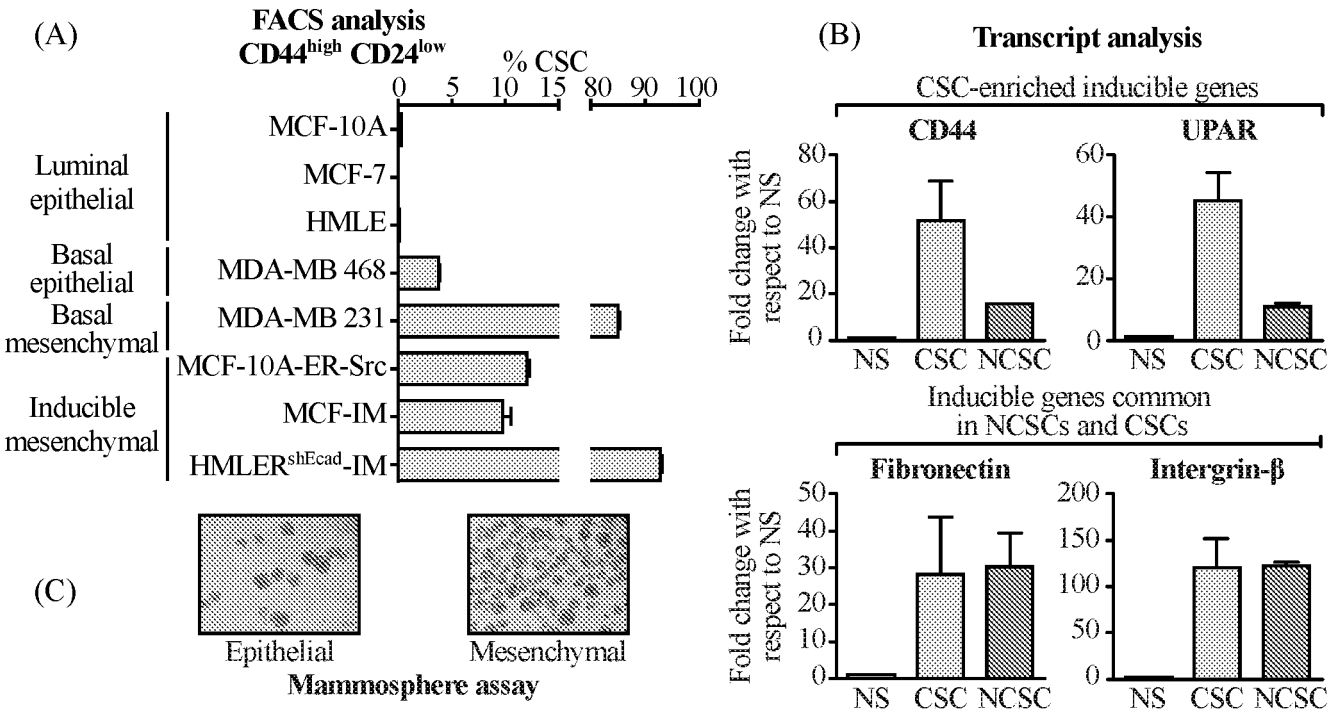

(A)
FACS analysis
CD44high CD24low
% CSC
0 5 10 15 80 90 100
MCF-10A
MCF-7
HMLE
MDA-MB 468
MDA-MB 231
MCF-10A-ER-Src
MCF-IM
HMLERshEcad-IM
Luminal epithelial
Basal epithelial
Basal mesenchymal
Inducible mesenchymal
(B)
Transcript analysis
CSC-enriched inducible genes
CD44
UPAR
Fold change with respect to NS
NS CSC NCSC
Inducible genes common in NCSCs and CSCs
Fibronectin
Intergrin-β
(C)
Epithelial
Mesenchymal
Mammosphere assay

