Fig. 1

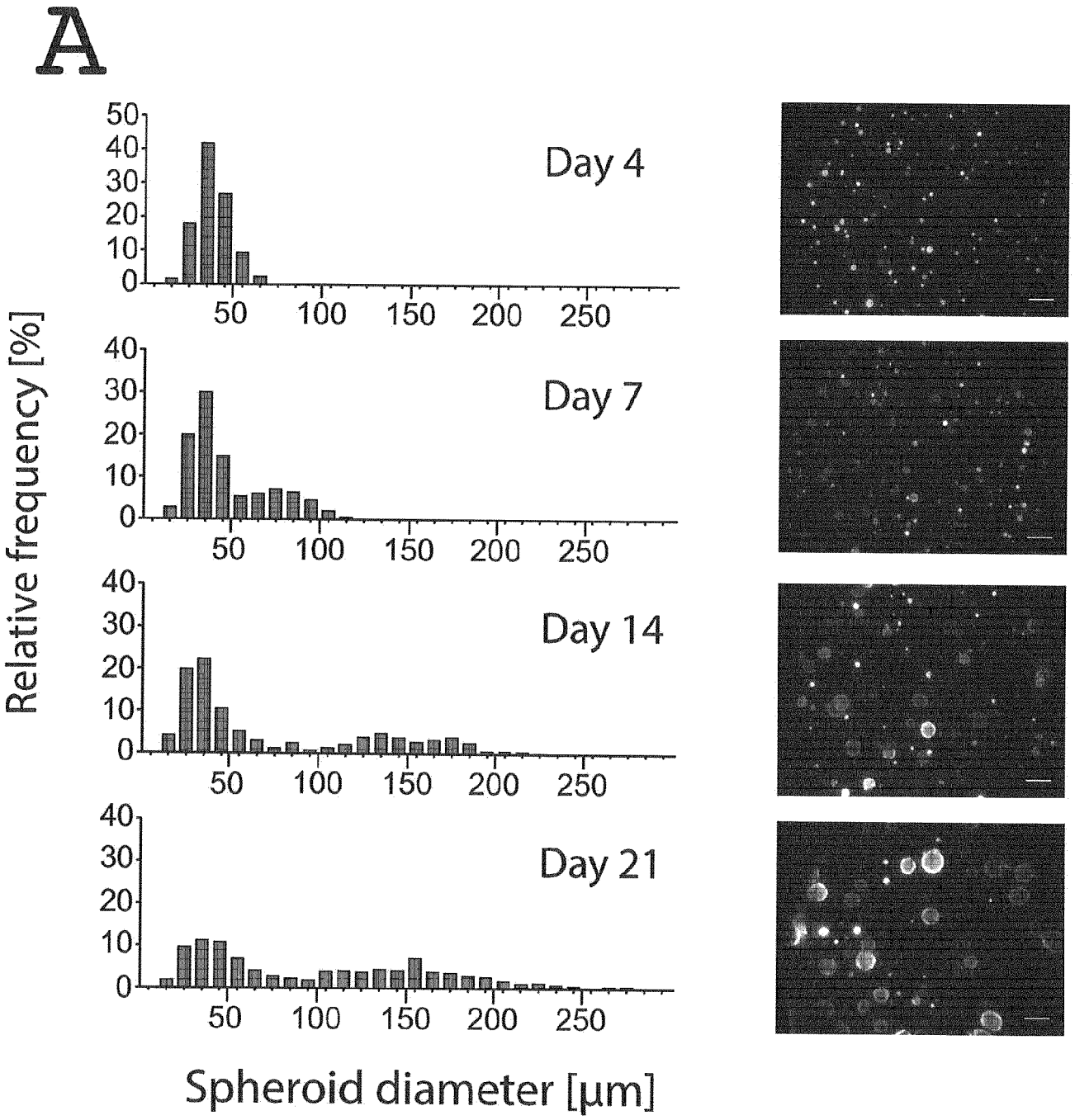

A
Day 4
Day 7
Day 14
Day 21
Relative frequency [%]
Spheroid diameter [µm]
0
10
20
30
40
50
50
100
150
200
250

Fig. 1

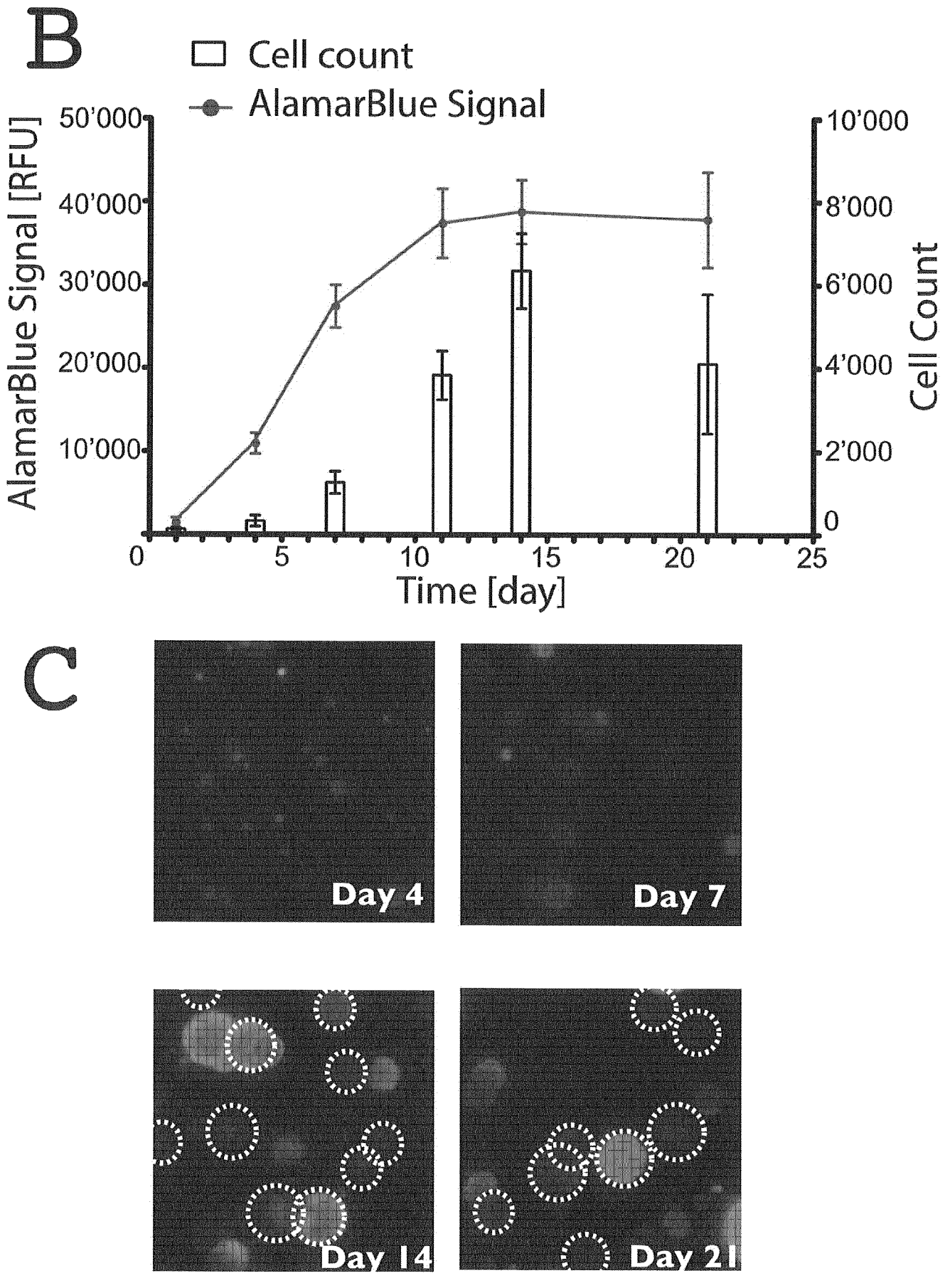

B
Cell count
AlamarBlue Signal
AlamarBlue Signal [RFU]
50'000
40'000
30'000
20'000
10'000
10'000
8'000
6'000
4'000
2'000
0
Cell Count
0
5
10
15
20
25
Time [day]
C
Day 4
Day 7
Day 14
Day 21

