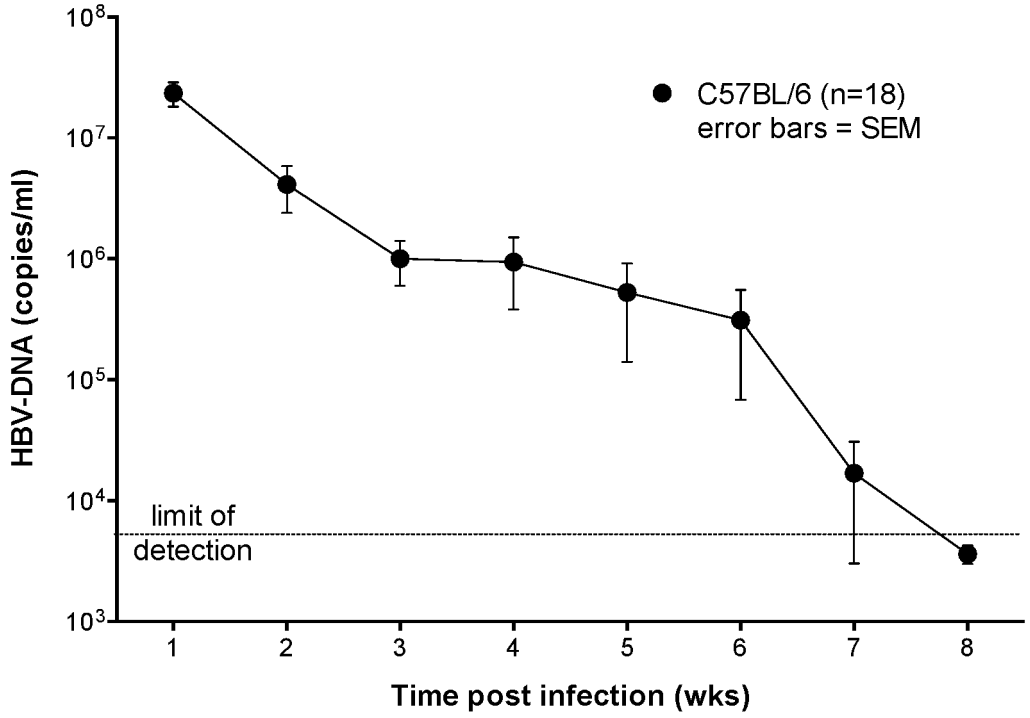
**Figure 1**


HBV-DNA (copies/ml)
$10^8$
$10^7$
$10^6$
$10^5$
$10^4$
$10^3$
C57BL/6 (n=18)
error bars = SEM
limit of
detection
1
2
3
4
5
6
7
8
Time post infection (wks)