FIGURE 1

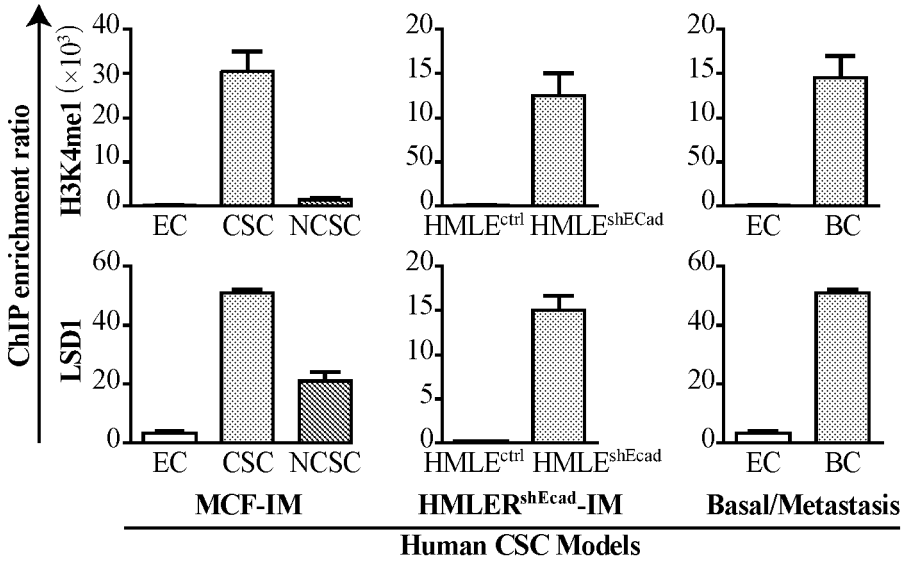


FIGURE 2

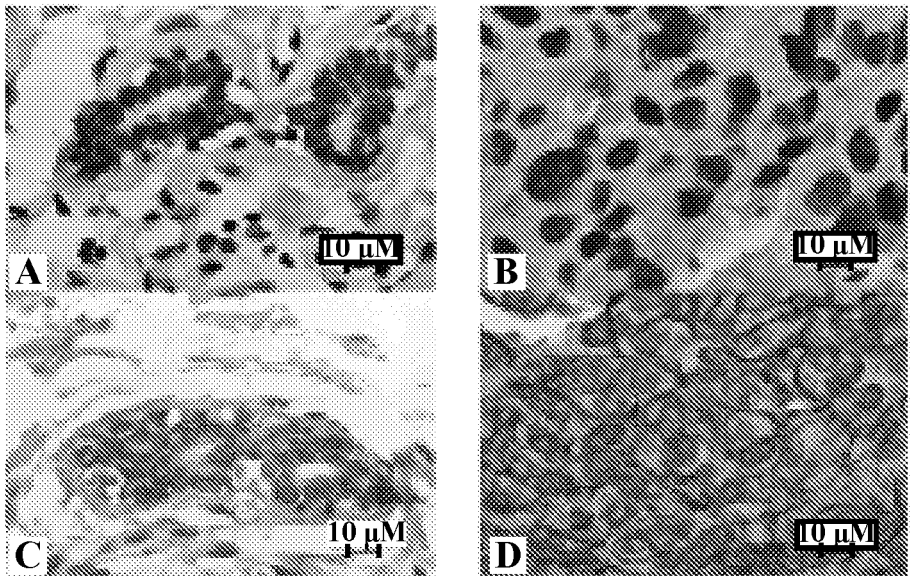


FIGURE 3

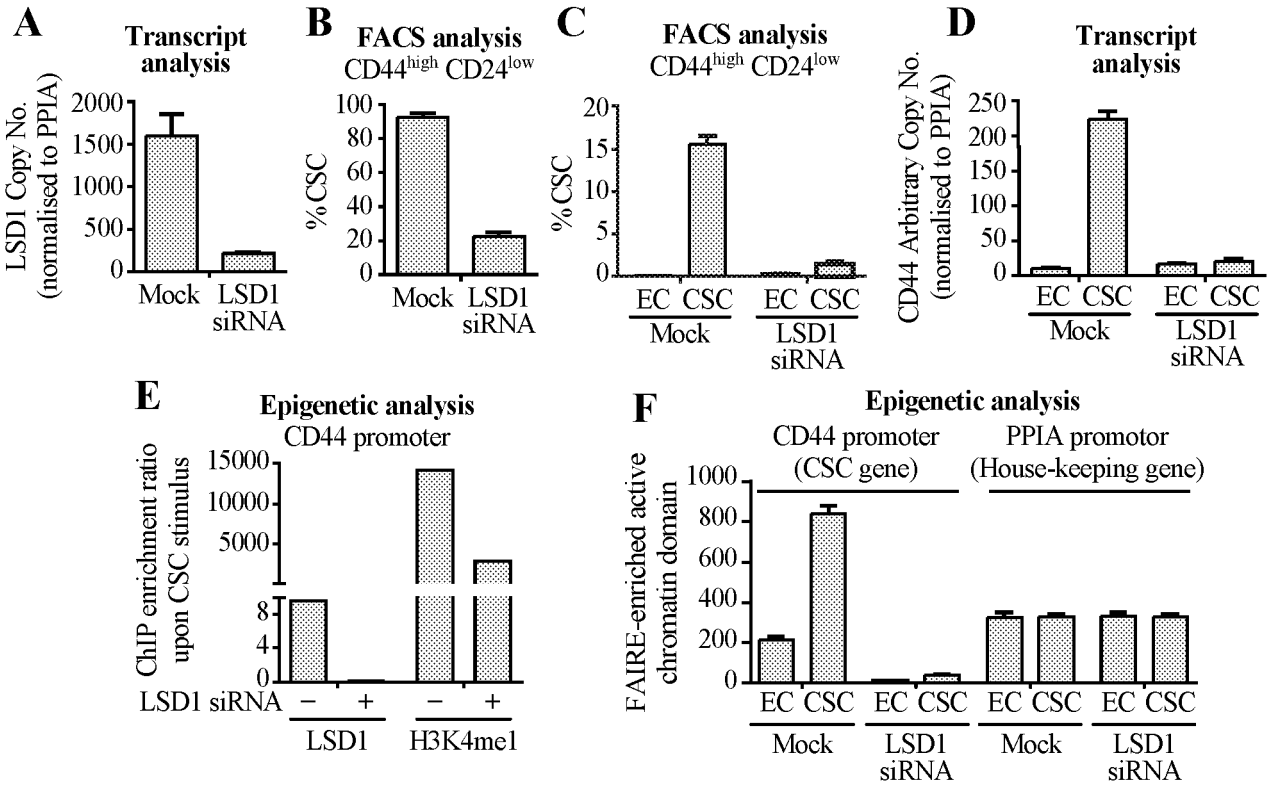

A
Transcript analysis
LSD1 Copy No. (normalised to PPIA)
2000
1500
1000
500
0
Mock
LSD1 siRNA
B
FACS analysis
CD44high CD24low
% CSC
100
80
60
40
20
0
Mock
LSD1 siRNA
C
FACS analysis
CD44high CD24low
% CSC
20
15
10
5
0
EC CSC
EC CSC
Mock
LSD1 siRNA
D
Transcript analysis
CD44 Arbitrary Copy No. (normalised to PPIA)
250
200
150
100
50
0
EC CSC
EC CSC
Mock
LSD1 siRNA
E
Epigenetic analysis
CD44 promoter
ChIP enrichment ratio upon CSC stimulus
15000
10000
5000
8
4
0
LSD1 siRNA
−
+
−
+
LSD1
H3K4me1
F
Epigenetic analysis
CD44 promoter (CSC gene)
PPIA promotor (House-keeping gene)
FAIRE-enriched active chromatin domain
1000
800
600
400
200
0
EC CSC
EC CSC
EC CSC
EC CSC
Mock
LSD1 siRNA
Mock
LSD1 siRNA

