Figure 1

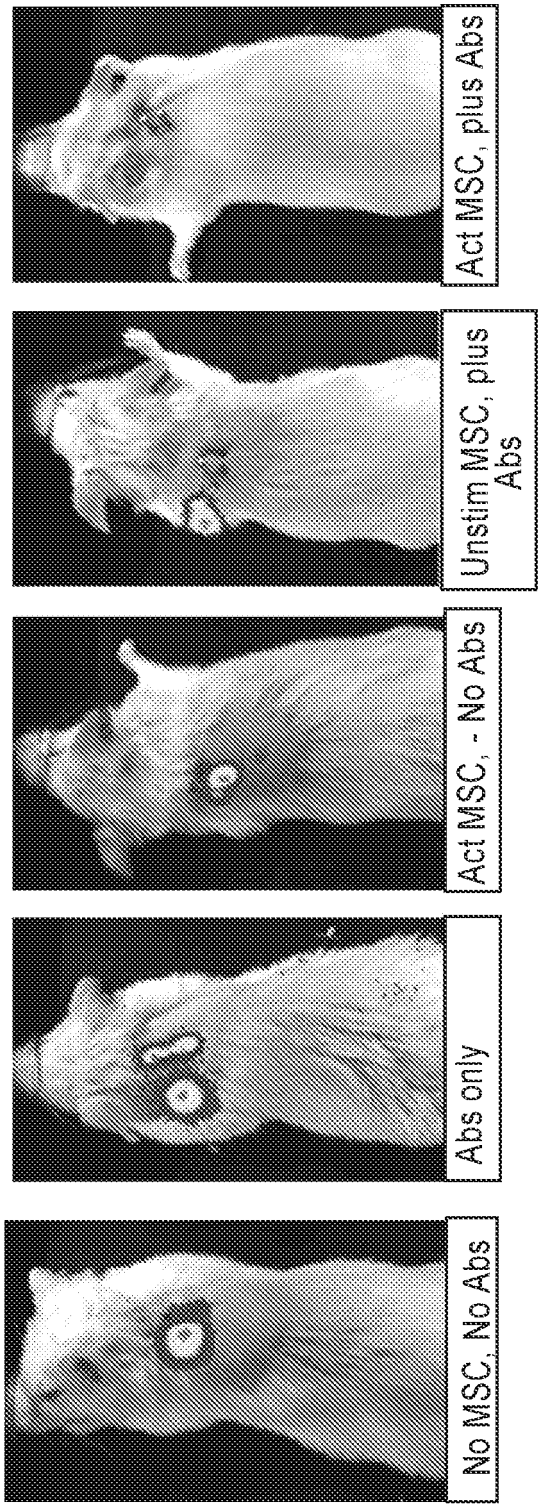

No MSC, No Abs
Abs only
Act MSC, - No Abs
Unstim MSC, plus Abs
Act MSC, plus Abs

Figure 2

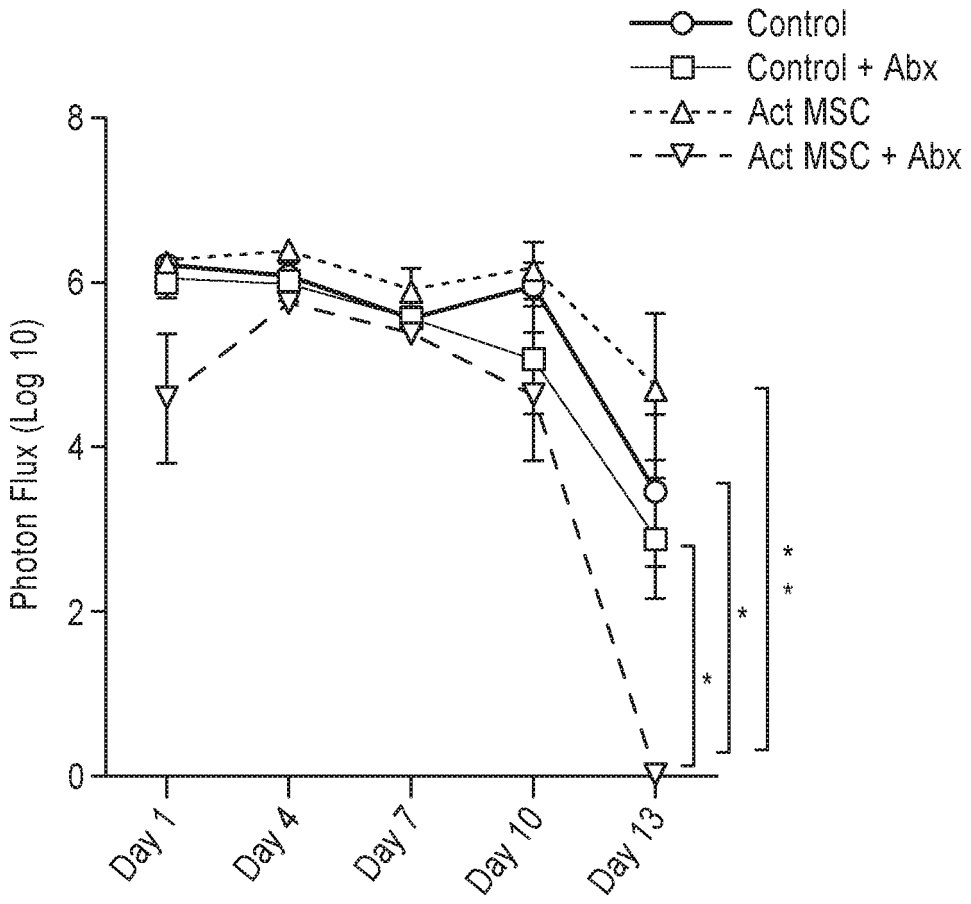

Control
Control + Abx
Act MSC
Act MSC + Abx
Photon Flux (Log 10)
8
6
4
2
0
Day 1
Day 4
Day 7
Day 10
Day 13
*
*
*
*

