Eligible:
T2-4, any N T1N1-2
ER/PR-HER2-
Or high grade ER+/any PR
RANDOMIZE
CP + Placebo 3/7 x 12 weeks
CP + Vorinostat 3/7 x 12 weeks
SURGERY
Additional chemotherapy at the discretion of the treating team (Anthracycline-based therapy x 4 is recommended)
RT, hormone therapy as indicated at the discretion of treating team
PET
Tumor biopsy
Blood sampling
CP, carboplatin (AUC2) and nab-paclitaxel (100), weekly x 12 weeks
Vorinostat 400 mg PO (3 days every 7 days)
N = 62 (31 participants per arm)

Figure 1

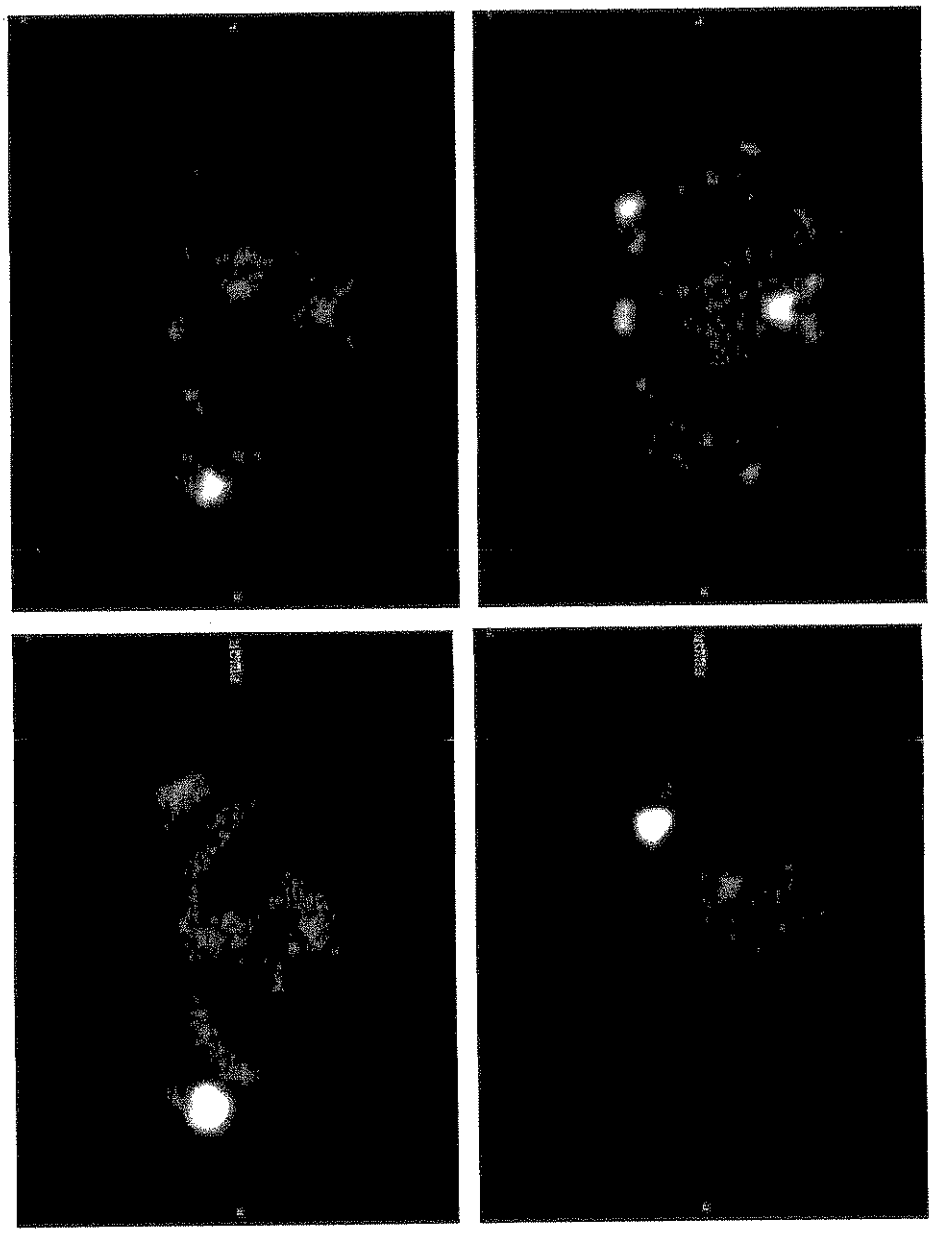


Figure 2

Figure 3

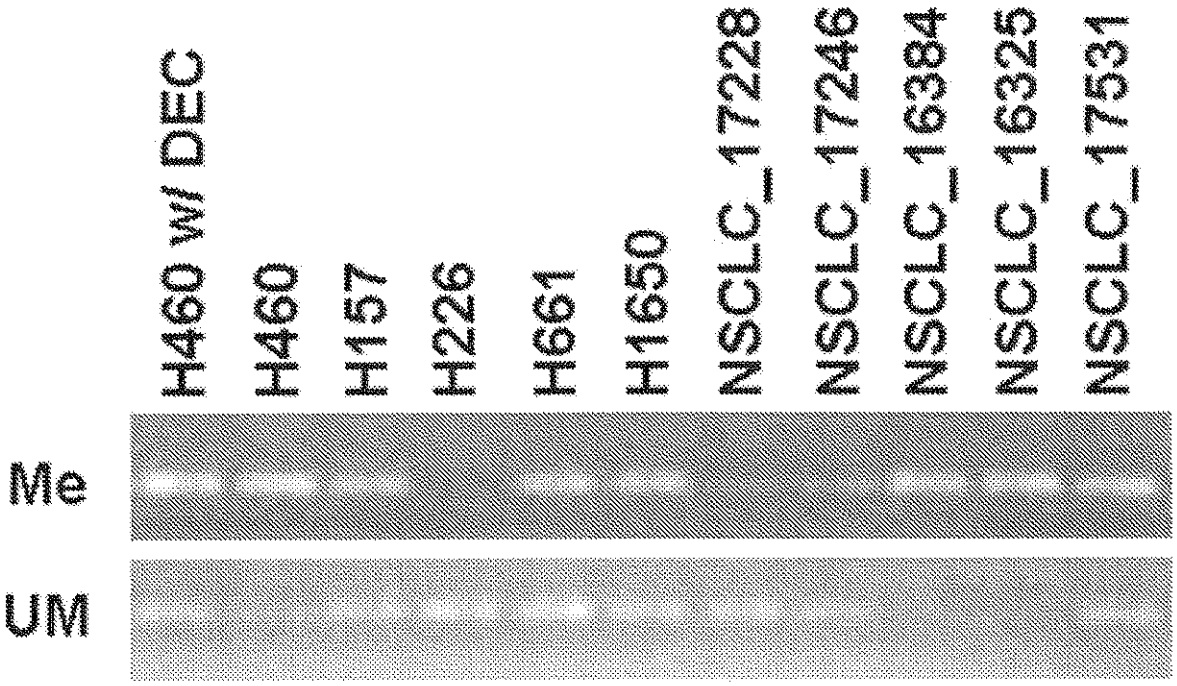

H460 w/ DEC