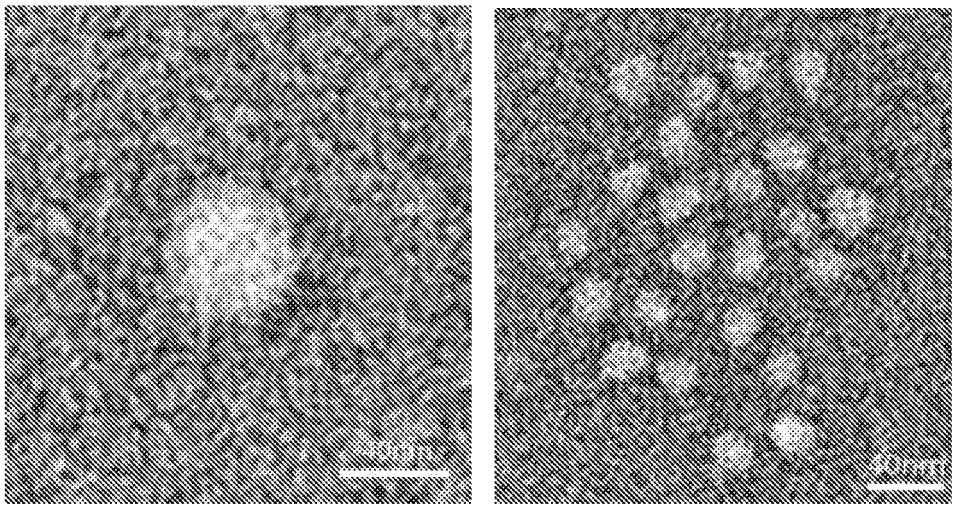


**Figure 2**

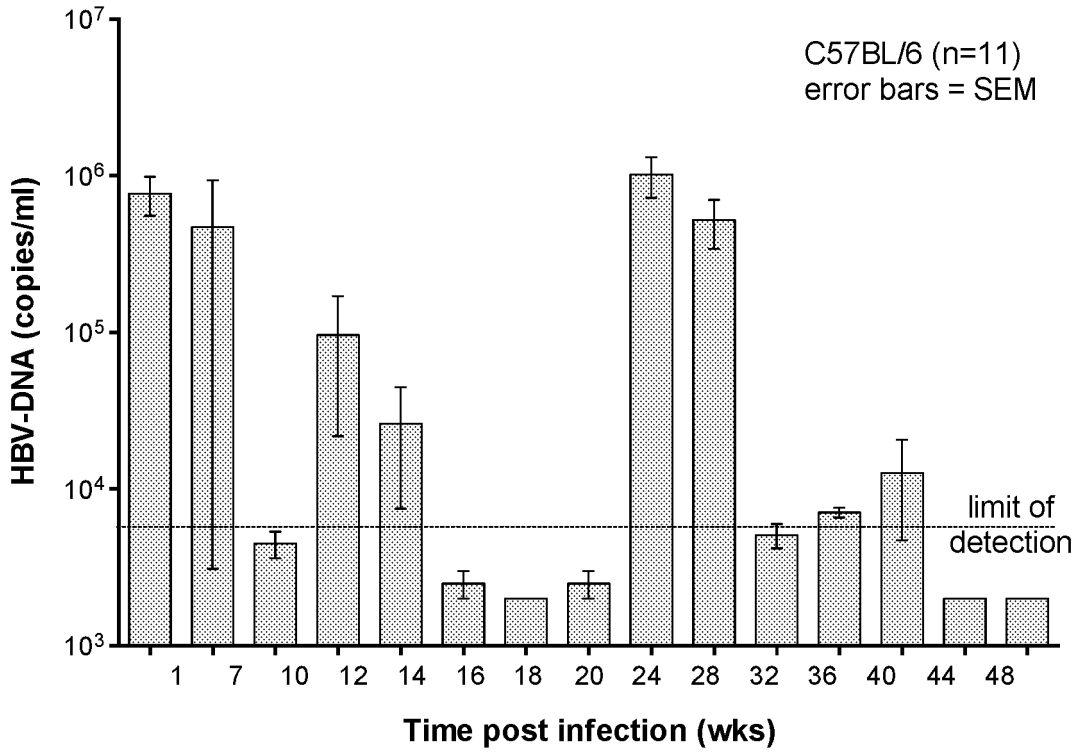

C57BL/6 (n=11)
error bars = SEM
HBV-DNA (copies/ml)
$10^7$
$10^6$
$10^5$
$10^4$
$10^3$
limit of detection
1 7 10 12 14 16 18 20 24 28 32 36 40 44 48
Time post infection (wks)

**Figure 3**

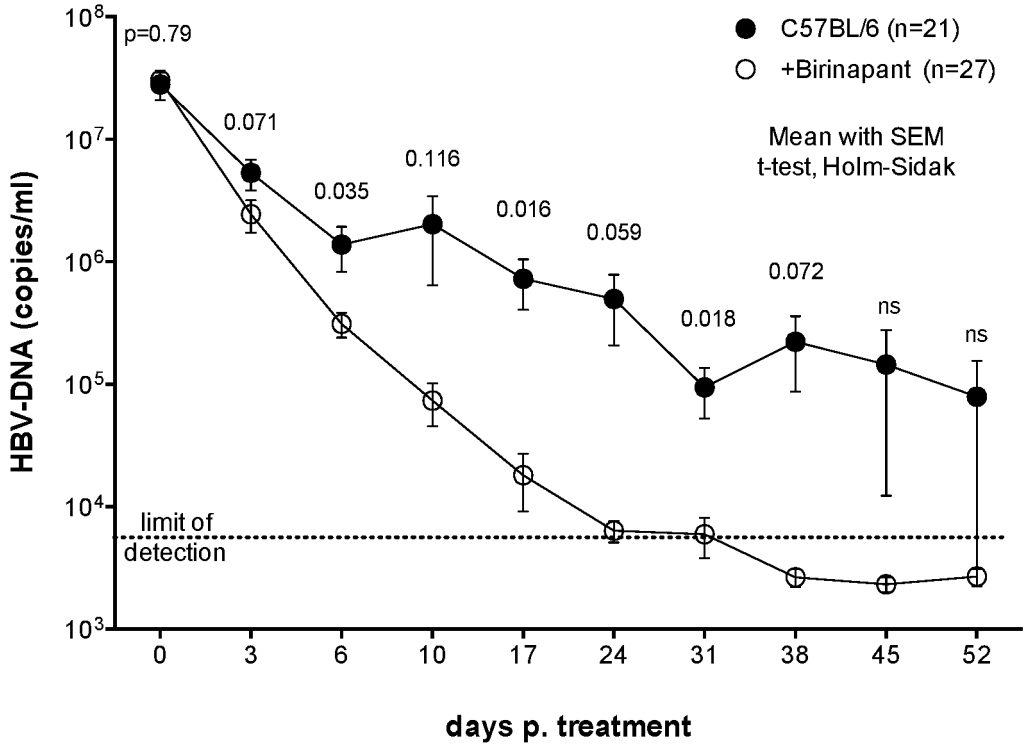

HBV-DNA (copies/ml)
$10^8$
$10^7$
$10^6$
$10^5$
$10^4$
$10^3$
p=0.79
0.071
0.035
0.116
0.016
0.059
0.018
0.072
ns
ns
limit of detection
C57BL/6 (n=21)
+Birinapant (n=27)
Mean with SEM
t-test, Holm-Sidak
0
3
6
10
17
24
31
38
45
52
days p. treatment