Figure 3

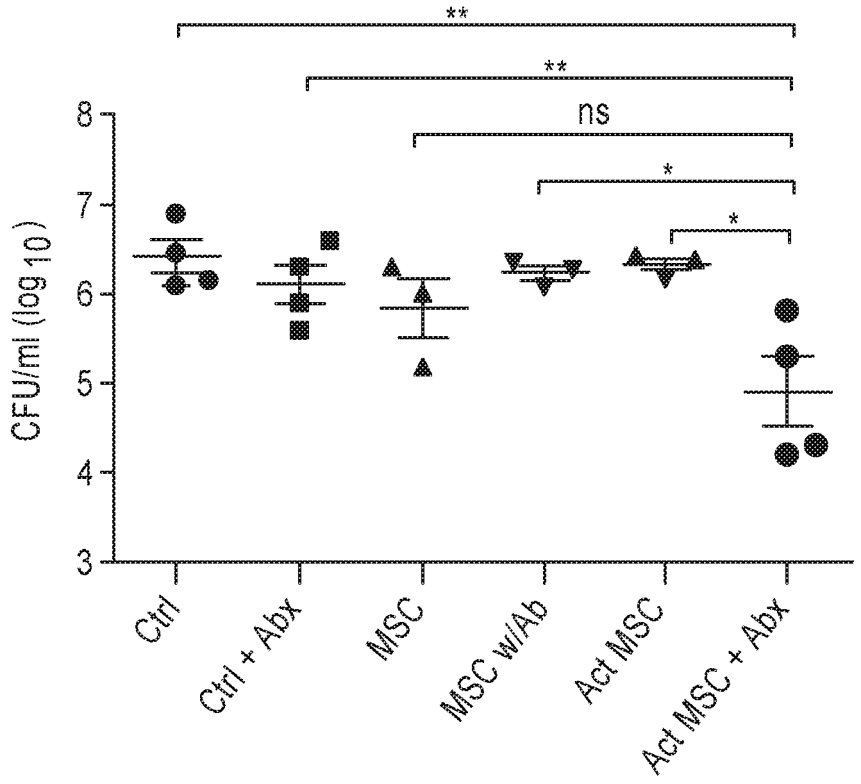

**
**
ns
*
*
CFU/ml (log 10)
8
7
6
5
4
3
Ctrl
Ctrl + Abx
MSC
MSC w/Ab
Act MSC
Act MSC + Abx

Figure 4

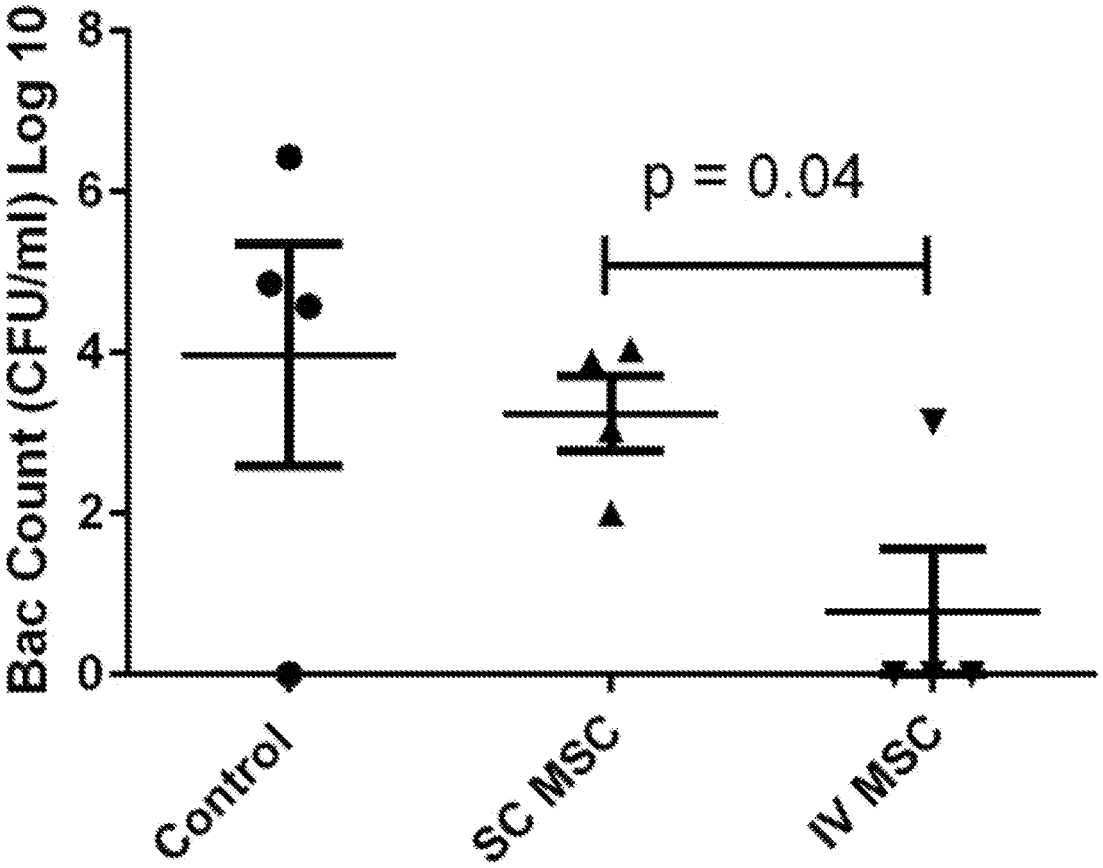


