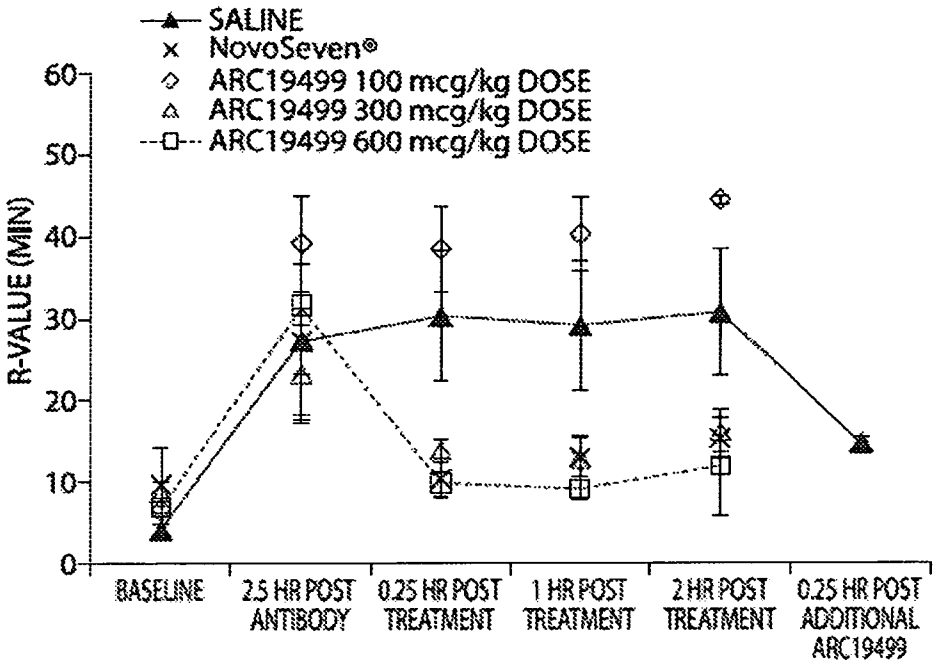


Fig. 117A

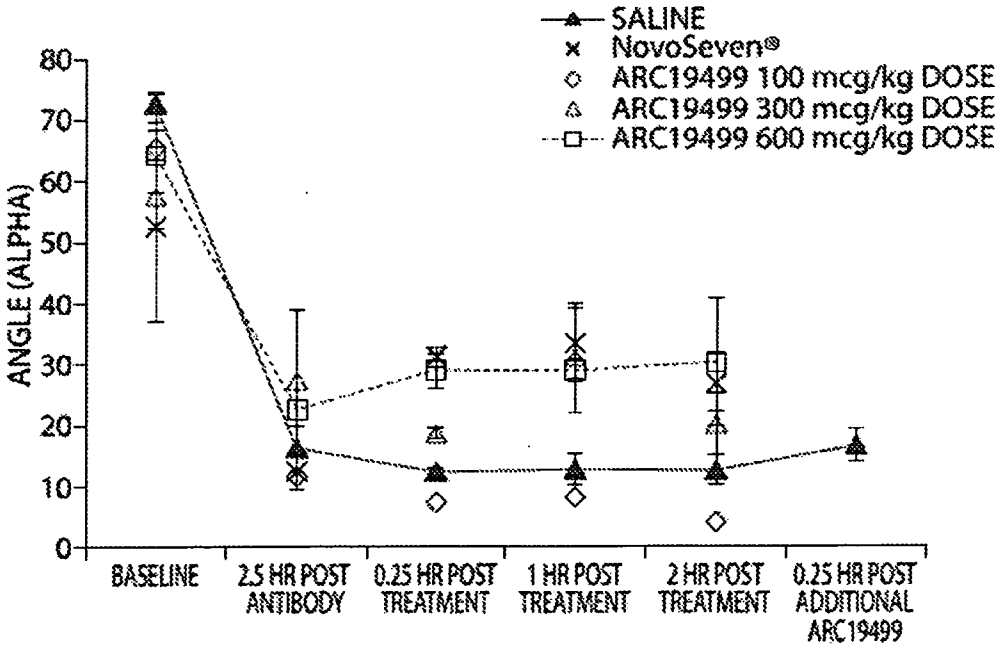


Fig. 117B

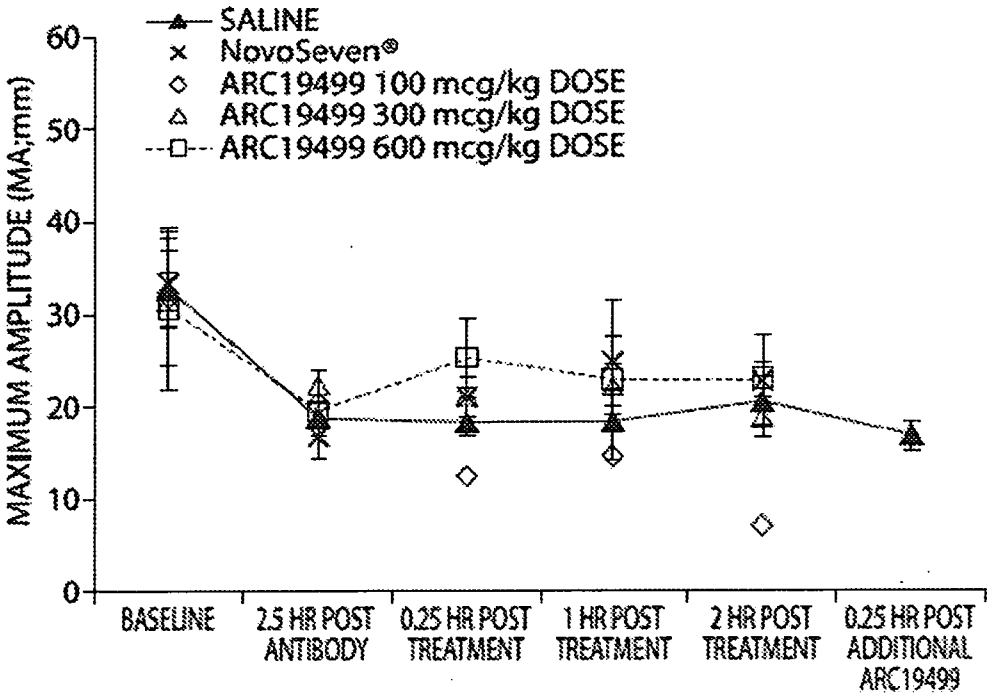

SALINE
NovoSeven®
ARC19499 100 mcg/kg DOSE
ARC19499 300 mcg/kg DOSE
ARC19499 600 mcg/kg DOSE
MAXIMUM AMPLITUDE (MA;mm)
60
50
40
30
20
10
0
BASELINE
2.5 HR POST ANTIBODY
0.25 HR POST TREATMENT
1 HR POST TREATMENT
2 HR POST TREATMENT
0.25 HR POST ADDITIONAL ARC19499

Fig. 117C

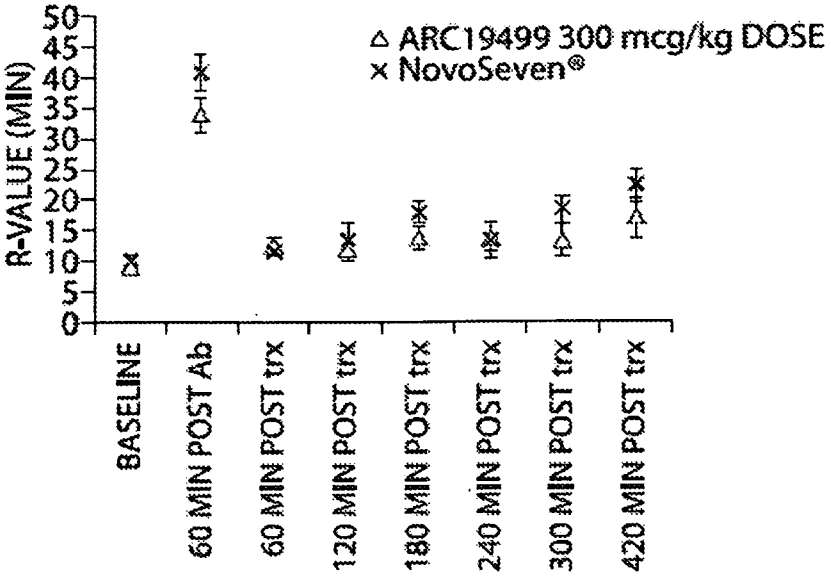


Fig. 118A

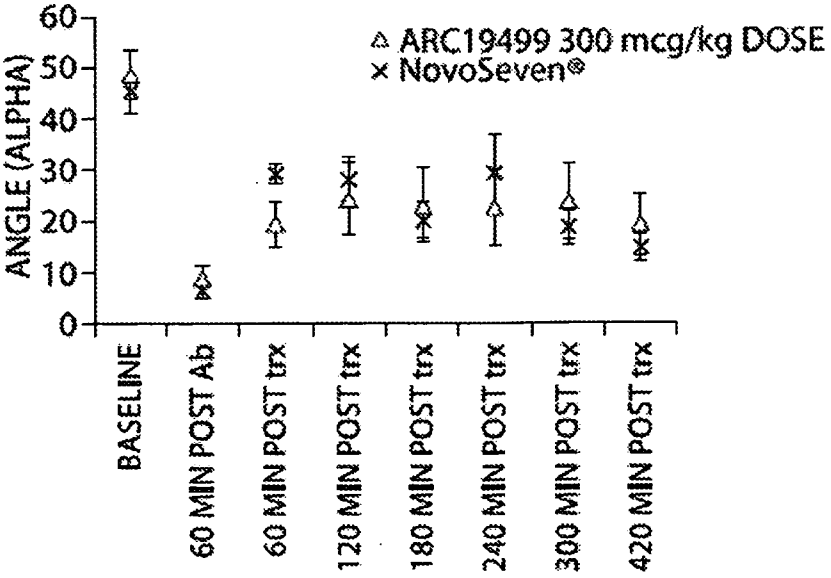


Fig. 118B

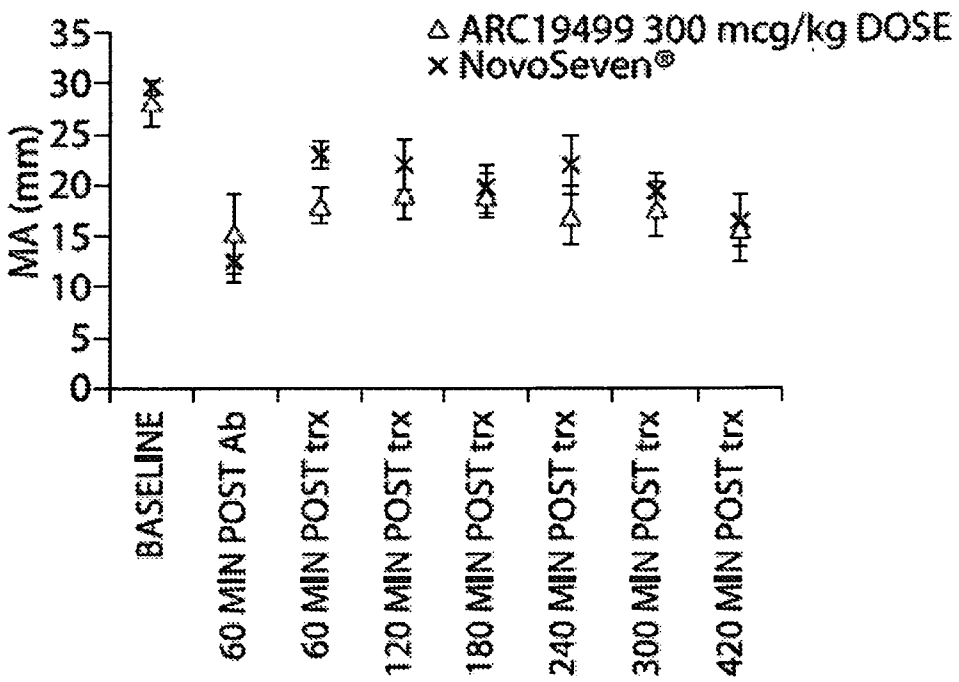

△ ARC19499 300 mcg/kg DOSE
× NovoSeven®
MA (mm)
35
30
25
20
15
10
5
0
BASELINE
60 MIN POST Ab
60 MIN POST trx
120 MIN POST trx
180 MIN POST trx
240 MIN POST trx
300 MIN POST trx
420 MIN POST trx