H460
H157
H226
H661
H1650
NSCLC_17228
NSCLC_17246
NSCLC_16384
NSCLC_16325
NSCLC_17531
Me
UM

Figure 4

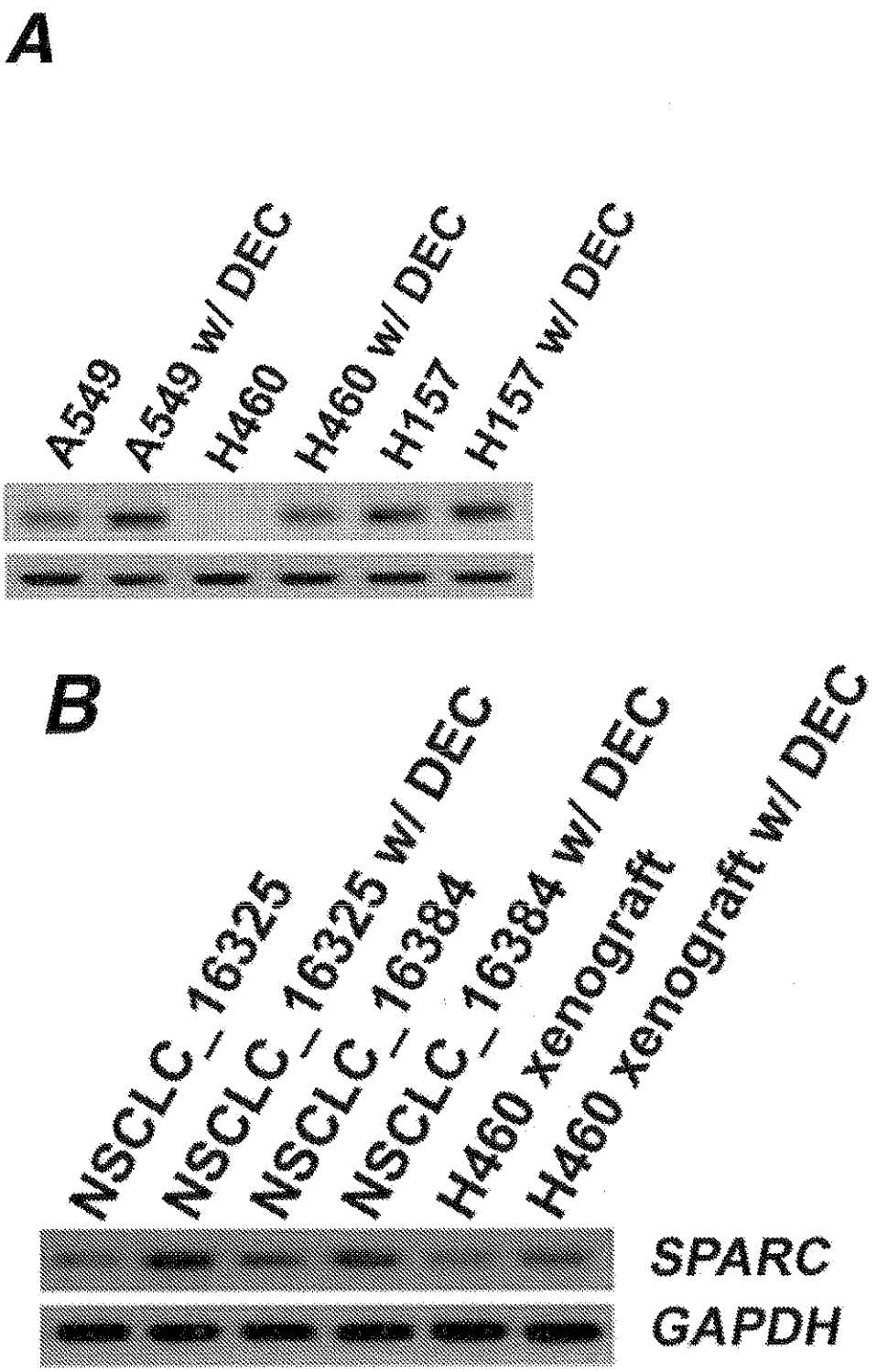

A
A549
A549 w/ DEC
H460
H460 w/ DEC
H157
H157 w/ DEC
B
NSCLC_16325
NSCLC_16325 w/ DEC
NSCLC_16384
NSCLC_16384 w/ DEC
H460 xenograft
H460 xenograft w/ DEC
SPARC
GAPDH