FIGURE 4

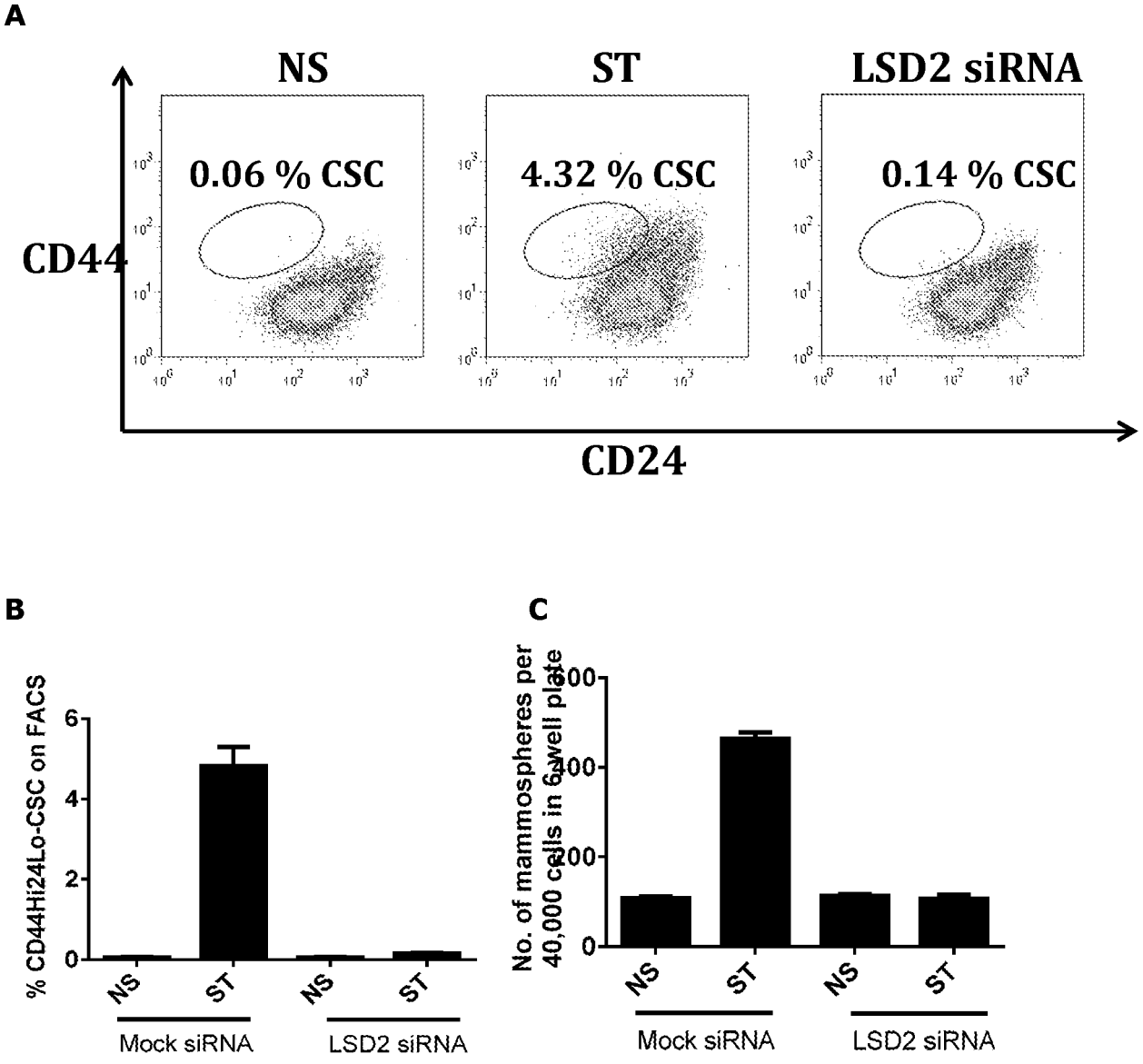