Fig. 118C

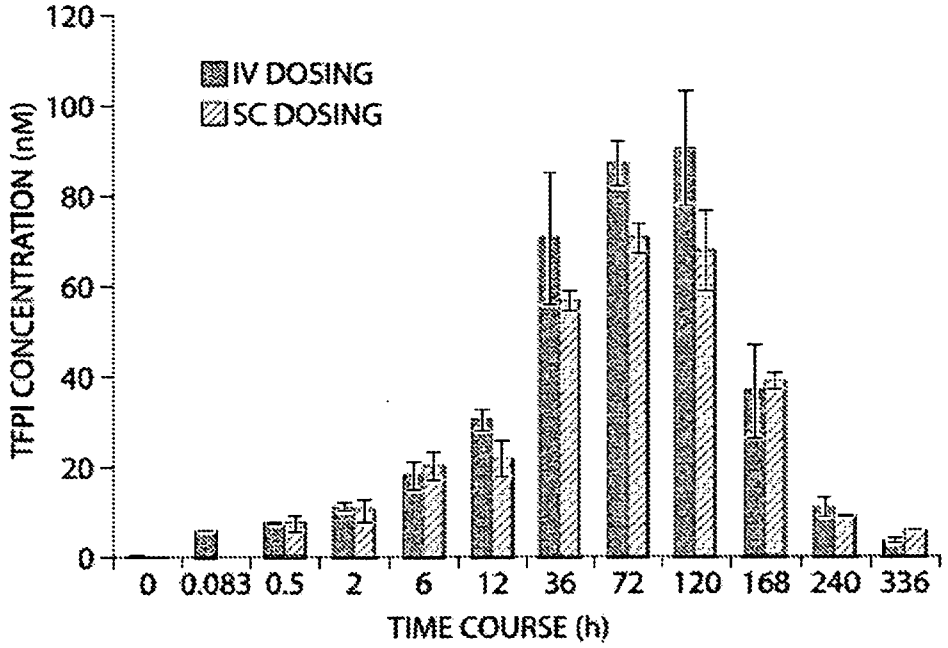


Fig. 119

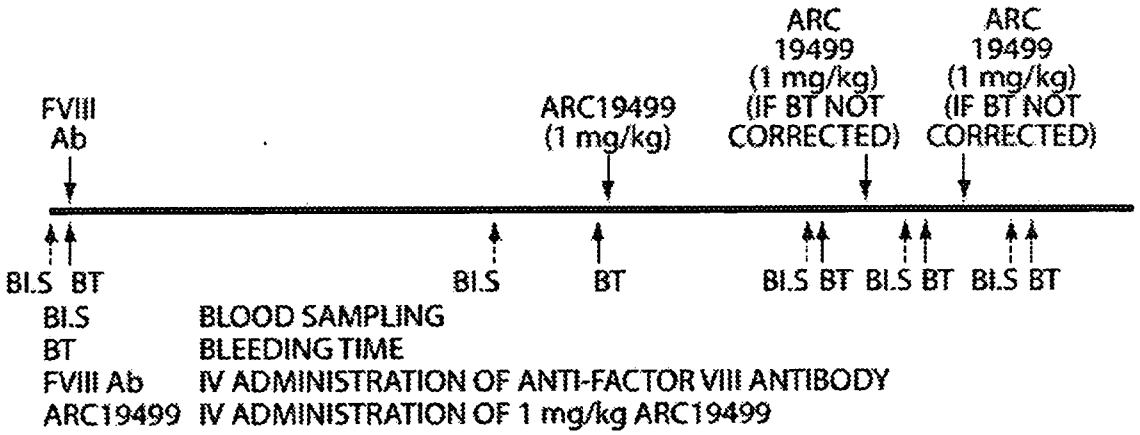


Fig. 120

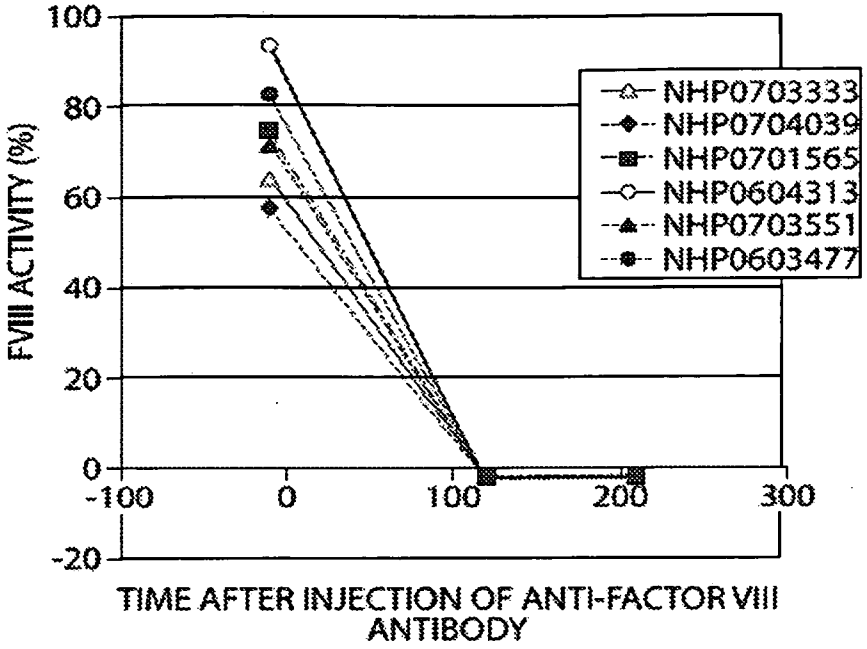


Fig. 121A

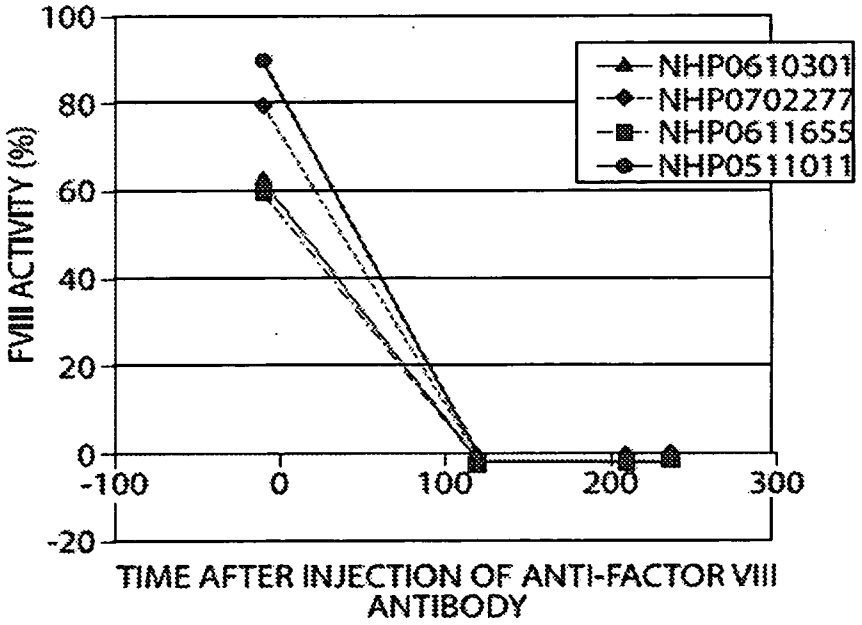


Fig. 121B

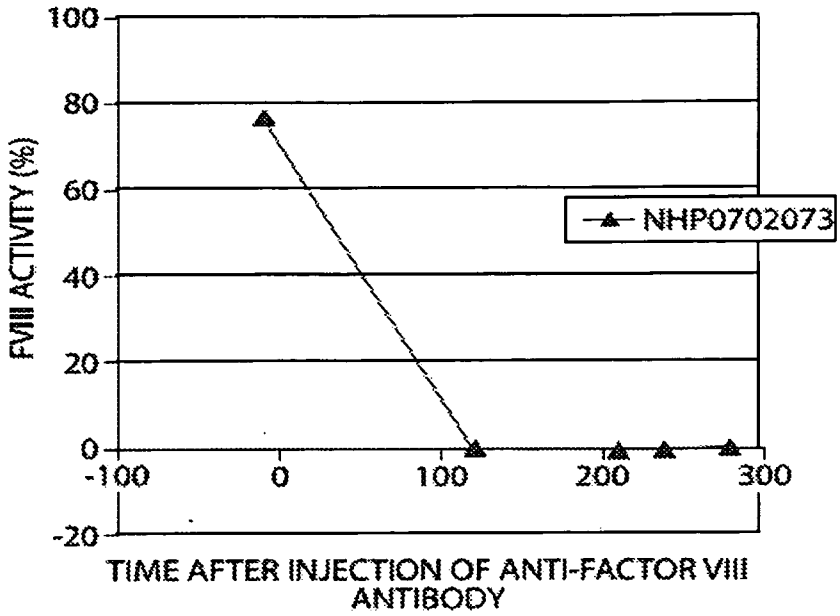


Fig. 121C

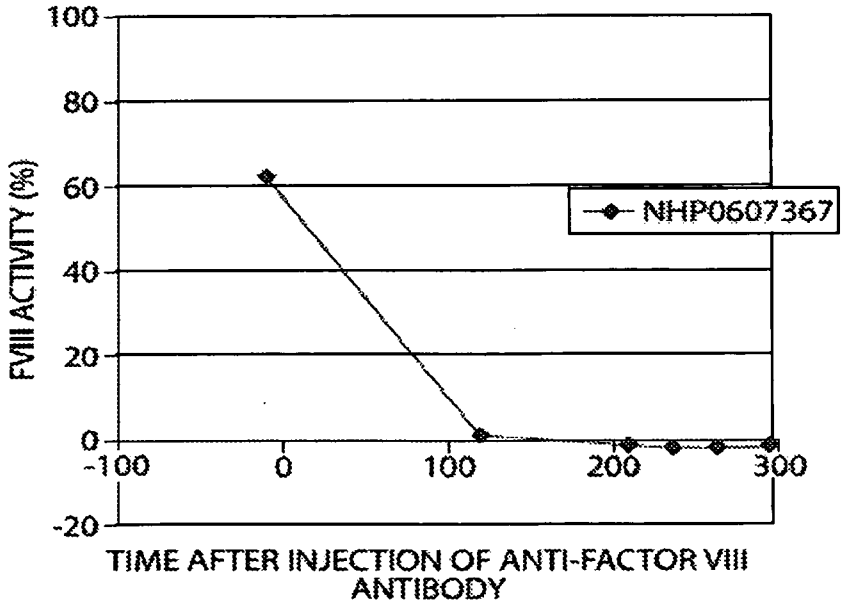


Fig. 121D

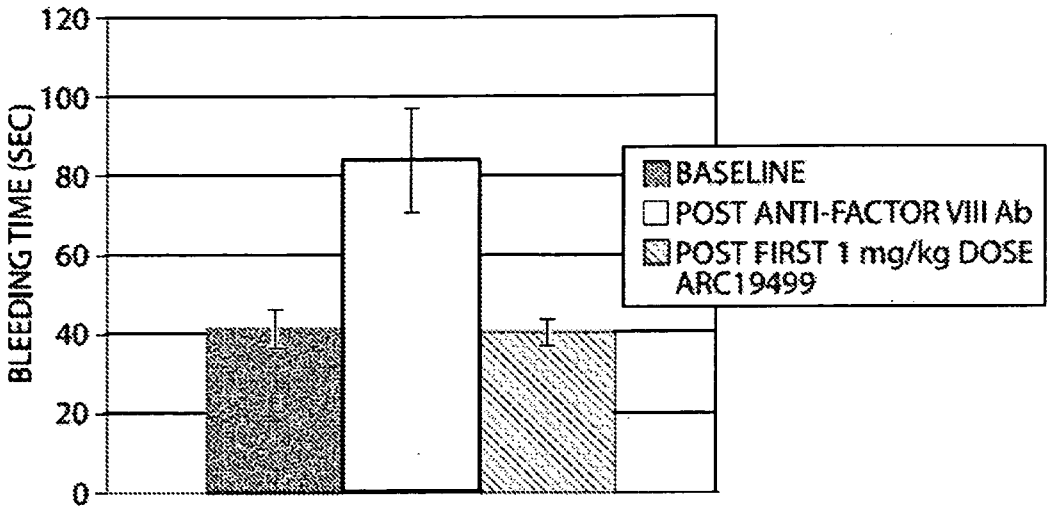


Fig. 122A

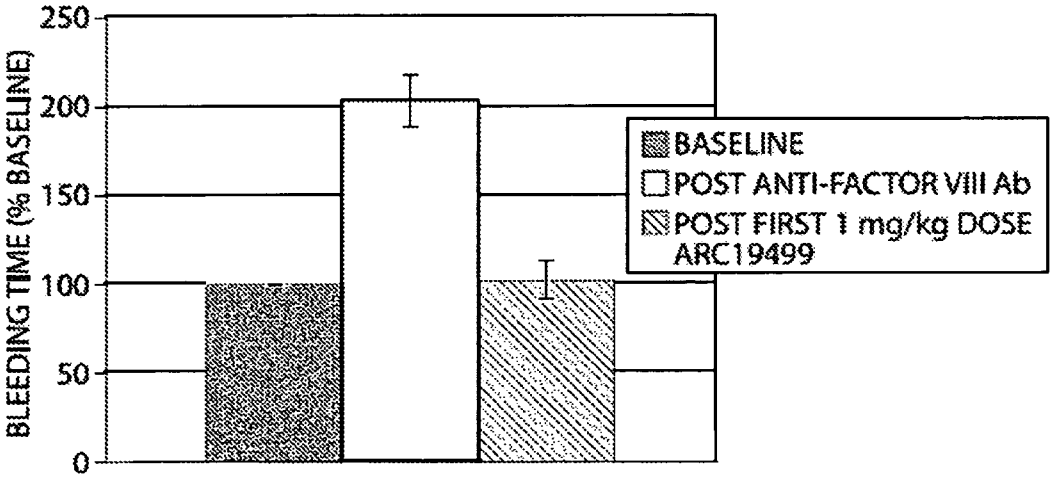


Fig. 122B

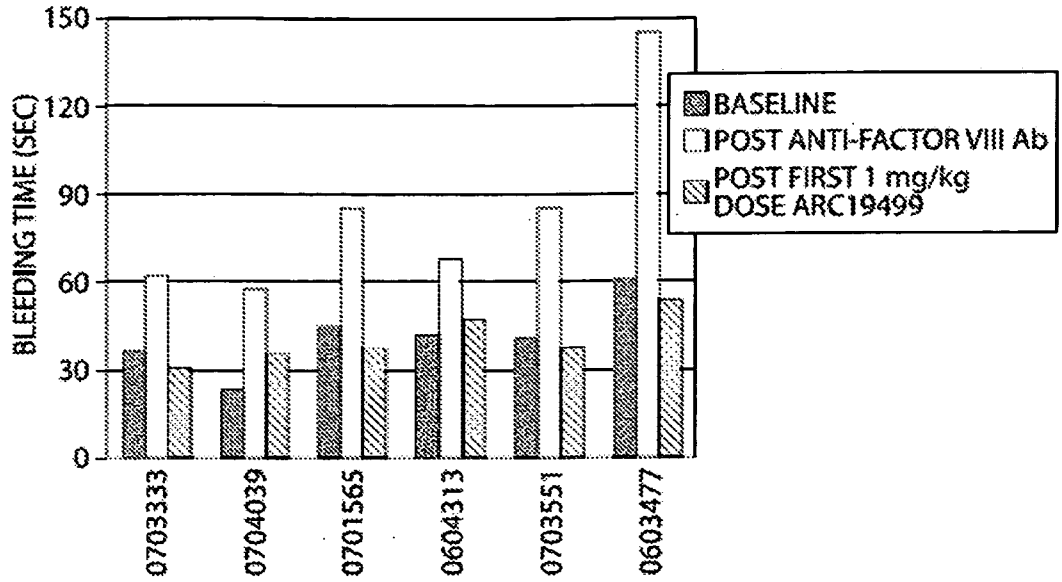


Fig. 123A

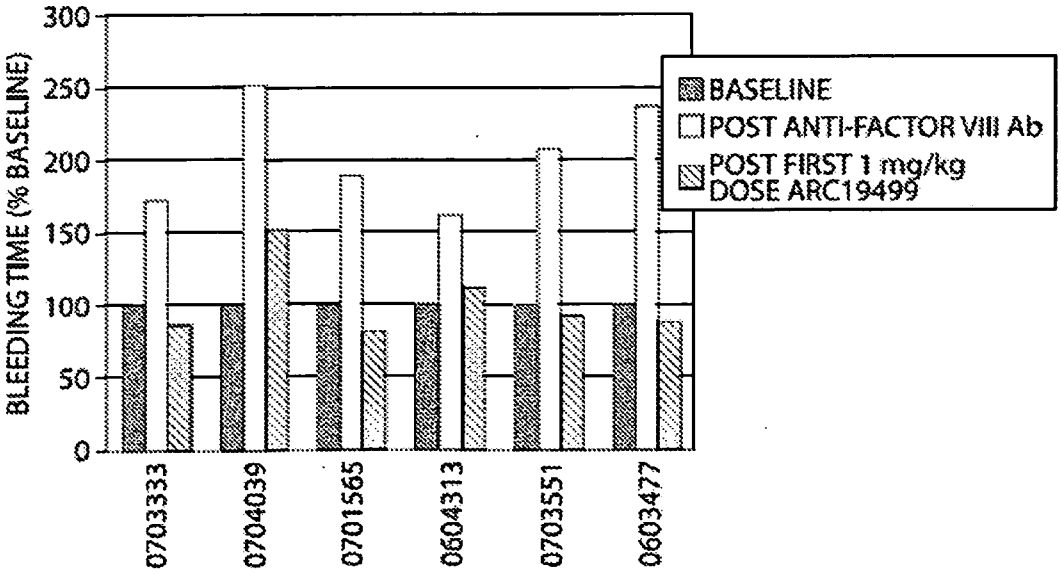


Fig. 123B

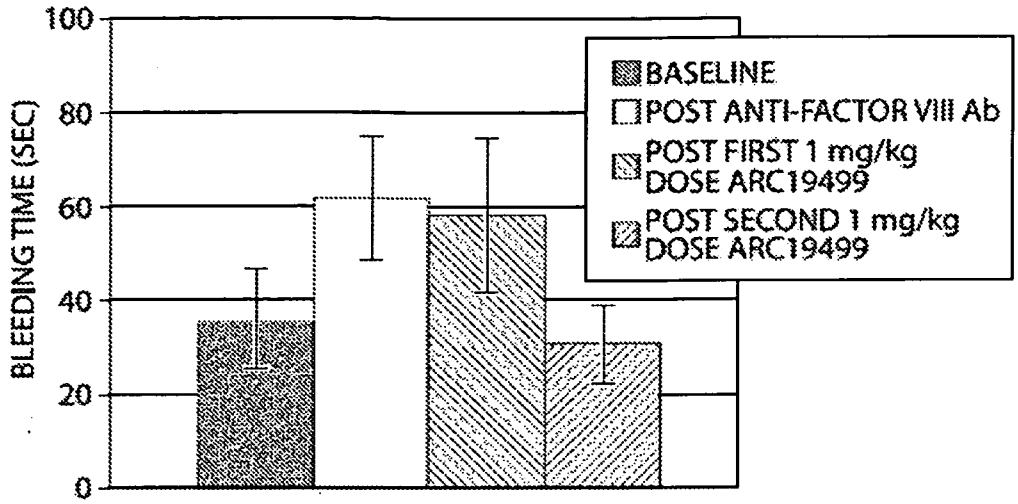


Fig. 124A

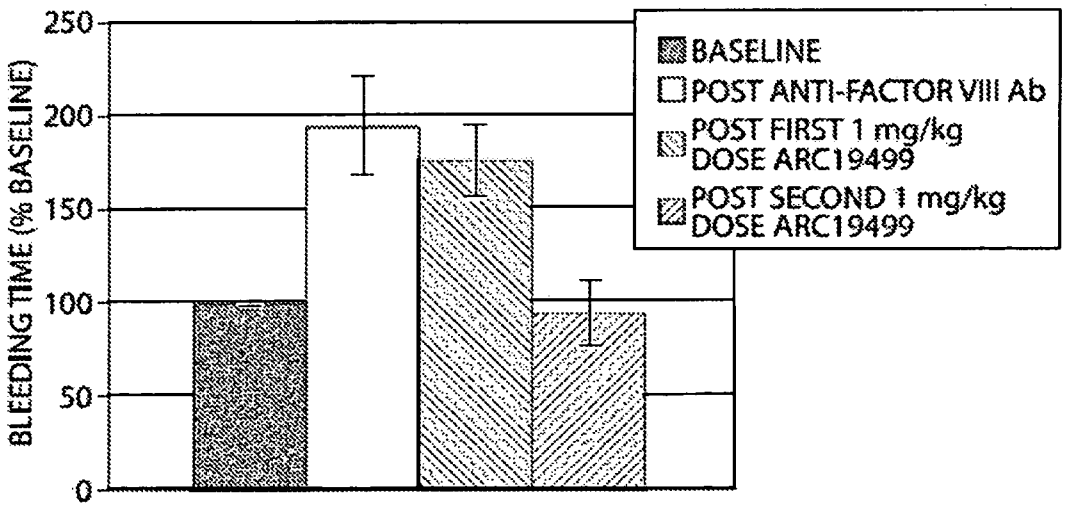


Fig. 124B

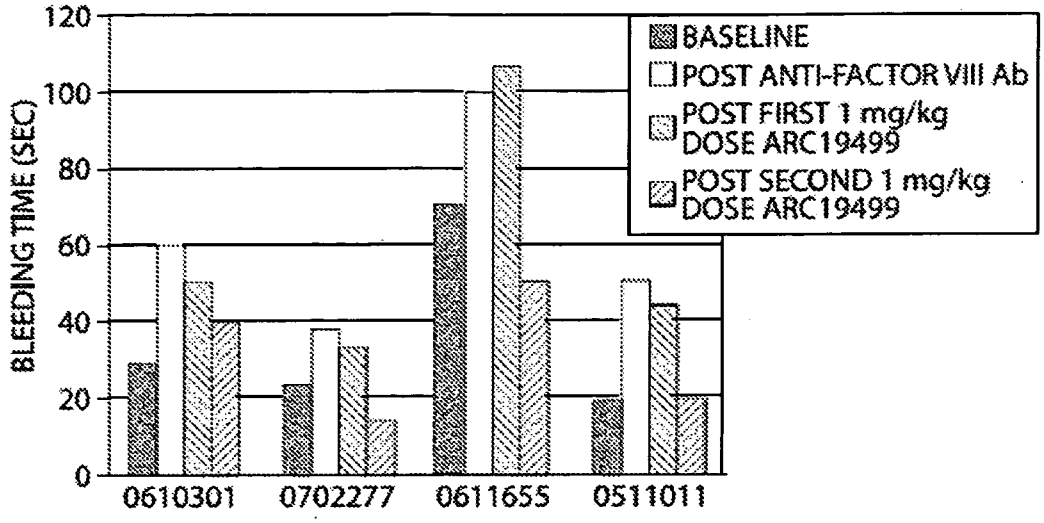


Fig. 125A

