Figure 1

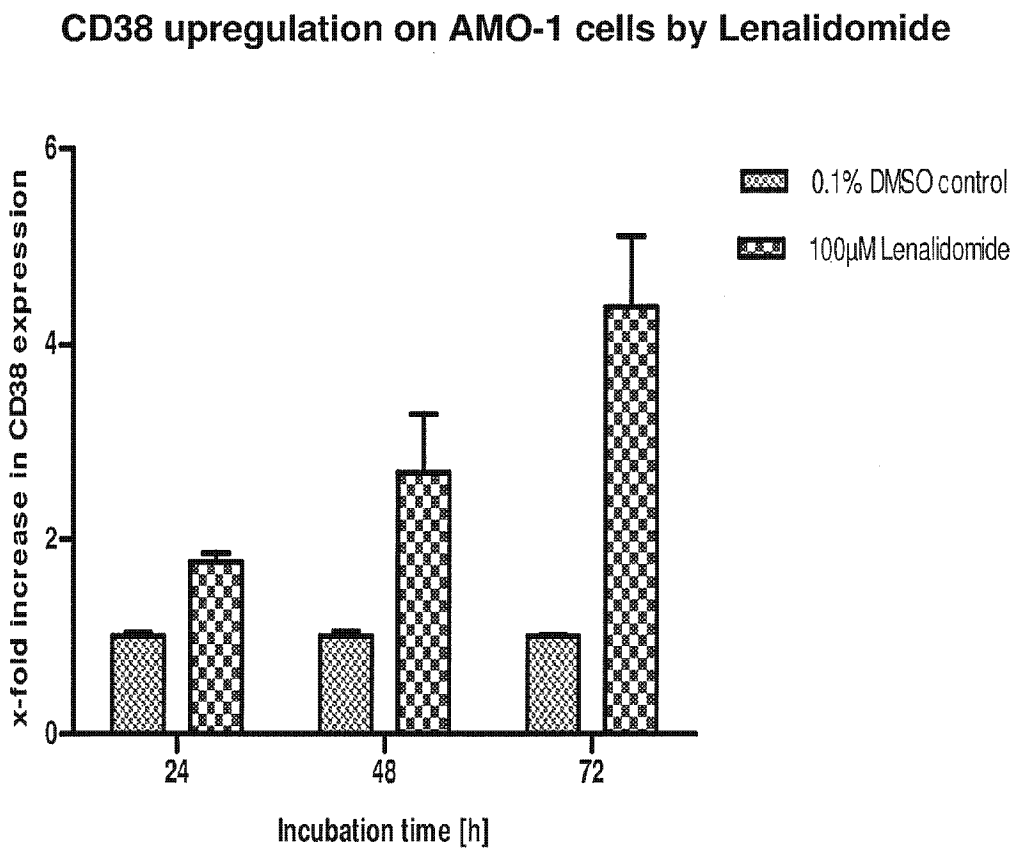

CD38 upregulation on AMO-1 cells by Lenalidomide
x-fold increase in CD38 expression
0
2
4
6
24
48
72
Incubation time [h]
0.1% DMSO control
100µM Lenalidomide

Figure 2

Influence of Lenalidomide Alone on Cell Proliferation

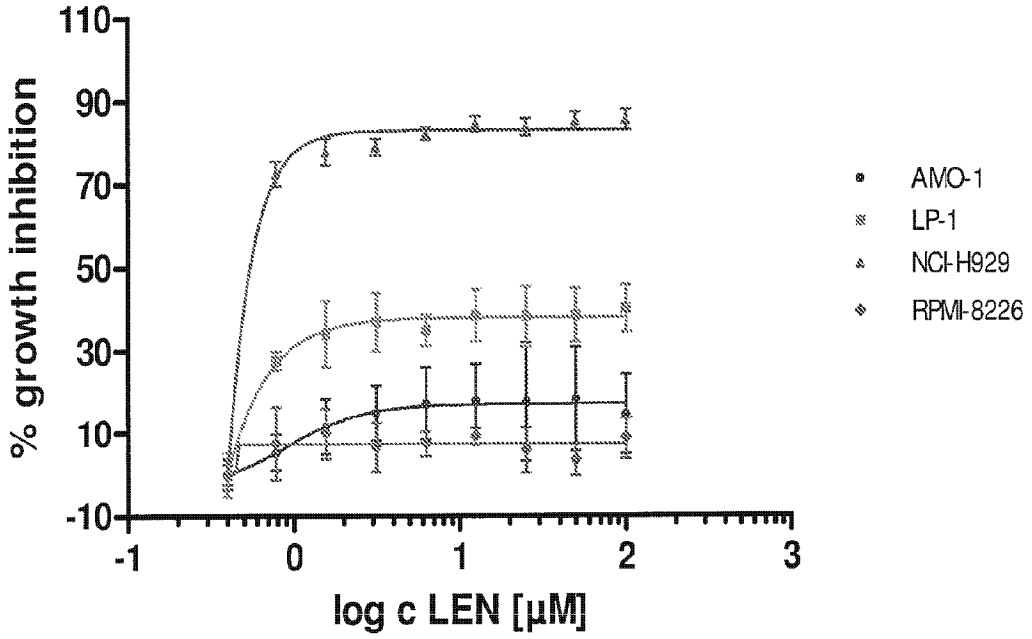
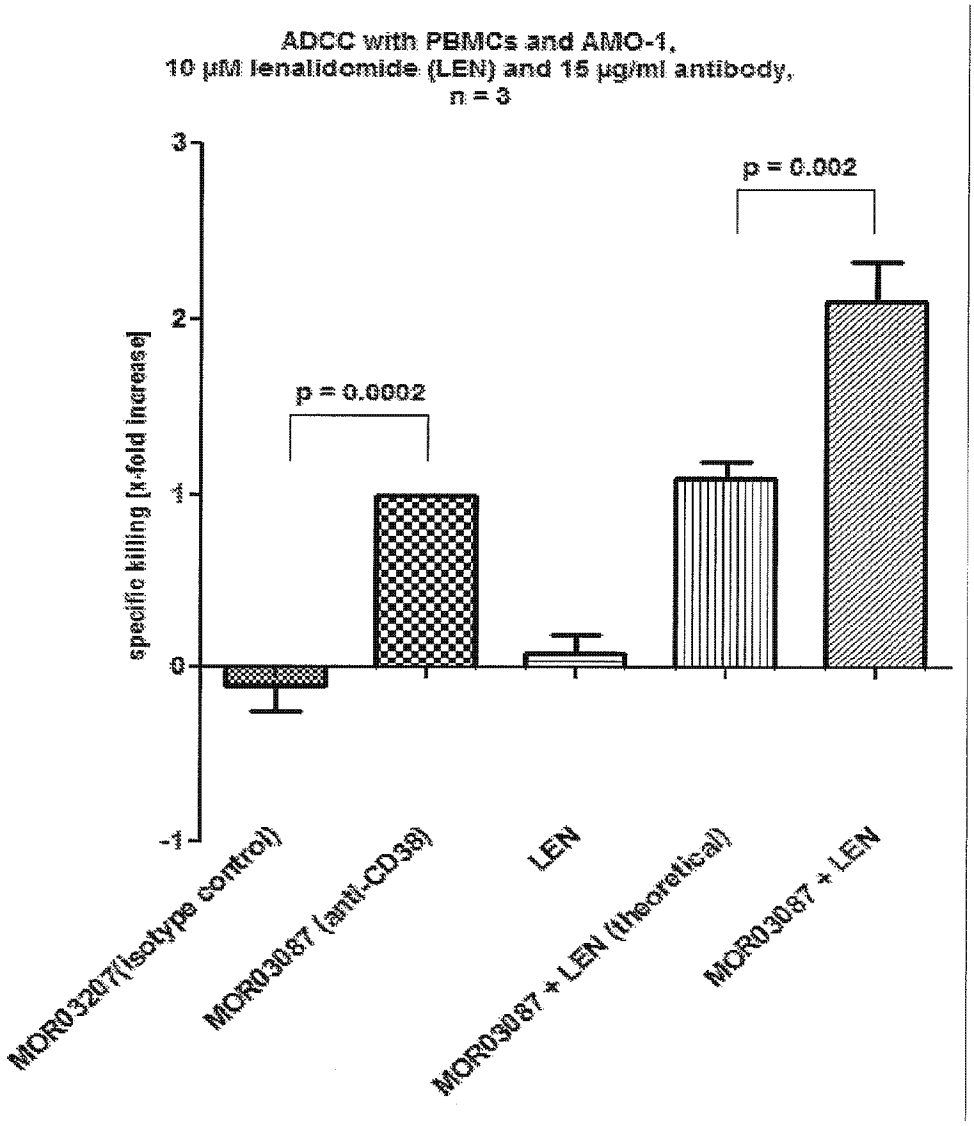
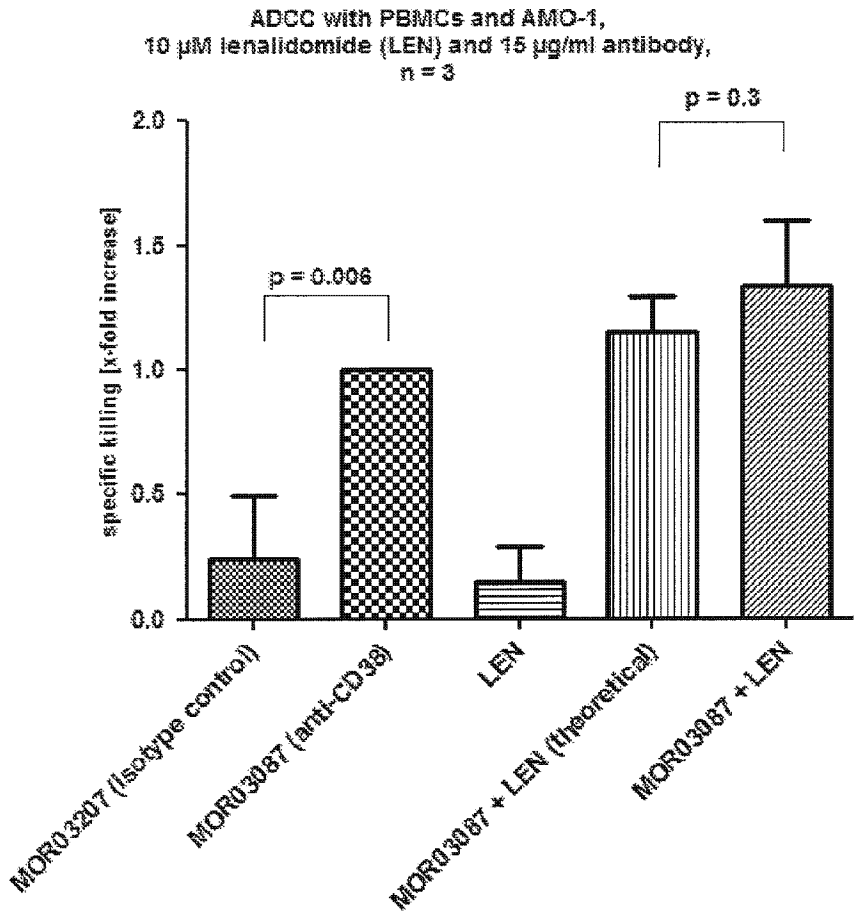