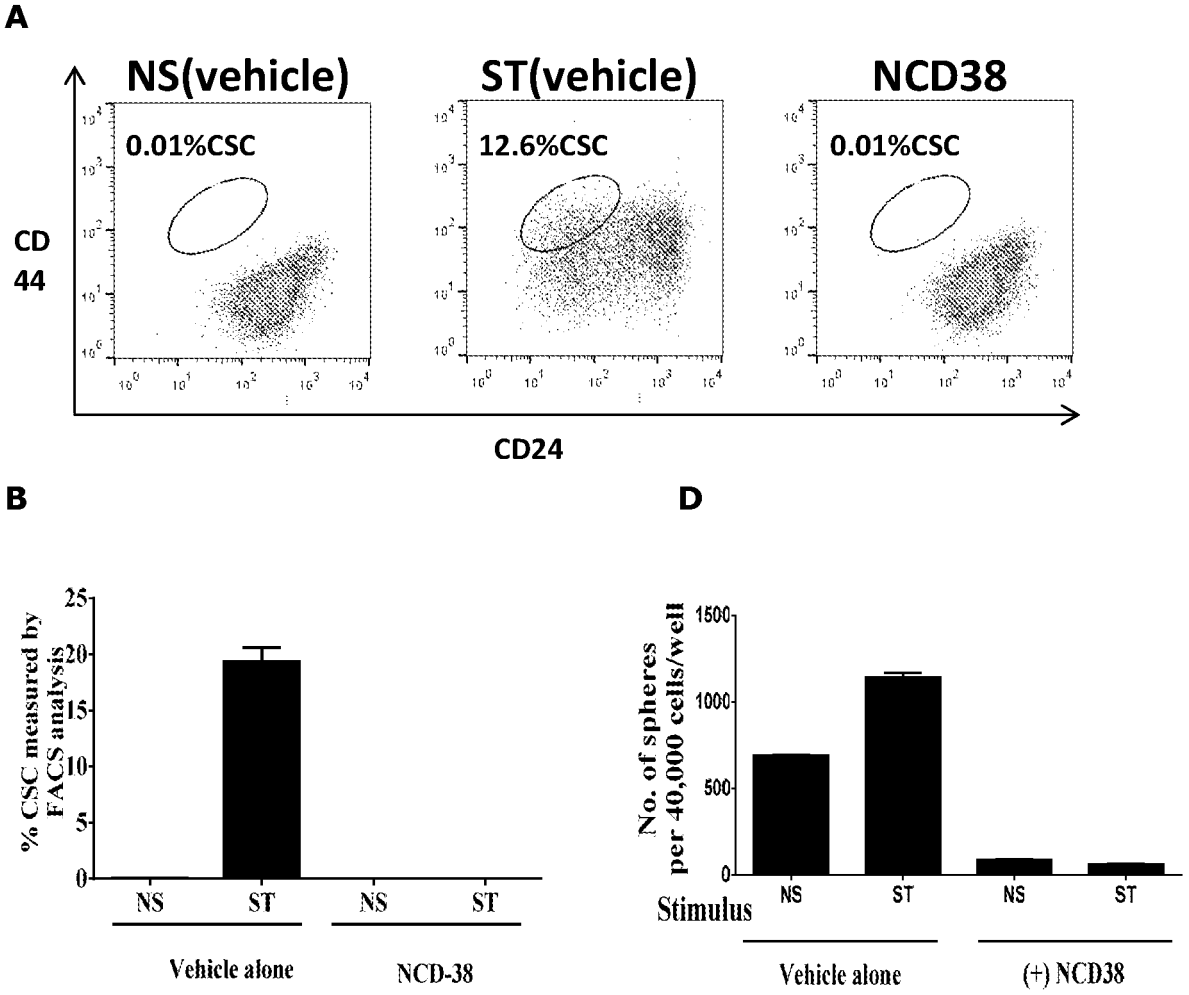
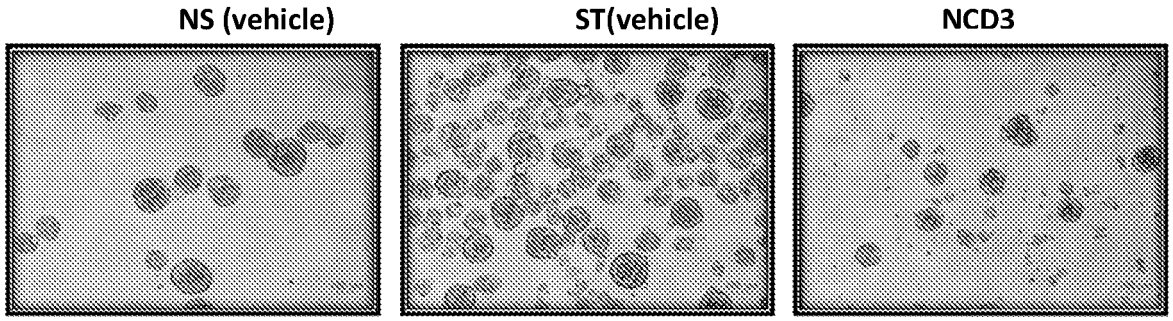