Fig. 2

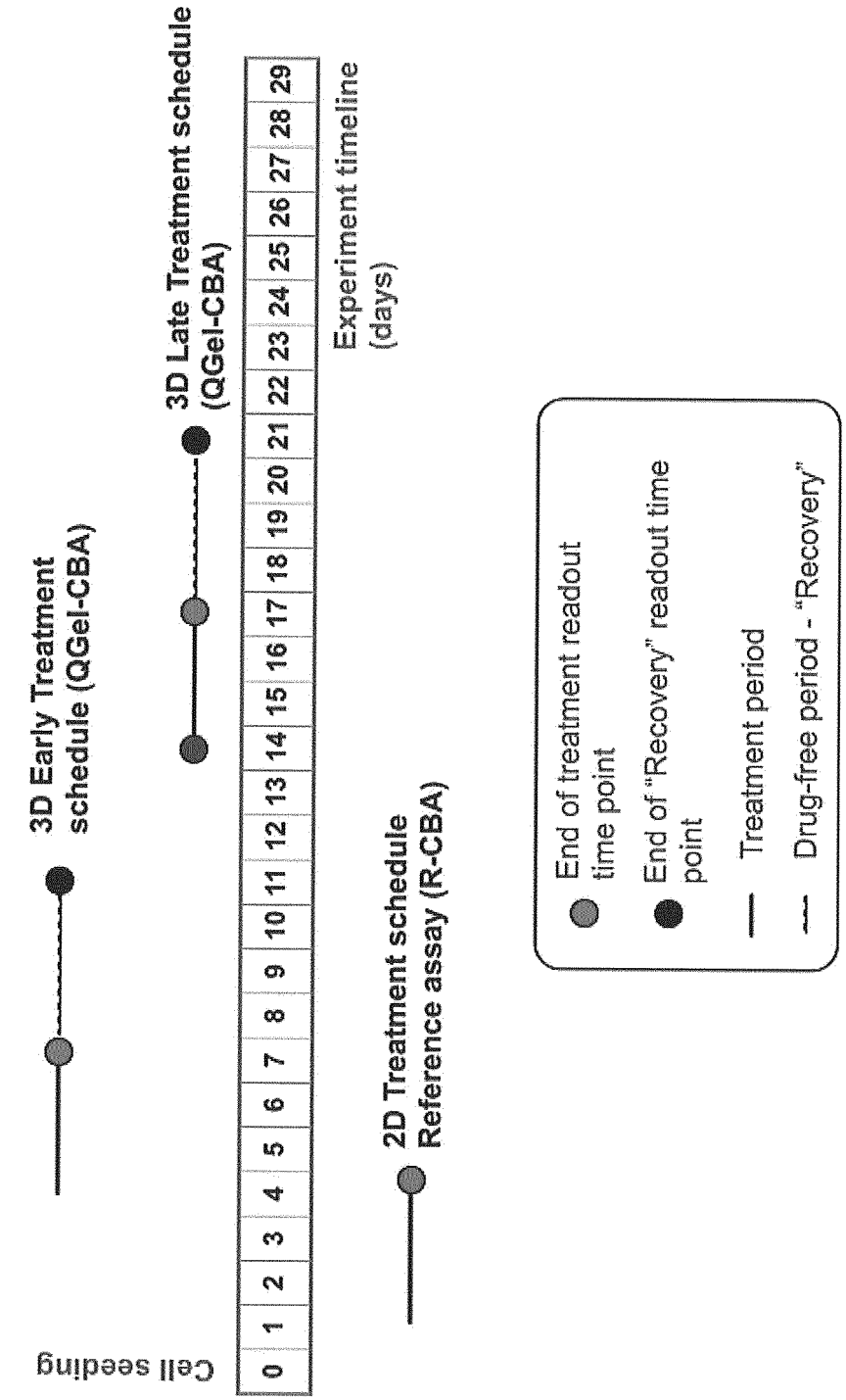
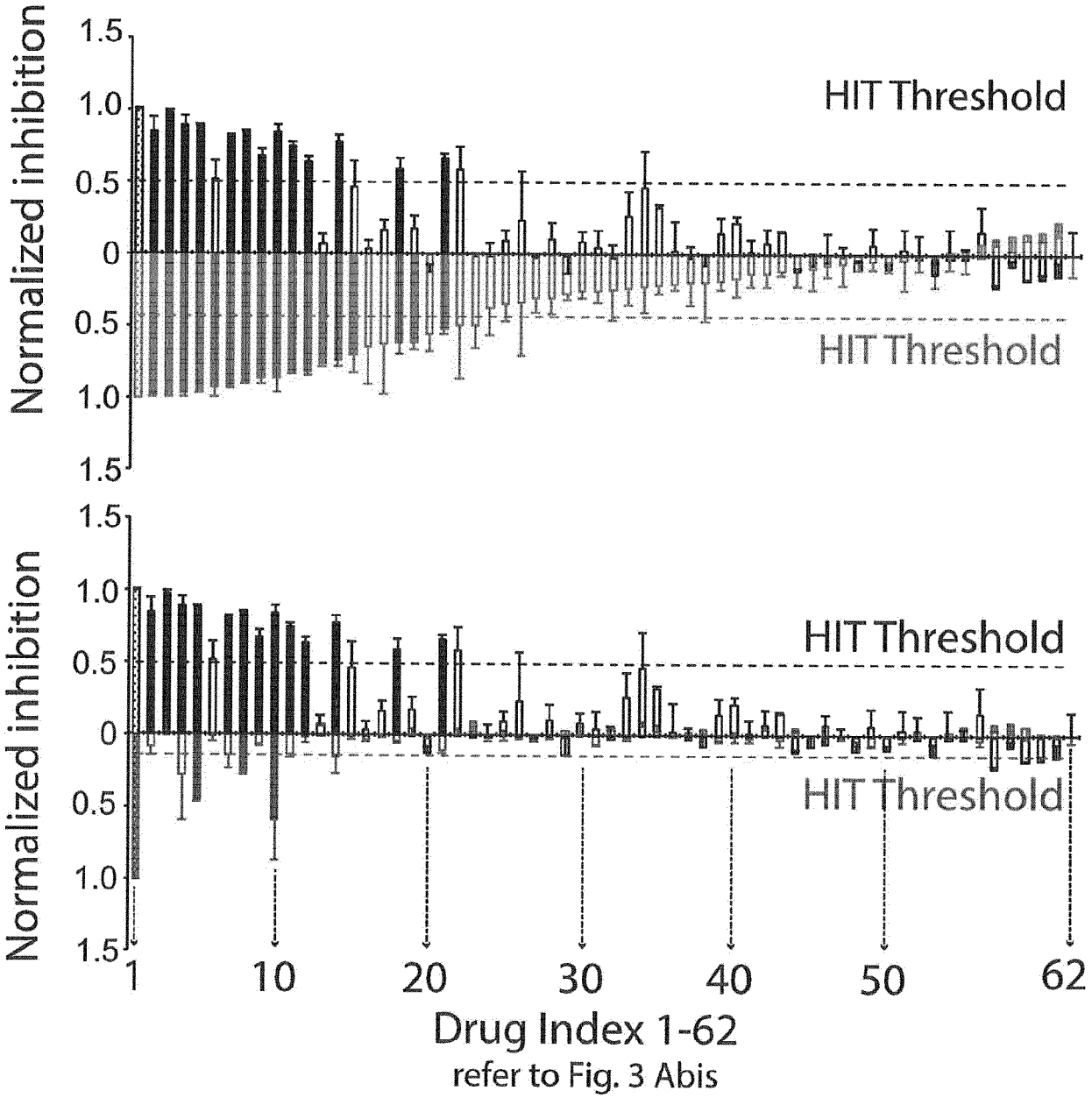

