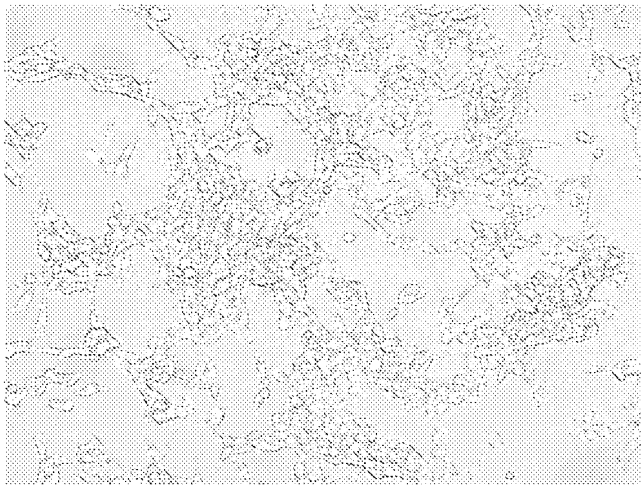


FIG. 1A

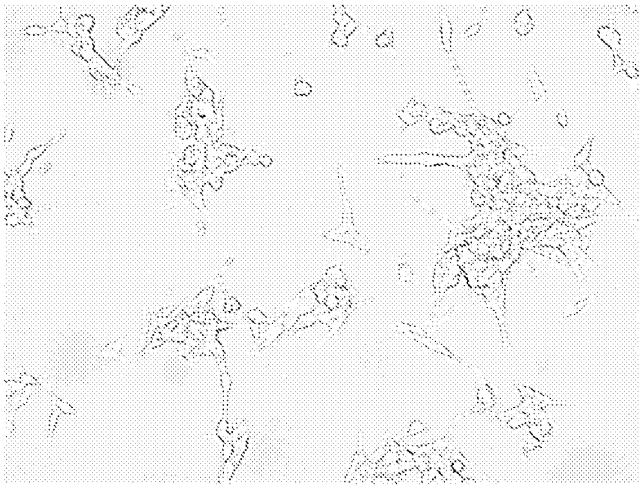
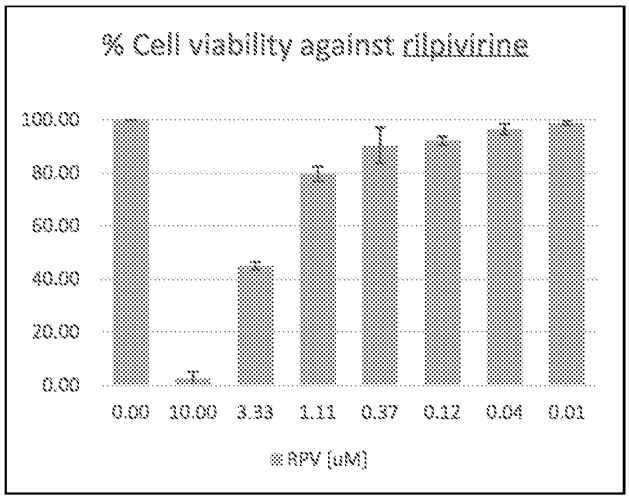


FIG. 1B



Dose (μM)	% cell viability
0.00	100.00
10.00	2.49
3.33	45.01
1.11	79.69
0.37	90.39
0.12	92.14
0.04	96.39
0.01	98.88

FIG. 1C

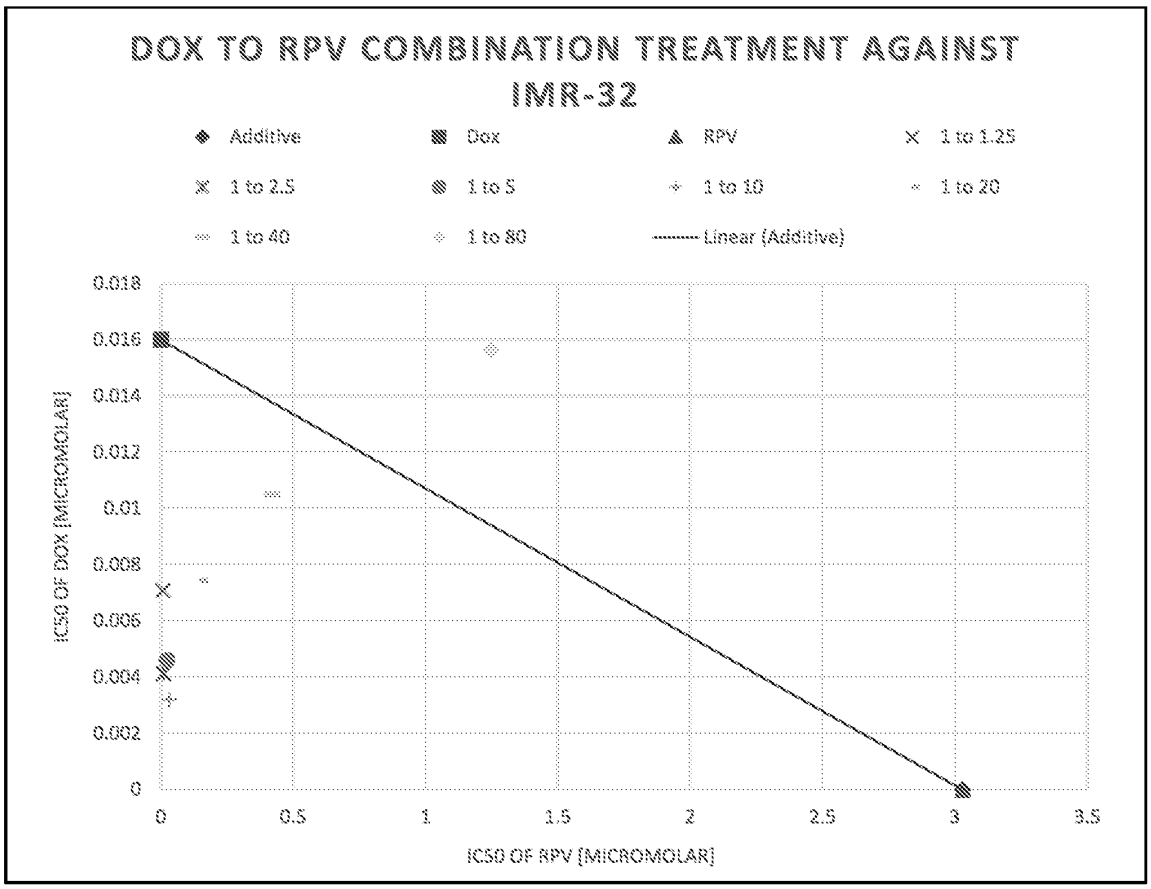

DOX TO RPV COMBINATION TREATMENT AGAINST IMR-32
Additive
Dox
RPV
1 to 1.25
1 to 2.5
1 to 5
1 to 10
1 to 20
1 to 40
1 to 80
Linear (Additive)
IC50 OF DOX [MICROMOLAR]
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
0
0.5
1
1.5
2
2.5
3
3.5
IC50 OF RPV [MICROMOLAR]

FIG. 2

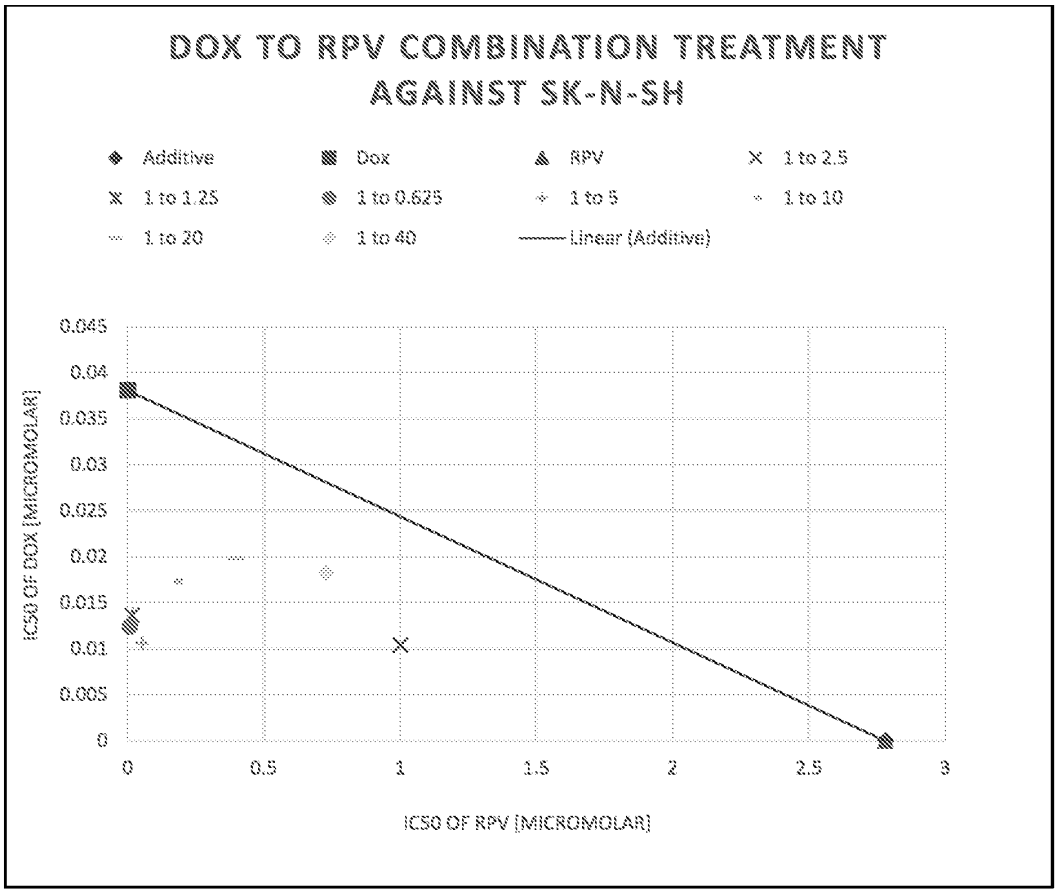

DOX TO RPV COMBINATION TREATMENT AGAINST SK-N-SH
Additive
Dox
RPV
1 to 2.5
1 to 1.25
1 to 0.625
1 to 5
1 to 10
1 to 20
1 to 40
Linear (Additive)
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
0
0.5
1
1.5
2
2.5
3
IC50 OF DOX [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]

FIG. 3

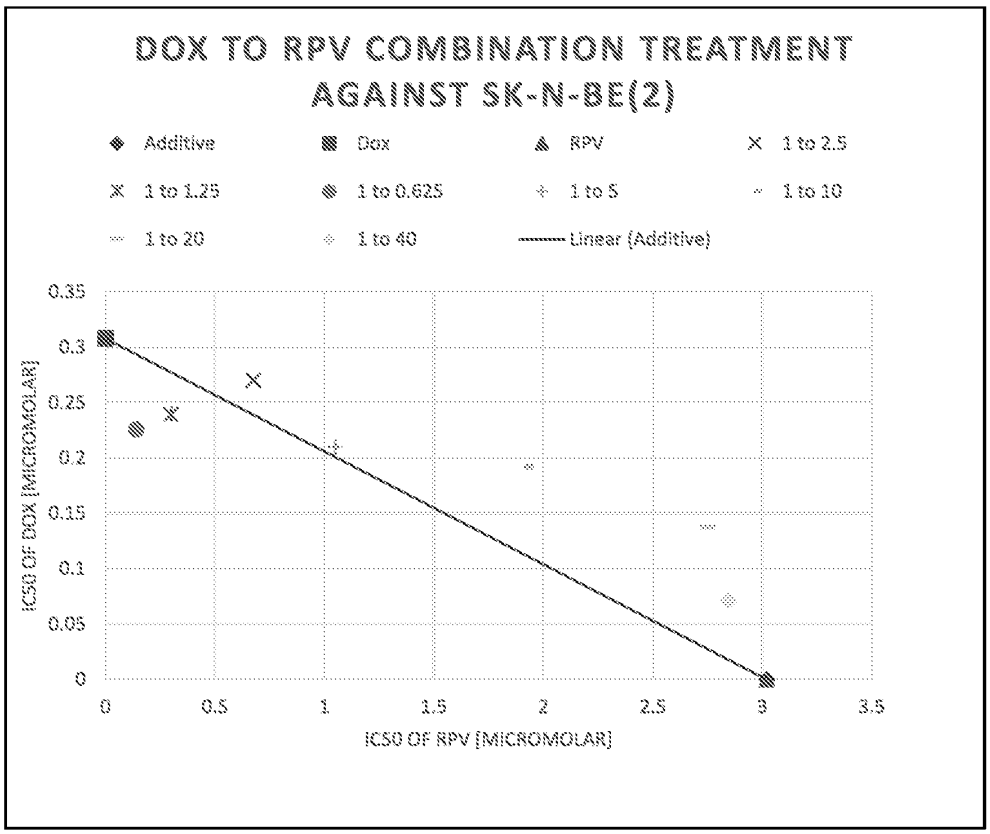

DOX TO RPV COMBINATION TREATMENT AGAINST SK-N-BE(2)
Additive
Dox
RPV
1 to 2.5
1 to 1.25
1 to 0.625
1 to 5
1 to 10
1 to 20
1 to 40
Linear (Additive)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
IC50 OF DOX [MICROMOLAR]
0
0.5
1
1.5
2
2.5
3
3.5
IC50 OF RPV [MICROMOLAR]