A
NS
ST
LSD2 siRNA
0.06 % CSC
4.32 % CSC
0.14 % CSC
CD44
CD24
B
% CD44Hi24Lo-CSC on FACS
6
4
2
0
NS
ST
NS
ST
Mock siRNA
LSD2 siRNA
C
No. of mammospheres per 40,000 cells in 6-well plate
600
400
200
0
NS
ST
NS
ST
Mock siRNA
LSD2 siRNA

FIGURE 5

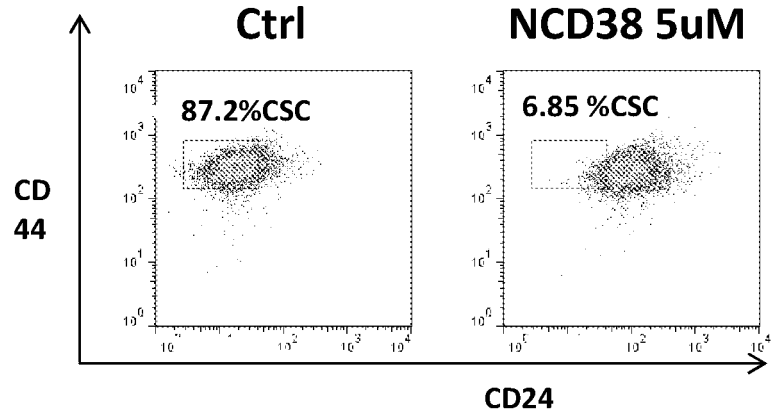




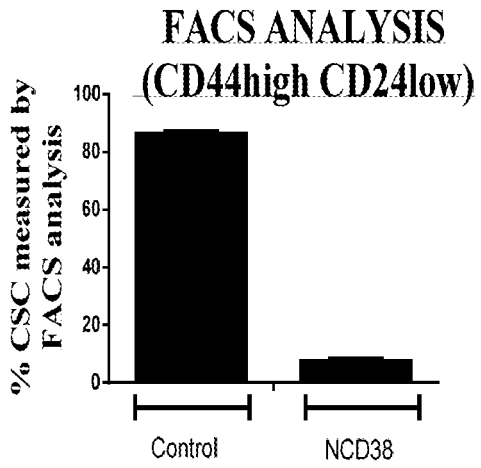
NS – Control cells
ST – Cancer Cell population