3D Early Treatment schedule (QGel-CBA)
3D Late Treatment schedule (QGel-CBA)
2D Treatment schedule Reference assay (R-CBA)
Cell seeding
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29
Experiment timeline (days)
End of treatment readout time point
End of "Recovery" readout time point
Treatment period
Drug-free period - "Recovery"

Fig. 3 A


Normalized inhibition
1.5
1.0
0.5
0
0.5
1.0
1.5
HIT Threshold
HIT Threshold
Normalized inhibition
HIT Threshold
HIT Threshold
1
10
20
30
40
50
62
Drug Index 1-62
refer to Fig. 3 Abis

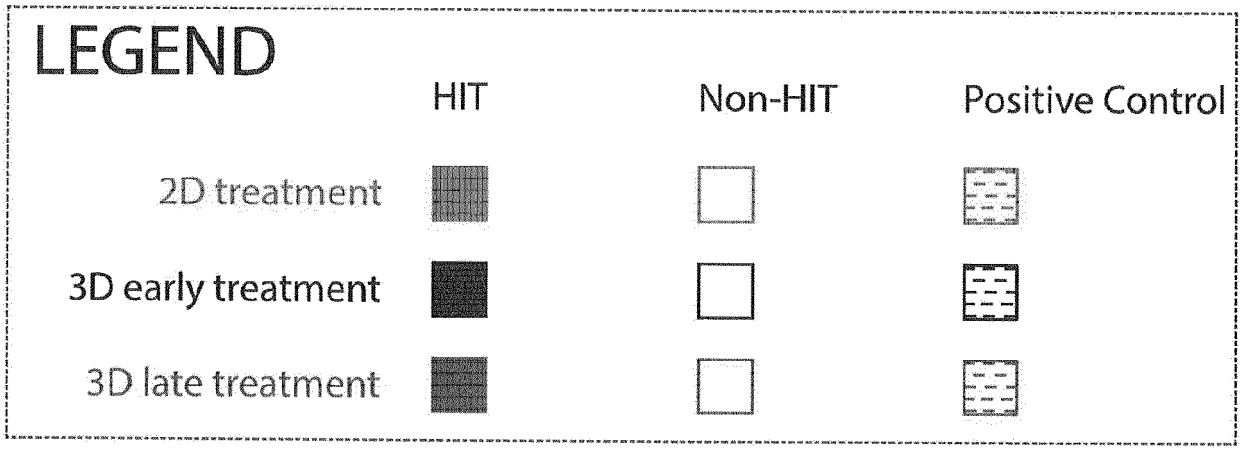

LEGEND
HIT
Non-HIT
Positive Control
2D treatment
3D early treatment
3D late treatment

Fig. 3 A bis

Drug Index

Positive control	1
Desloratadine	2
Carvedilol	3
Aripiprazole	4
Topotecan	5
Bromhexine hydrochloride	6
Cladribine	7
Gemcitabine	8
Cilnidipine	9
Triclosan	10
5-fluorouracil	11
Docetaxel	12
Diclazuril	13
Fludarabine	14
Sparfloxacin	15
Fosinopril	16
Amcinonide	17
Gatifloxacin	18
Bifonazole	19
Telmisartan	20
Atorvastatin	21
Mitotane	22
Enoxacin	23
Clarithromycin	24
Clofibrate	25
Ethinylestradiol	26
Anthralin	27
Imiquimod	28
Phentermine hydrochloride	29
Acetylcysteine	30
Montelukast	31
Anethole-trithione	32
Benztropine mesylate	33
Celecoxib	34
Melengestrol acetate	35
Cyclophosphamide	36
Tripelennamine hydrochloride	37
Vardenafil	38
Azithromycin	39
Bosentan	40
Olmesartan	41
Dopamine hydrochloride	42
Famciclovir	43
Methenamine	44
Mesna	45
Losartan	46
Fluocinolone acetonide	47
Vecuronium bromide	48
Racepinephrine HCl	49
Nalmefene hydrochloride	50
Tulobuterol	51
Fluconazole	52
Caffeine	53
Lamotrigine	54
Cefdinir	55
Ibudilast	56
Granisetron	57
Carprofen	58
Ambrisentan	59
Olopatadine hydrochloride	60
Candesartan	61
Negative Control	62