**Figure 4**

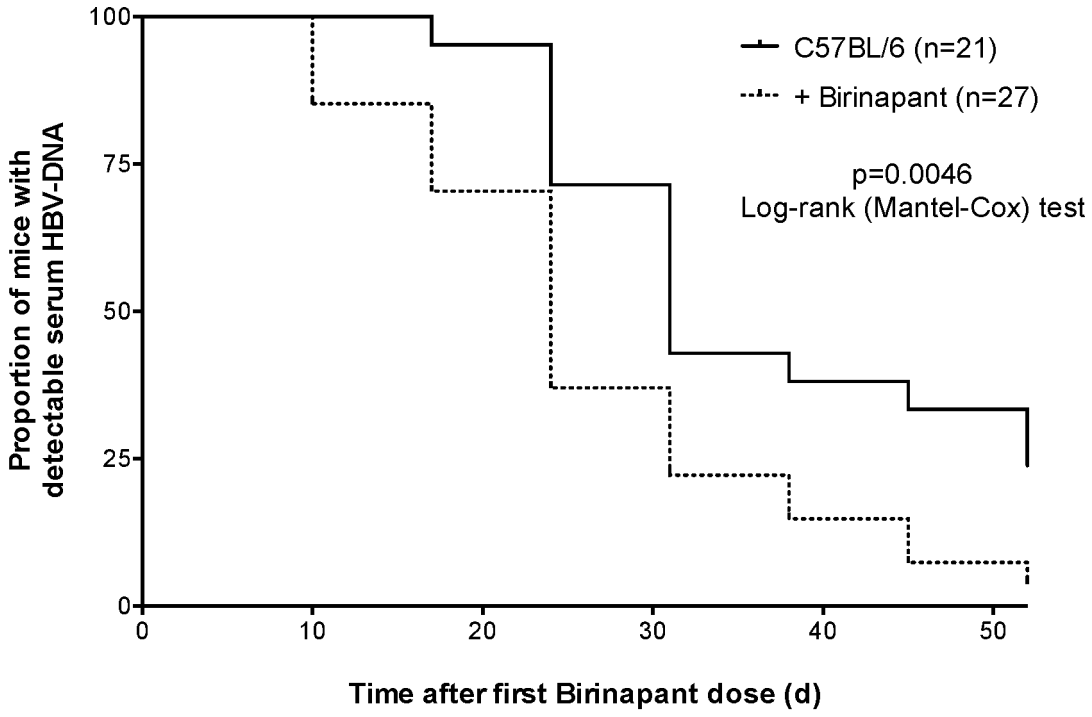

100
75
50
25
0
0
10
20
30
40
50
Proportion of mice with detectable serum HBV-DNA
Time after first Birinapant dose (d)
C57BL/6 (n=21)
+ Birinapant (n=27)
p=0.0046
Log-rank (Mantel-Cox) test

**Figure 5**

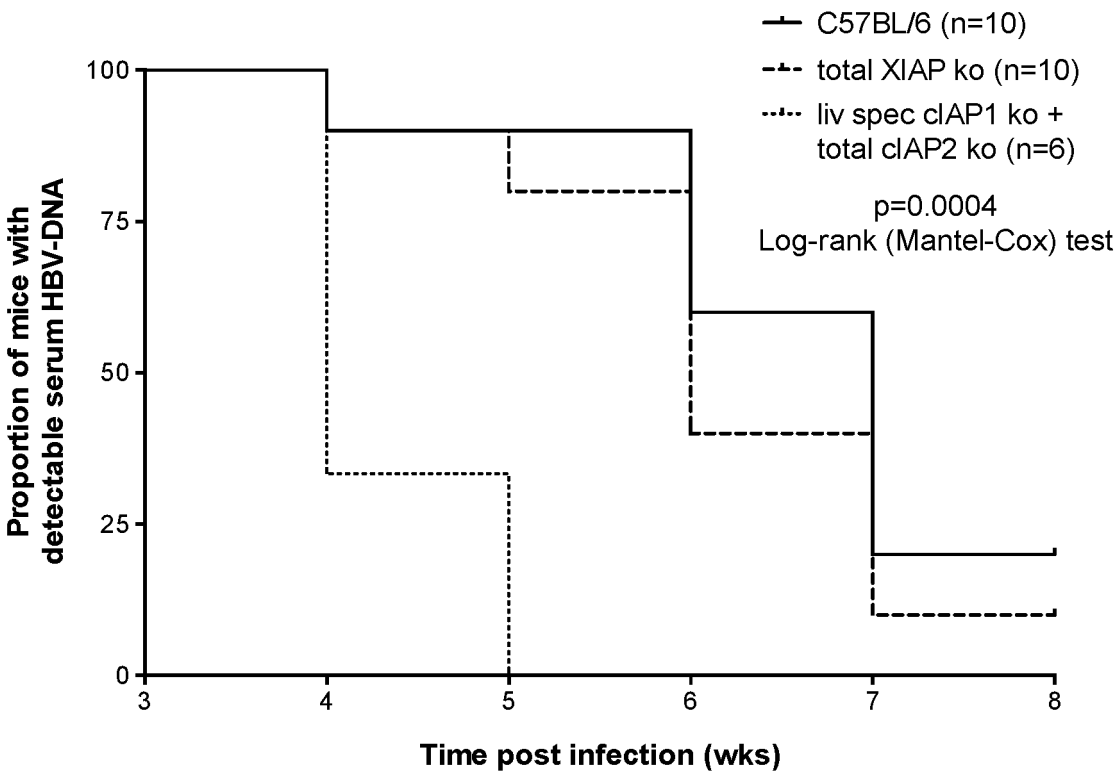

C57BL/6 (n=10)
total XIAP ko (n=10)
liv spec cIAP1 ko +
total cIAP2 ko (n=6)
p=0.0004
Log-rank (Mantel-Cox) test
Proportion of mice with detectable serum HBV-DNA
100
75
50
25
0
3
4
5
6
7
8
Time post infection (wks)