Figure 3



PBMCs and AMO-1 cells treated with lenalidomide prior to treatment with MOR202.

Figure 4



PBMCs alone were treated with lenalidomide prior to treatment with MOR202.

Figure 5

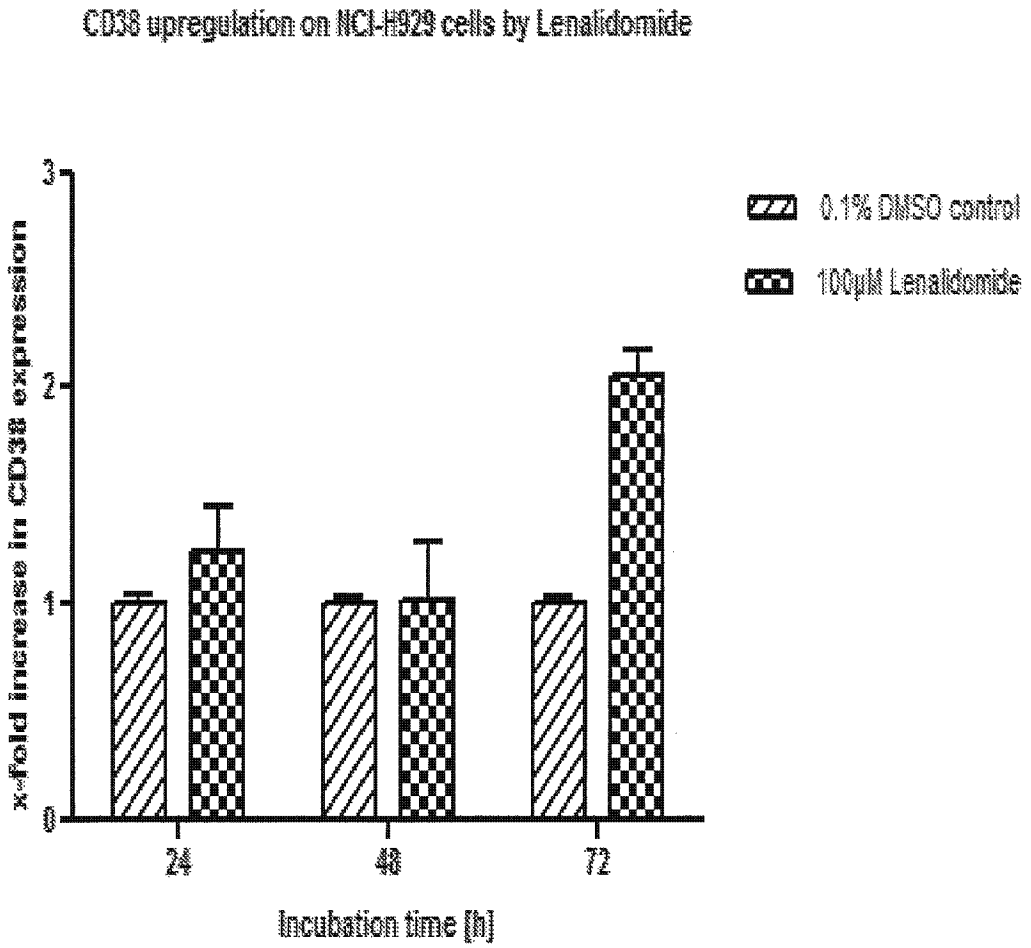
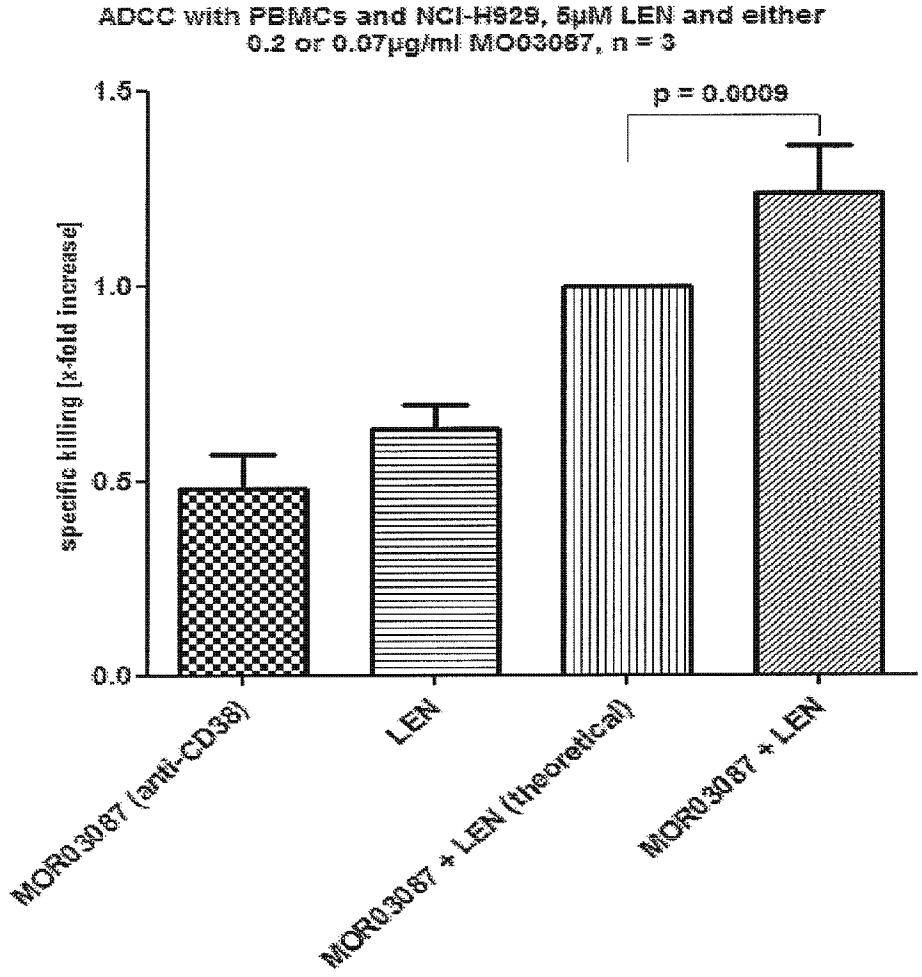
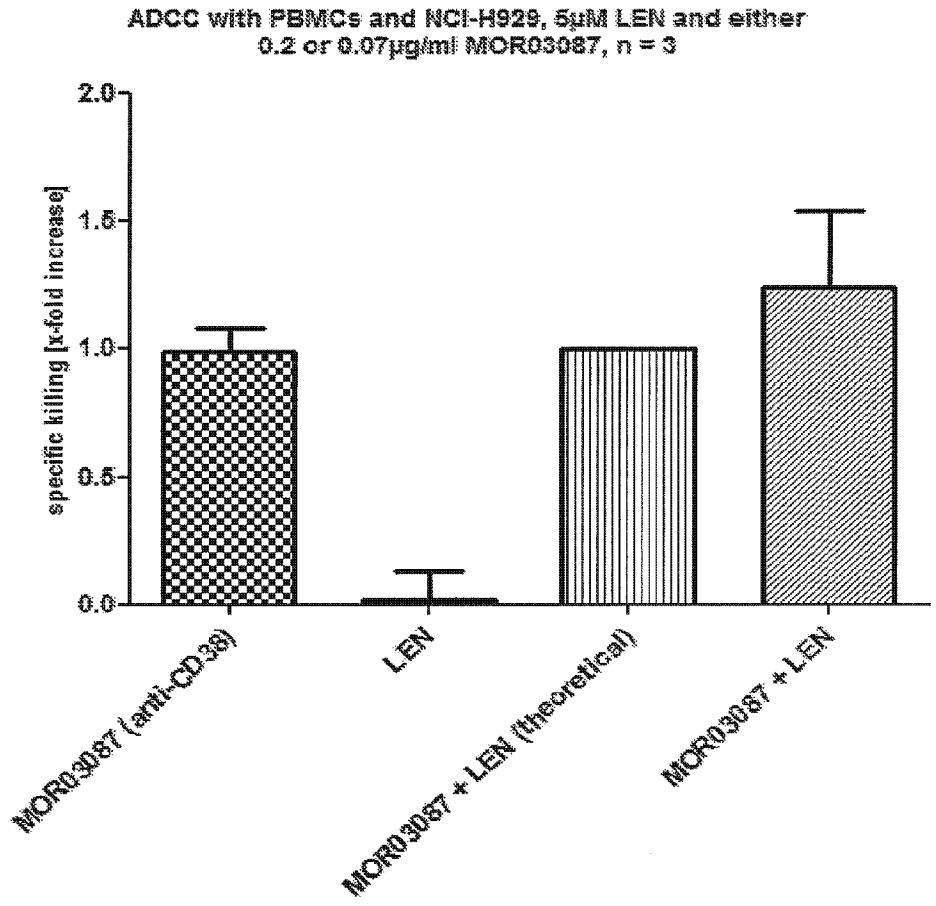

CD38 upregulation on NCI-H929 cells by Lenalidomide
x-fold increase in CD38 expression
0
1
2
3
24
48
72
Incubation time [h]