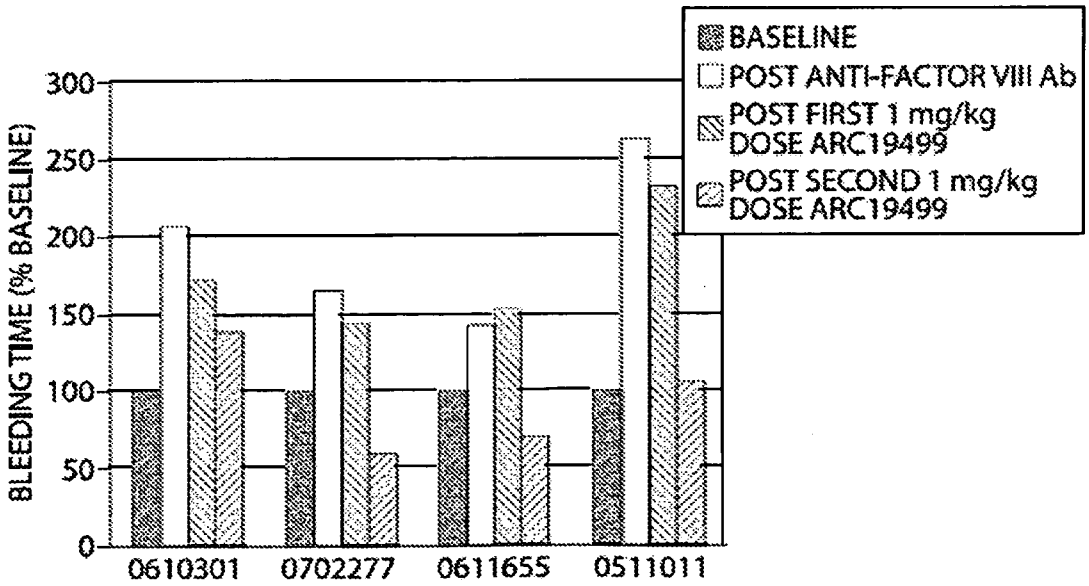


Fig. 125B

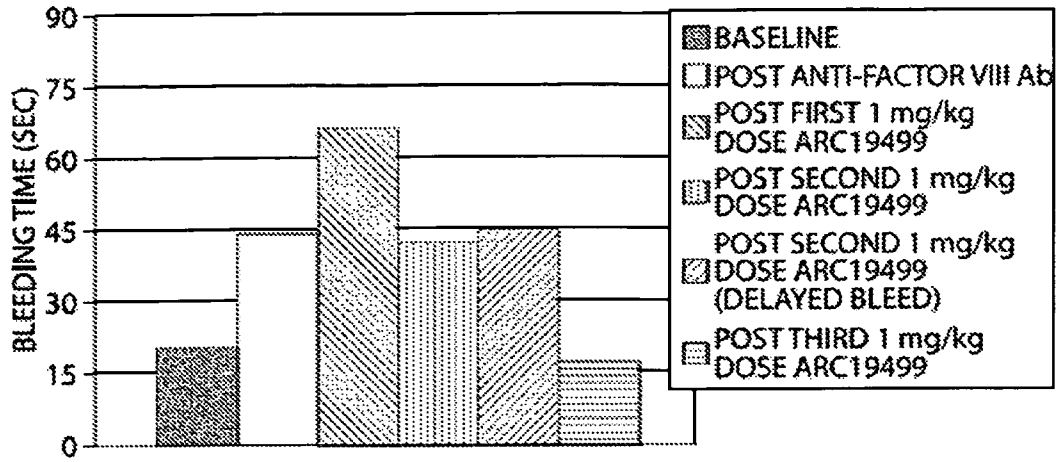


Fig. 126A

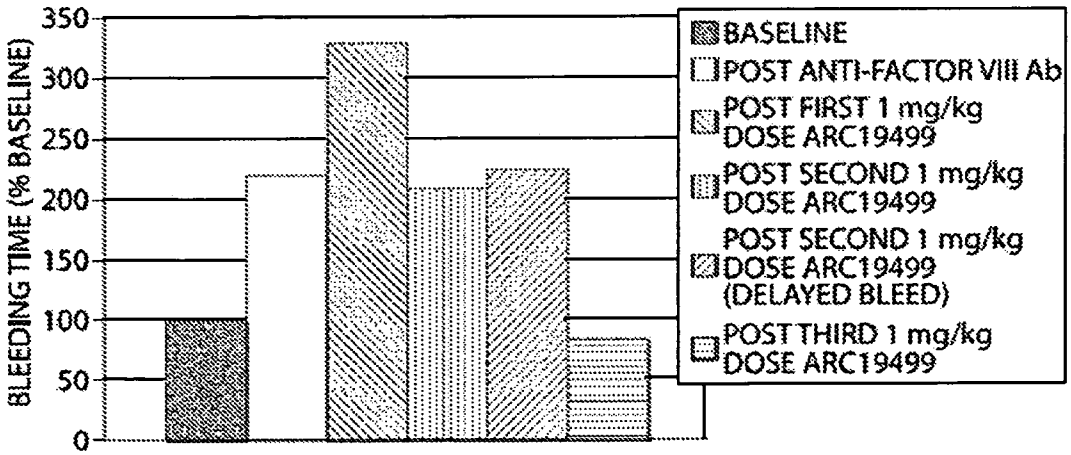


Fig. 126B

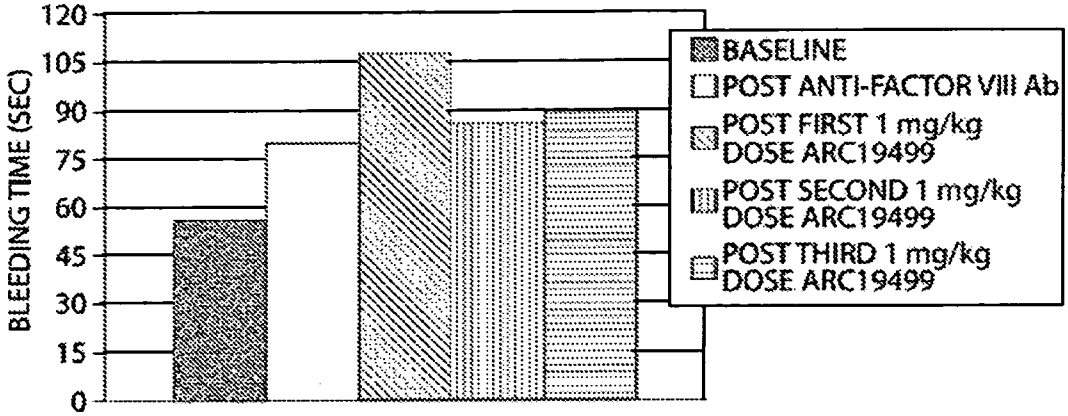


Fig. 127A

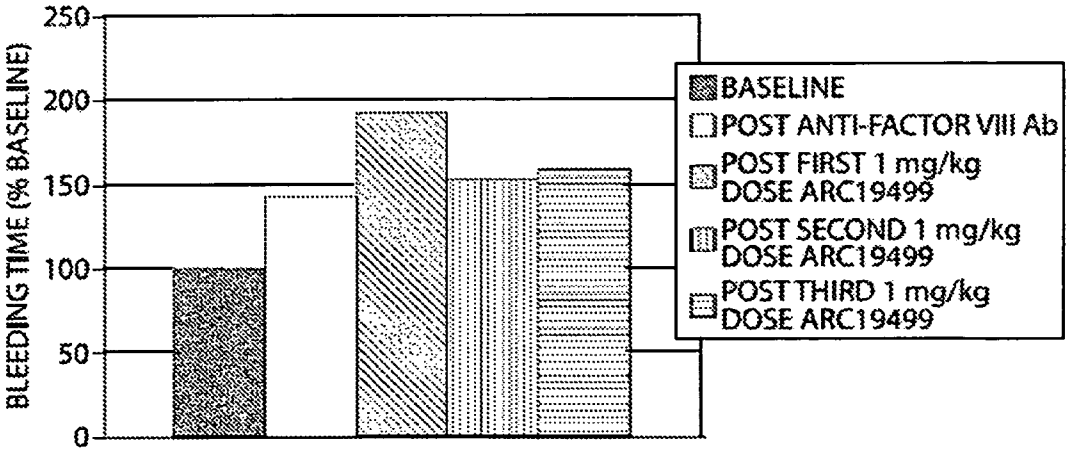


Fig. 127B

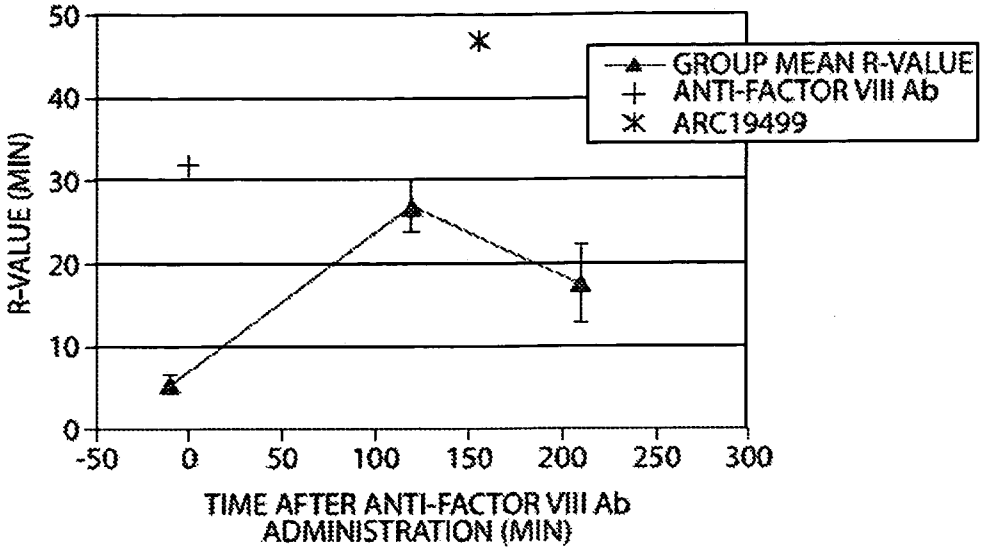


Fig. 128

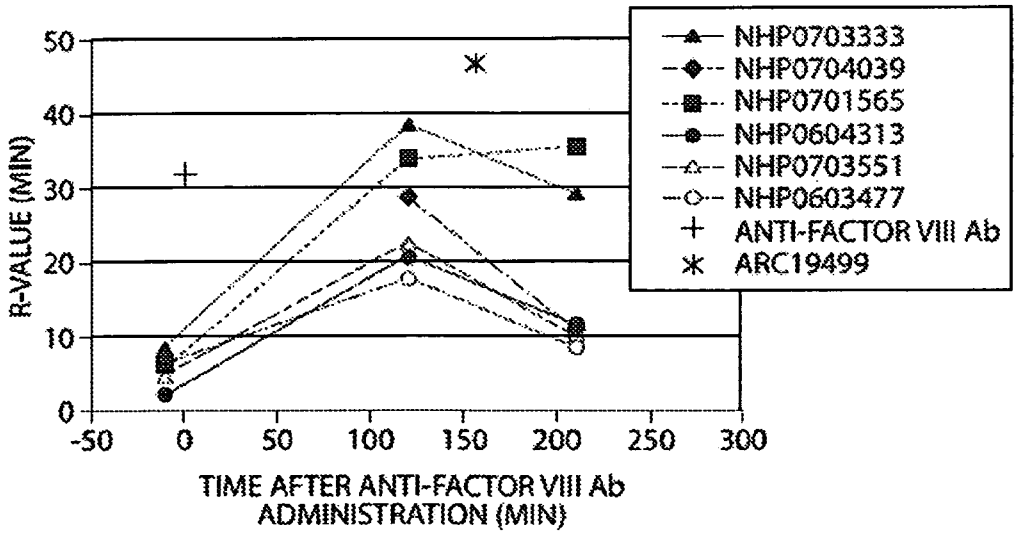


Fig. 129

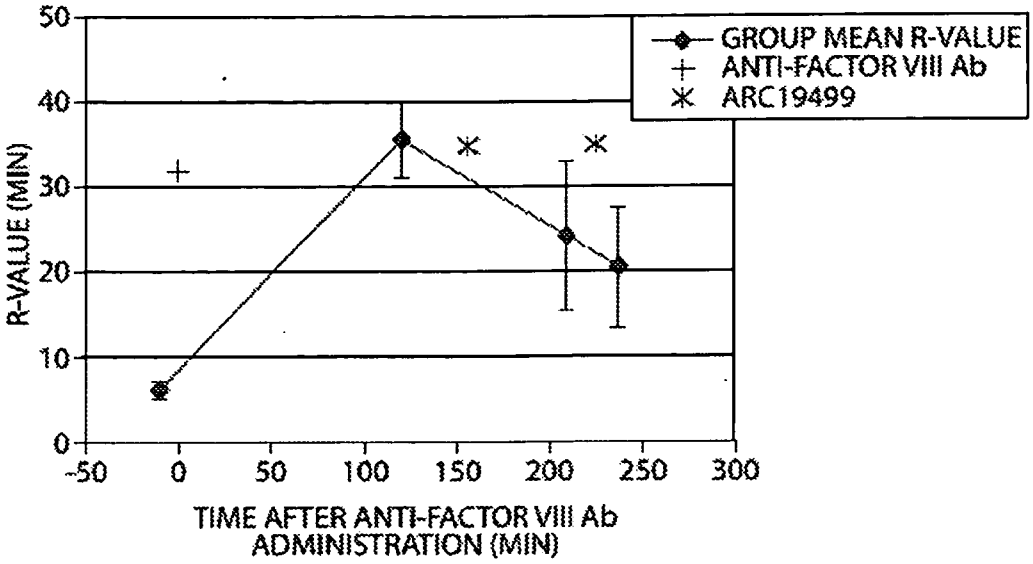


Fig. 130

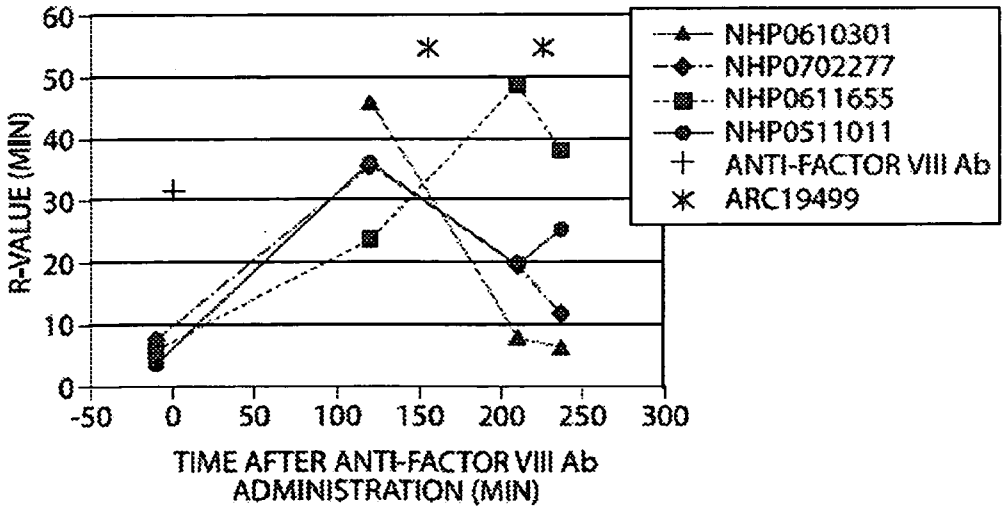


Fig. 131

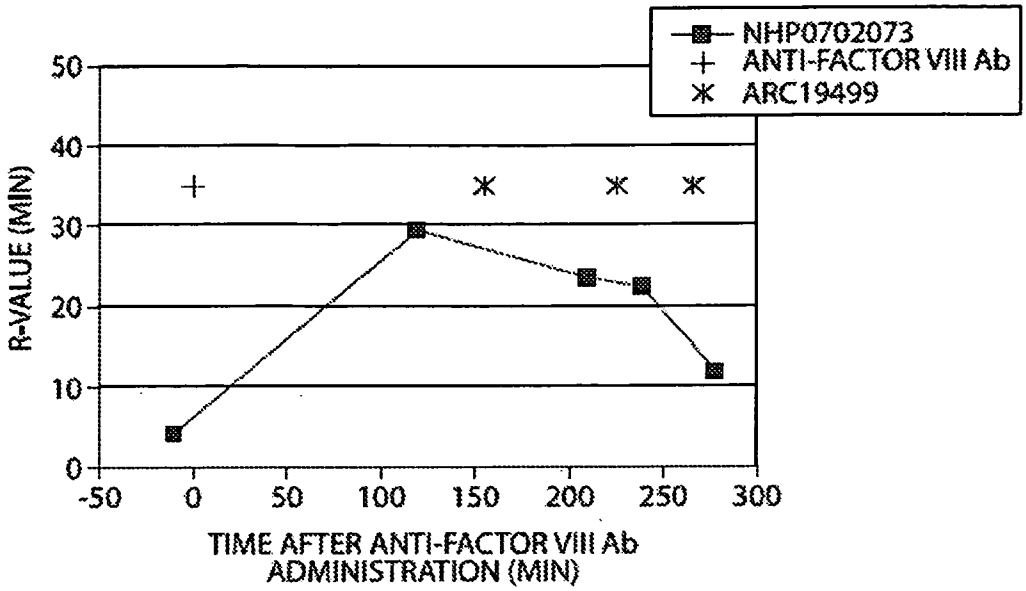


Fig. 132

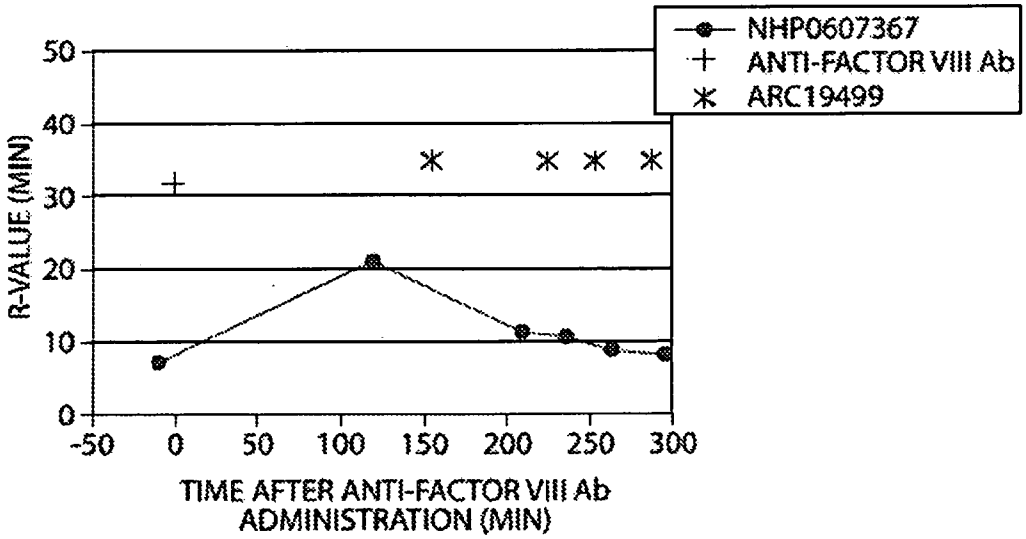


Fig. 133

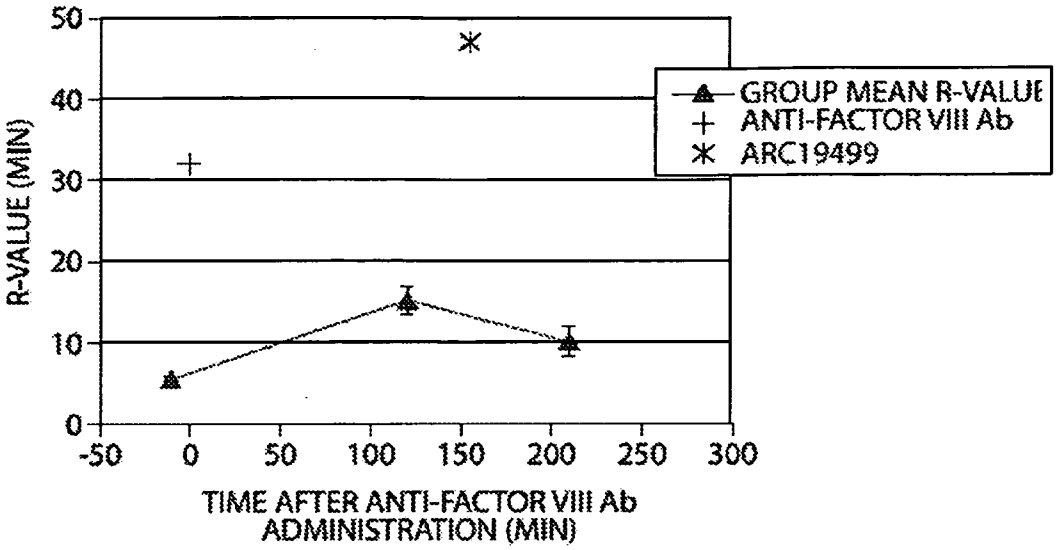


Fig. 134

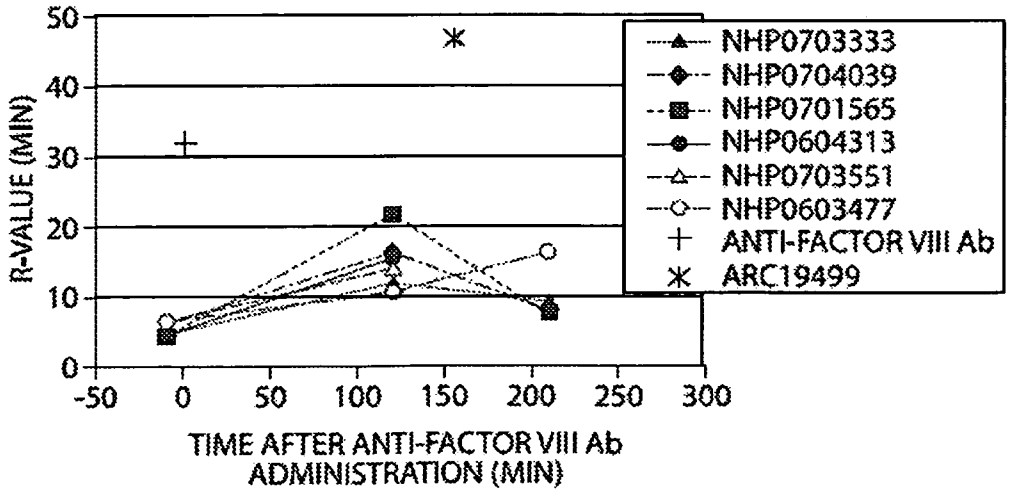


Fig. 135