Figure 5

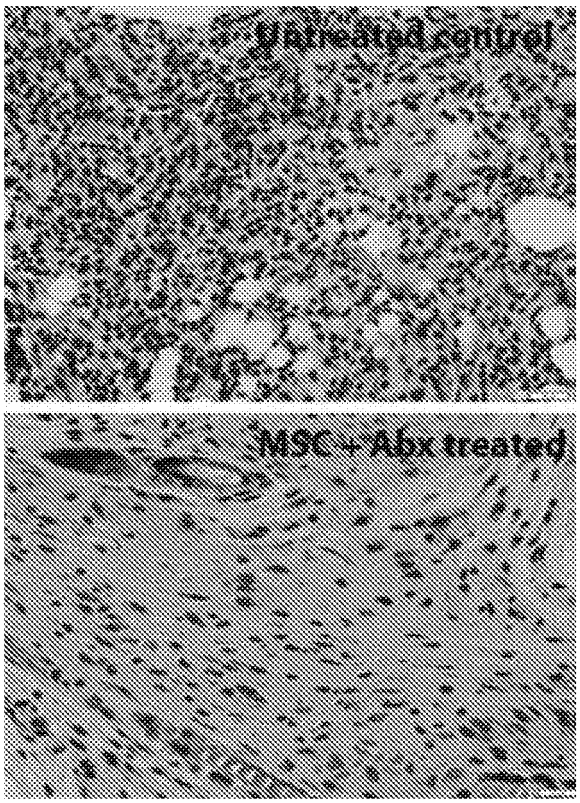


Figure 6

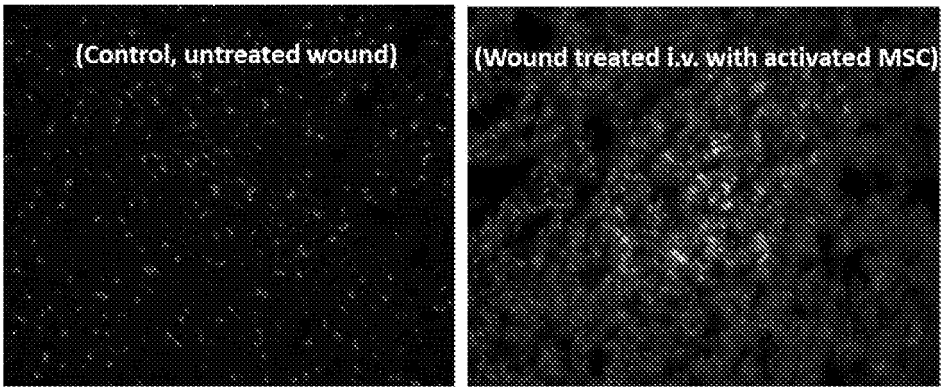

(Control, untreated wound)
(Wound treated i.v. with activated MSC)