**Figure 6**

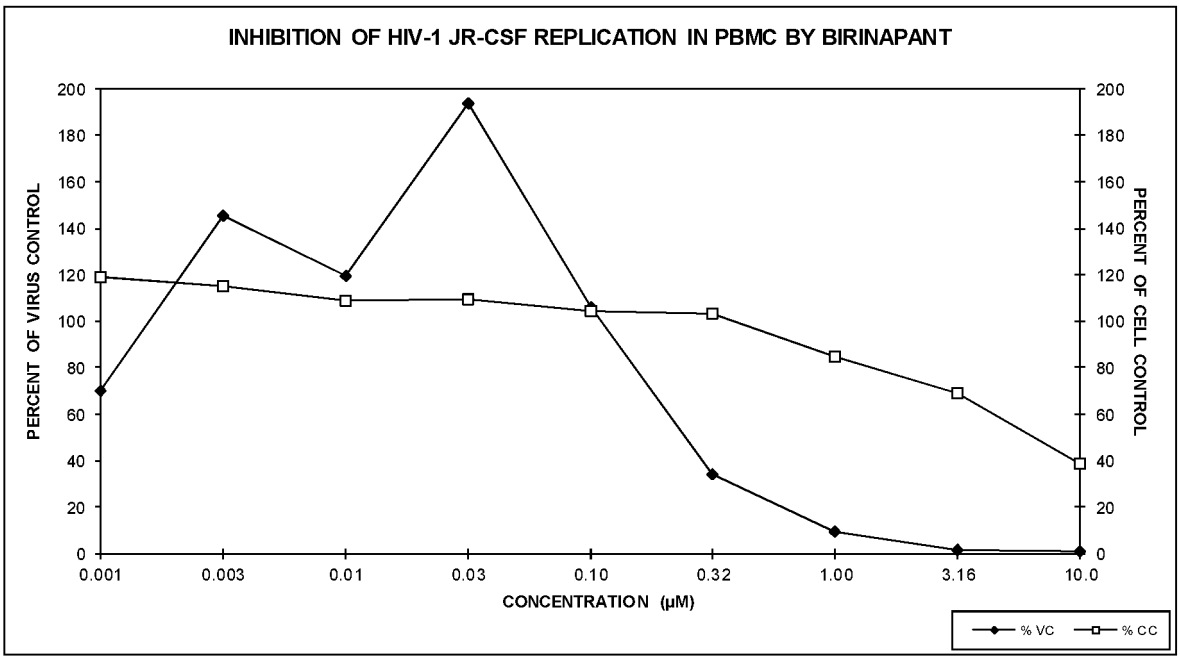

INHIBITION OF HIV-1 JR-CSF REPLICATION IN PBMC BY BIRINAPANT
PERCENT OF VIRUS CONTROL
PERCENT OF CELL CONTROL
0
20
40
60
80
100
120
140
160
180
200
0.001
0.003
0.01
0.03
0.10
0.32
1.00
3.16
10.0
CONCENTRATION (μM)
% VC
% CC