FIGURE 6

A


Ctrl
NCD38 5uM
87.2%CSC
6.85 %CSC
CD 44
CD24

B


FACS ANALYSIS
(CD44high CD24low)
% CSC measured by FACS analysis
100
80
60
40
20
0
Control
NCD38

C

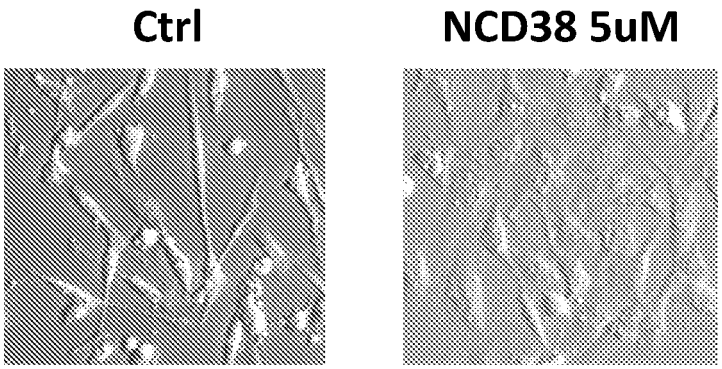
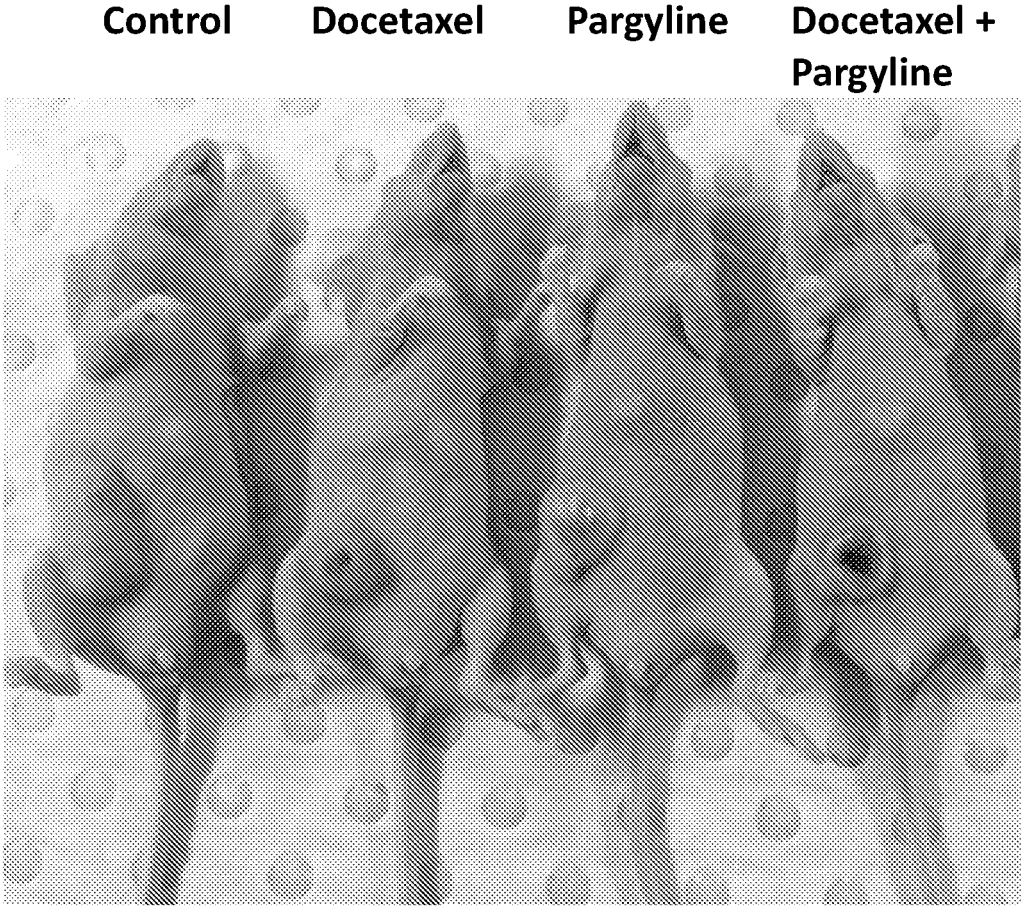