Figure 7

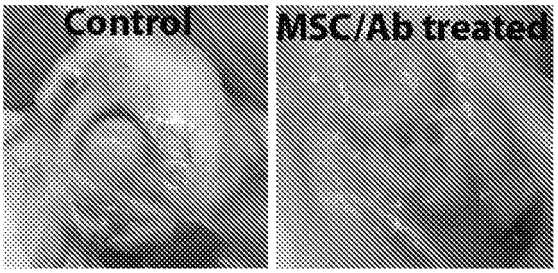


Figure 8

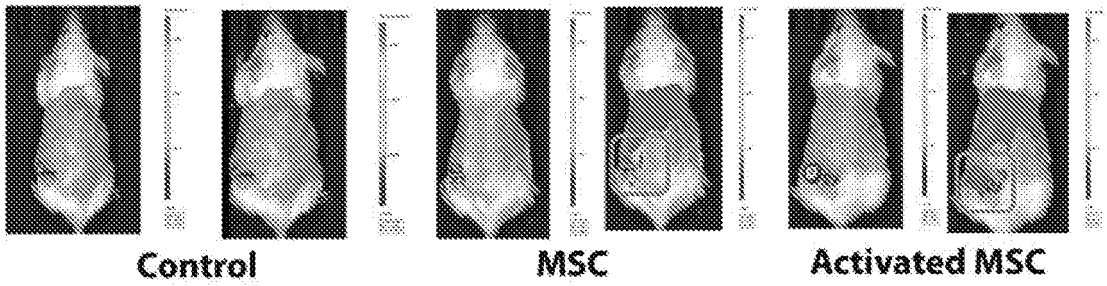


Figure 9

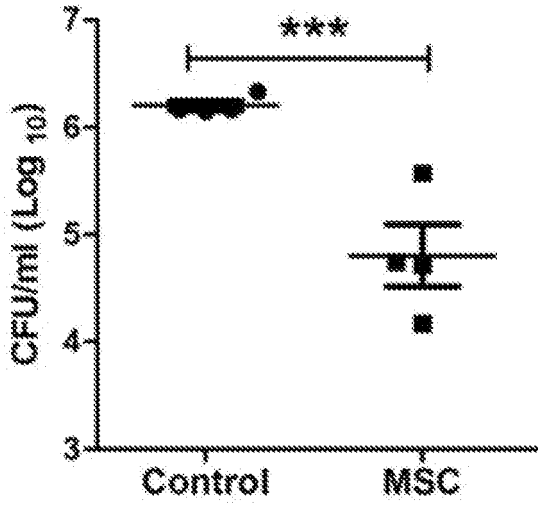


Figure 10

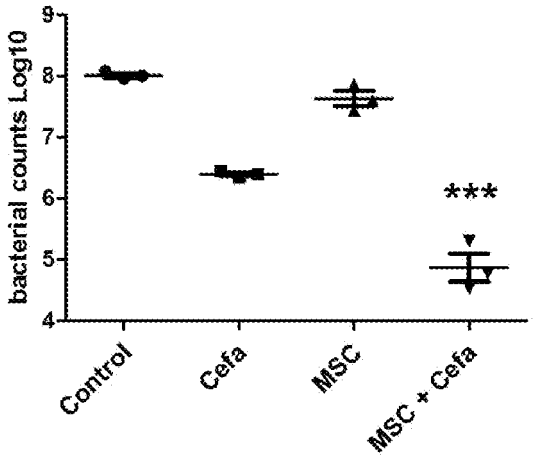


Figure 11