Figure 5

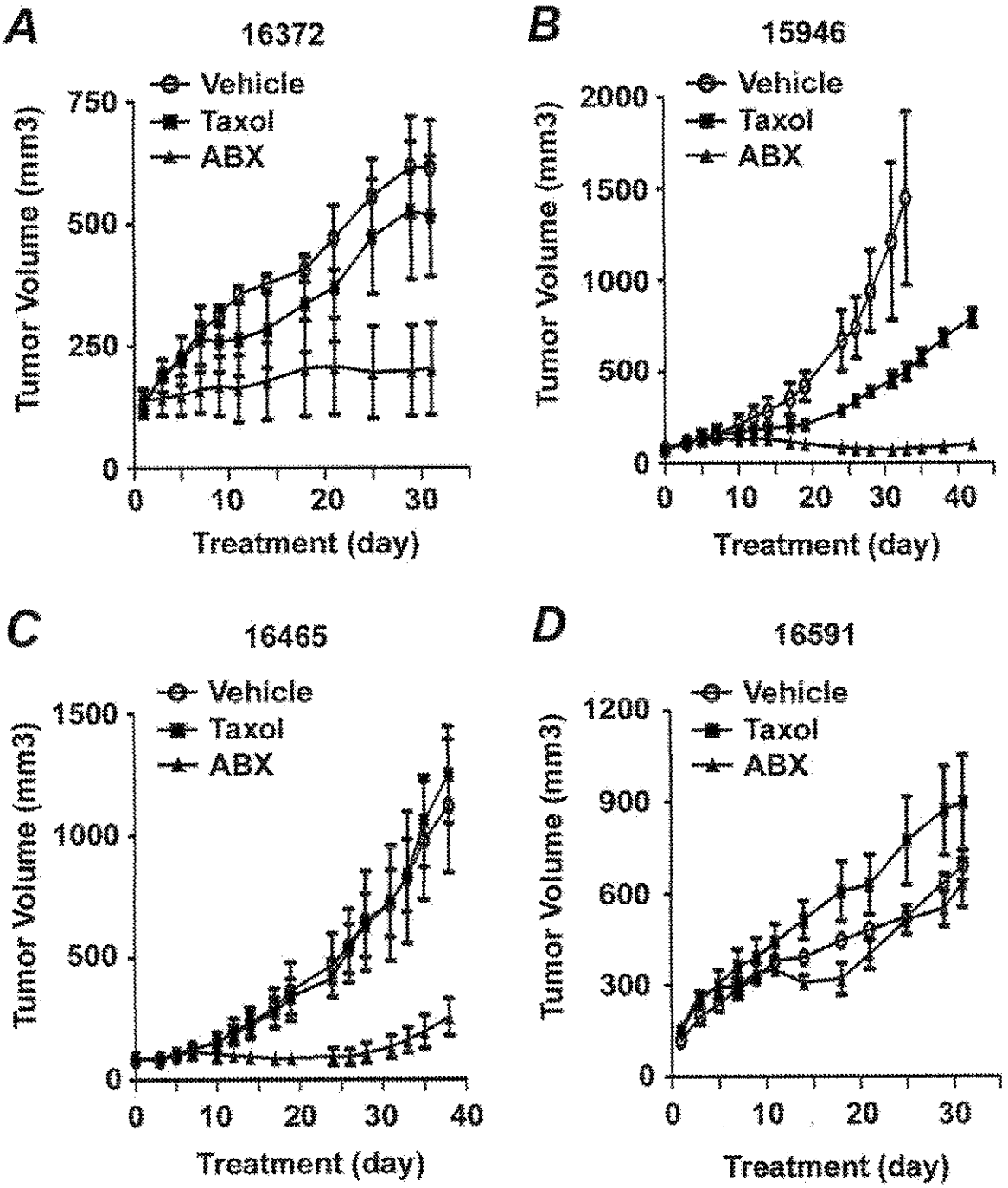

A
16372
Vehicle
Taxol
ABX
Tumor Volume (mm3)
750
500
250
0
0
10
20
30
Treatment (day)
B
15946
Vehicle
Taxol
ABX
Tumor Volume (mm3)
2000
1500
1000
500
0
0
10
20
30
40
Treatment (day)
C
16465
Vehicle
Taxol
ABX
Tumor Volume (mm3)
1500
1000
500
0
0
10
20
30
40
Treatment (day)
D
16591
Vehicle
Taxol
ABX
Tumor Volume (mm3)
1200
900
600
300
0
0
10
20
30
Treatment (day)