Ctrl
NCD38 5uM

FIGURE 7

A


Control
Docetaxel
Pargyline
Docetaxel + Pargyline

B

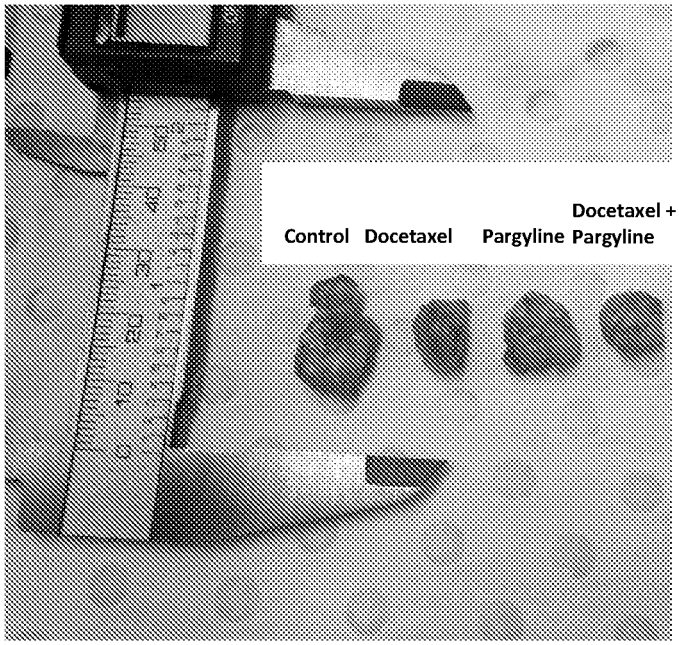
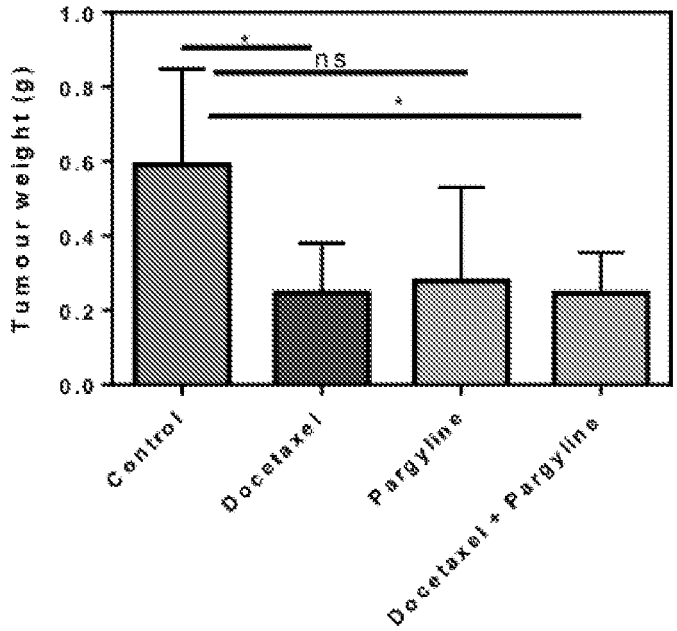

Control
Docetaxel
Pargyline
Docetaxel + Pargyline

FIGURE 8

A


Tumour weight (g)
1.0
0.8
0.6
0.4
0.2
0.0
*
ns
*
Control
Docetaxel
Pargyline
Docetaxel + Pargyline