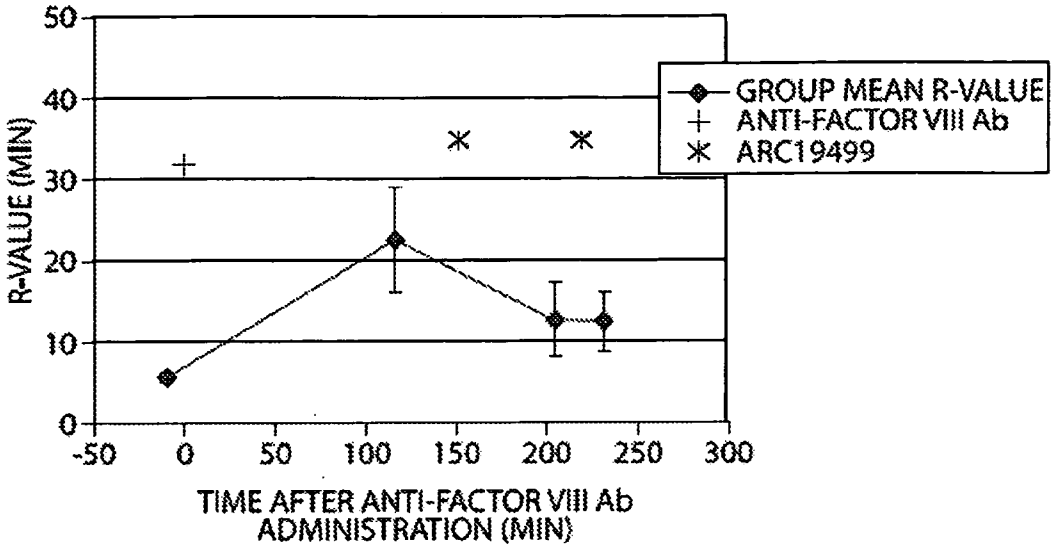


Fig. 136

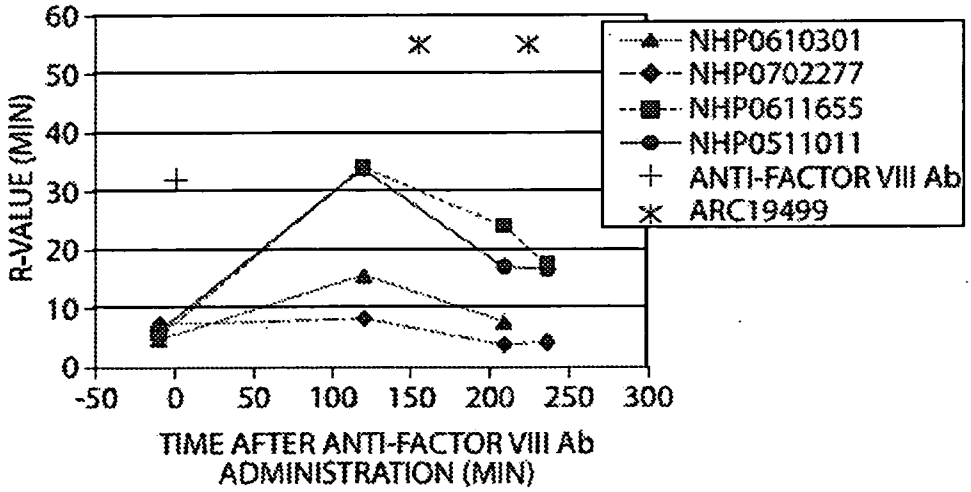


Fig. 137

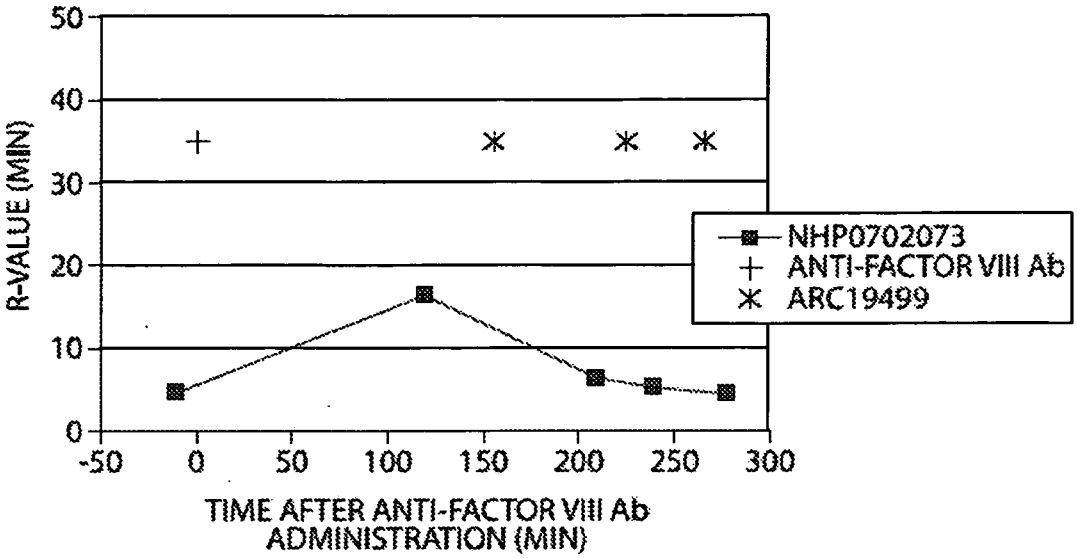


Fig. 138

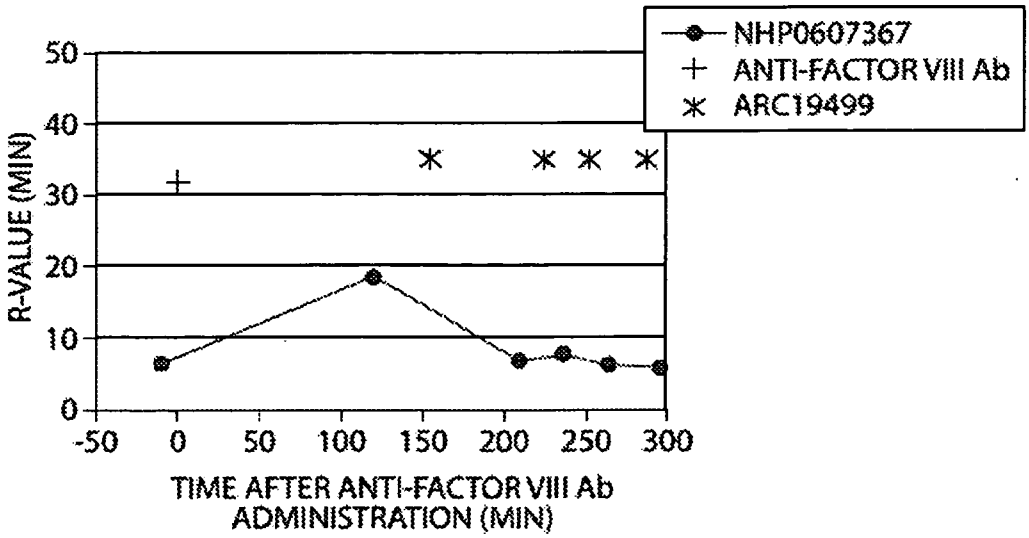
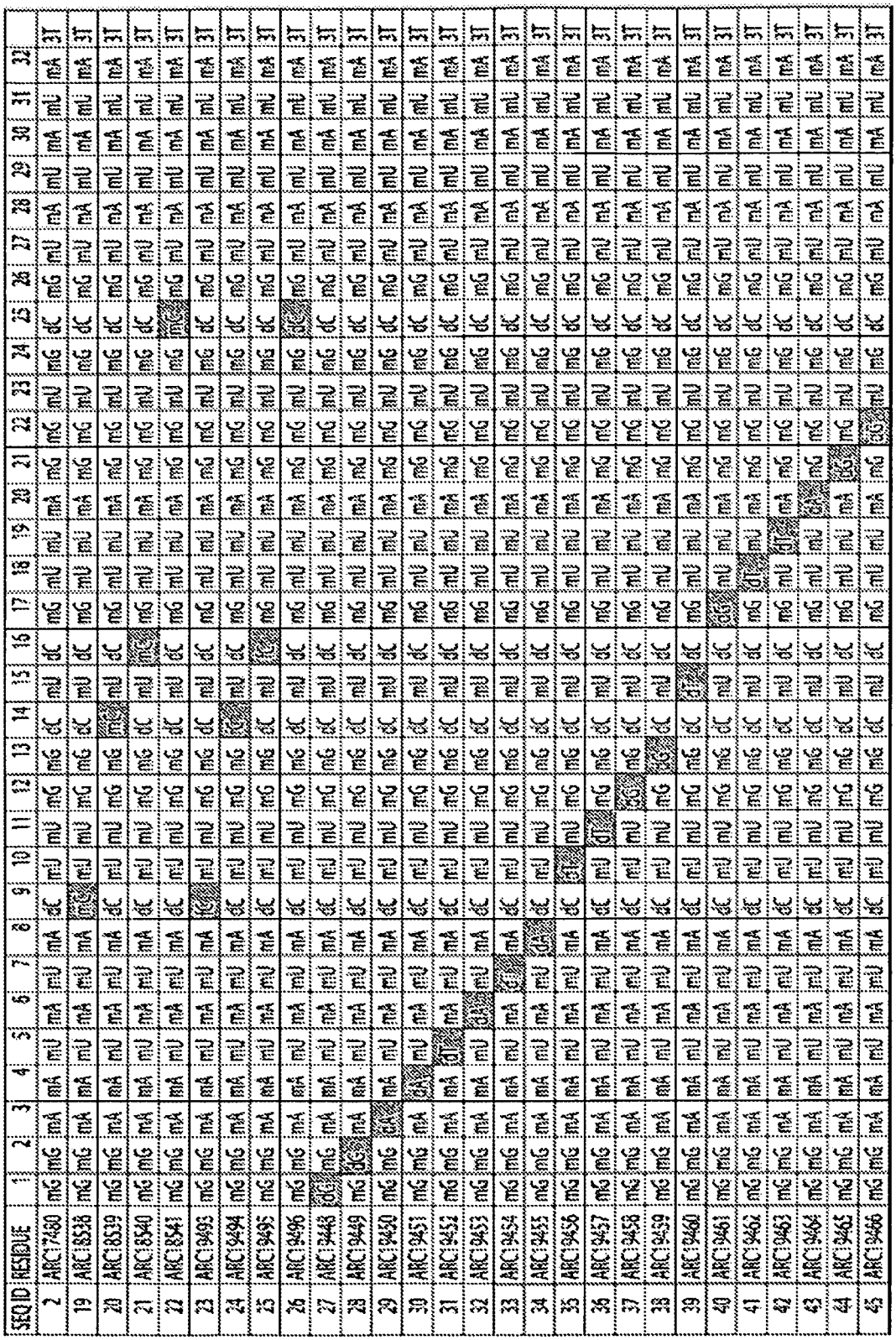


Fig. 139



SEQ ID	RESIDUE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
2	ARC7480	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
19	ARC8538	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
20	ARC8539	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
21	ARC8540	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
22	ARC8541	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
23	ARC9493	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
24	ARC9494	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
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34	ARC9455	mG	mG	mA	mA	mU	mA	mU	dA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
35	ARC9456	mG	mG	mA	mA	mU	mA	mU	mA	dC	dT	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
36	ARC9457	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	dT	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
37	ARC9458	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	dG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
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39	ARC9460	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	dT	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
40	ARC9461	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	dG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
41	ARC9462	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	dT	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
42	ARC9463	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	dT	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
43	ARC9464	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	dA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
44	ARC9465	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	dG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
45	ARC9466	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	dG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T