**Figure 7**

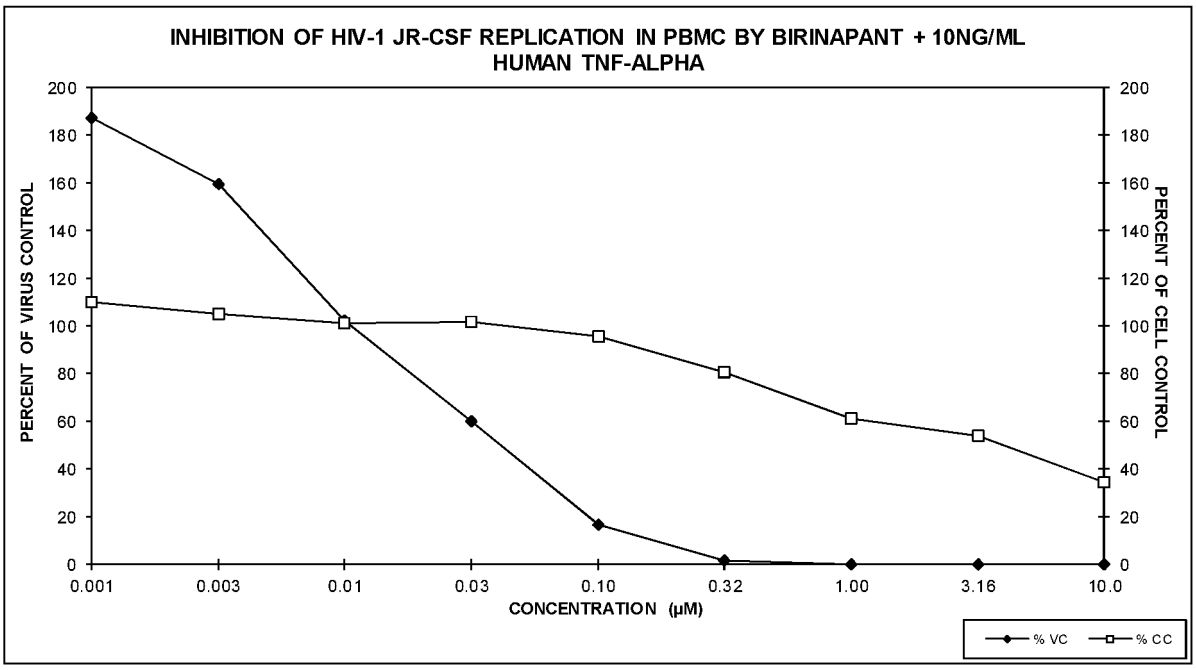

INHIBITION OF HIV-1 JR-CSF REPLICATION IN PBMC BY BIRINAPANT + 10NG/ML HUMAN TNF-ALPHA
PERCENT OF VIRUS CONTROL
PERCENT OF CELL CONTROL
200
180
160
140
120
100
80
60
40
20
0
0.001
0.003
0.01
0.03
0.10
0.32
1.00
3.16
10.0
CONCENTRATION (µM)
% VC
% CC

Figure 8

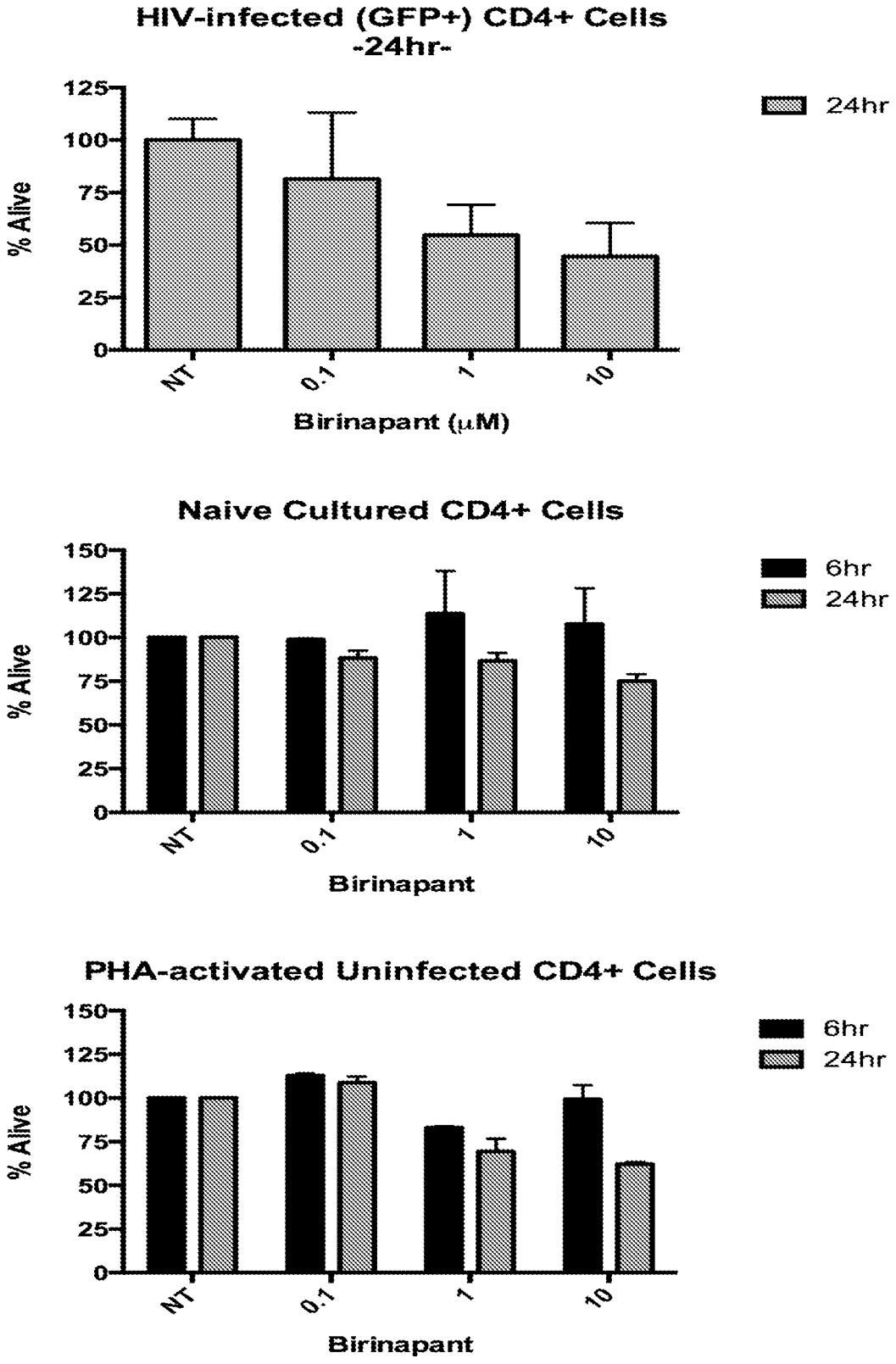

HIV-infected (GFP+) CD4+ Cells
-24hr-
24hr
% Alive
125
100
75
50
25
0
NT
0.1
1
10
Birinapant (μM)
Naive Cultured CD4+ Cells
6hr
24hr
% Alive
150
125
100
75
50
25
0
NT
0.1
1
10
Birinapant
PHA-activated Uninfected CD4+ Cells
6hr
24hr
% Alive
150
125
100
75
50
25
0
NT
0.1
1
10
Birinapant