B

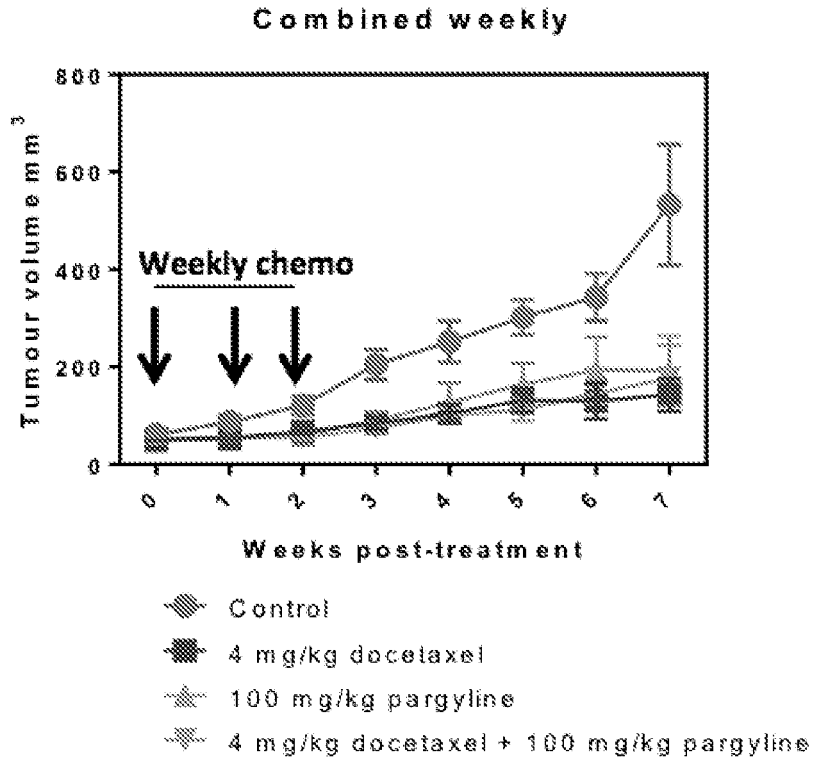
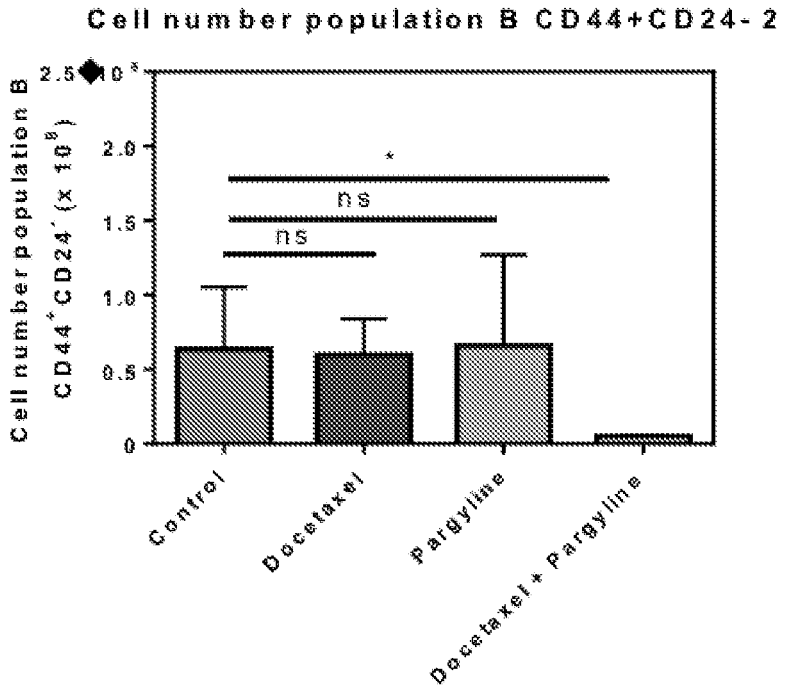

Combined weekly
Tumour volume mm3
800
600
400
200
0
Weekly chemo
0
1
2
3
4
5
6
7
Weeks post-treatment
Control
4 mg/kg docetaxel
100 mg/kg pargyline
4 mg/kg docetaxel + 100 mg/kg pargyline

FIGURE 9

A


Cell number population B CD44+CD24- 2
Cell number population B
CD44+CD24- (x 10^6)
2.5
2.0
1.5
1.0
0.5
0
*
ns
ns
Control
Docetaxel
Pargyline
Docetaxel + Pargyline

B

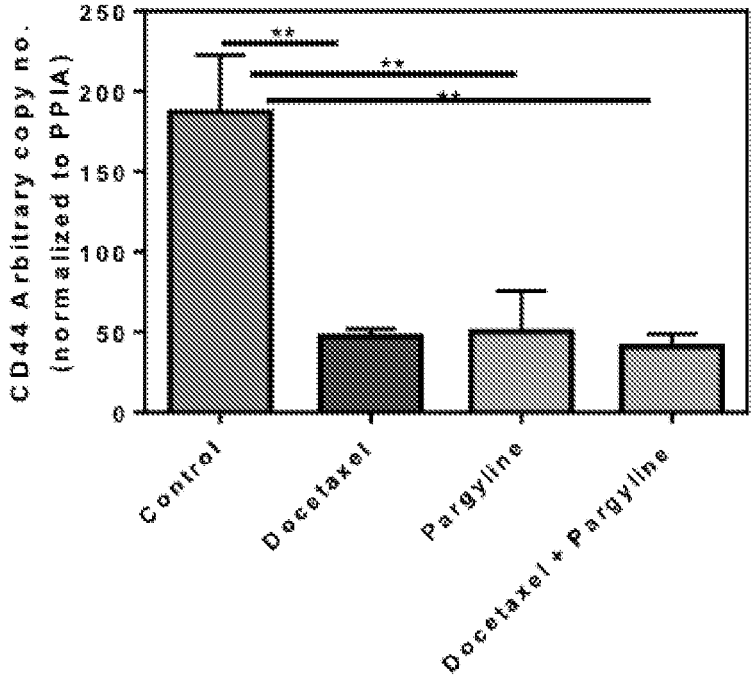

CD44 Arbitrary copy no.
(normalized to PPIA)
250
200
150
100
50
0
**
**
**
Control
Docetaxel
Pargyline
Docetaxel + Pargyline

FIGURE 10