Fig. 140-1

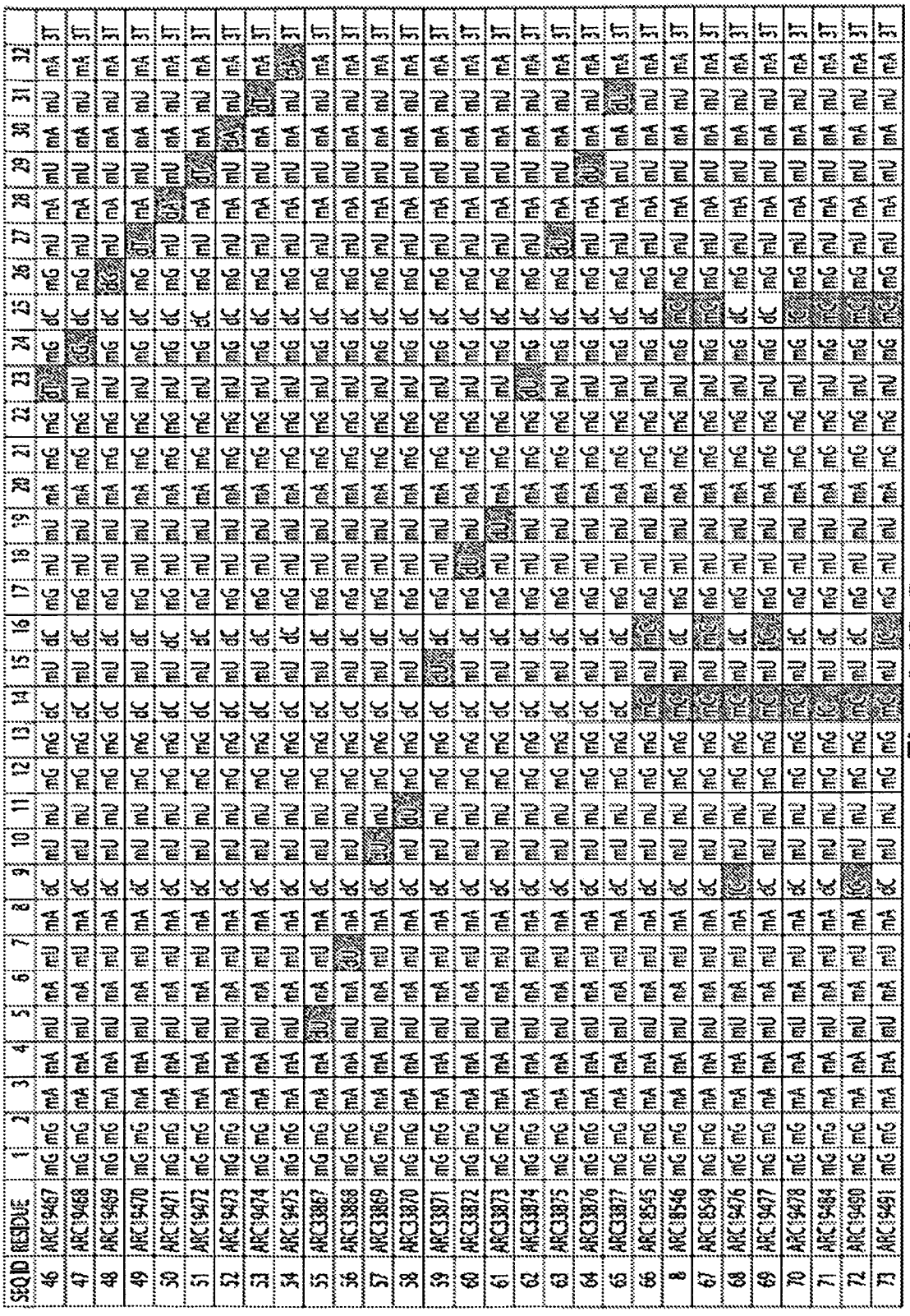


Fig. 140-2

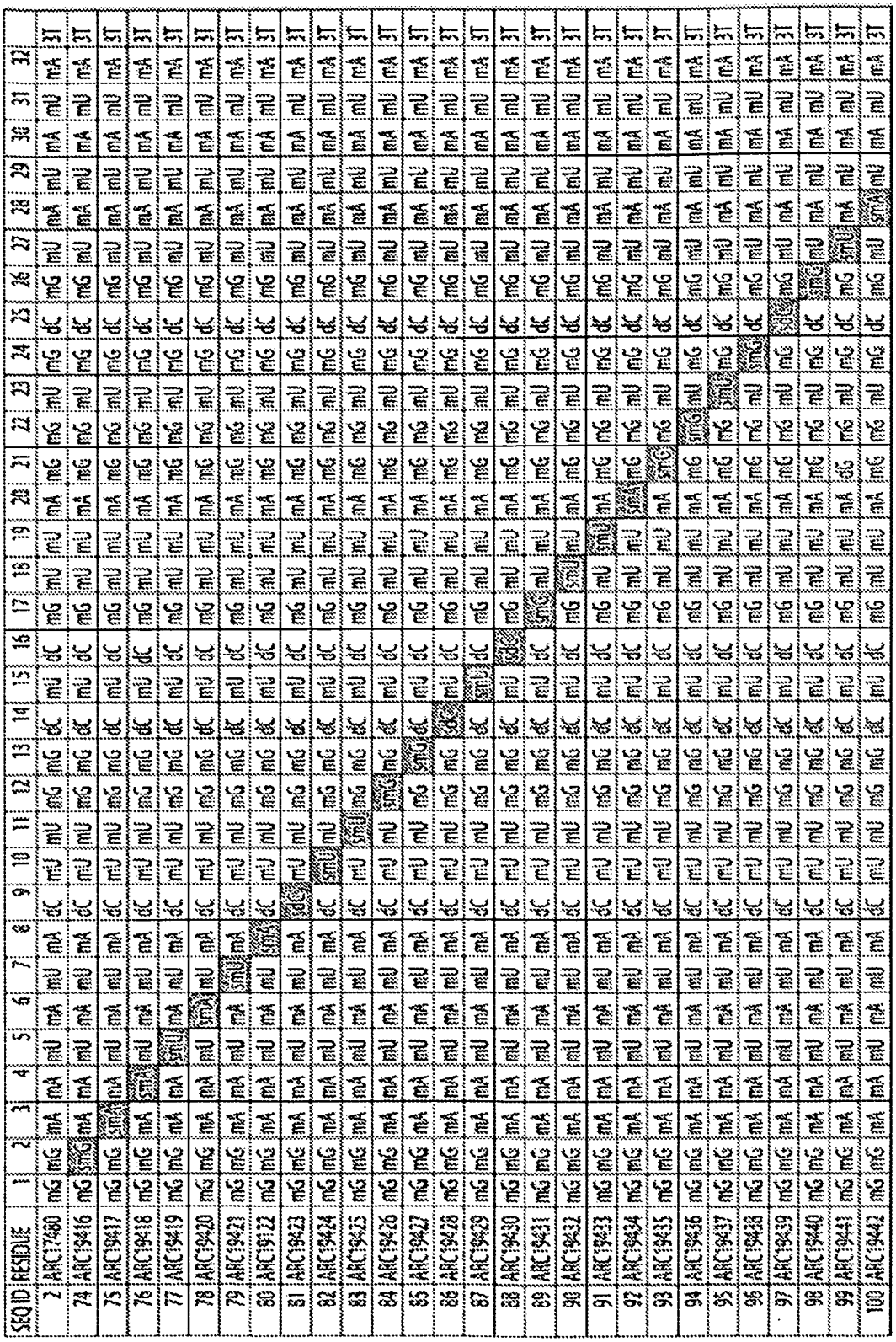
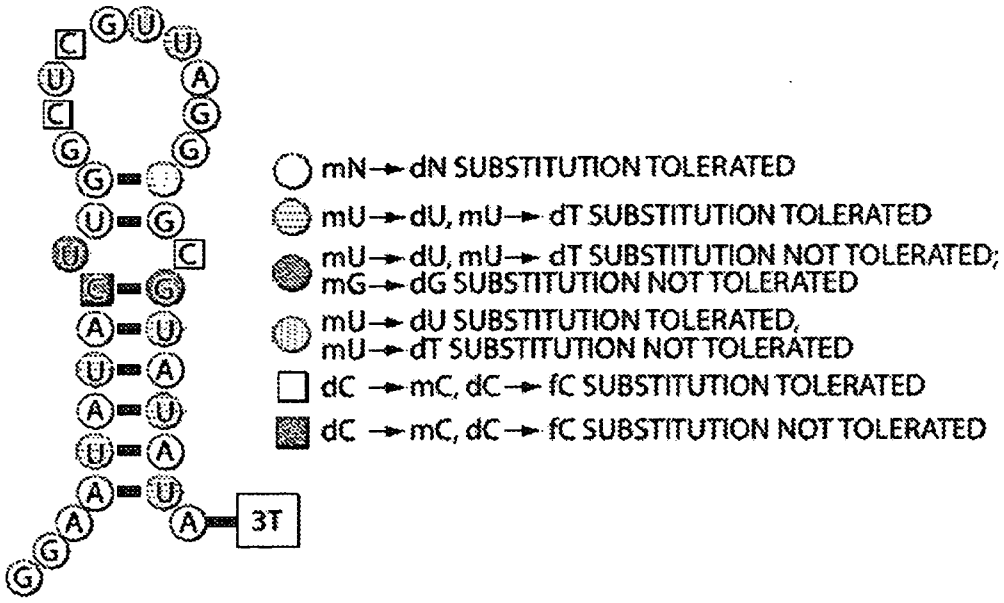


Fig. 141-1

REPLACEMENT SHEET

SEQ ID	RESIDUE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
101	ARC17443	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	3T
102	ARC17444	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	3T
103	ARC19445	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	3T
104	ARC19446	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	3T
105	ARC19447	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	3T

Fig. 141-2



SEQ ID NO: 2

Fig. 142A

SEQ ID		RESIDUE 9	RESIDUE 14	RESIDUE 16	RESIDUE 25	TOLERATED?
2	ARC17480	dC	dC	dC	dC	YES
66	ARC18545	dC	mC	mC	dC	YES
8	ARC18546	dC	mC	dC	mC	YES
67	ARC18549	dC	mC	mC	mC	YES
68	ARC19476	fC	mC	dC	dC	YES
69	ARC19477	dC	mC	fC	dC	YES
70	ARC19478	dC	mC	dC	fC	YES
71	ARC19484	dC	fC	dC	mC	YES
72	ARC19490	fC	mC	dC	mC	YES
73	ARC19491	dC	mC	fC	mC	YES