**Figure 9**

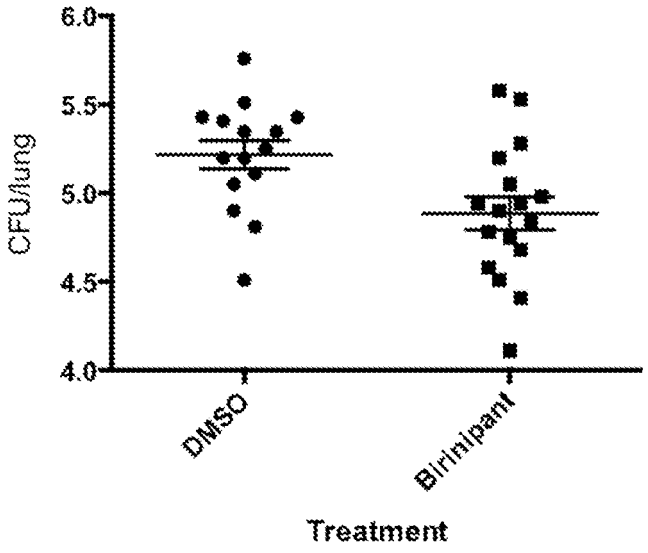


**Figure 10**

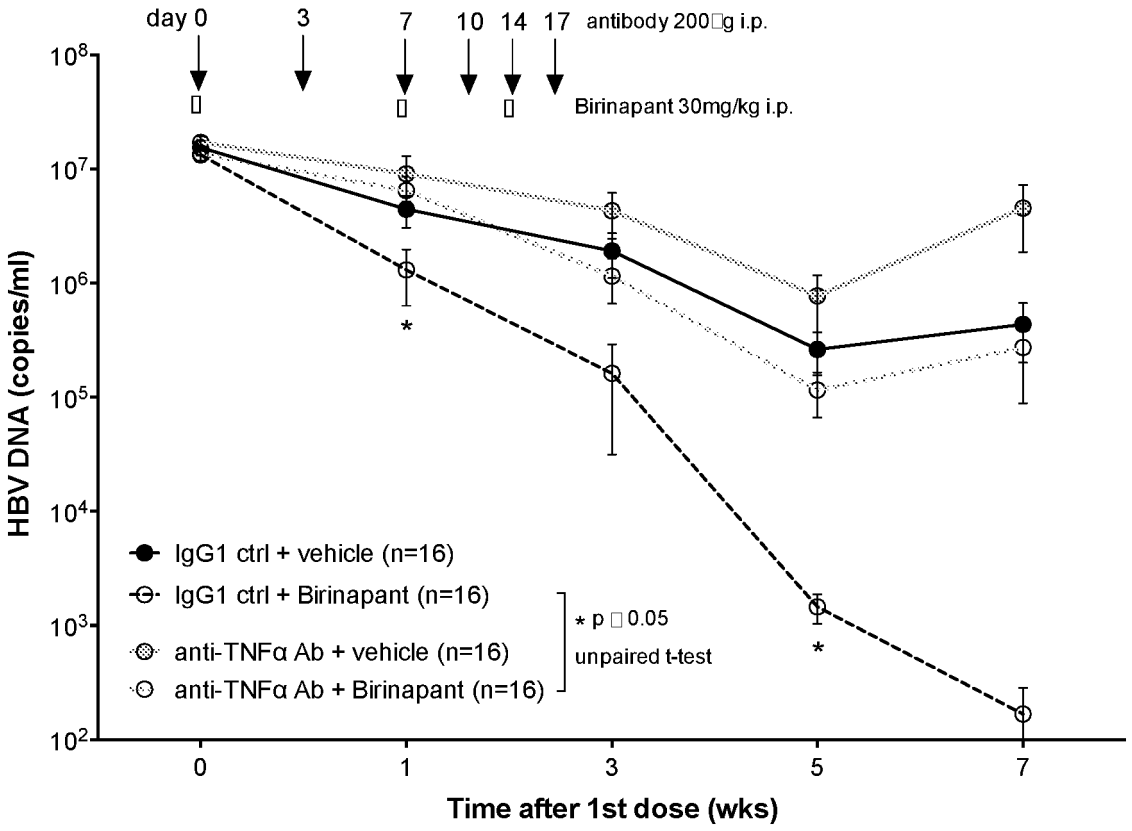

day 0
3
7
10
14
17
antibody 200□g i.p.
Birinapant 30mg/kg i.p.
HBV DNA (copies/ml)
$10^8$
$10^7$
$10^6$
$10^5$
$10^4$
$10^3$
$10^2$
IgG1 ctrl + vehicle (n=16)
IgG1 ctrl + Birinapant (n=16)
anti-TNFα Ab + vehicle (n=16)
anti-TNFα Ab + Birinapant (n=16)
* p □ 0.05
unpaired t-test
*
*
0
1
3
5
7
Time after 1st dose (wks)