FIG. 4

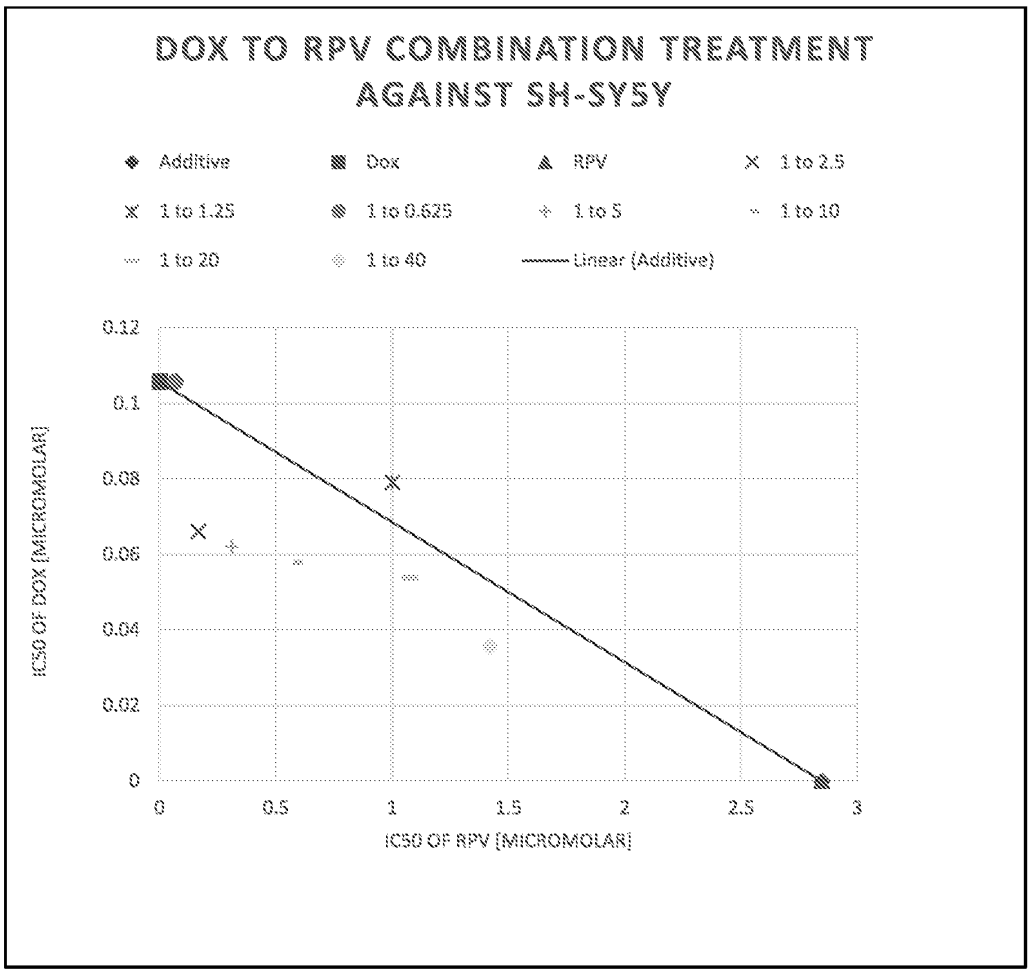

DOX TO RPV COMBINATION TREATMENT AGAINST SH-SY5Y
Additive
Dox
RPV
1 to 2.5
1 to 1.25
1 to 0.625
1 to 5
1 to 10
1 to 20
1 to 40
Linear (Additive)
IC50 OF DOX [MICROMOLAR]
0.12
0.1
0.08
0.06
0.04
0.02
0
0
0.5
1
1.5
2
2.5
3
IC50 OF RPV [MICROMOLAR]

FIG. 5

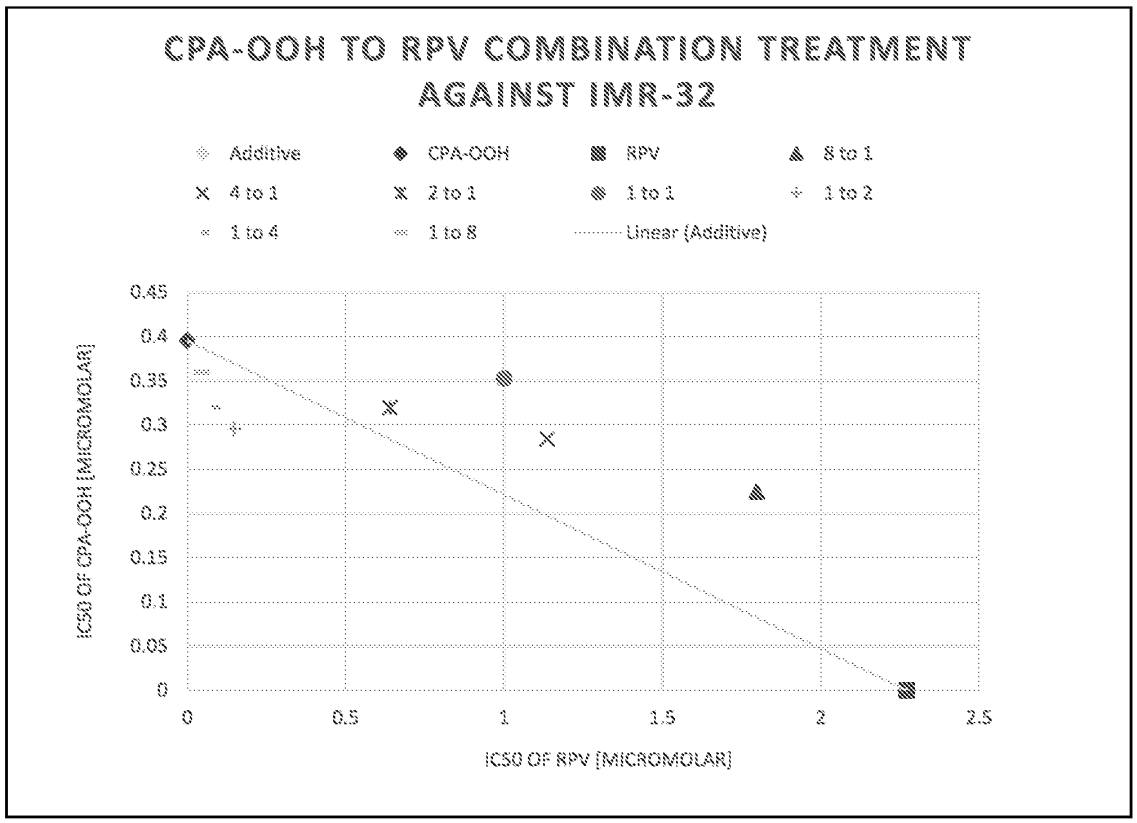

CPA-OOH TO RPV COMBINATION TREATMENT AGAINST IMR-32
Additive
CPA-OOH
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
IC50 OF CPA-OOH [MICROMOLAR]
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
IC50 OF RPV [MICROMOLAR]

FIG. 6

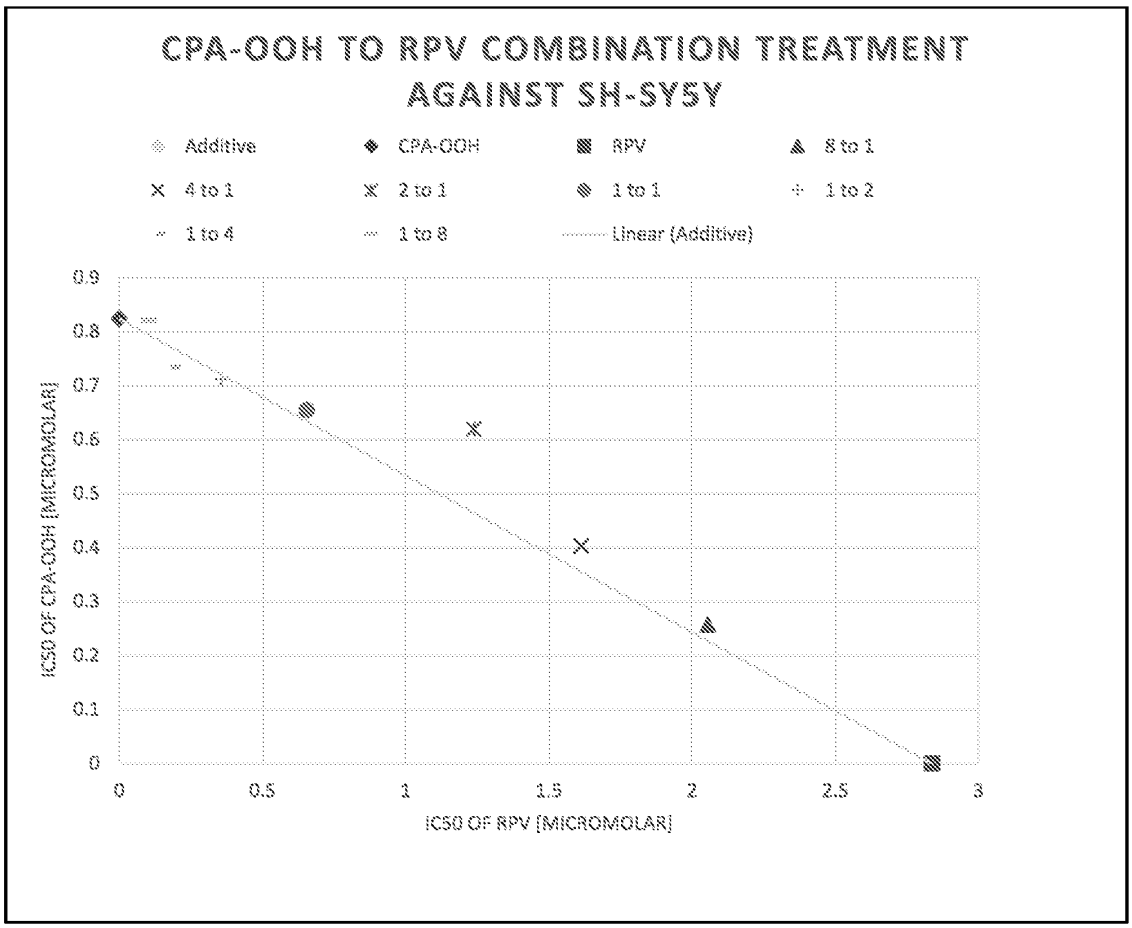

CPA-OOH TO RPV COMBINATION TREATMENT AGAINST SH-SY5Y
Additive
CPA-OOH
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
IC50 OF CPA-OOH [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
0
0.5
1
1.5
2
2.5
3