Fig. 142B

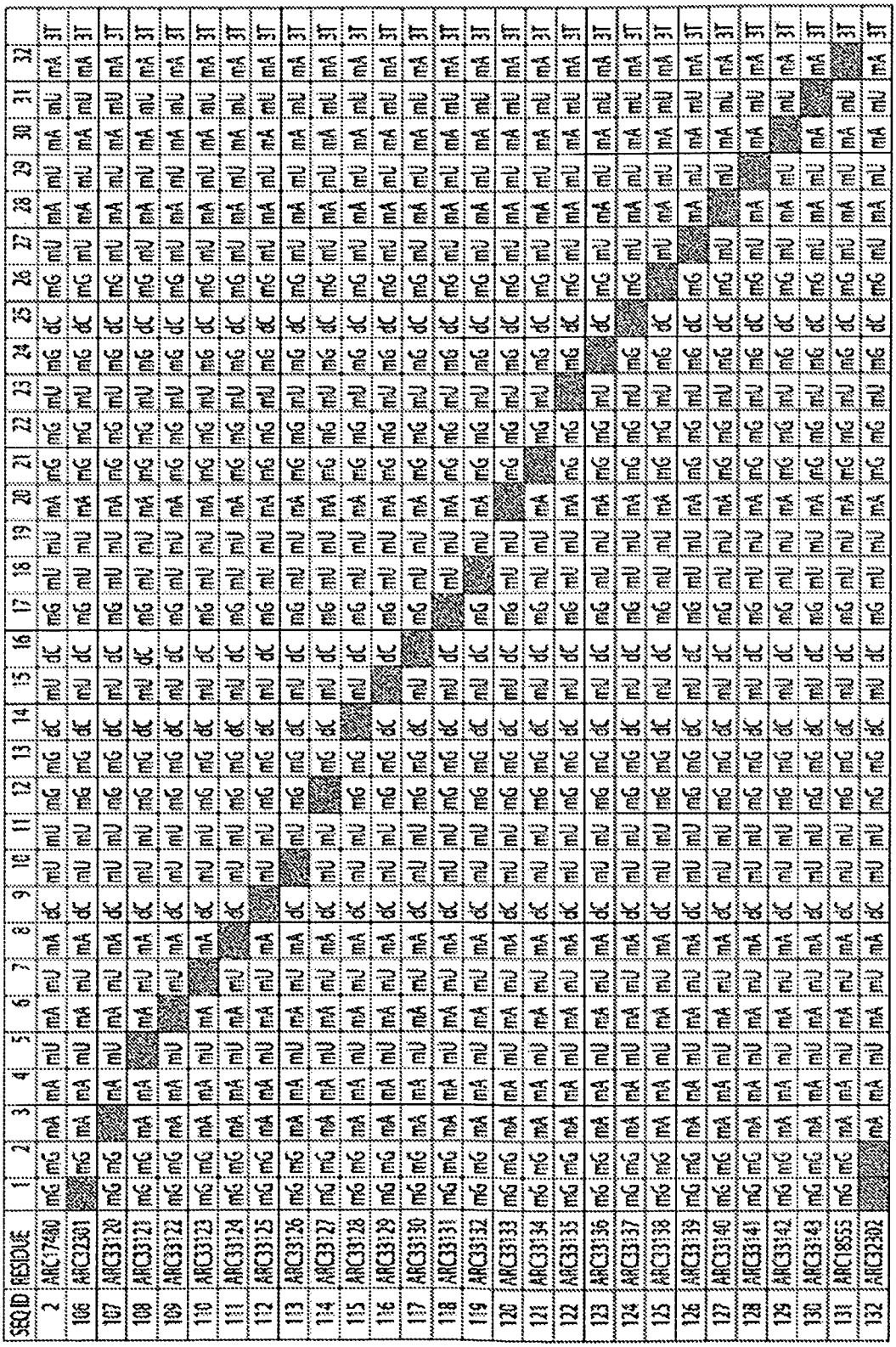
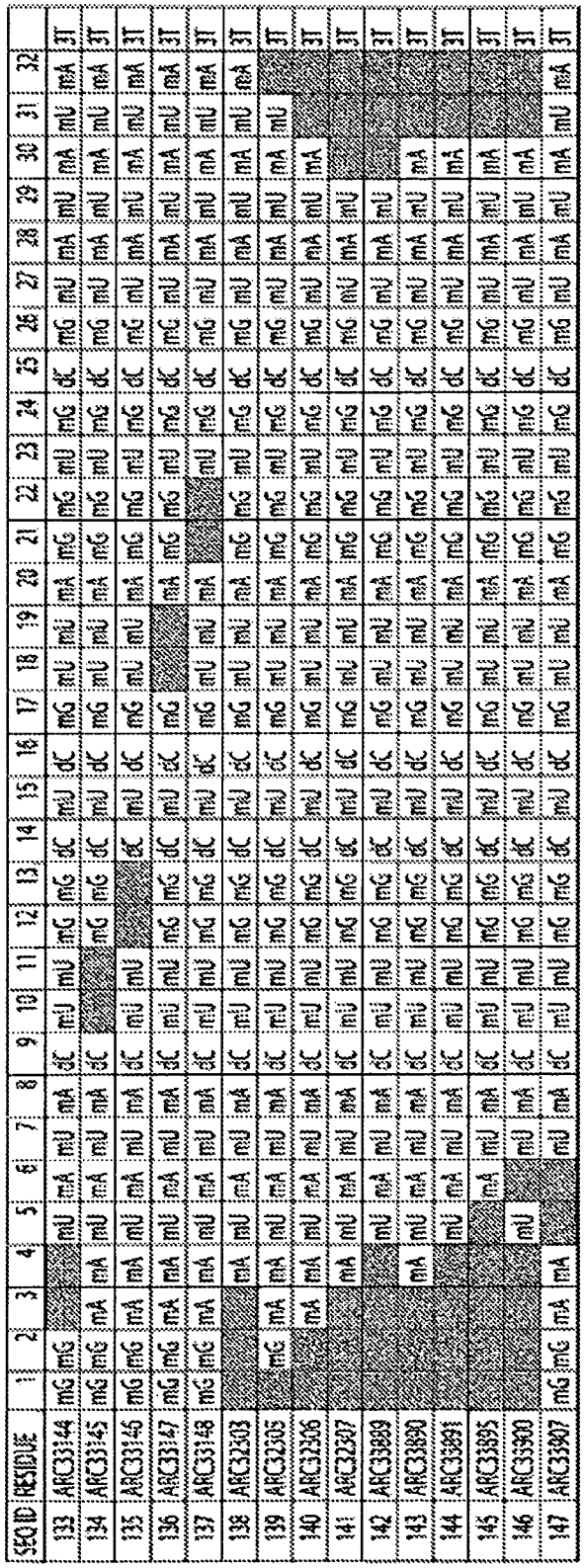
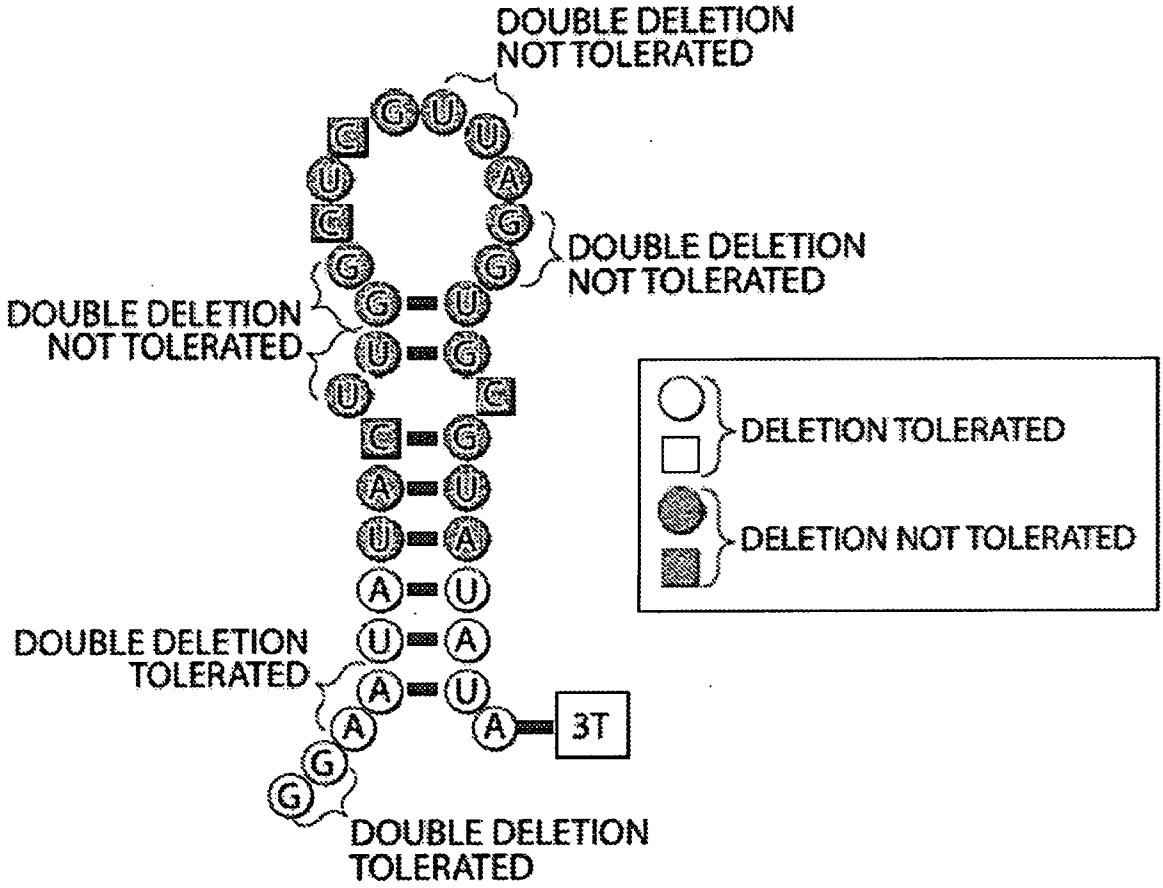


Fig. 143-1



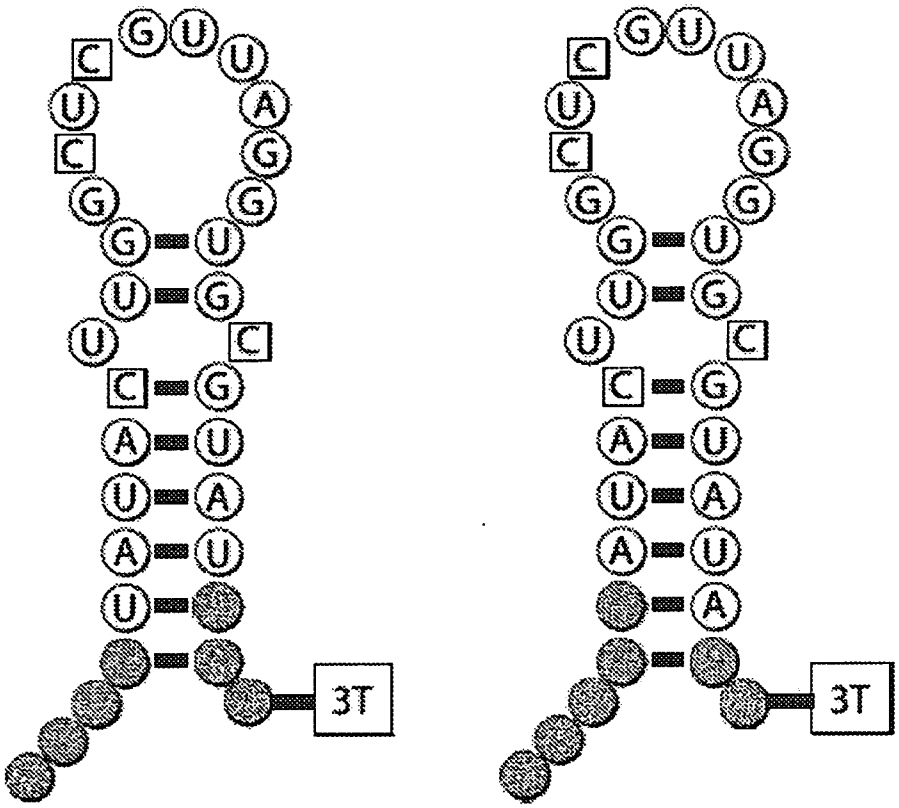
SEQ ID	RESIDUE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
133	ARC33144	mG	mG			mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
134	ARC33145	mG	mG	mA	mA	mU	mA	mU	mA	dC			mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
135	ARC33146	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU			dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
136	ARC33147	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG			mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
137	ARC33148	mG	mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T
138	ARC32303				mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU		3T
139	ARC32305		mG	mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU		3T
140	ARC32306			mA	mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA			3T
141	ARC32307				mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU				3T
142	ARC33889					mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU		3T
143	ARC33890				mA	mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA			3T
144	ARC33891					mU	mA	mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA			3T
145	ARC33895					mA	mU	mA	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA			3T
146	ARC33900					mU		mU	mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA			3T
147	ARC33907	mG	mG	mA	mA		mU		mA	dC	mU	mU	mG	mG	dC	mU	dC	mG	mU	mU	mA	mG	mG	mU	mG	dC	mG	mU	mA	mU	mA	mU	mA	3T

Fig. 143-2



SEQ ID NO: 2

Fig. 144A



ARC33889
SEQ ID NO: 142

ARC33895
SEQ ID NO: 145

Fig. 144B

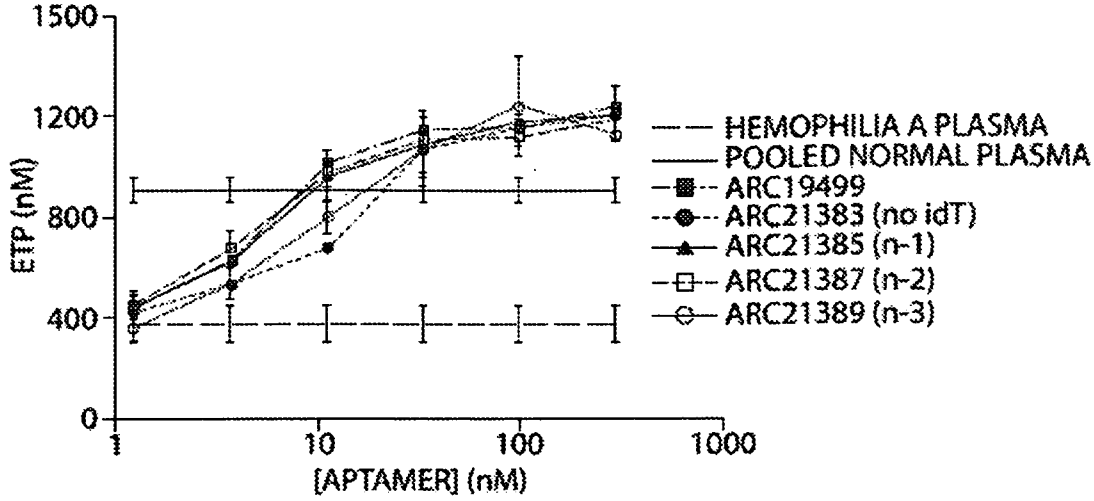


Fig. 145A

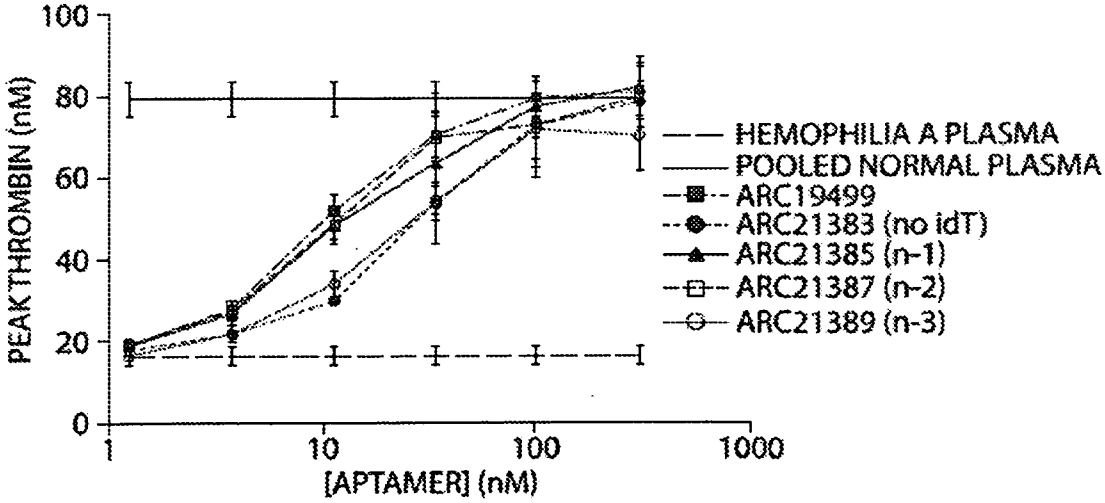


Fig. 145B