Fig. 3

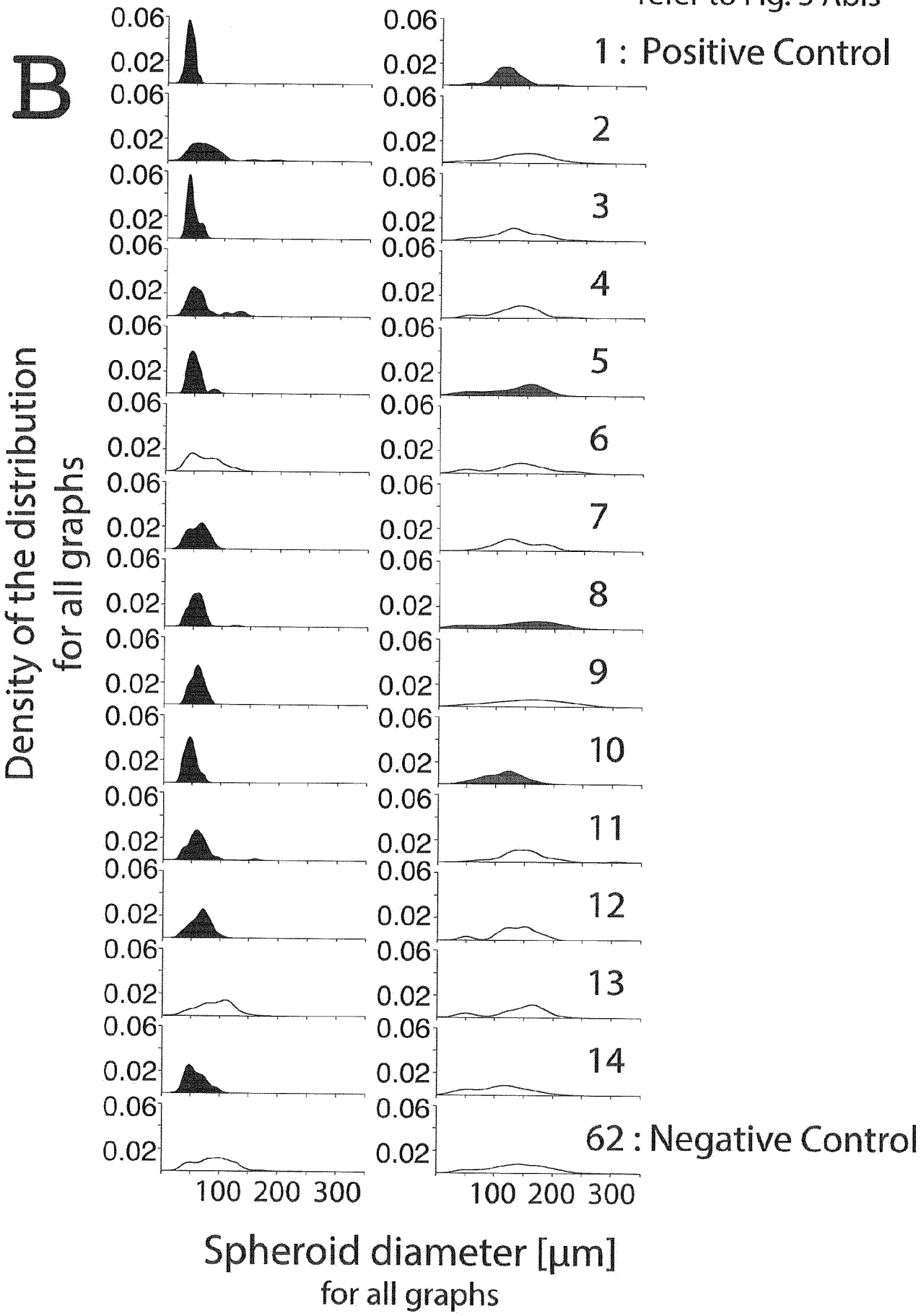

B
Drug Index
refer to Fig. 3 Abis
1 : Positive Control
2
3
4
5
6
7
8
9
10
11
12
13
14
62 : Negative Control
0.06
0.02
100 200 300
Density of the distribution
for all graphs
Spheroid diameter [µm]
for all graphs

Fig. 4

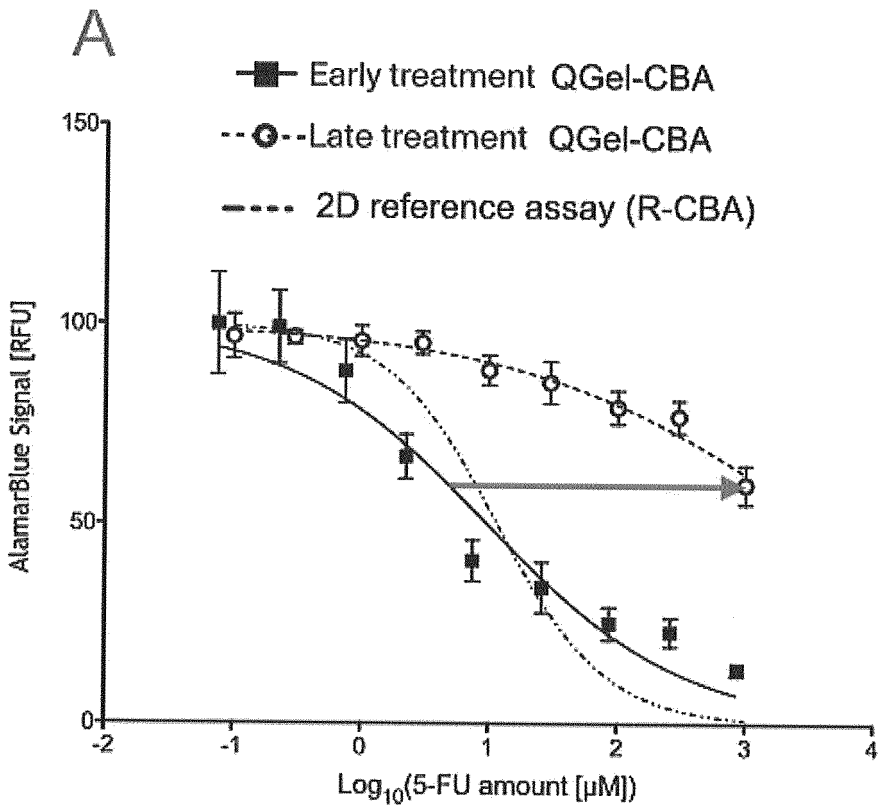

A
Early treatment QGel-CBA
Late treatment QGel-CBA
2D reference assay (R-CBA)
AlamarBlue Signal [RFU]
150
100
50
0
-2
-1
0
1
2
3
4
Log10(5-FU amount [µM])

Fig. 4

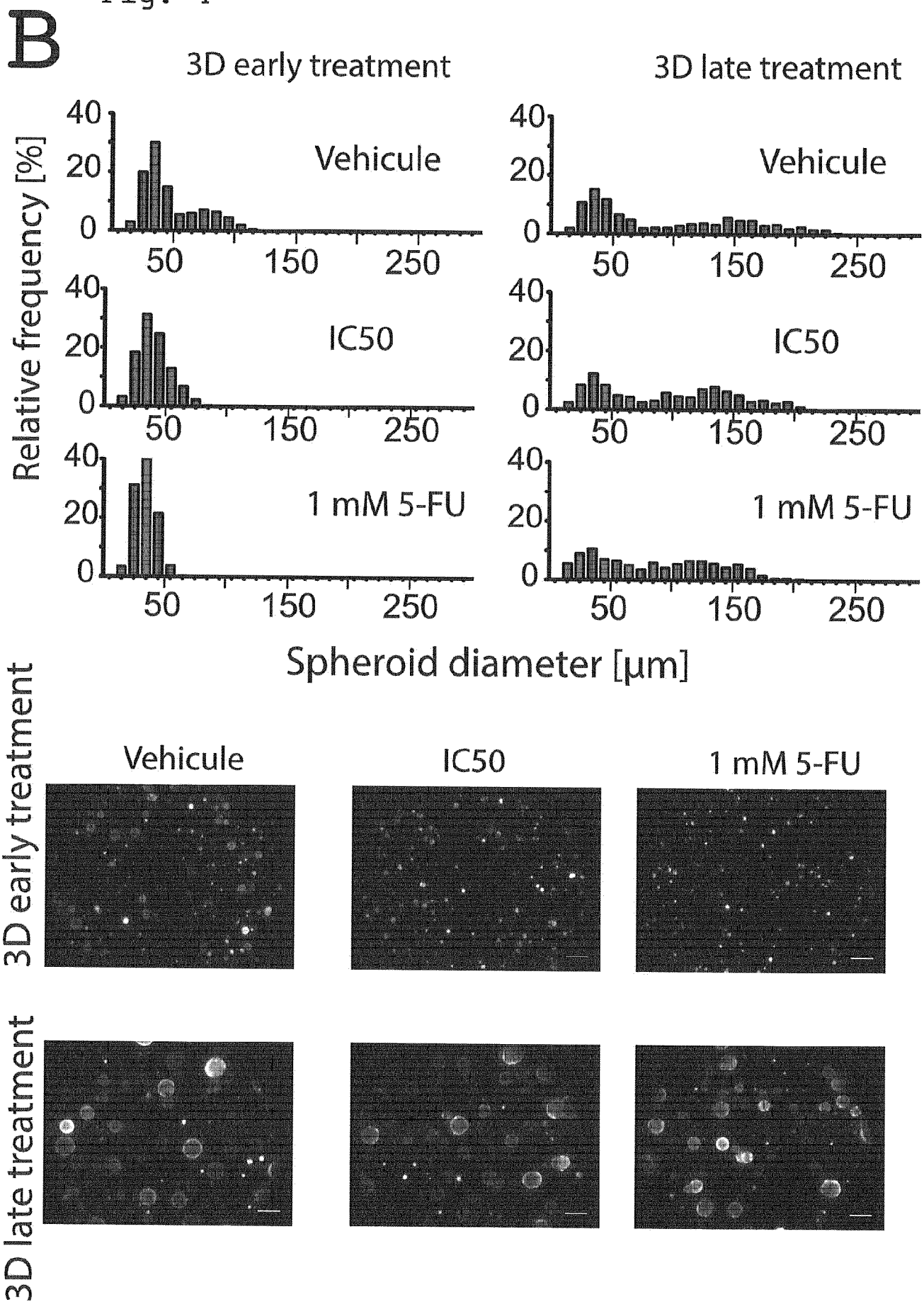

B
3D early treatment
3D late treatment
Relative frequency [%]
Vehicule
IC50
1 mM 5-FU
40
20
0
50
150
250
Spheroid diameter [µm]
3D early treatment
3D late treatment
Vehicule
IC50
1 mM 5-FU