FIG. 7

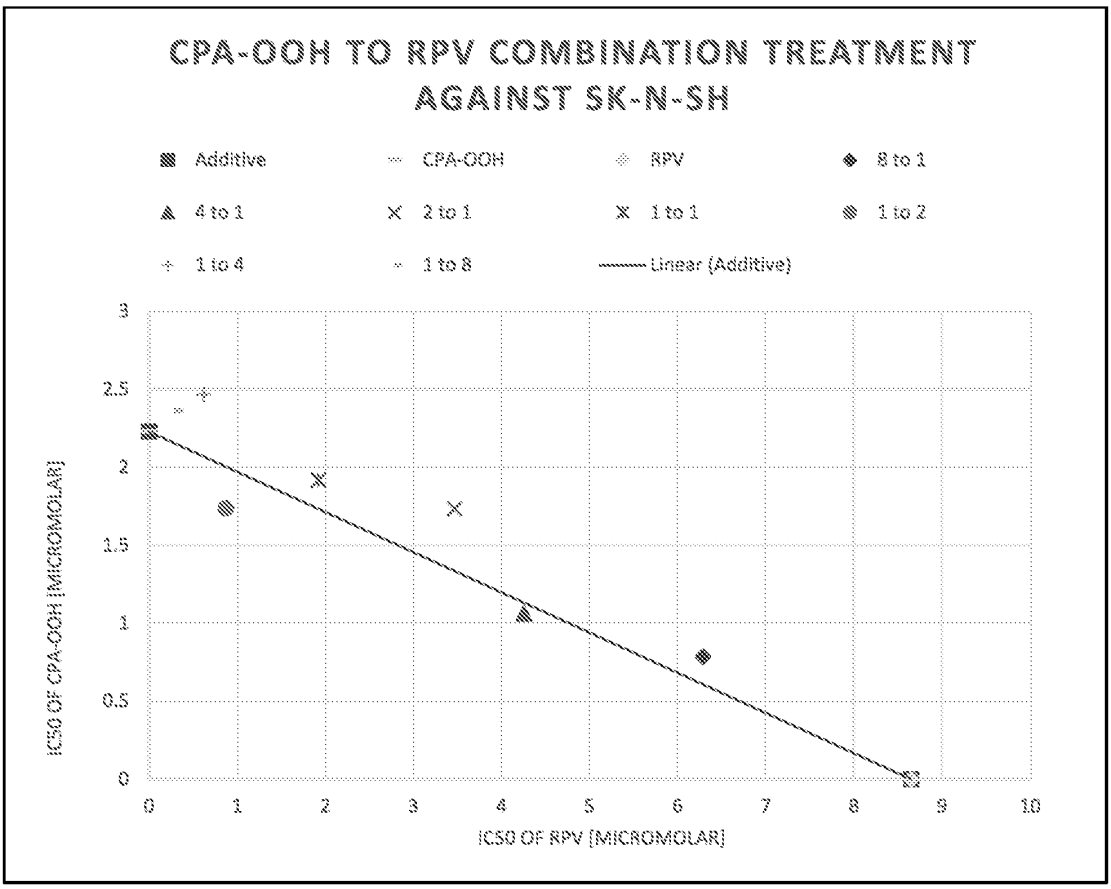

CPA-OOH TO RPV COMBINATION TREATMENT AGAINST SK-N-SH
Additive
CPA-OOH
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
IC50 OF CPA-OOH [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
0.5
1
1.5
2
2.5
3
0
1
2
3
4
5
6
7
8
9
10

FIG. 8

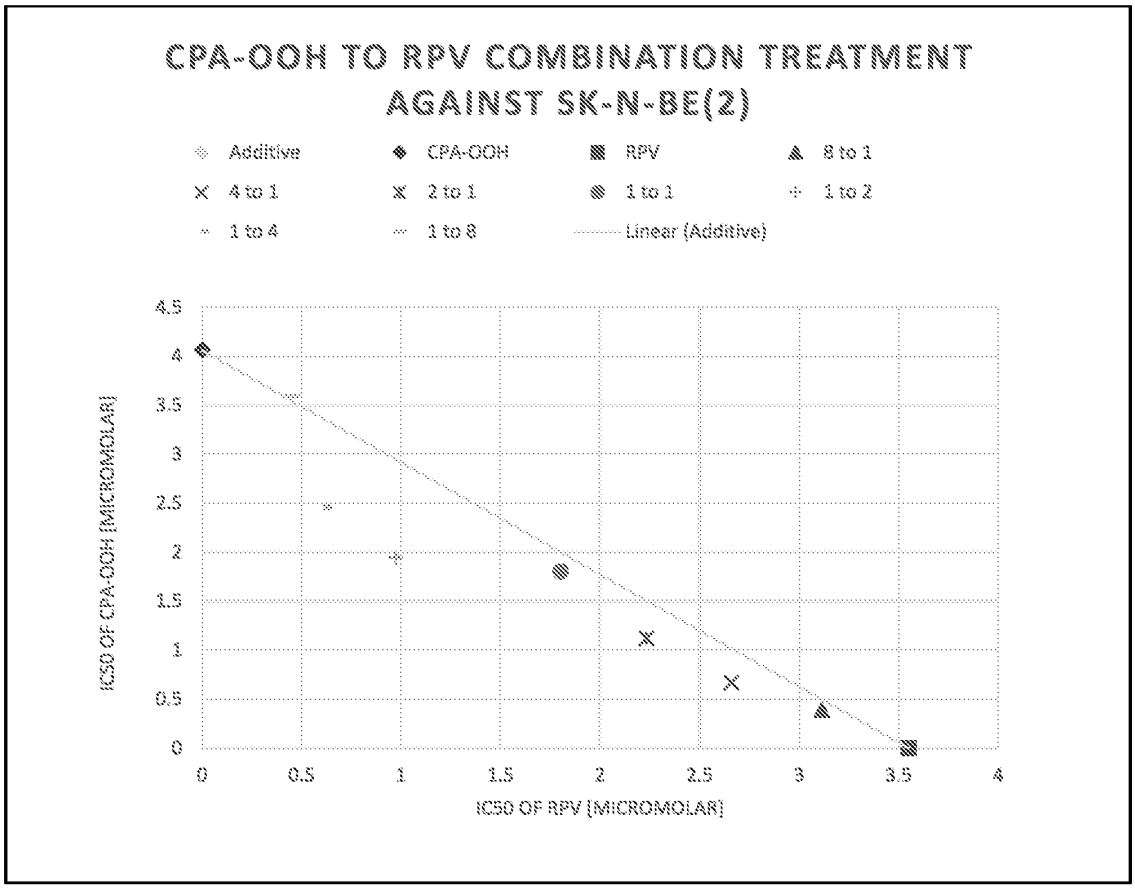

CPA-OOH TO RPV COMBINATION TREATMENT AGAINST SK-N-BE(2)
Additive
CPA-OOH
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
IC50 OF CPA-OOH [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5

FIG. 9

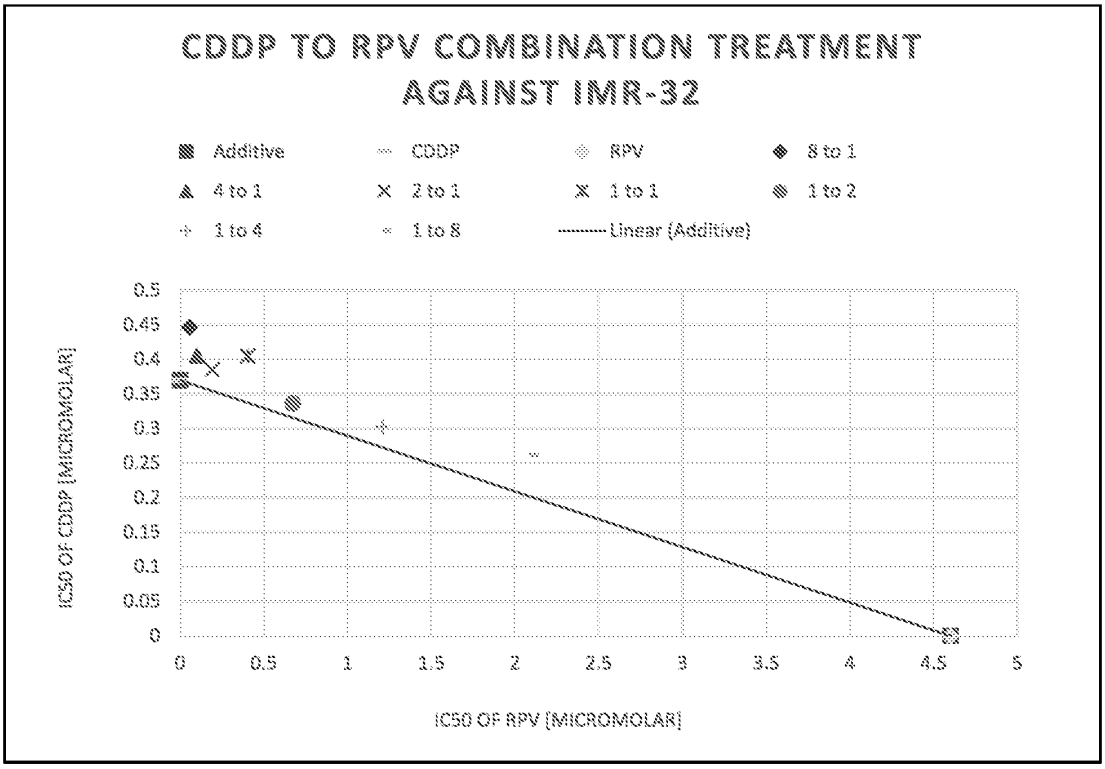

CDDP TO RPV COMBINATION TREATMENT AGAINST IMR-32
Additive
CDDP
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
IC50 OF CDDP [MICROMOLAR]
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IC50 OF RPV [MICROMOLAR]

FIG. 10

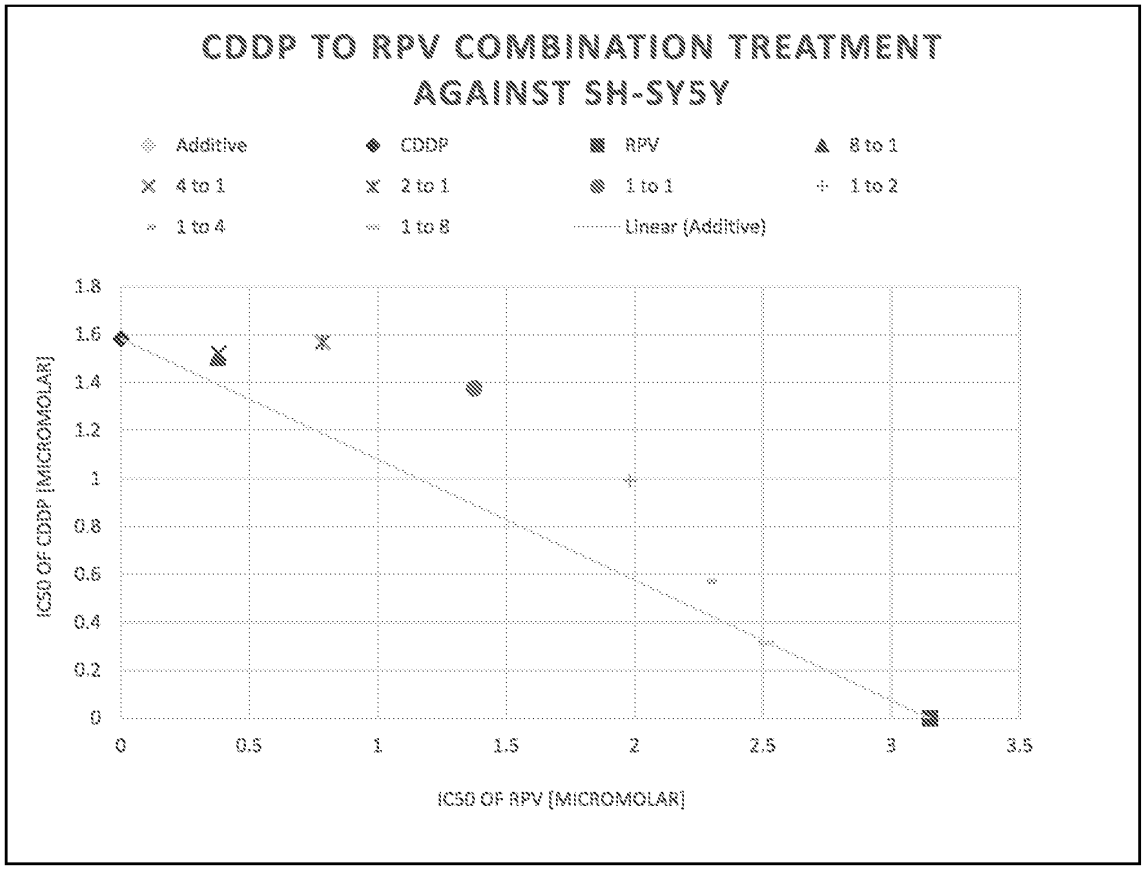

CDDP TO RPV COMBINATION TREATMENT AGAINST SH-SY5Y
Additive
CDDP
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
IC50 OF CDDP [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
0
0.5
1
1.5
2
2.5
3
3.5