**Figure 11**

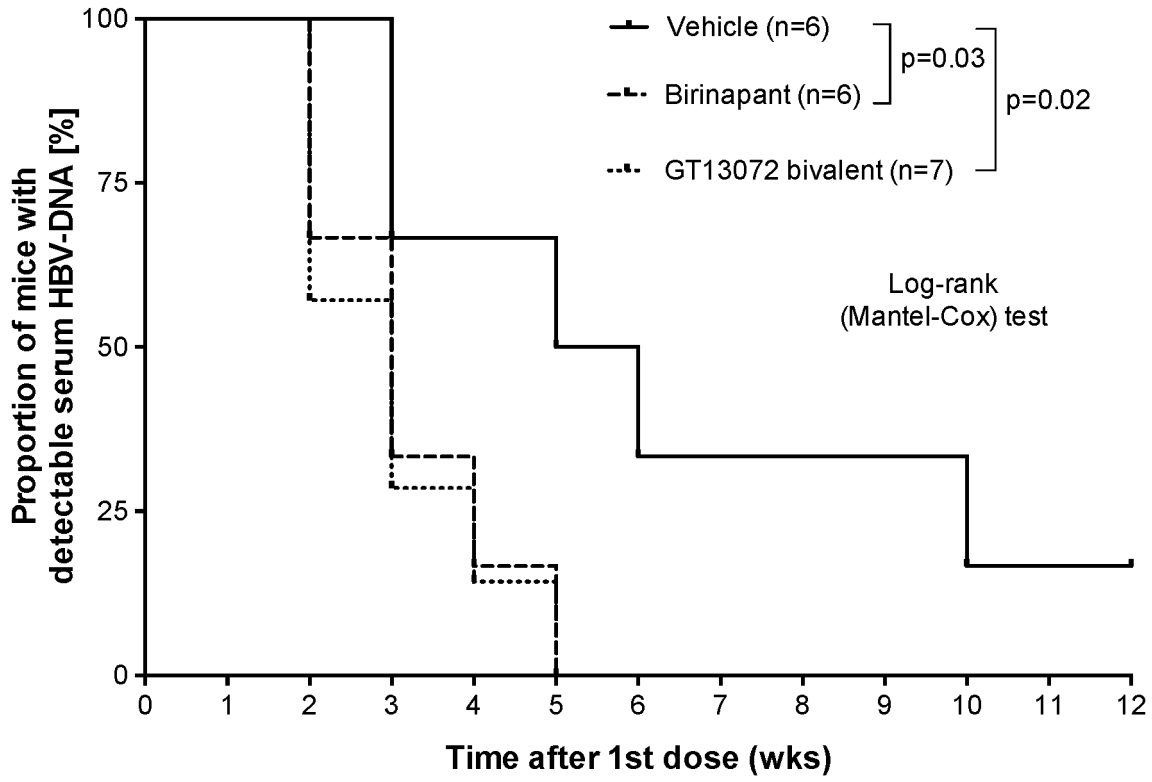

Vehicle (n=6)
Birinapant (n=6)
GT13072 bivalent (n=7)
p=0.03
p=0.02
Log-rank
(Mantel-Cox) test
Proportion of mice with detectable serum HBV-DNA [%]
100
75
50
25
0
0 1 2 3 4 5 6 7 8 9 10 11 12
Time after 1st dose (wks)