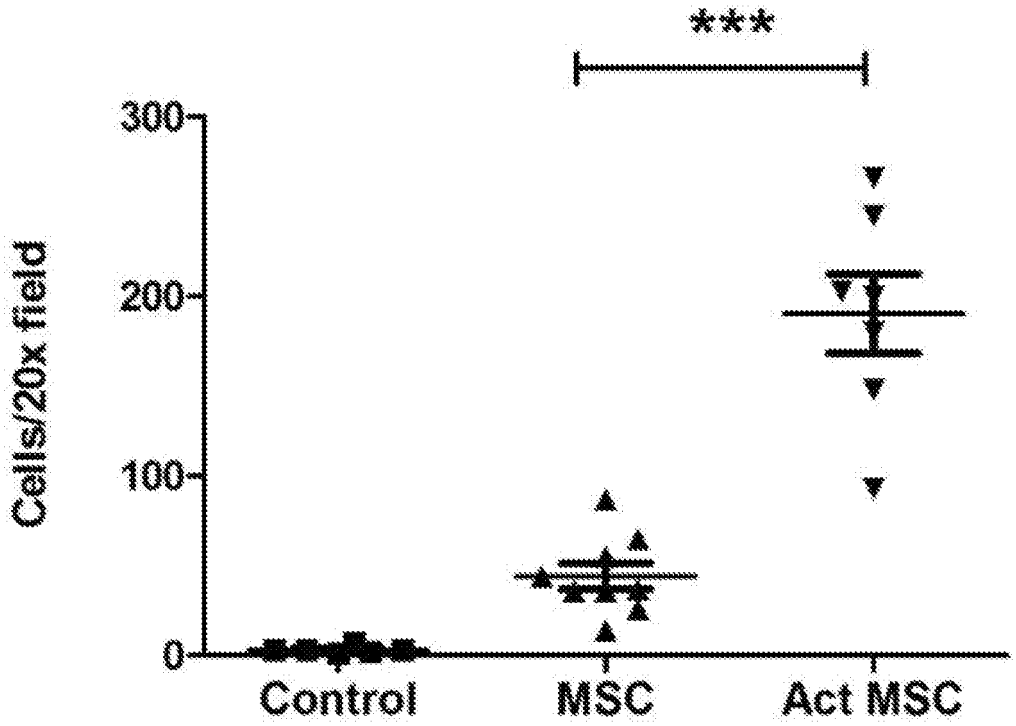


Figure 12

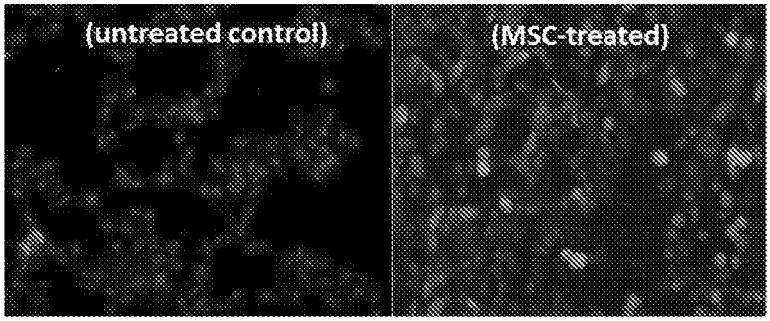


Figure 13

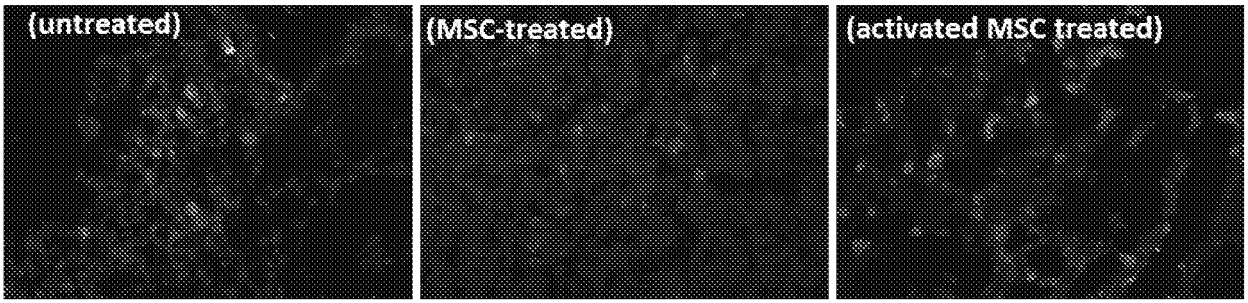
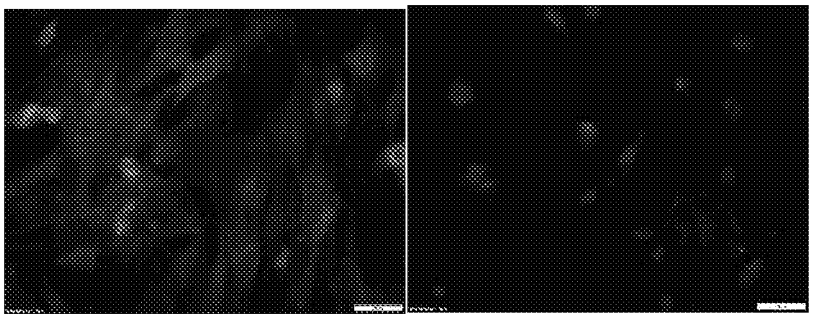


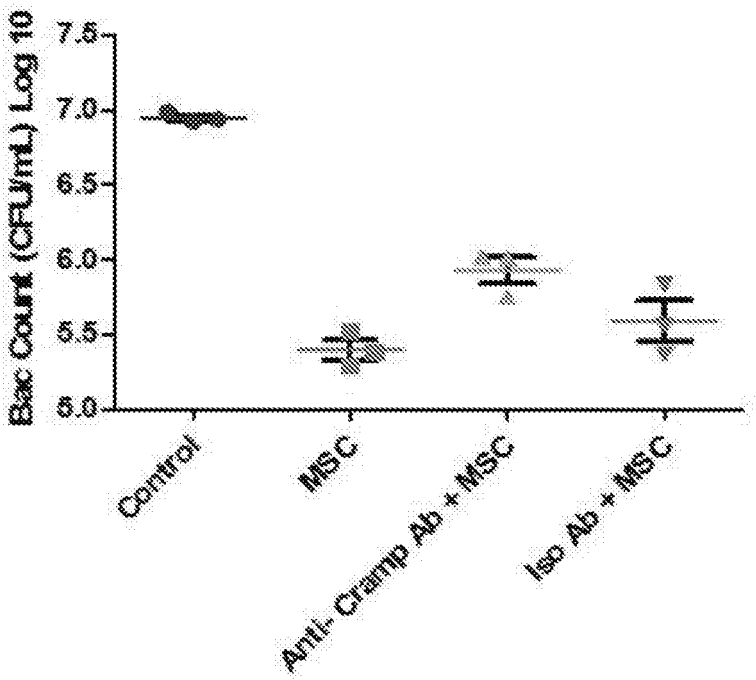
Figure 14



Immunostaining for intracellular production of the antimicrobial peptide LL-37

Immunostaining with isotype control antibody

Figure 15


Bac Count (CFU/mL) Log 10
7.5
7.0
6.5
6.0
5.5
5.0
Control
MSC
Anti- Cramp Ab + MSC
Iso Ab + MSC