0.1% DMSO control
100pM Lenalidomide

Figure 6



PBMCs and NCI-H929 cells were treated with lenalidomide prior to treatment with MOR202.

Figure 7



PBMCs alone were treated with lenalidomide prior to treatment with MOR202.

Figure 8

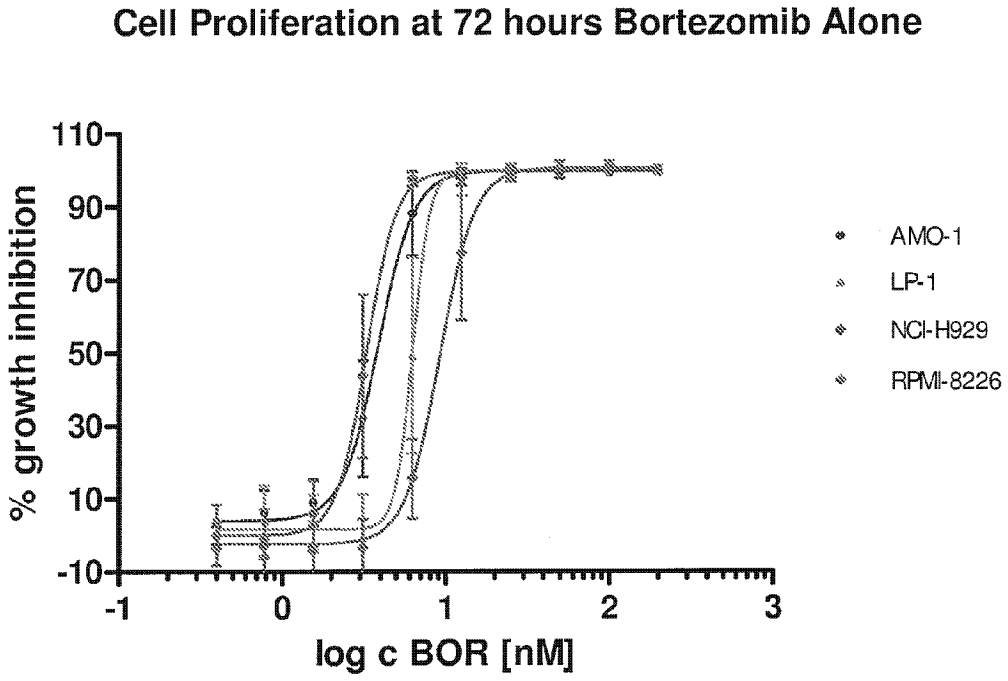

Cell Proliferation at 72 hours Bortezomib Alone
% growth inhibition
110
90
70
50
30
10
-10
-1
0
1
2
3
log c BOR [nM]
AMO-1
LP-1
NCI-H929
RPMI-8226