FIG. 11

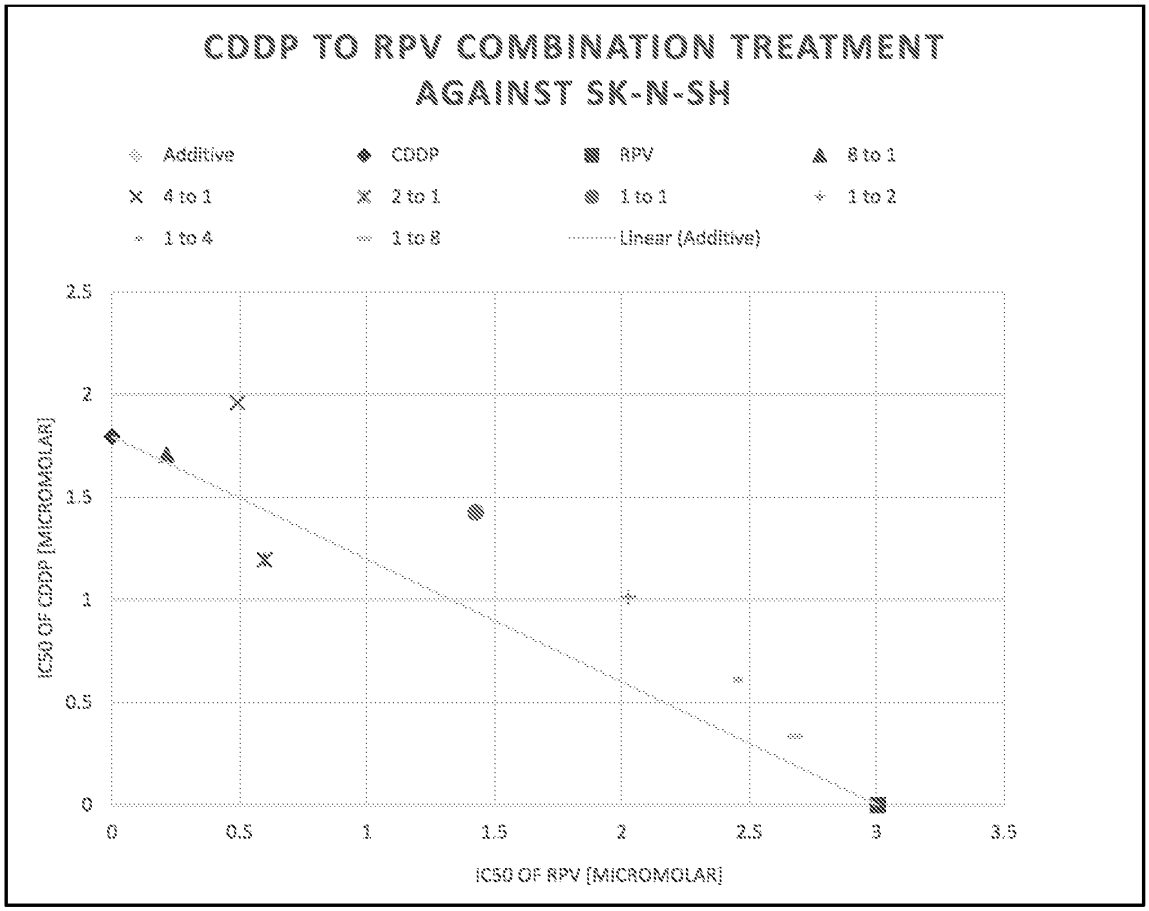

CDDP TO RPV COMBINATION TREATMENT
AGAINST SK-N-SH
Additive
CDDP
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
ICSO OF CDDP [MICROMOLAR]
ICSO OF RPV [MICROMOLAR]
0
0.5
1
1.5
2
2.5
3
3.5

FIG. 12

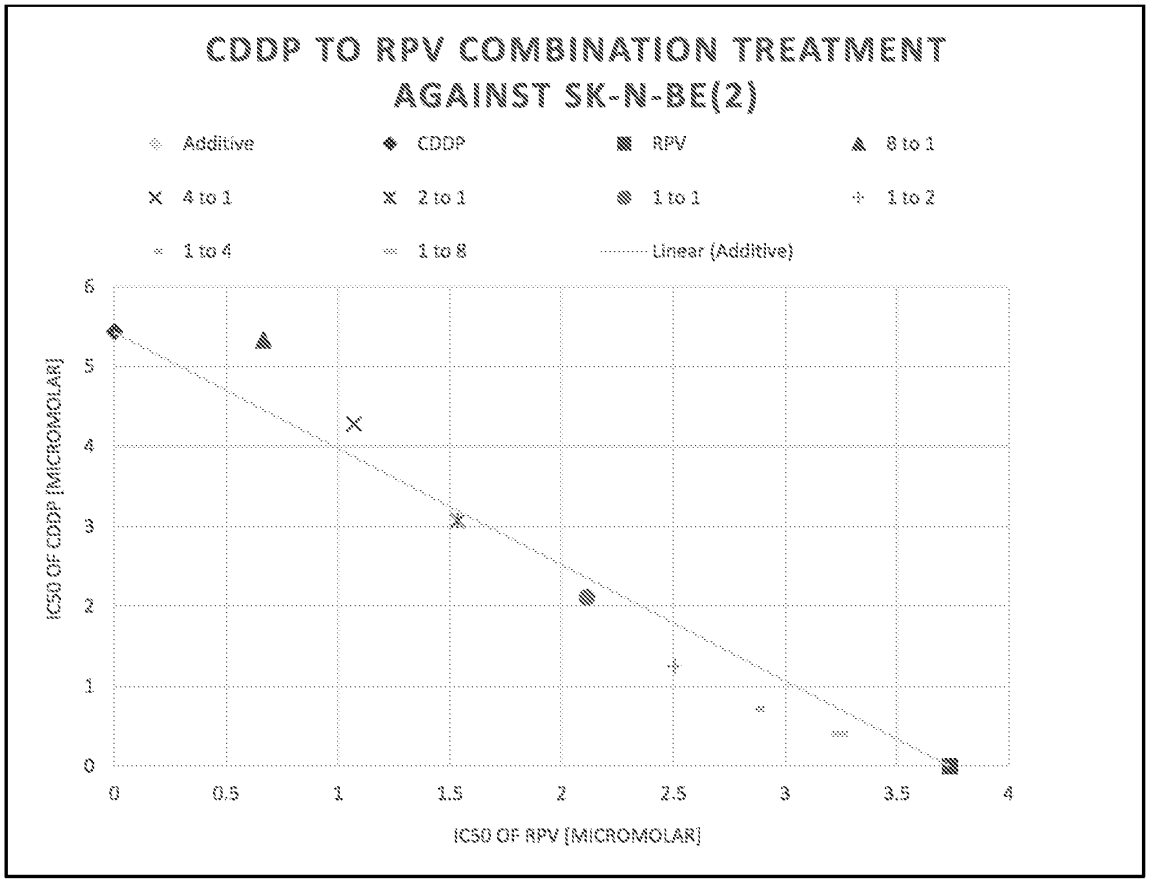

CDDP TO RPV COMBINATION TREATMENT AGAINST SK-N-BE(2)
Additive
CDDP
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
IC50 OF CDDP [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
1
2
3
4
5
6
0
0.5
1
1.5
2
2.5
3
3.5
4

FIG. 13

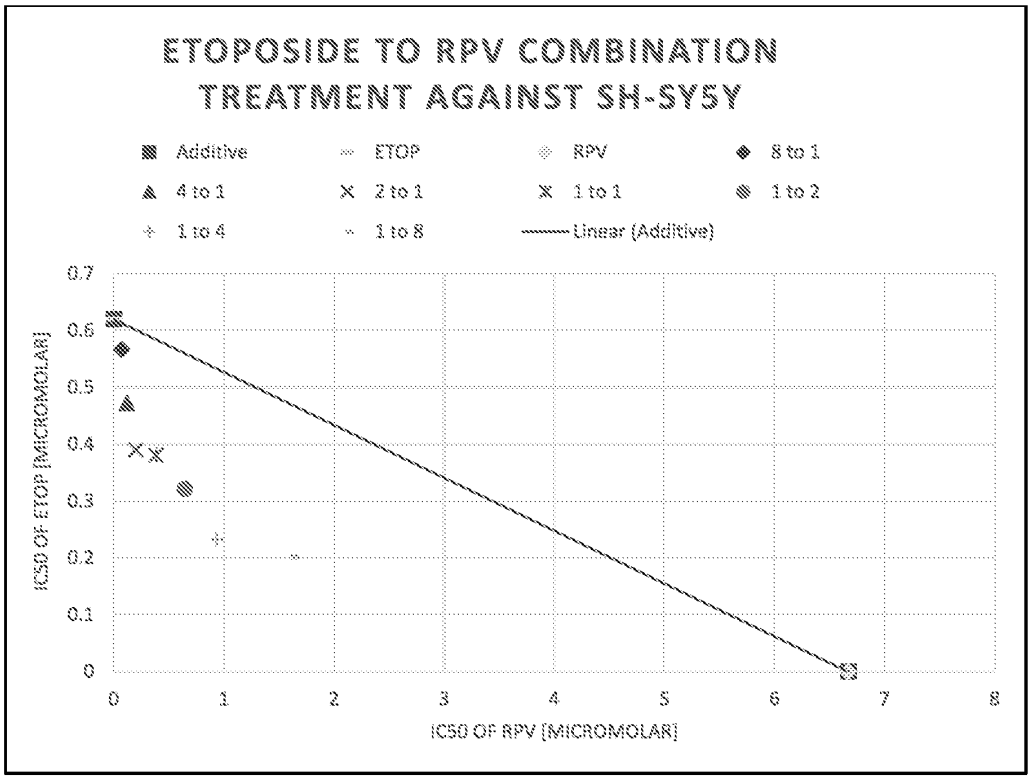

ETOPOSIDE TO RPV COMBINATION TREATMENT AGAINST SH-SY5Y
Additive
ETOP
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
IC50 OF ETOP [MICROMOLAR]
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
1
2
3
4
5
6
7
8
IC50 OF RPV [MICROMOLAR]

FIG. 14

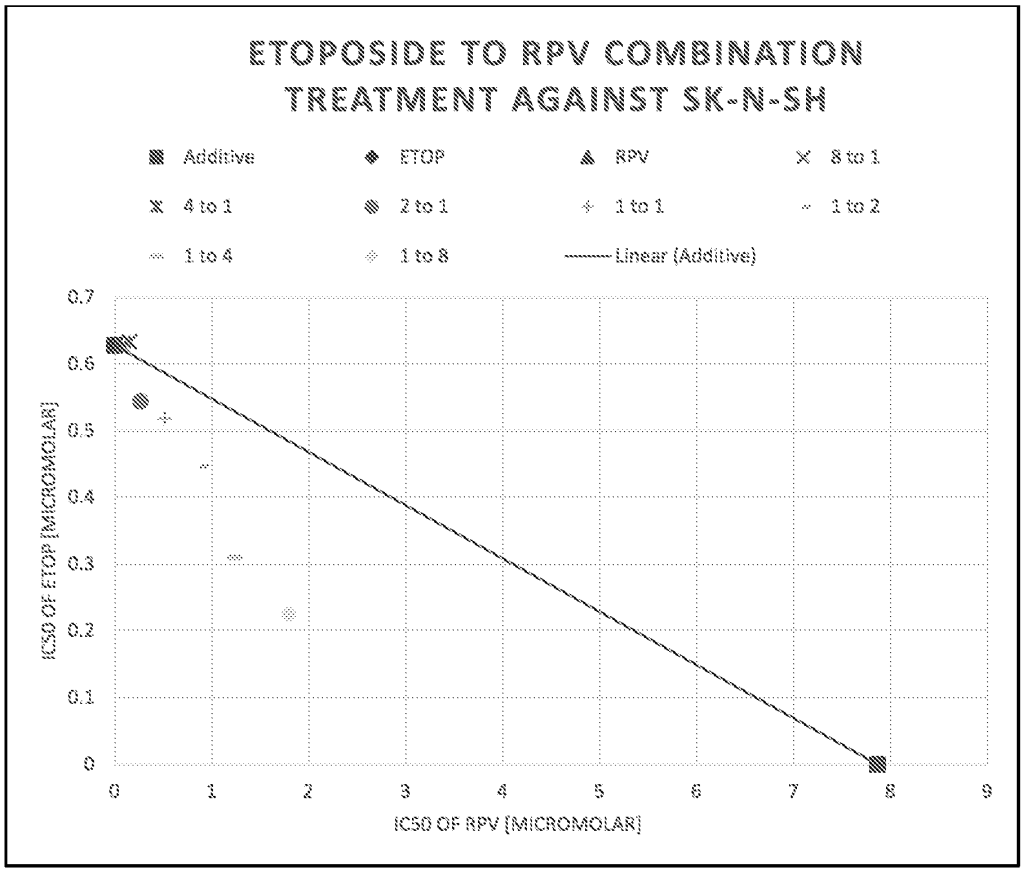

ETOPOSIDE TO RPV COMBINATION TREATMENT AGAINST SK-N-SH
Additive
ETOP
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
IC50 OF ETOP [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0
1
2
3
4
5
6
7
8
9