Fig. 5

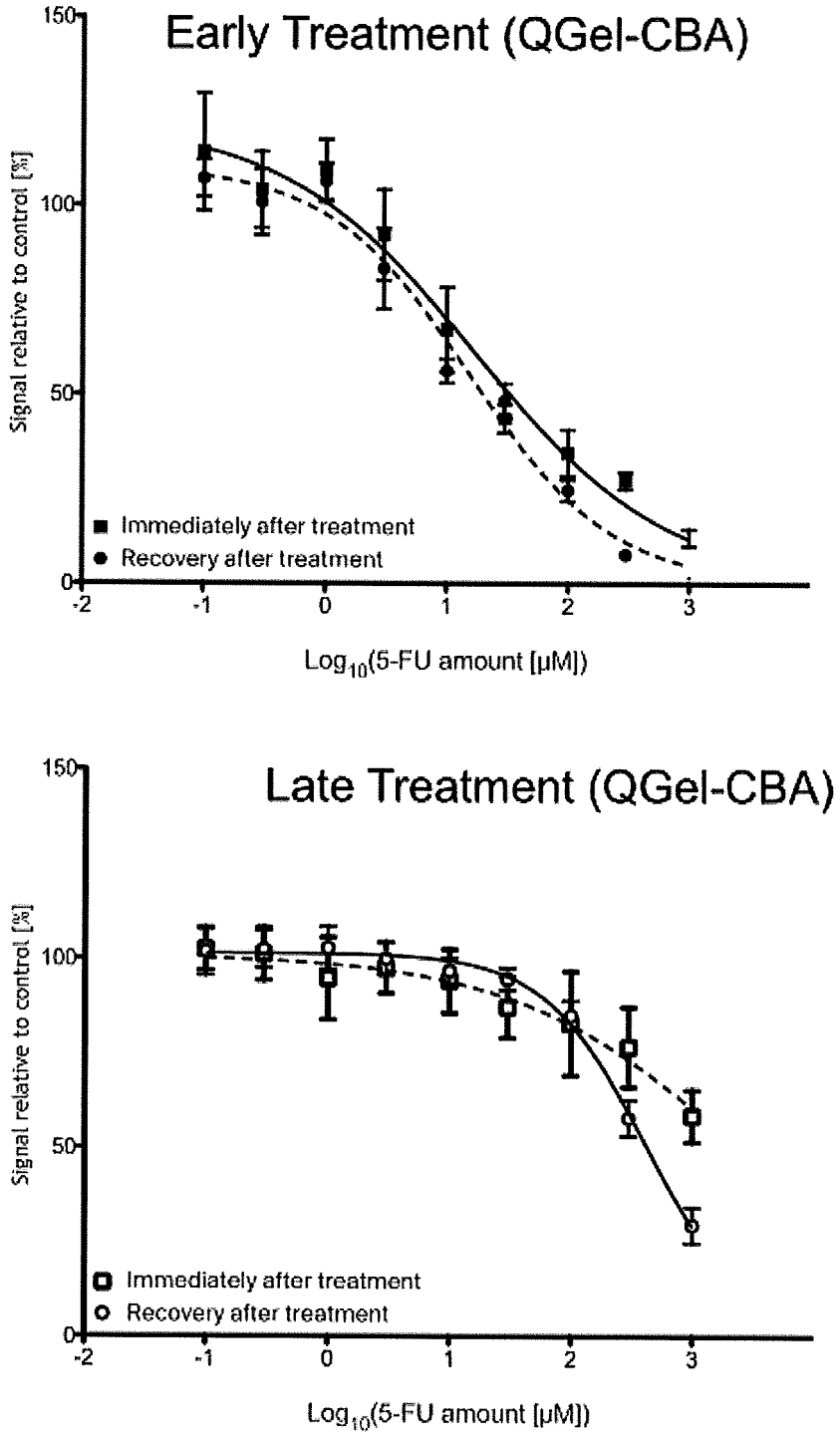

Early Treatment (QGel-CBA)
Signal relative to control [%]
150
100
50
0
-2
-1
0
1
2
3
Immediately after treatment
Recovery after treatment
Log10(5-FU amount [µM])
Late Treatment (QGel-CBA)
Signal relative to control [%]
150
100
50
0
-2
-1
0
1
2
3
Immediately after treatment
Recovery after treatment
Log10(5-FU amount [µM])

Fig. 6

5-Fluorouracil Treatment	IC50 (uM)		
	Repeat 1	Repeat 2	Repeat 3
Early	7.4	17.1	9.74
Late	1000	1000	1000
Early Recovery	6.32	15.4	6.16
Late Recovery	325	417	523
2D	3.34	3.58	11.67