**Figure 12**

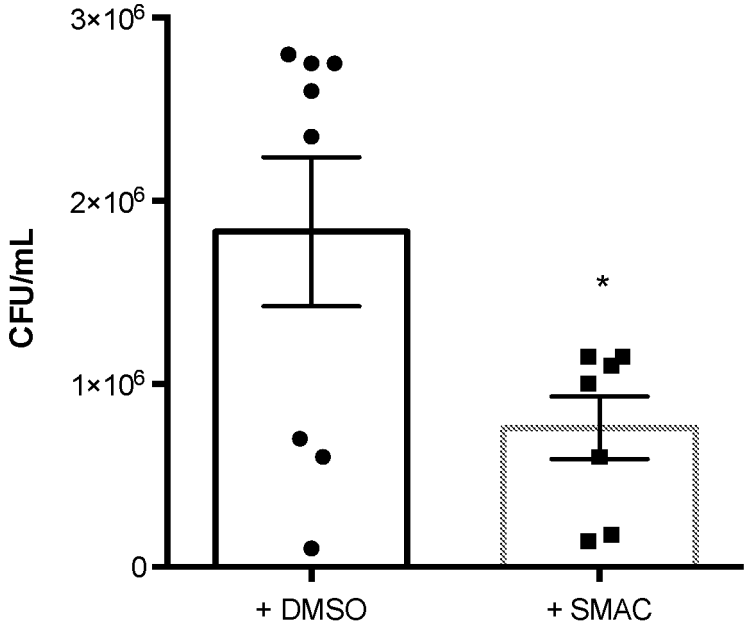


**Figure 13**

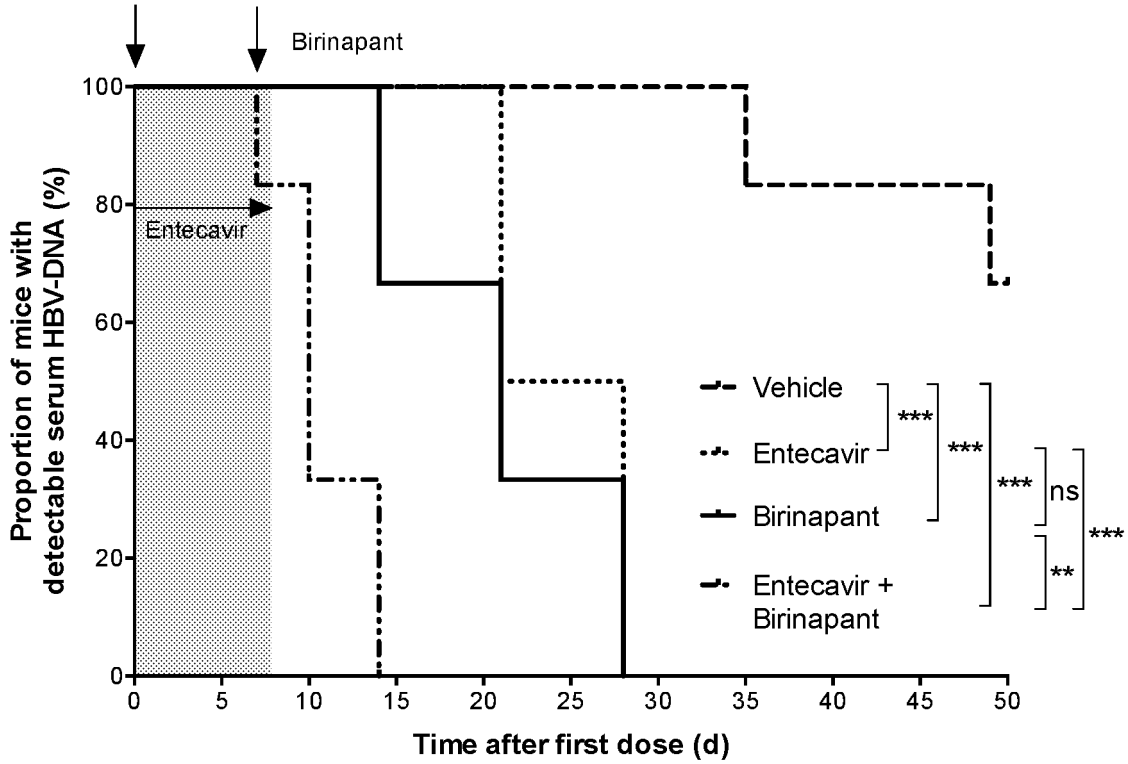
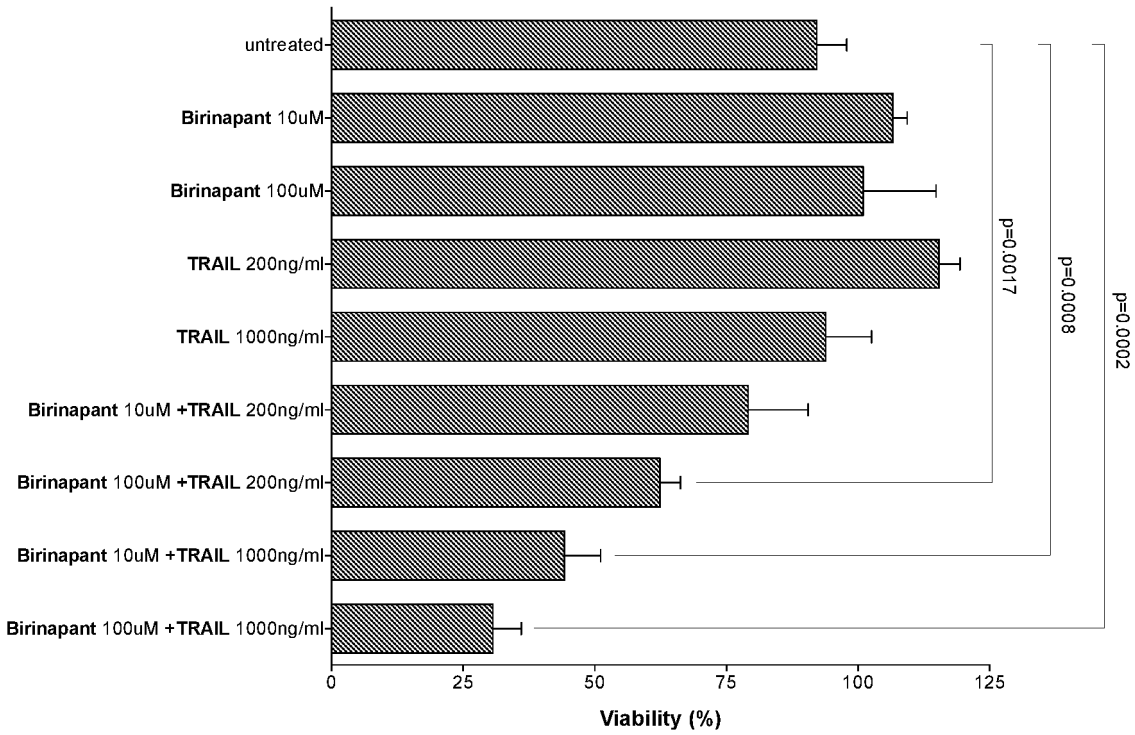

Birinapant
Entecavir
Proportion of mice with detectable serum HBV-DNA (%)
100
80
60
40
20
0
0
5
10
15
20
25
30
35
40
45
50
Time after first dose (d)
Vehicle
Entecavir
Birinapant
Entecavir + Birinapant
***
***
***
ns
**
***

**Figure 14**


untreated
Birinapant 10uM
Birinapant 100uM
TRAIL 200ng/ml
TRAIL 1000ng/ml
Birinapant 10uM +TRAIL 200ng/ml
Birinapant 100uM +TRAIL 200ng/ml
Birinapant 10uM +TRAIL 1000ng/ml
Birinapant 100uM +TRAIL 1000ng/ml
p=0.0017
p=0.0008
p=0.0002
0
25
50
75
100
125
Viability (%)