FIG. 15

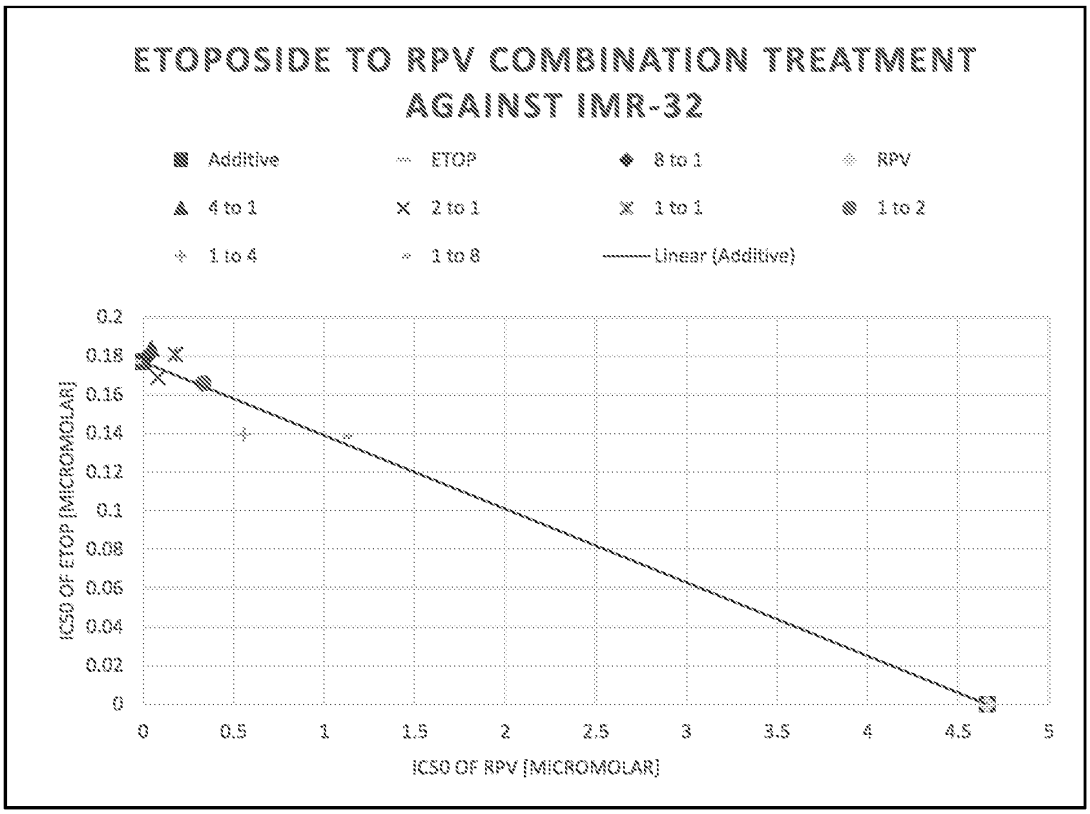

ETOPOSIDE TO RPV COMBINATION TREATMENT AGAINST IMR-32
Additive
ETOP
8 to 1
RPV
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
ICS0 OF ETOP [MICROMOLAR]
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
ICS0 OF RPV [MICROMOLAR]

FIG. 16

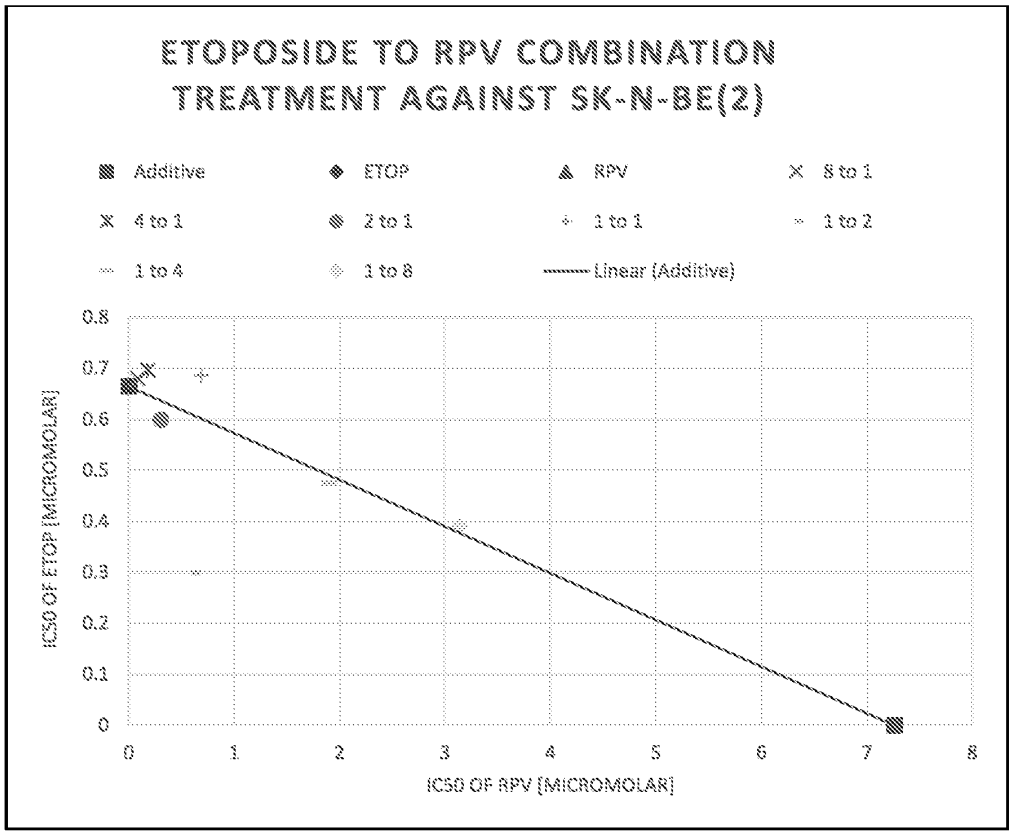

ETOPOSIDE TO RPV COMBINATION TREATMENT AGAINST SK-N-BE(2)
Additive
ETOP
RPV
8 to 1
4 to 1
2 to 1
1 to 1
1 to 2
1 to 4
1 to 8
Linear (Additive)
IC50 OF ETOP [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0
1
2
3
4
5
6
7
8

FIG. 17

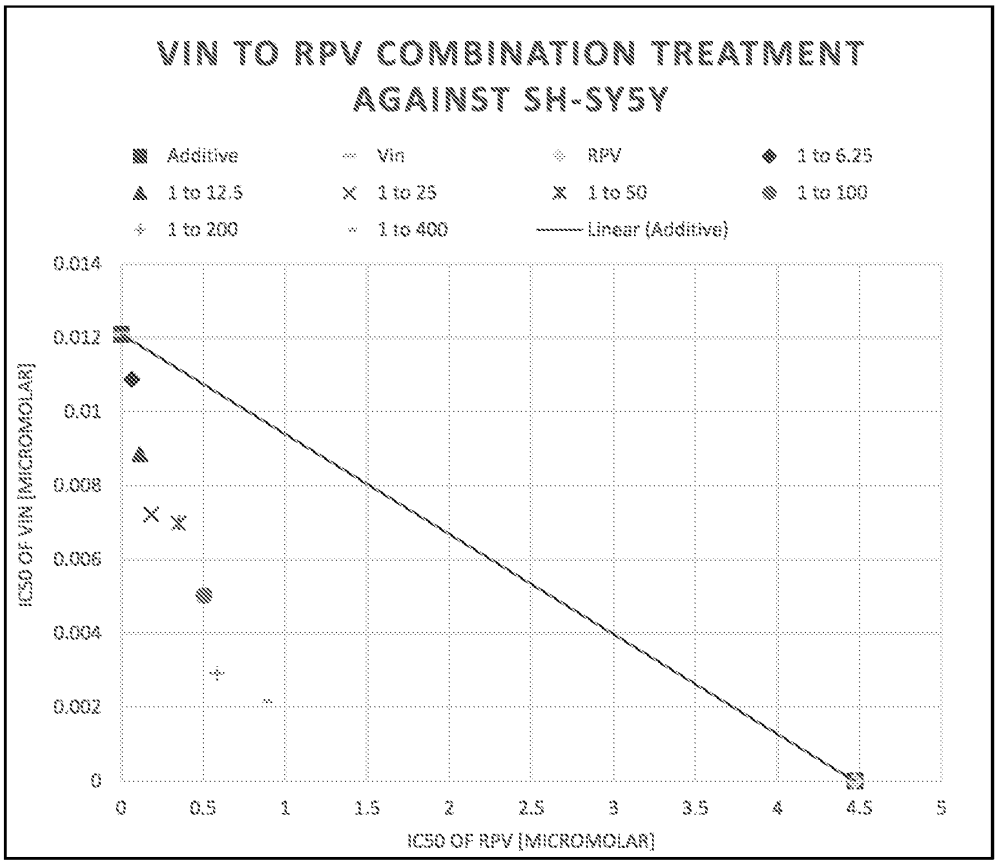

VIN TO RPV COMBINATION TREATMENT AGAINST SH-SY5Y
Additive
Vin
RPV
1 to 6.25
1 to 12.5
1 to 25
1 to 50
1 to 100
1 to 200
1 to 400
Linear (Additive)
IC50 OF VIN [MICROMOLAR]
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IC50 OF RPV [MICROMOLAR]