Figure 9

Effect of MOR202 and Velcade on ADCC in NCI-H929 Cells

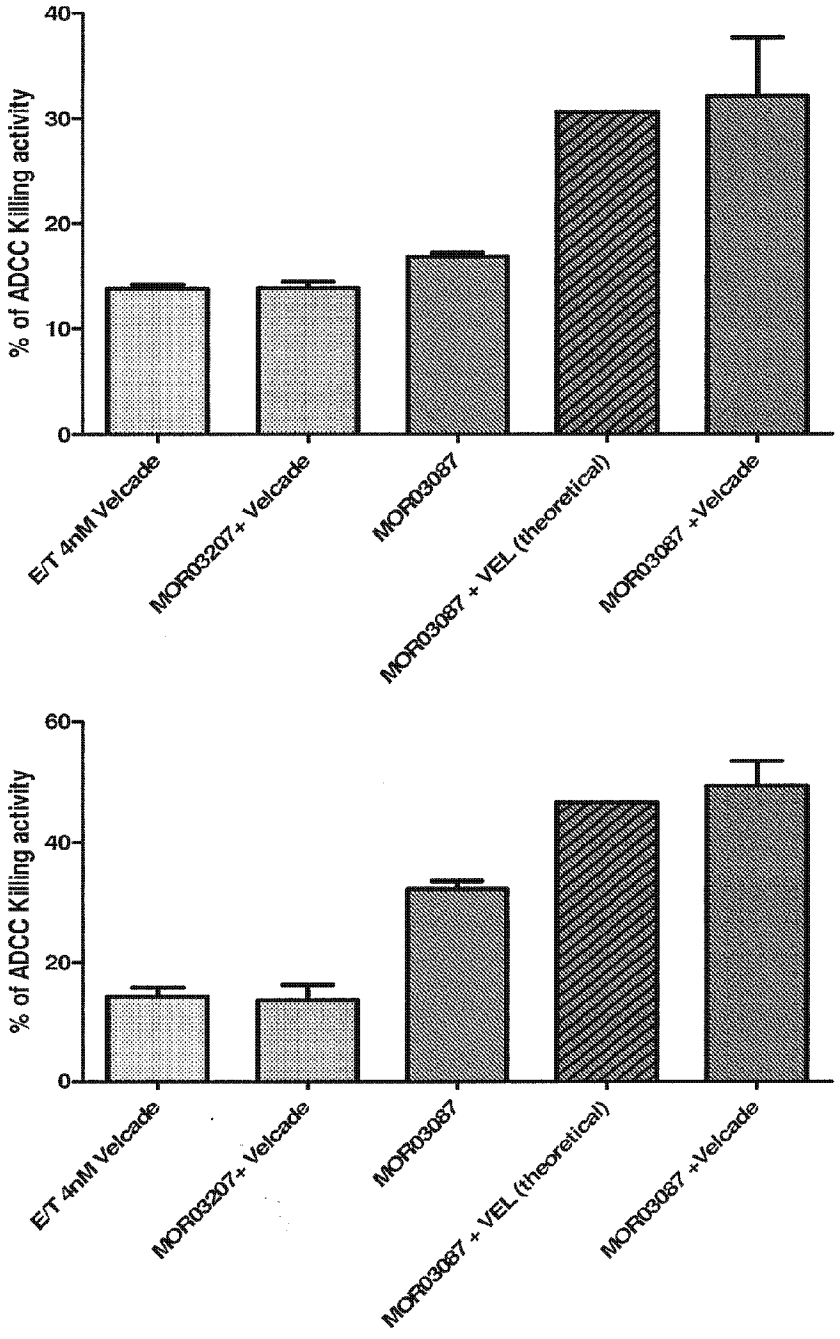
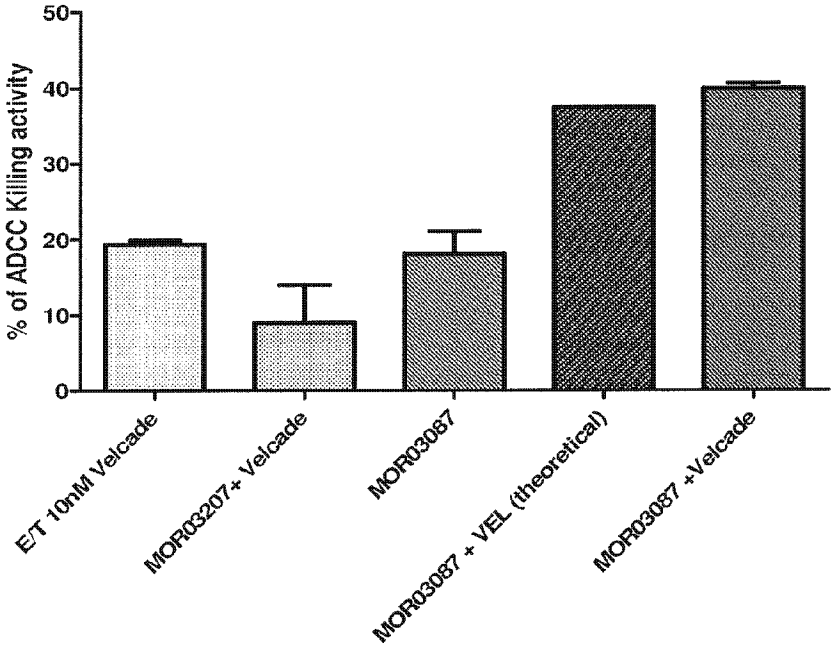


Figure 10
Effect of MOR202 and Velcade on ADCC in LP-1 Cells



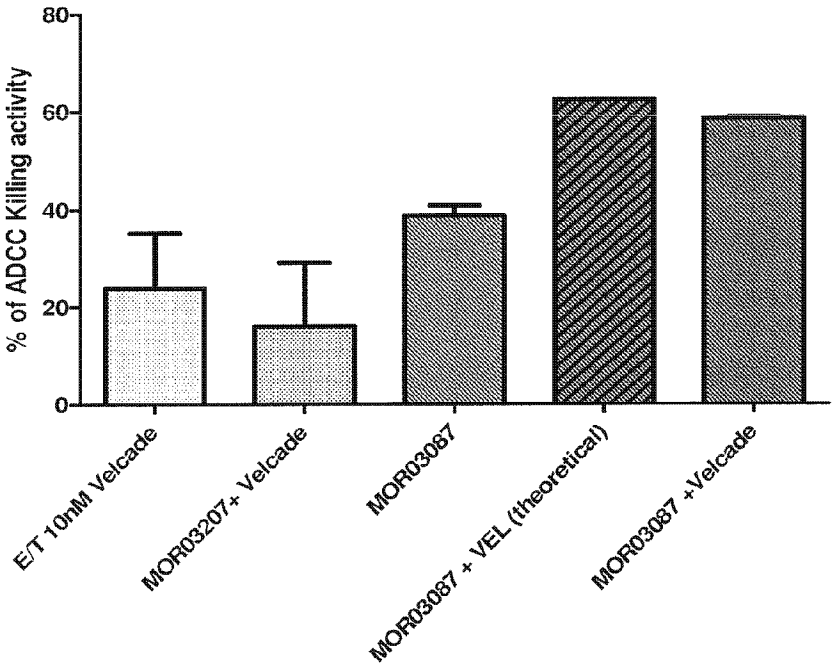


Figure 11

The amino acid sequence of the MOR202 Variable Heavy Domain is:

QVQLVESGGGLVQPGGSLRLSCAASGFTFSSYYMNWVRQAPGKGLEWVSGISGDPS NTYYADSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCARDLPLVYTGFAYWGQGTLVTV SS (SEQ ID NO: 10)

The amino acid sequence of the MOR202 Variable Light Domain is:

DIELTQPPSVSVAPGQTARISCSGDNLRHYYVYWYQQKPGQAPVLVIYGDSKRPSGIP ERFSGSNSGNTATLTISGTQAEDEADYYCQTYTGGASLVFGGGTKLTVLGQ (SEQ ID NO: 11)

The amino acid sequence of the MOR202 HCDR1 as defined by an internal nomenclature is: GFTFSSYYMN (SEQ ID NO: 1)

The amino acid sequence of the MOR202 HCDR1 as defined by Kabat is: SYYMN (SEQ ID NO: 14)

The amino acid sequence of the MOR202 HCDR2 as defined by Kabat is: GISGDPSNTYYADSVKG (SEQ ID NO: 2)

The amino acid sequence of the MOR202 HCDR3 as defined by Kabat is: DLPLVYTGFAY (SEQ ID NO: 3)

The amino acid sequence of the MOR202 LCDR1 as defined by Kabat is: SGDNLRHYYVY (SEQ ID NO: 4)

The amino acid sequence of the MOR202 LCDR2 as defined by Kabat is: GDSKRPS (SEQ ID NO: 5)

The amino acid sequence of the MOR202 LCDR3 as defined by Kabat is: QTYTGGAS (SEQ ID NO:6)

Figure 12

"Best Fit" curve for the combination of MOR202 and lenalidomide in the mediation of ADCC in AMO-1 cells.

MOR202 µg/ml	Effect (%dead)
0.011574	46.000000
0.069444	65.000000
0.416667	77.000000
2.500000	94.000000

Y=100/(1+10^((Dm-X)*m))

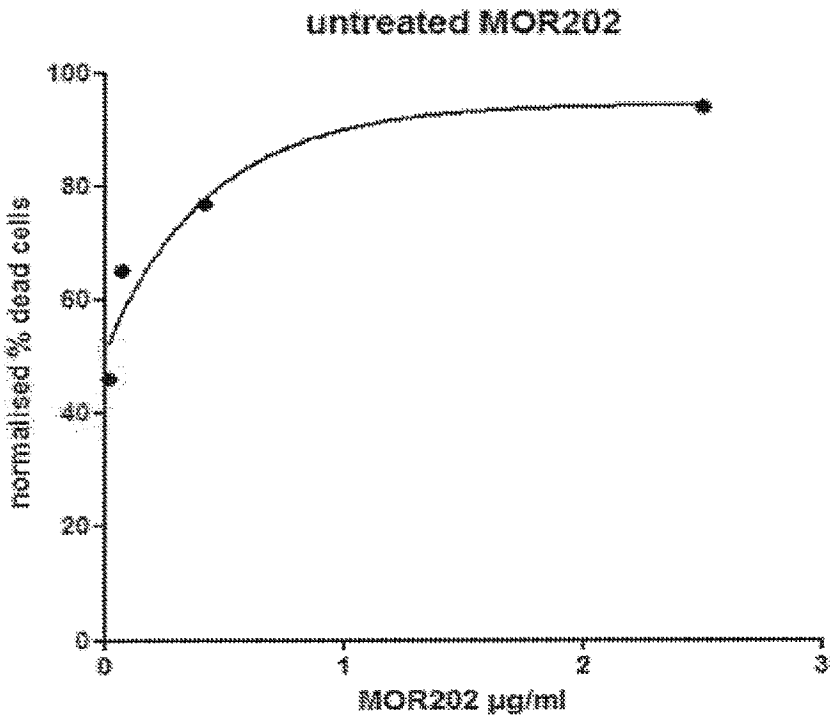


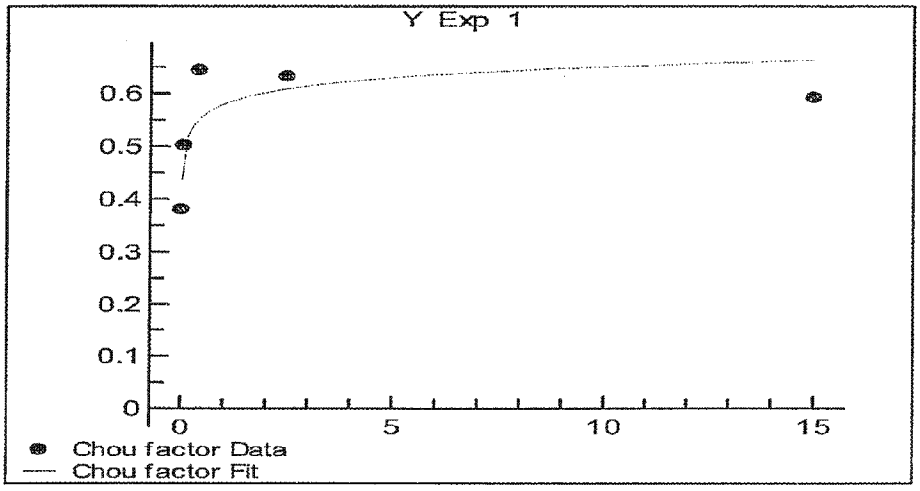
Figure 13

Y Exp 1

raw data	
X	Y
0.012	0.37997
0.07	0.501679
0.42	0.643211
2.5	0.631401
15	0.59145

XL fit calulations	
chart	#Ok
fit	#Ok
Dm	0.083866
m	0.129731
r^2	0.644434
(lin. correlation ciefficient)	

data fitted to y=f(x)=1/(1+((Dm/x)^m))