Figure 6

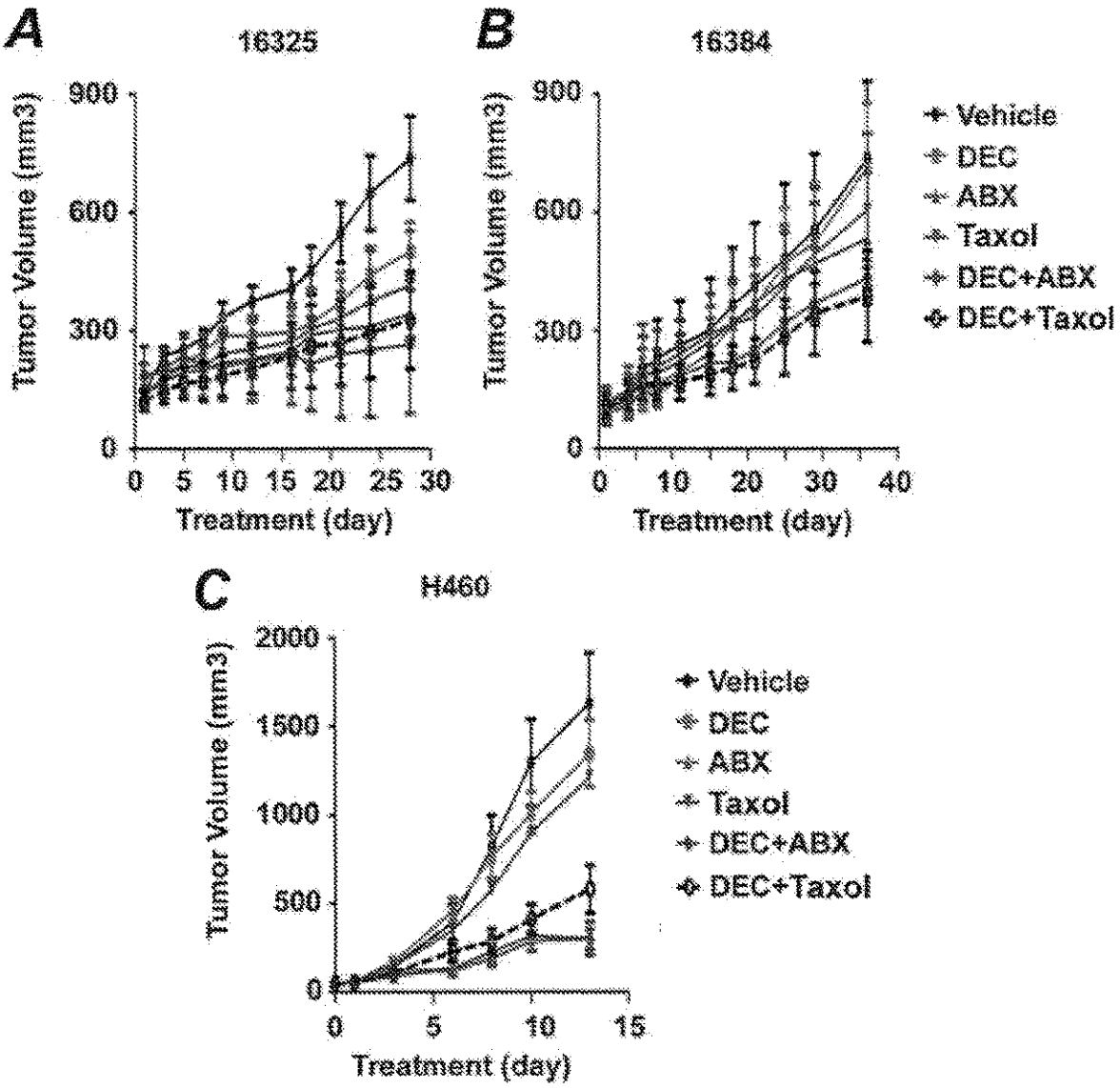
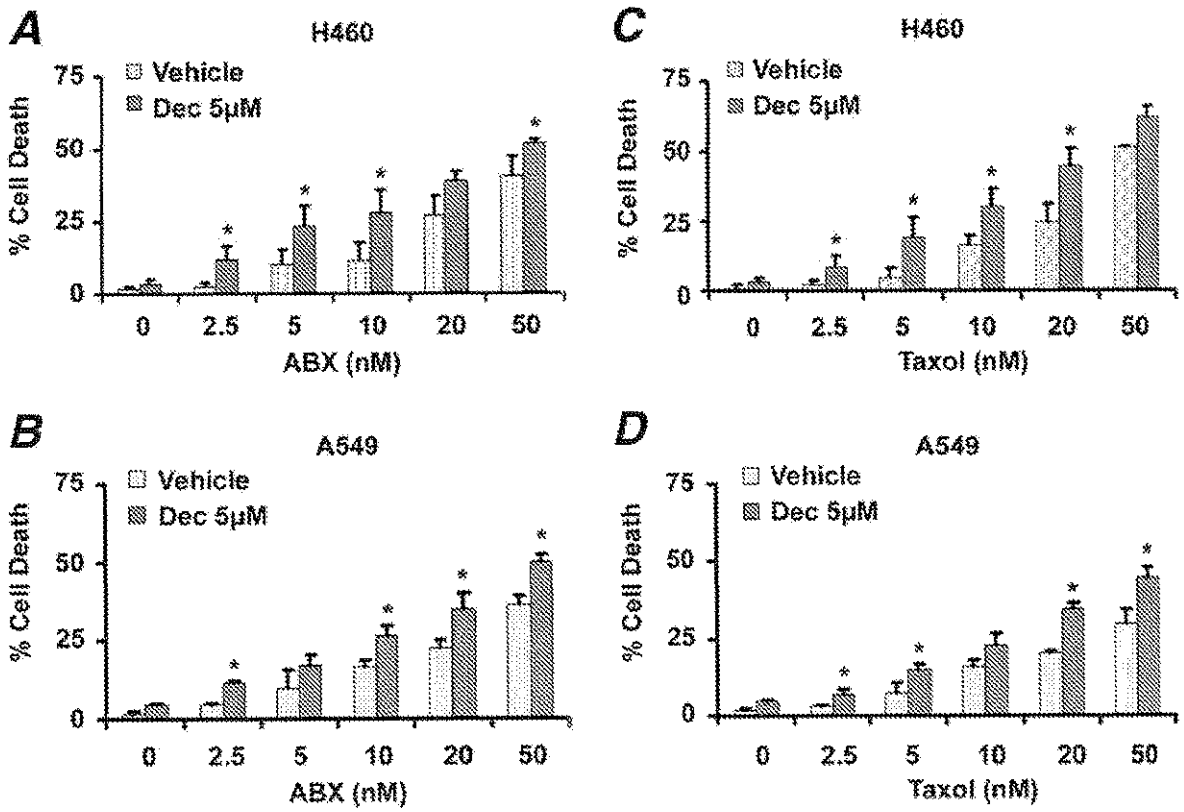

A
16325
Tumor Volume (mm3)
900
600
300
0
0 5 10 15 20 25 30
Treatment (day)
B
16384
Tumor Volume (mm3)
900
600
300
0
0 10 20 30 40
Treatment (day)
Vehicle
DEC
ABX
Taxol
DEC+ABX
DEC+Taxol
C
H460
Tumor Volume (mm3)
2000
1500
1000
500
0
0 5 10 15
Treatment (day)
Vehicle
DEC
ABX
Taxol
DEC+ABX
DEC+Taxol

Figure 7


A
H460
Vehicle
Dec 5μM
% Cell Death
75
50
25
0
0
2.5
5
10
20
50
ABX (nM)
C
H460
Vehicle
Dec 5μM
% Cell Death
Taxol (nM)
B
A549
Vehicle
Dec 5μM
% Cell Death
ABX (nM)
D
A549
Vehicle
Dec 5μM
% Cell Death
Taxol (nM)