FIG. 18

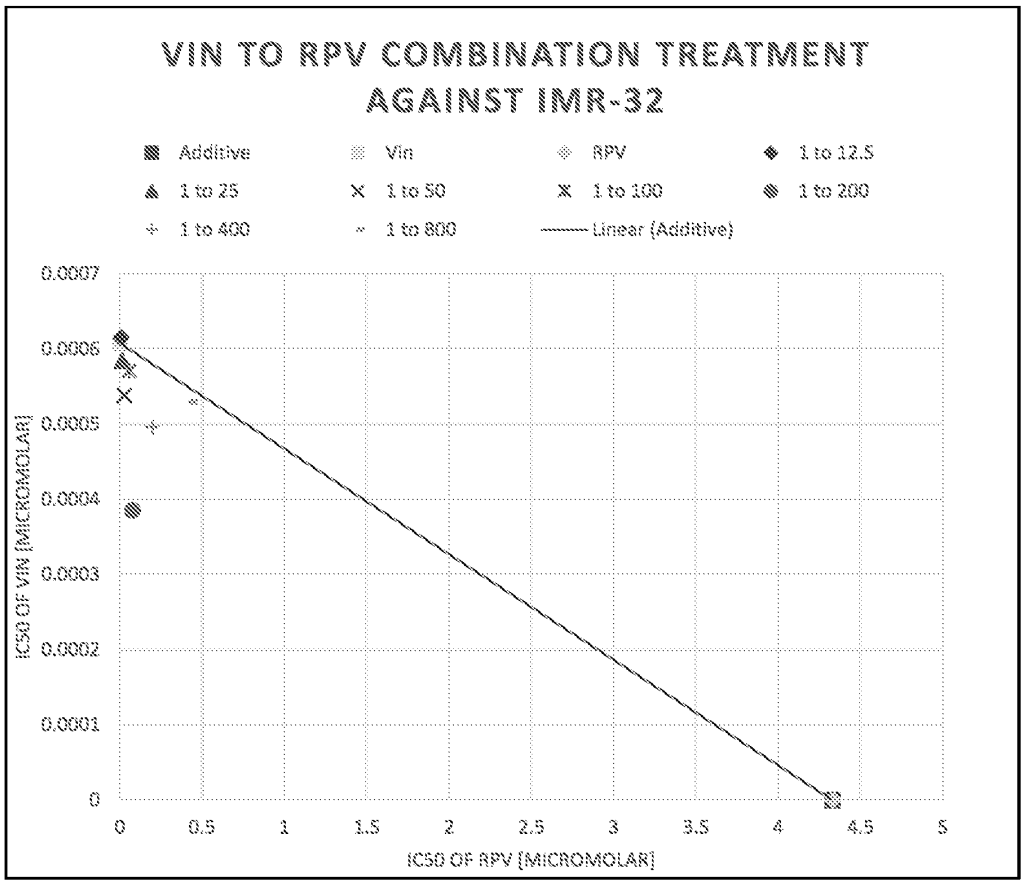

VIN TO RPV COMBINATION TREATMENT AGAINST IMR-32
Additive
Vin
RPV
1 to 12.5
1 to 25
1 to 50
1 to 100
1 to 200
1 to 400
1 to 800
Linear (Additive)
0.0007
0.0006
0.0005
0.0004
0.0003
0.0002
0.0001
0
IC50 OF VIN [MICROMOLAR]
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
IC50 OF RPV [MICROMOLAR]

FIG. 19

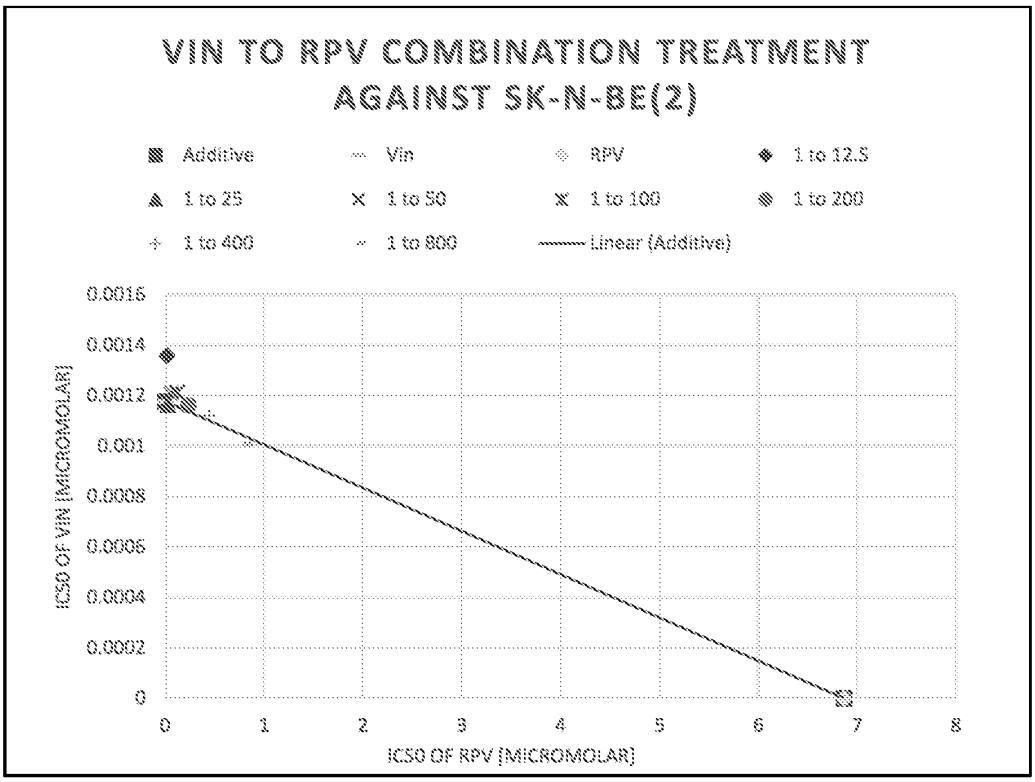

VIN TO RPV COMBINATION TREATMENT AGAINST SK-N-BE(2)
Additive
Vin
RPV
1 to 12.5
1 to 25
1 to 50
1 to 100
1 to 200
1 to 400
1 to 800
Linear (Additive)
ICS0 OF VIN [MICROMOLAR]
0.0016
0.0014
0.0012
0.001
0.0008
0.0006
0.0004
0.0002
0
0
1
2
3
4
5
6
7
8
ICS0 OF RPV [MICROMOLAR]

FIG. 20

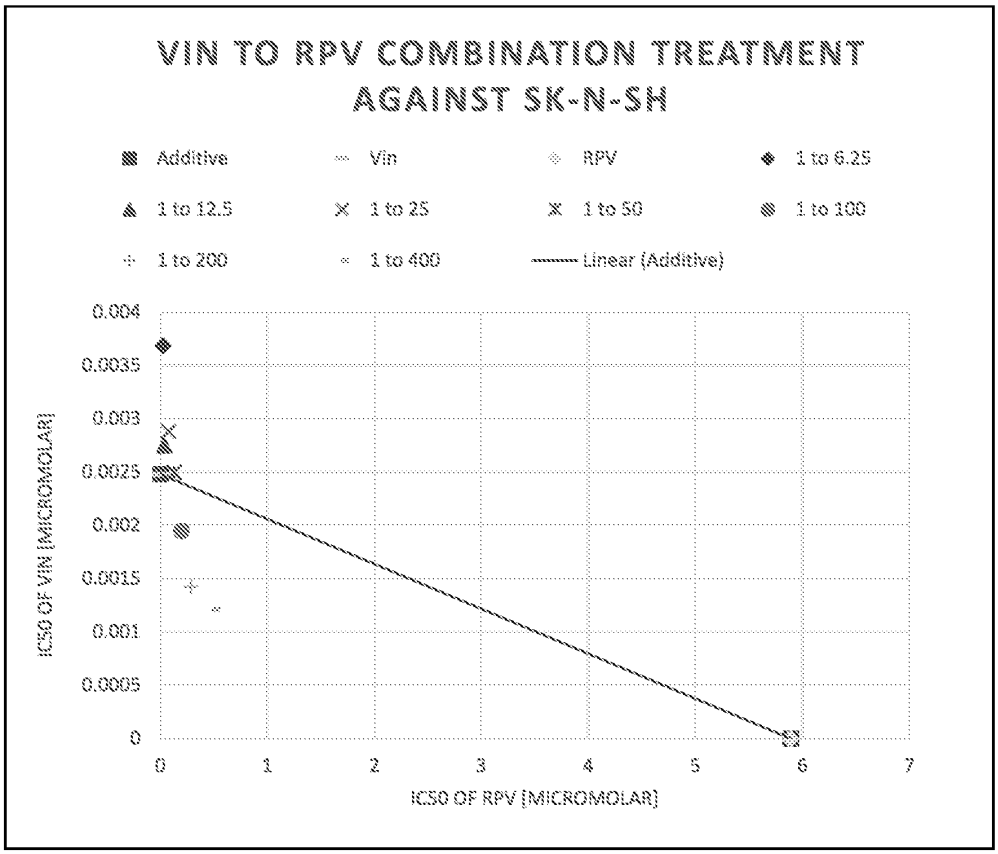

VIN TO RPV COMBINATION TREATMENT AGAINST SK-N-SH
Additive
Vin
RPV
1 to 6.25
1 to 12.5
1 to 25
1 to 50
1 to 100
1 to 200
1 to 400
Linear (Additive)
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
IC50 OF VIN [MICROMOLAR]
0
1
2
3
4
5
6
7
IC50 OF RPV [MICROMOLAR]

FIG. 21

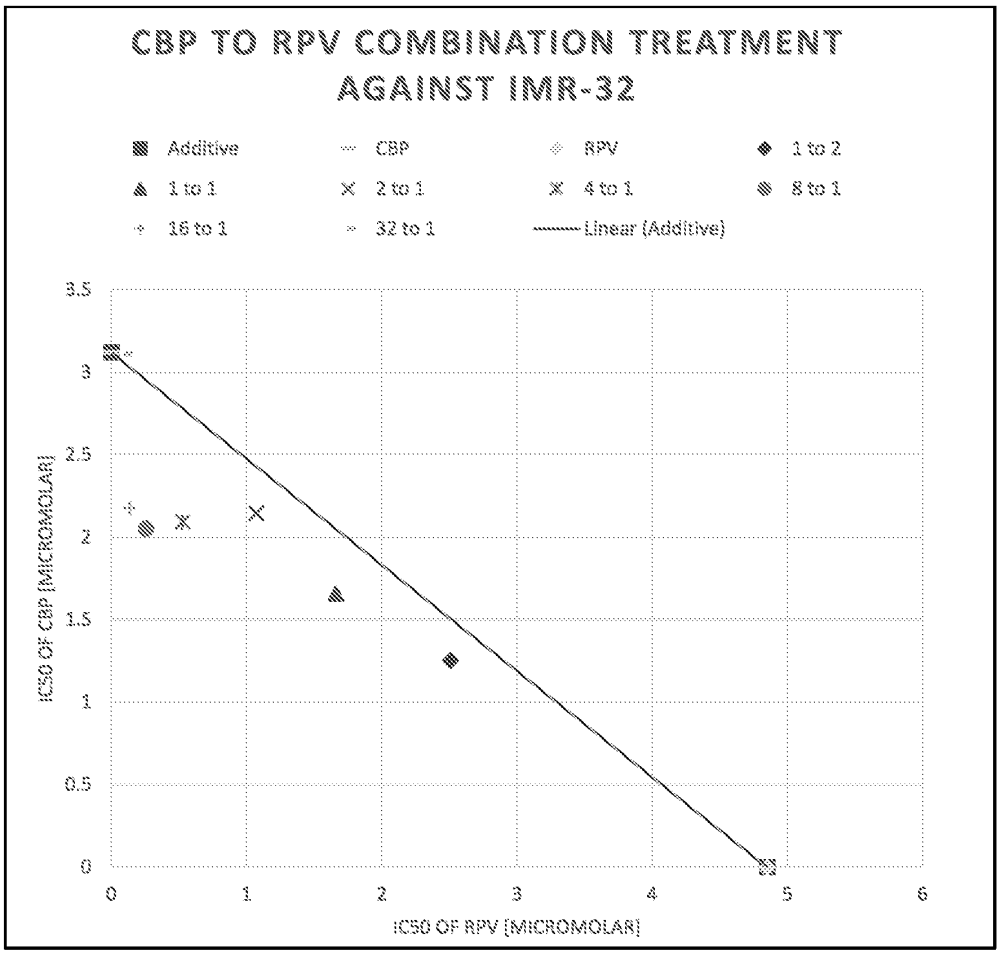

CBP TO RPV COMBINATION TREATMENT AGAINST IMR-32
Additive
CBP
RPV
1 to 2
1 to 1
2 to 1
4 to 1
8 to 1
16 to 1
32 to 1
Linear (Additive)
IC50 OF CBP [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
0.5
1
1.5
2
2.5
3
3.5
0
1
2
3
4
5
6