zoomed plot of data and fit

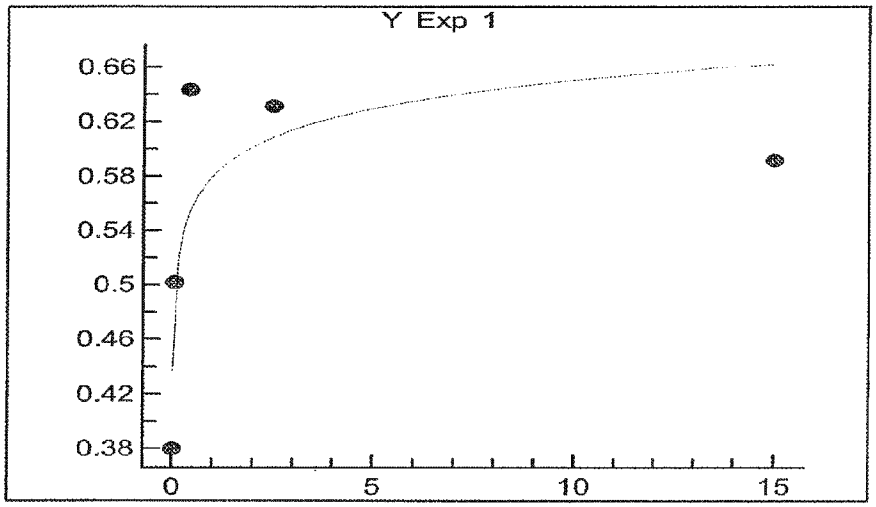


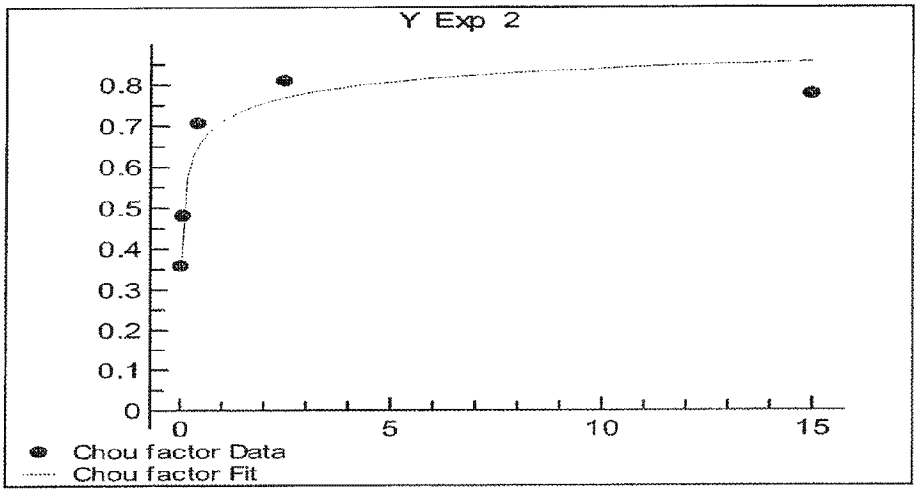
Figure 14

Y Exp 2

raw data	
X	Y
0.012	0.357662
0.07	0.480497
0.42	0.706076
2.5	0.809306
15	0.7768

XL fit calulations	
chart	#Ok
fit	#Ok
Dm	0.062255
m	0.32594
r^2 (lin. correlation ciefficient)	0.924687

data fitted to y=f(x)=1/(1+((Dm/x)^m))



zoomed plot of data and fit

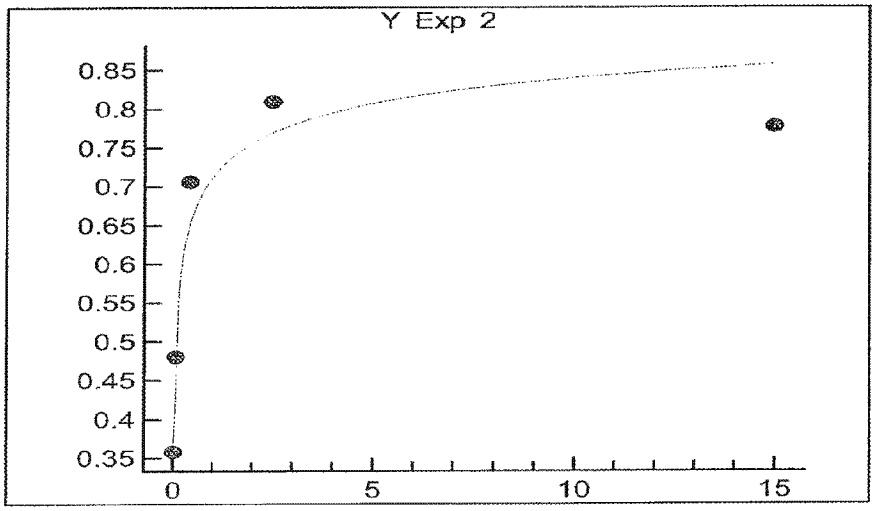


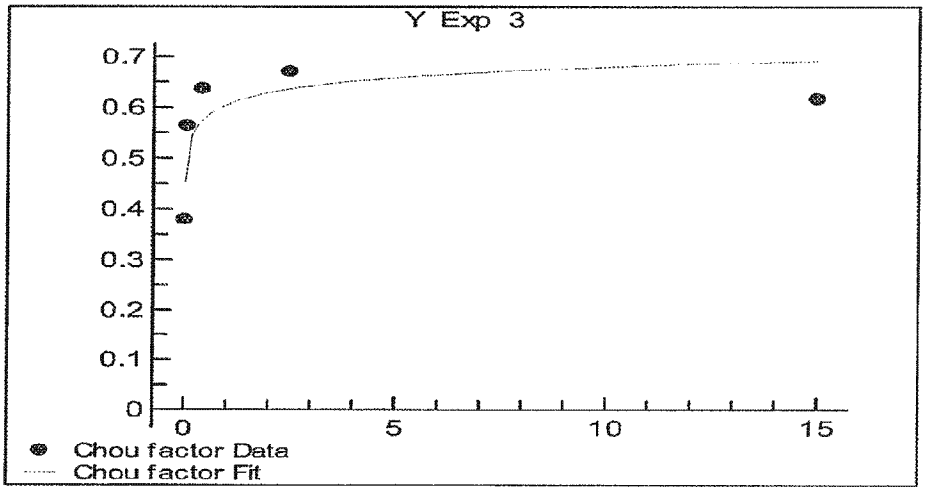
Figure 15

Y Exp 3

raw data	
X	Y
0.012	0.378846
0.07	0.562988
0.42	0.635872
2.5	0.669822
15	0.61643

XL fit calulations	
chart	#Ok
fit	#Ok
Dm	0.04629
m	0.139915
r^2	0.657161
(lin. correlation ciefficient)	

data fitted to y=f(x)=1/(1+((Dm/x)^m))