Fig. 7

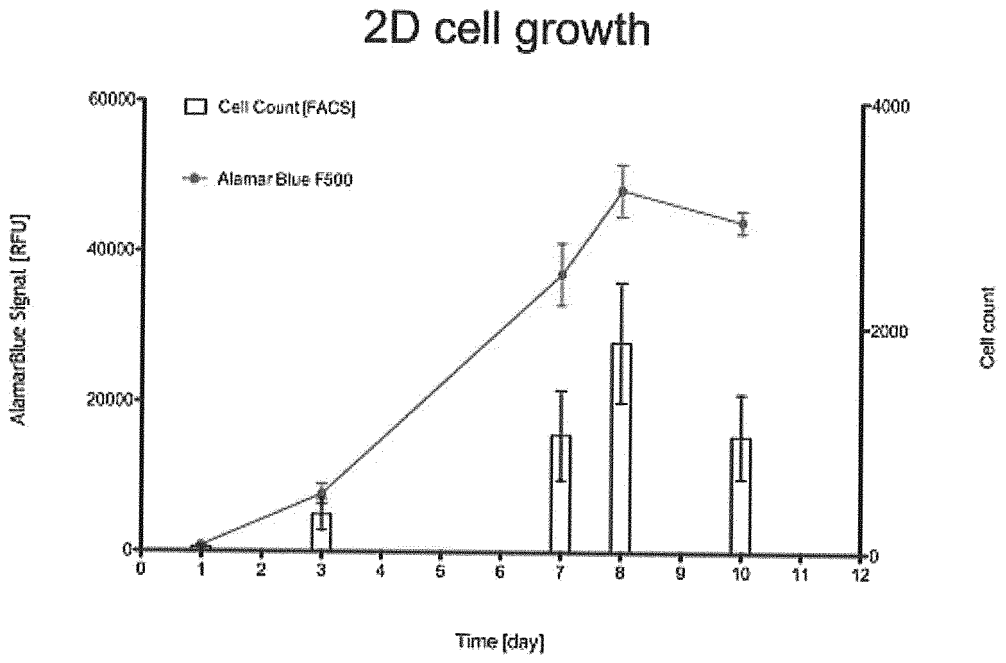


Fig. 8

A

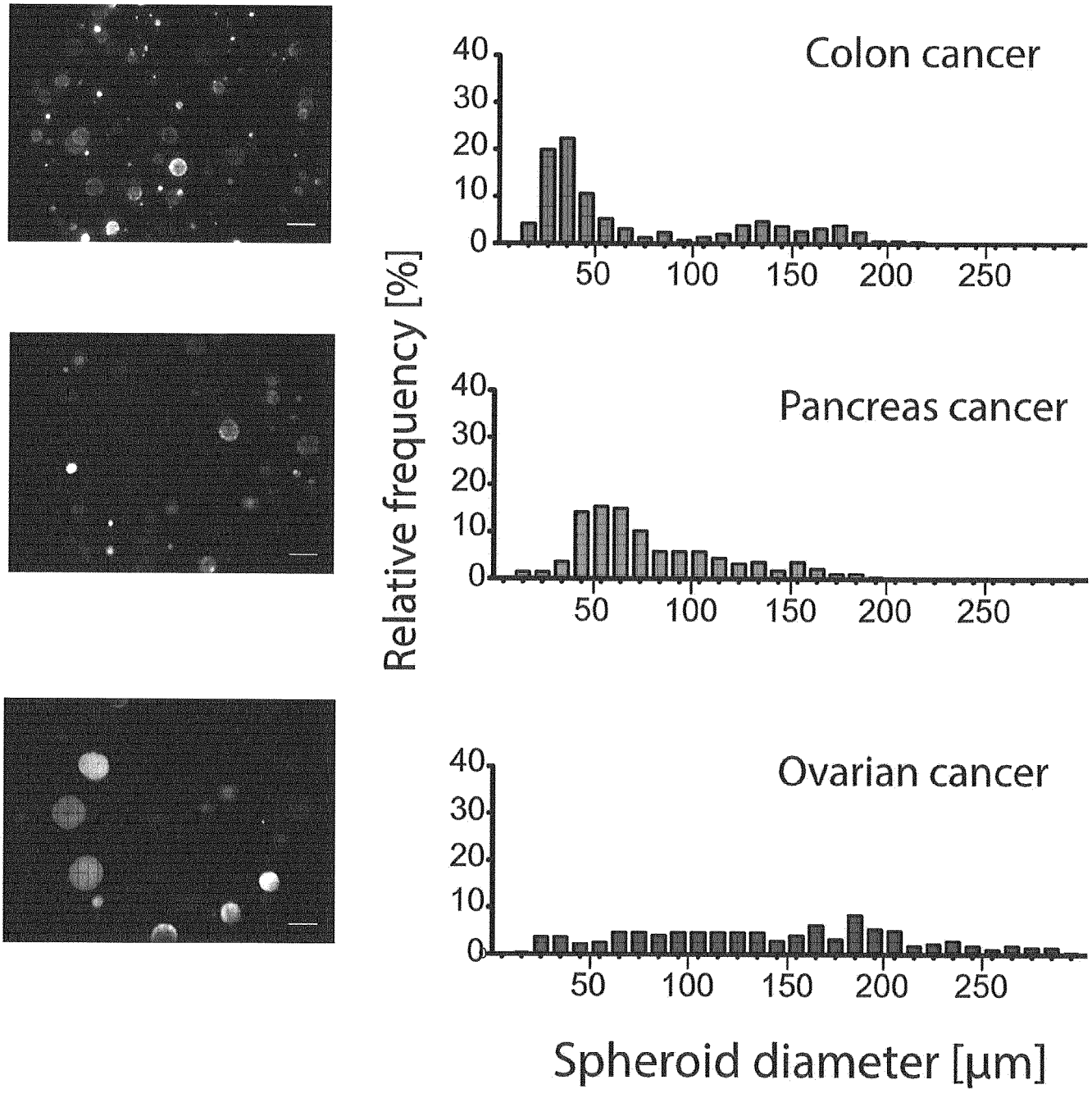

Colon cancer
Pancreas cancer
Ovarian cancer
Relative frequency [%]
0
10
20
30
40
50
100
150
200
250
Spheroid diameter [µm]

Fig. 8

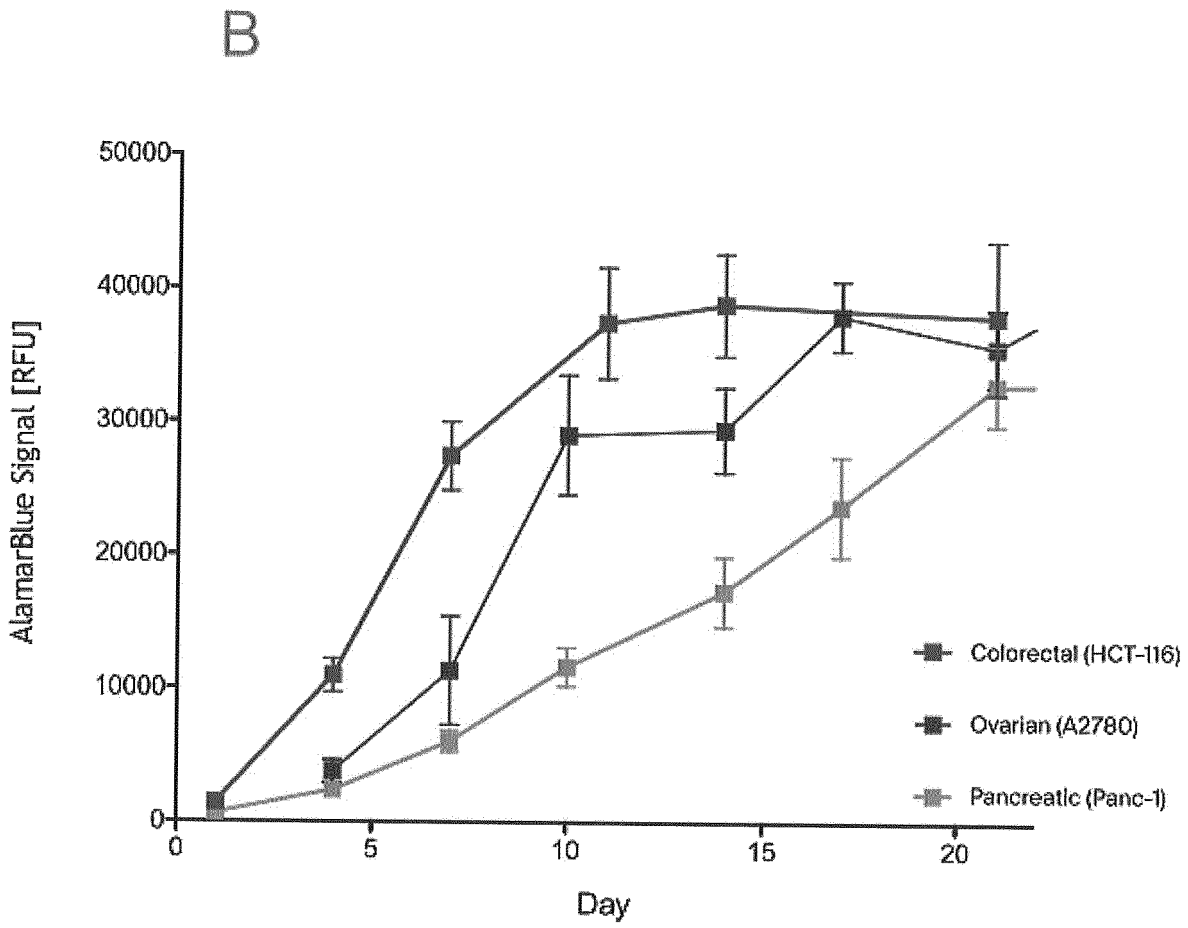

B
AlamarBlue Signal [RFU]
50000
40000
30000
20000
10000
0
0
5
10
15
20
Day
Colorectal (HCT-116)
Ovarian (A2780)
Pancreatic (Panc-1)