FIG. 22

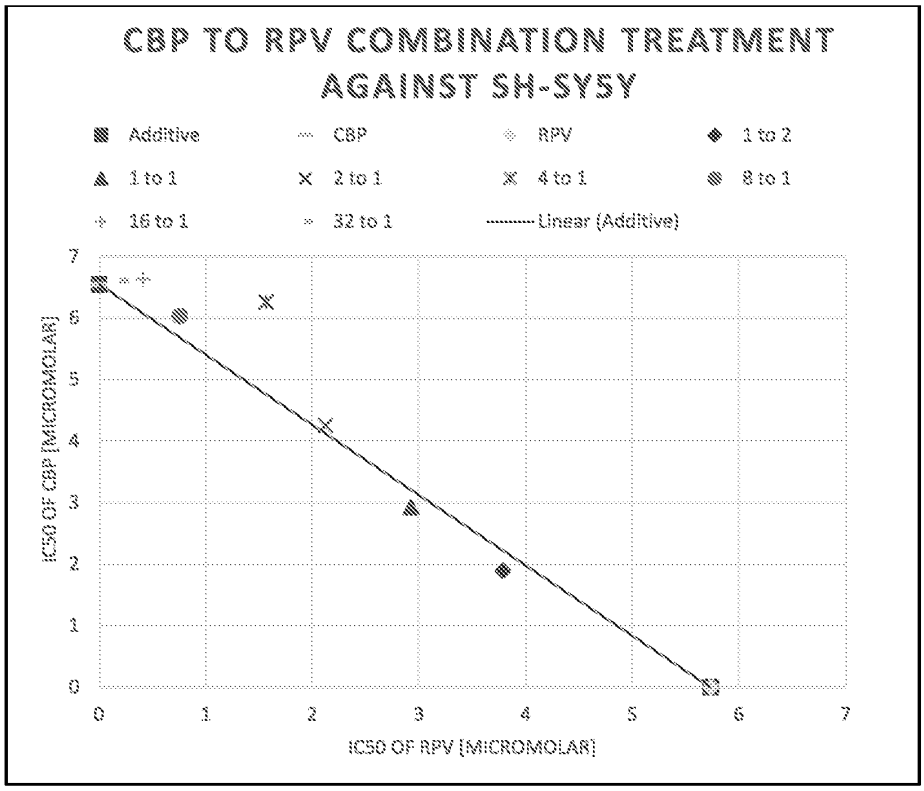

CBP TO RPV COMBINATION TREATMENT AGAINST SH-SYSY
Additive
CBP
RPV
1 to 2
1 to 1
2 to 1
4 to 1
8 to 1
16 to 1
32 to 1
Linear (Additive)
IC50 OF CBP [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
1
2
3
4
5
6
7

FIG. 23

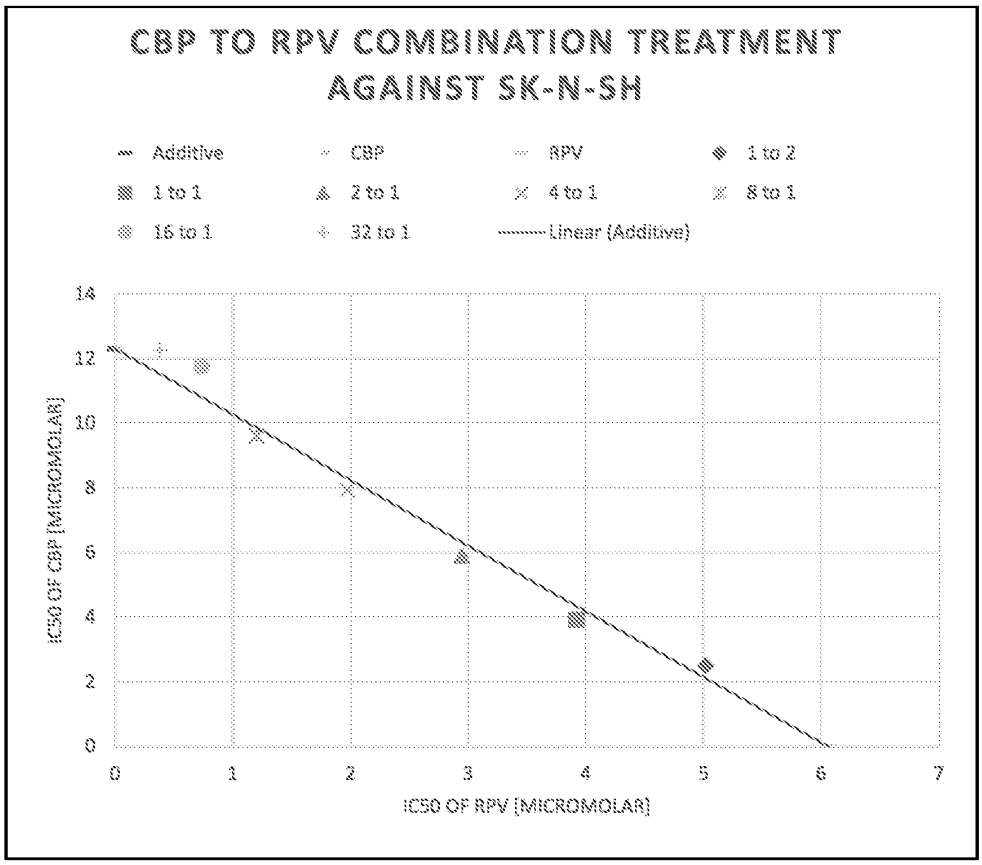

CBP TO RPV COMBINATION TREATMENT AGAINST SK-N-SH
Additive
CBP
RPV
1 to 2
1 to 1
2 to 1
4 to 1
8 to 1
16 to 1
32 to 1
Linear (Additive)
IC50 OF CBP [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
2
4
6
8
10
12
14
0
1
2
3
4
5
6
7

FIG. 24

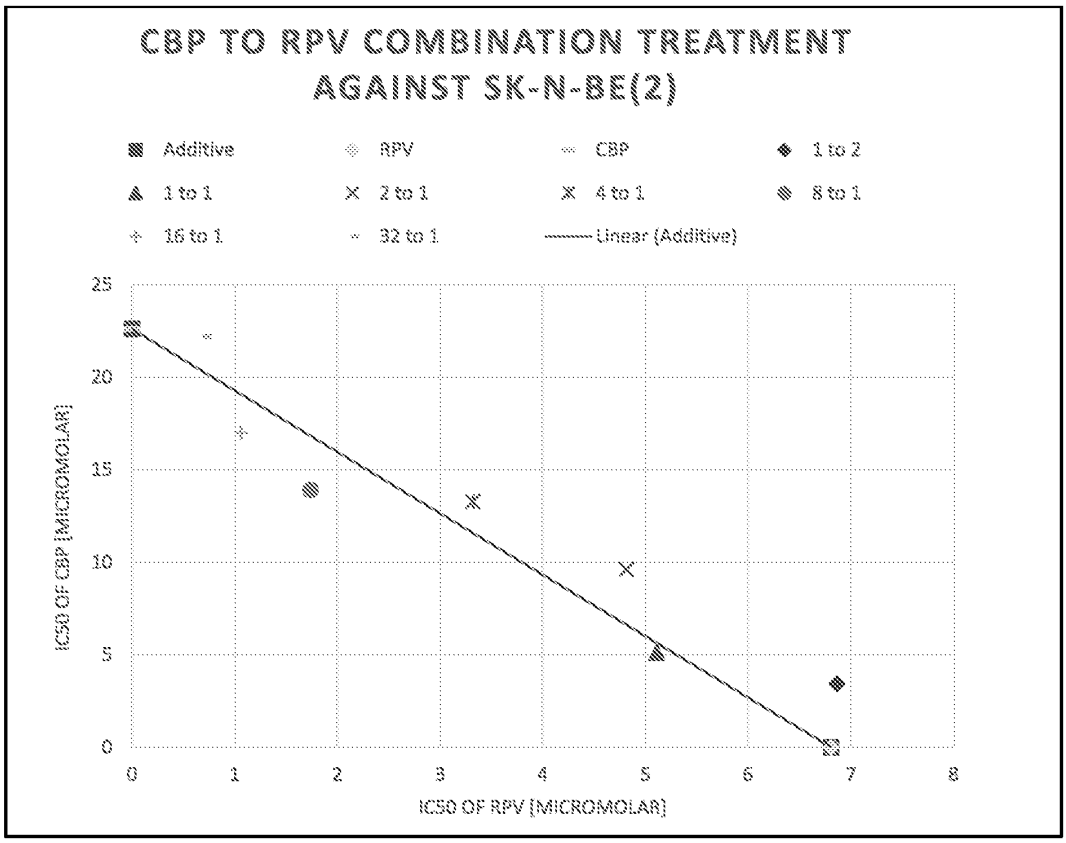

CBP TO RPV COMBINATION TREATMENT AGAINST SK-N-BE(2)
Additive
RPV
CBP
1 to 2
1 to 1
2 to 1
4 to 1
8 to 1
16 to 1
32 to 1
Linear (Additive)
IC50 OF CBP [MICROMOLAR]
IC50 OF RPV [MICROMOLAR]
0
5
10
15
20
25
0
1
2
3
4
5
6
7
8

FIG. 25

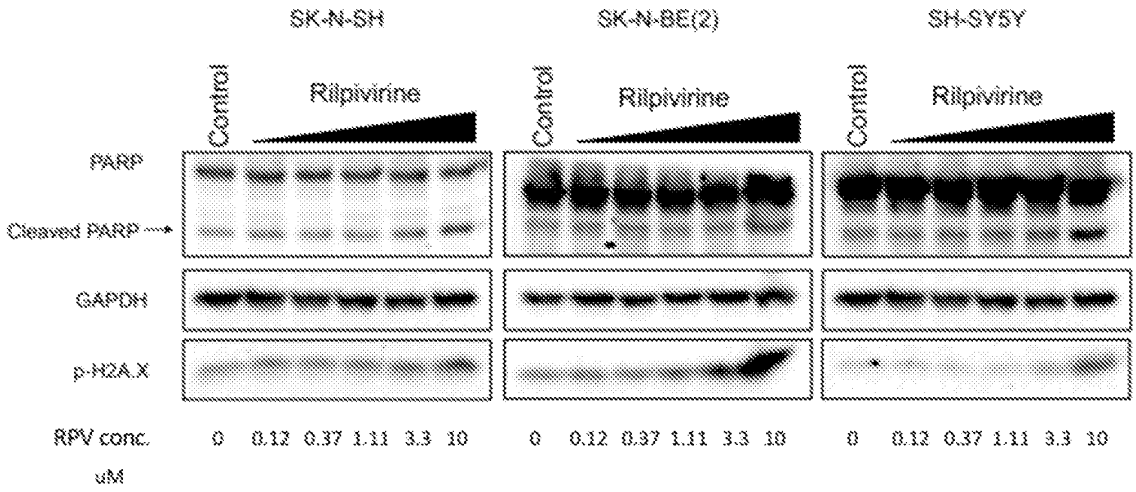

SK-N-SH
SK-N-BE(2)
SH-SY5Y
Control
Rilpivirine
PARP
Cleaved PARP
GAPDH
p-H2A.X
RPV conc. uM
0 0.12 0.37 1.11 3.3 10