zoomed plot of data and fit

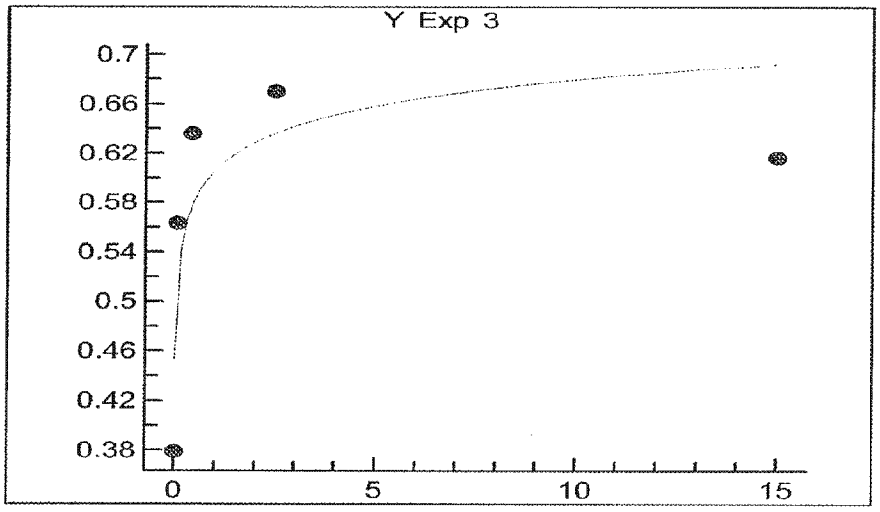


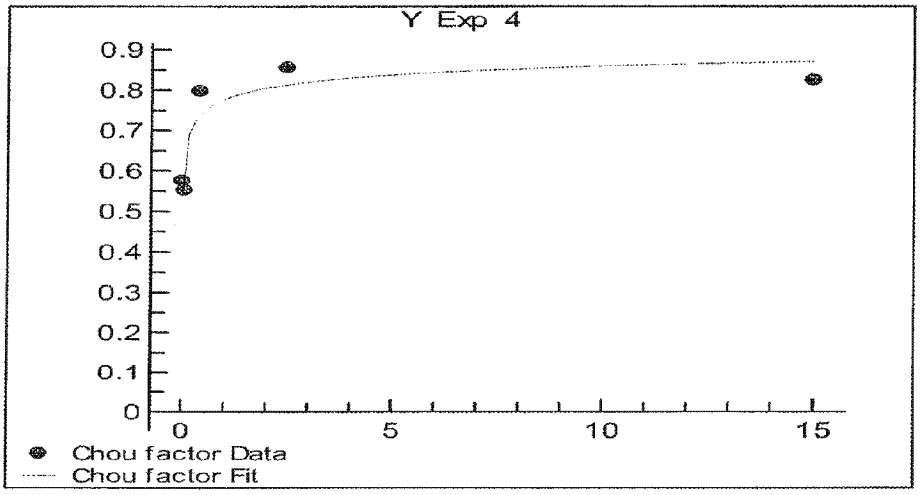
Figure 16

Y Exp 4

raw data	
X	Y
0.012	0.575381
0.07	0.551706
0.42	0.797069
2.5	0.855131
15	0.824584

XL fit calulations	
chart	#Ok
fit	#Ok
Dm	0.006182
m	0.245157
r^2	0.795756
(lin. correlation ciefficient)	

data fitted to y=f(x)=1/(1+((Dm/x)^m))



zoomed plot of data and fit

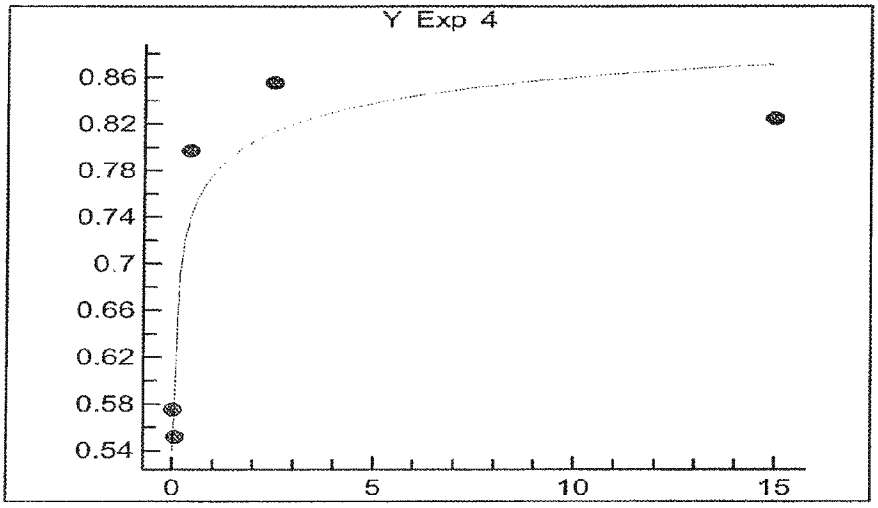


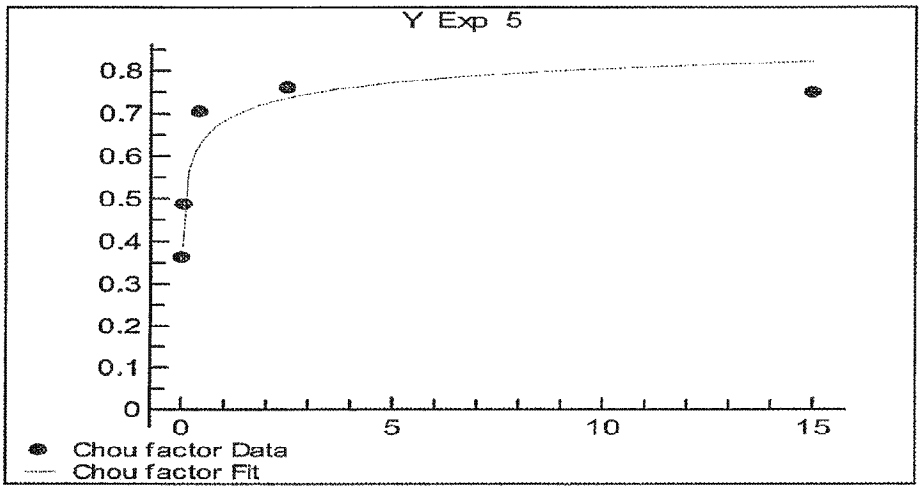
Figure 17

Y Exp 5

raw data	
X	Y
0.012	0.361208
0.07	0.486295
0.42	0.703533
2.5	0.759272
15	0.747995

XL fit calulations	
chart	#Ok
fit	#Ok
Dm	0.063193
m	0.278814
r^2 (lin. correlation cieefficient)	0.90303

data fitted to y=f(x)=1/(1+((Dm/x)^m))



zoomed plot of data and fit

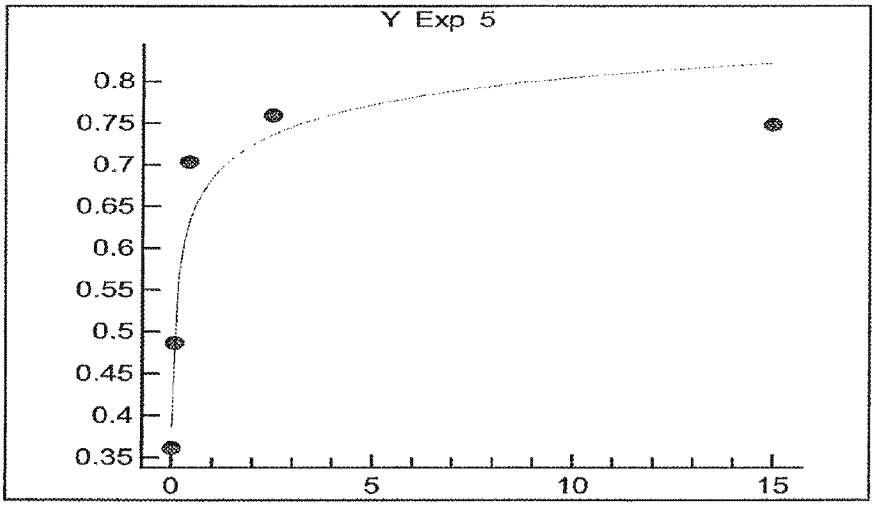


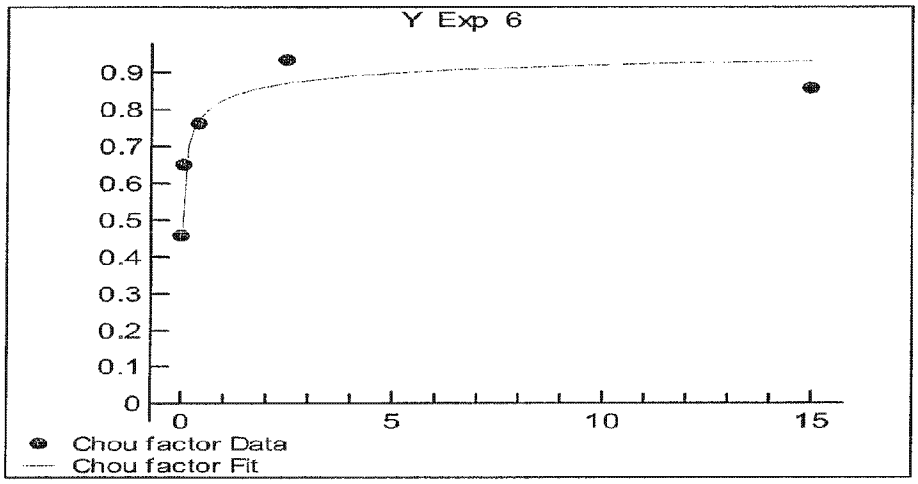
Figure 18

Y Exp 6

raw data	
X	Y
0.012	0.456555
0.07	0.649115
0.42	0.761269
2.5	0.93137
15	0.85444

XL fit calulations	
chart	#Ok
fit	#Ok
Dm	0.016501
m	0.379718
r^2 (lin. correlation ciefficient)	0.930189