Fig. 8

C

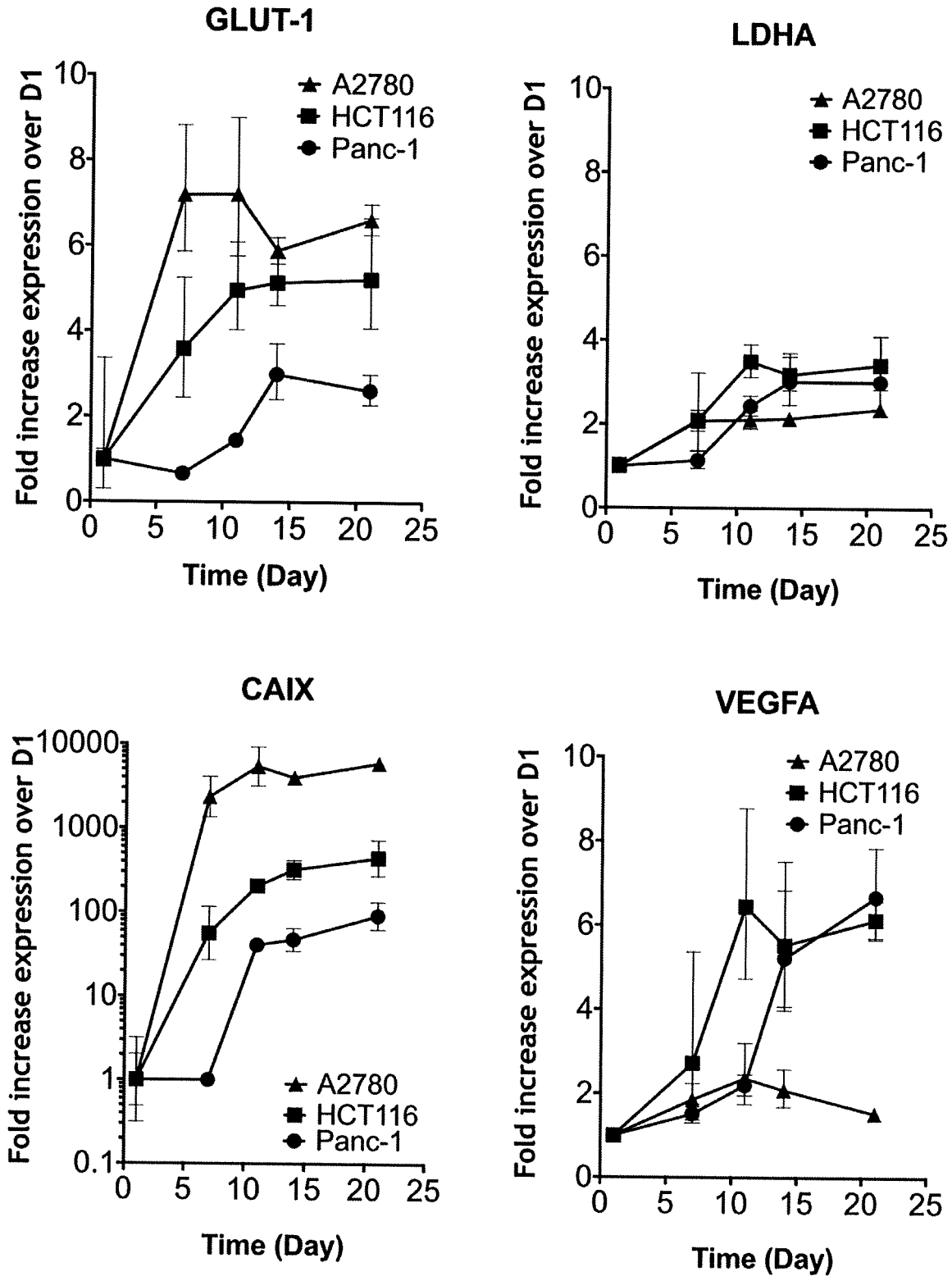

GLUT-1
Fold increase expression over D1
Time (Day)
A2780
HCT116
Panc-1
LDHA
Fold increase expression over D1
Time (Day)
A2780
HCT116
Panc-1
CAIX
Fold increase expression over D1
Time (Day)
A2780
HCT116
Panc-1
VEGFA
Fold increase expression over D1
Time (Day)
A2780
HCT116
Panc-1