FIG. 26

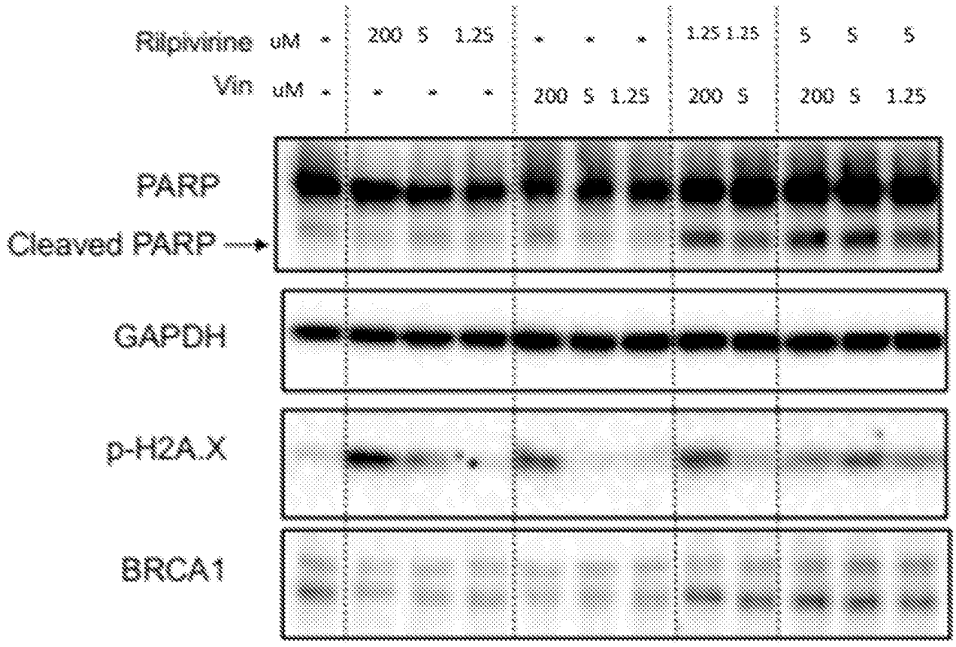
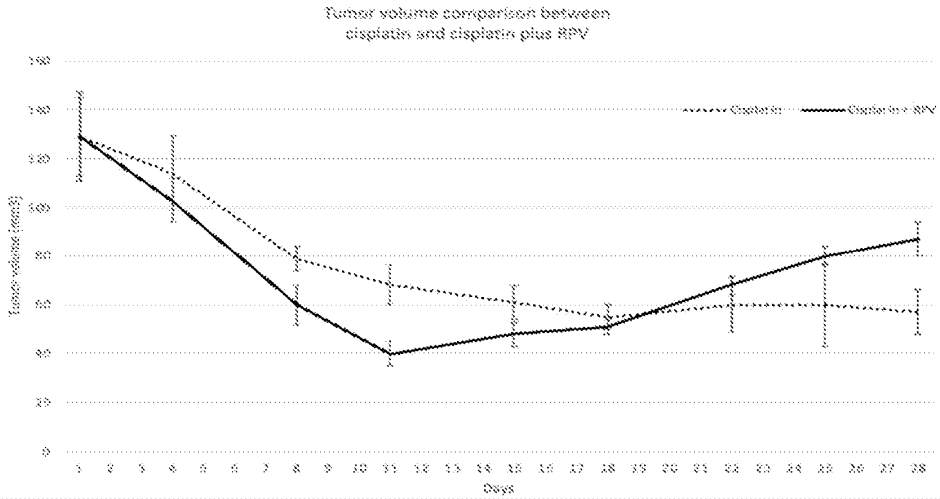
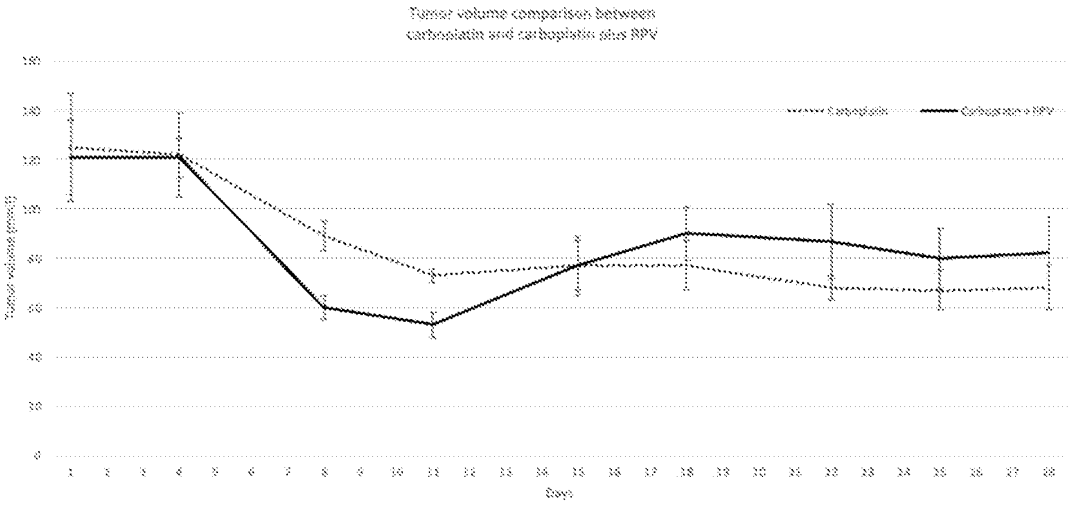

Rilpivirine uM
Vin uM
200 5 1.25
1.25 1.25
PARP
Cleaved PARP
GAPDH
p-H2A.X
BRCA1

FIG. 27



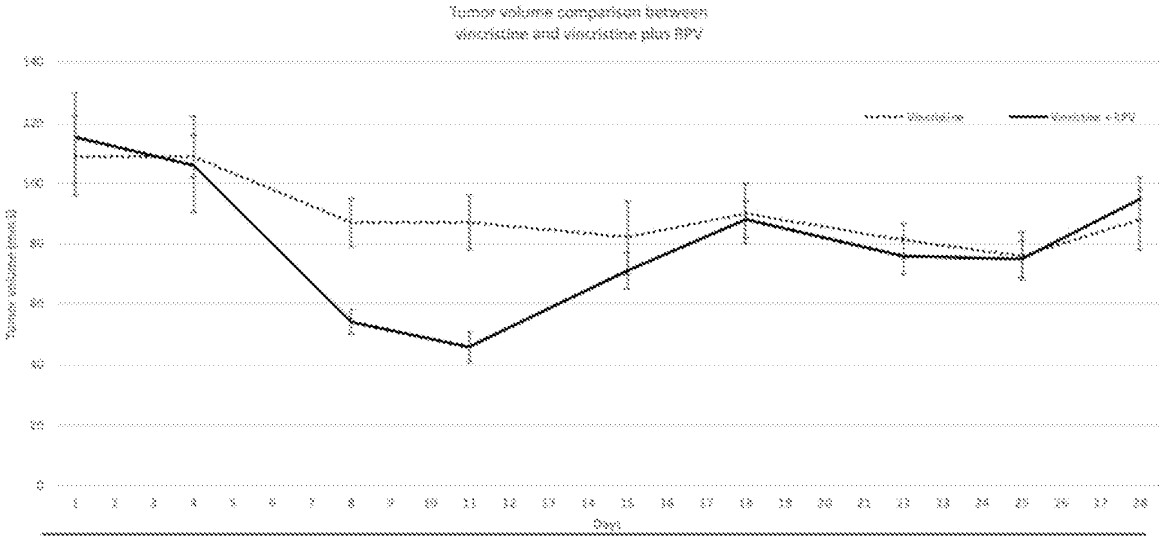
	D1	D4	D8	D11	D15	D18	D22	D25	D28
Cisplatin TGI (%)	NA	42	69	79	88	92	93	94	96
Cisplatin T/C (%)	NA	58	31	21	12	8	7	6	4
Cisplatin + RPV TGI (%)	NA	47	77	88	91	93	92	93	94
Cisplatin + RPV T/C (%)	NA	53	23	12	9	7	8	7	6

FIG. 28



	D1	D4	D8	D11	D15	D18	D22	D25	D28
Carboplatin TGI (%)	NA	38	65	77	85	89	92	93	95
Carboplatin T/C (%)	NA	62	35	23	15	11	8	7	5
Carboplatin + RPV TGI (%)	NA	38	77	84	85	87	90	93	94
Carboplatin + RPV T/C (%)	NA	62	23	16	15	13	10	7	6

FIG. 29



	D1	D4	D8	D11	D15	D18	D22	D25	D28
Vincristine TGI (%)	NA	44	66	73	84	87	91	93	93
Vincristine T/C (%)	NA	56	34	27	16	13	9	7	7
Vincristine + RPV TGI (%)	NA	46	79	86	86	88	91	93	93
Vincristine + RPV T/C (%)	NA	54	21	14	14	12	9	7	7

FIG. 30

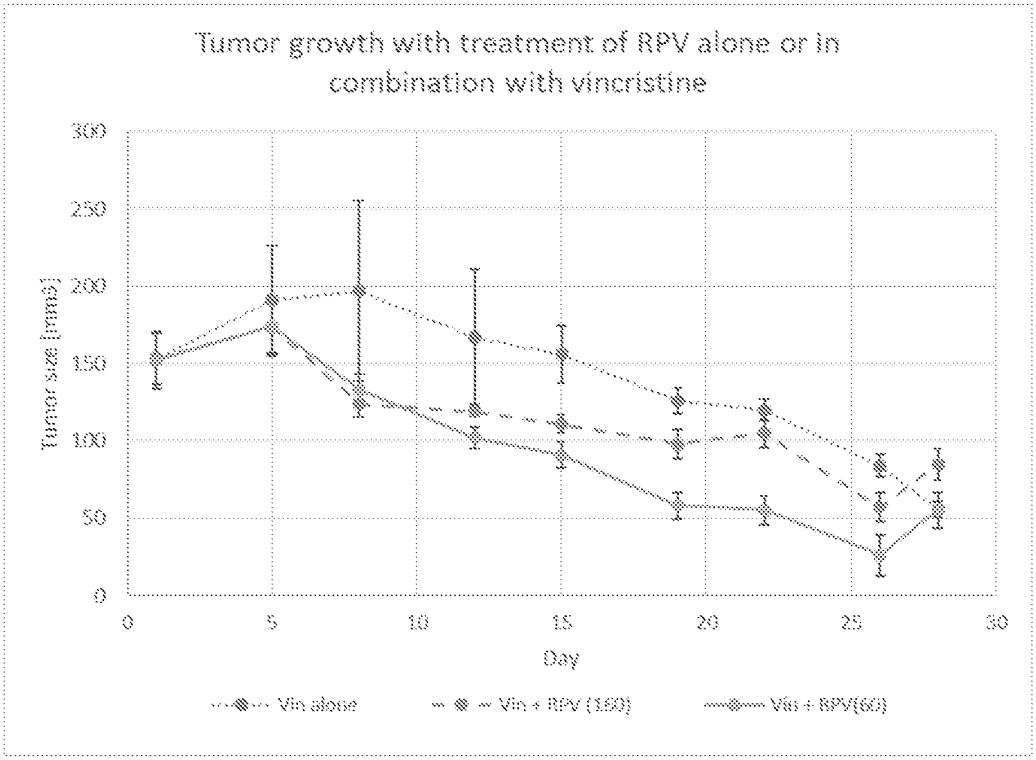

Tumor growth with treatment of RPV alone or in combination with vincristine
Tumor size [mm3]
300
250
200
150
100
50
0
0
5
10
15
20
25
30
Day
Vin alone
Vin + RPV (150)
Vin + RPV(60)

FIG. 31

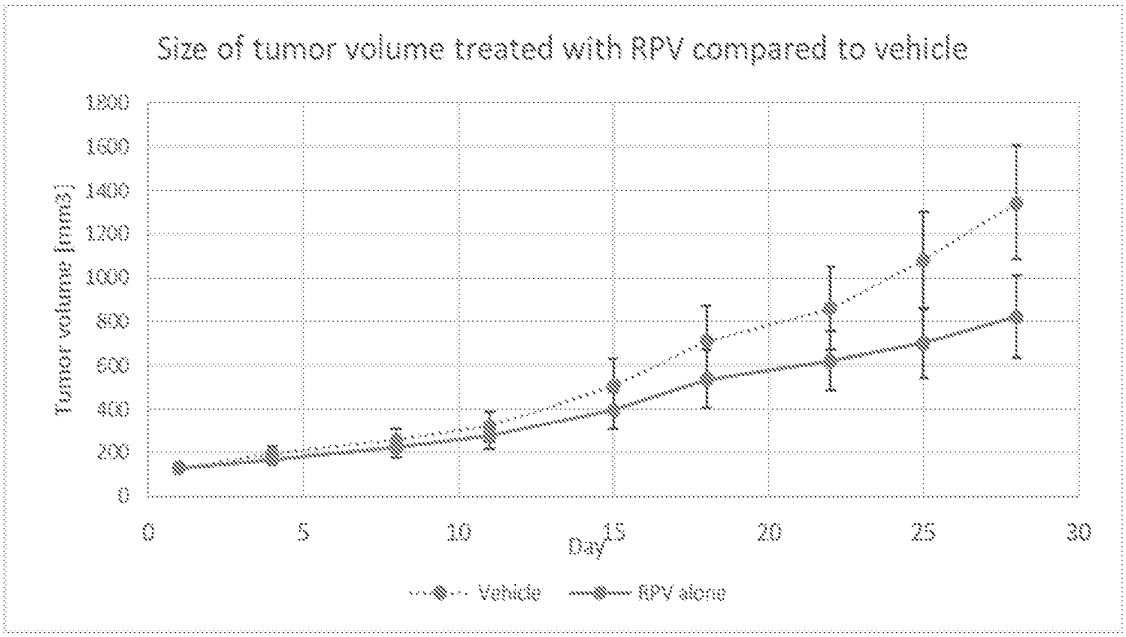

Size of tumor volume treated with RPV compared to vehicle
Tumor volume [mm3]
1800
1600
1400
1200
1000
800
600
400
200
0
0
5
10
15
20
25
30
Day
Vehicle
RPV alone

FIG. 32