data fitted to y=f(x)=1/(1+((Dm/x)^m))



zoomed plot of data and fit

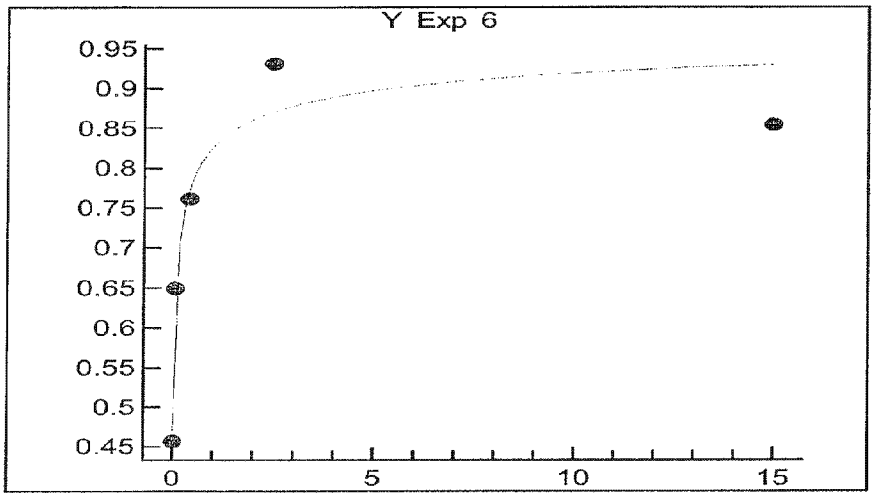
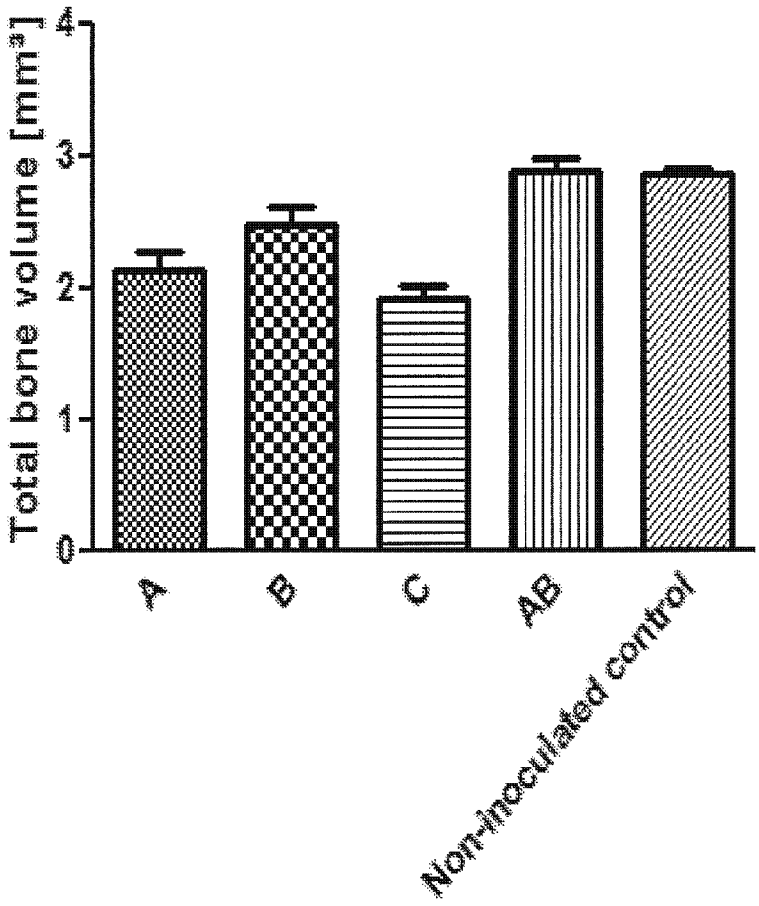


Figure 19

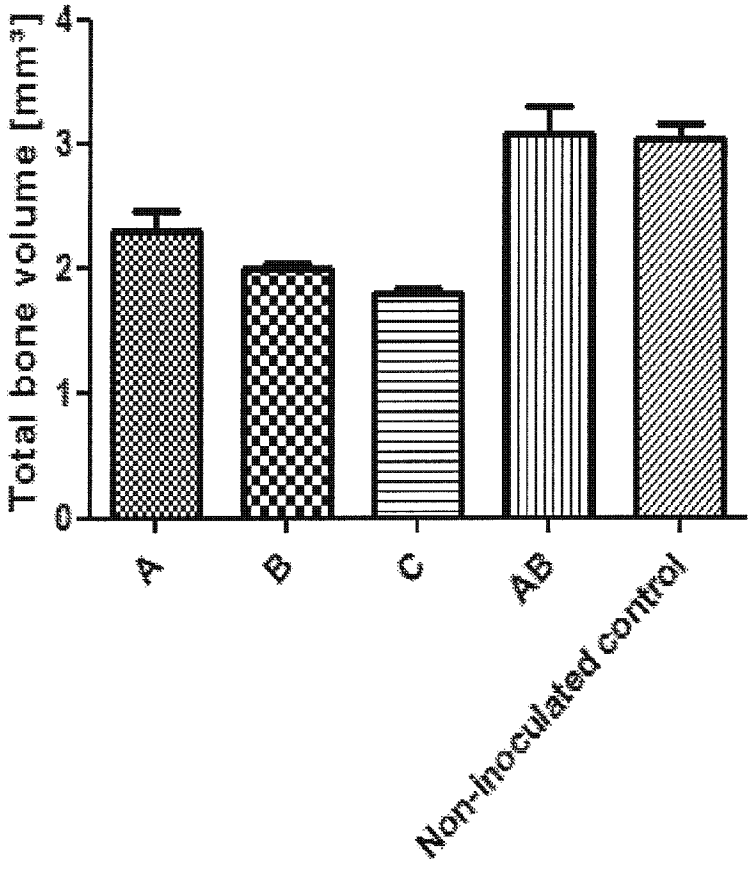
Mean Total Bone Volume +/- SEM for Each Study Group



A: LEN 50mg/kg, p.o. in 10mL/kg
B: MOR202 3 mg/kg, i.p., in 10 mL/kg
C: Vehicle Control (Ora Plus: Ora Sweet) 10mL/kg, p.o.
AB: LEN 50mg/kg p.o. in 10mL/kg + MOR202 3 mg/kg i.p., in 10 mL/kg

Figure 20

Mean Total Bone Volume +/- SEM for Each Study Group



Group A	Bortezomib	0.6 mg/kg, i.p., in 10 mL/kg
Group B	MOR202	1 mg/kg, i.v., in 10 mL/kg
Group C	Vehicle Control (0.9% Saline for Injection)	i.p., 10 mL/kg
Group AB	Bortezomib/MOR202	0.6/1 mg/kg, i.p./i.v., in 10 mL/kg