Fig. 8
C - continued

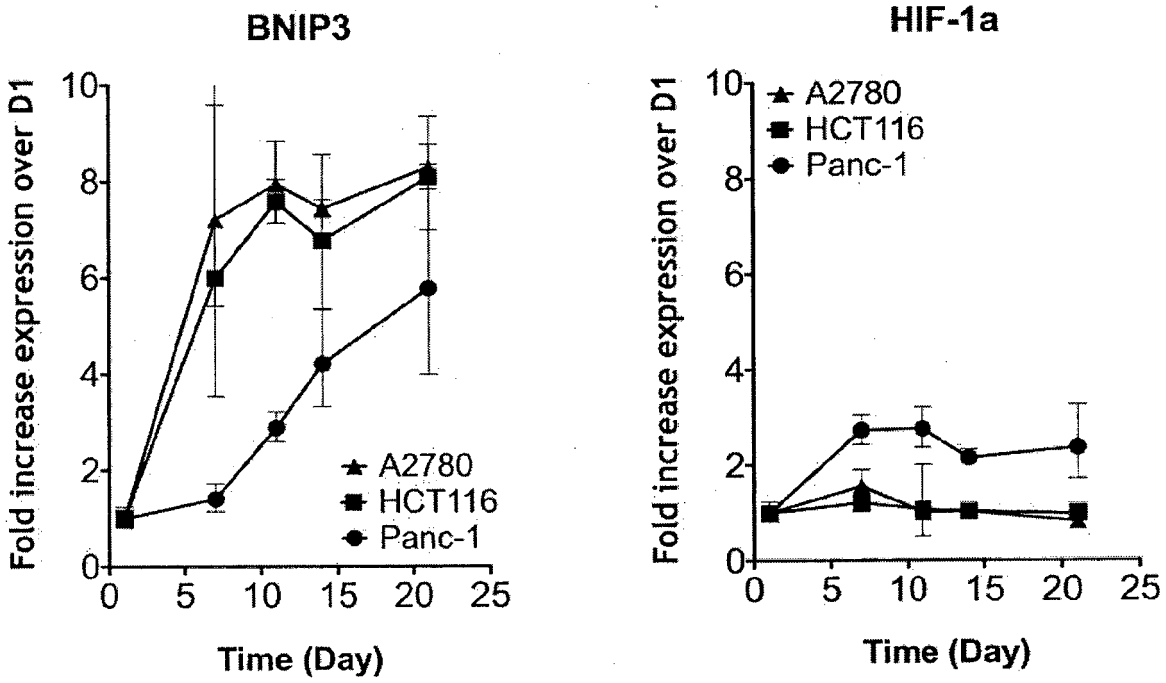
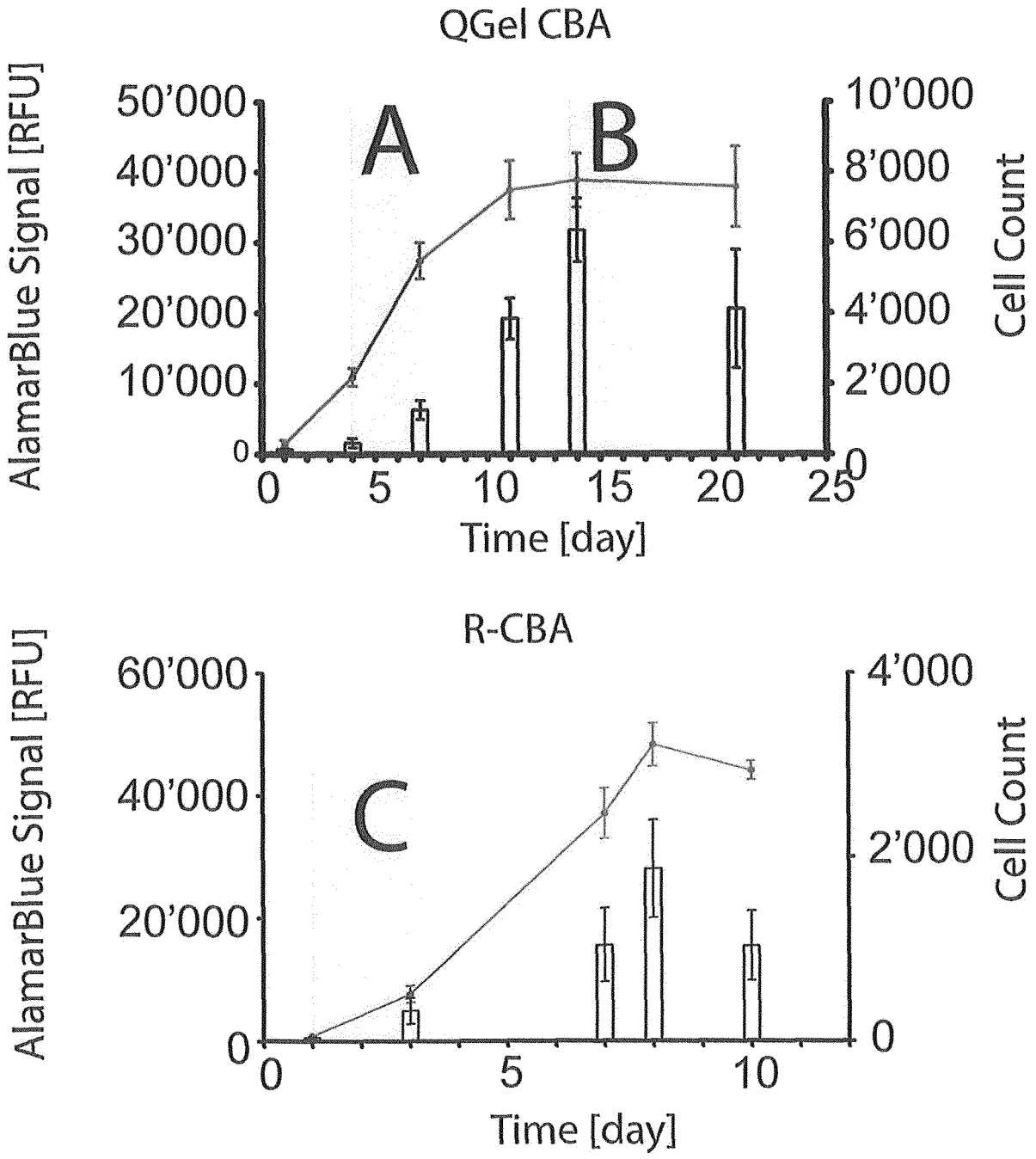


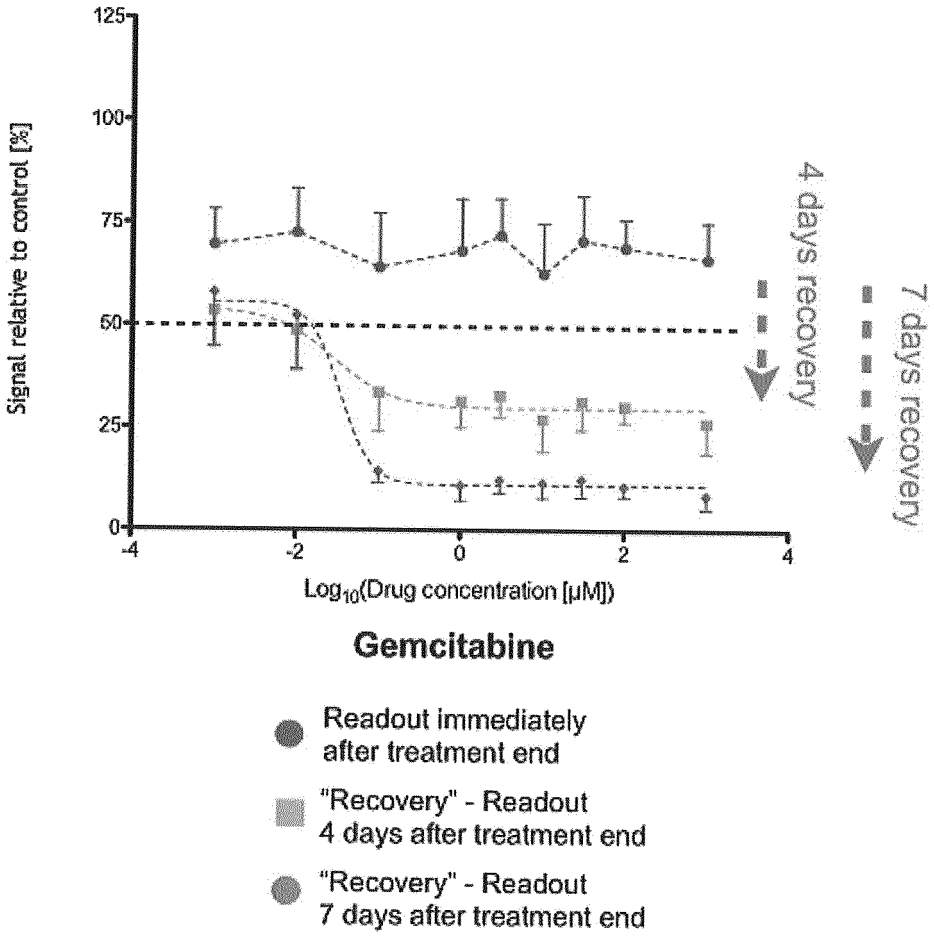
Fig. 9



LEGEND

A : 3D Early treatment period
B : 3D Late treatment period
C : 2D reference assay treatment period
□ : Cell count (FACS)
—●— : AlamarBlue Signal

Fig. 10


125
100
75
50
25
0
Signal relative to control [%]
-4
-2
0
2
4
Log10(Drug concentration [µM])
4 days recovery
7 days recovery
Gemcitabine
Readout immediately after treatment end
"Recovery" - Readout 4 days after treatment end
"Recovery" - Readout 7 days after treatment end