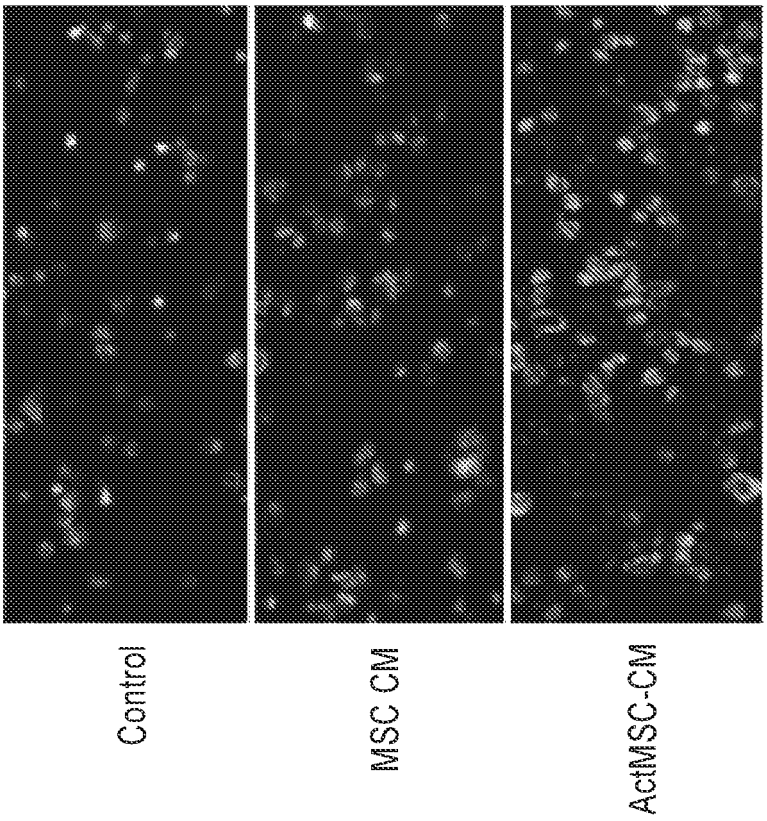

Control
MSC CM
ActMSC-CM

Figure 16

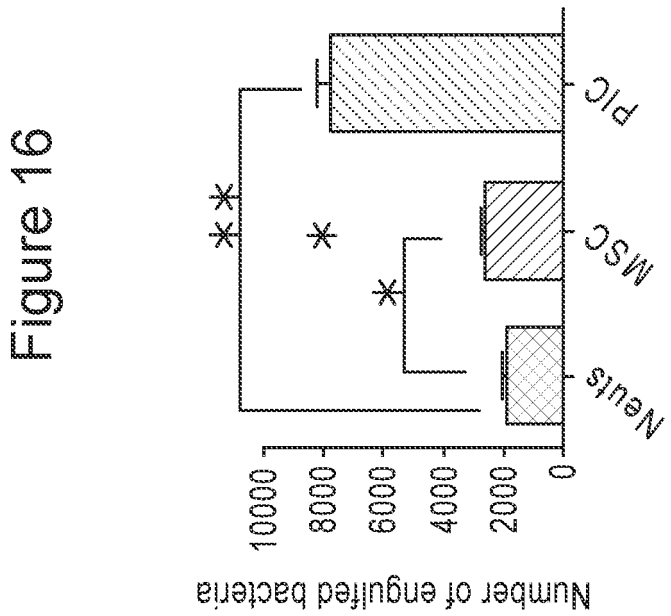

Number of engulfed bacteria
10000
8000
6000
4000
2000
0
Neuts
MSC
PIC
*
*
**

Figure 17

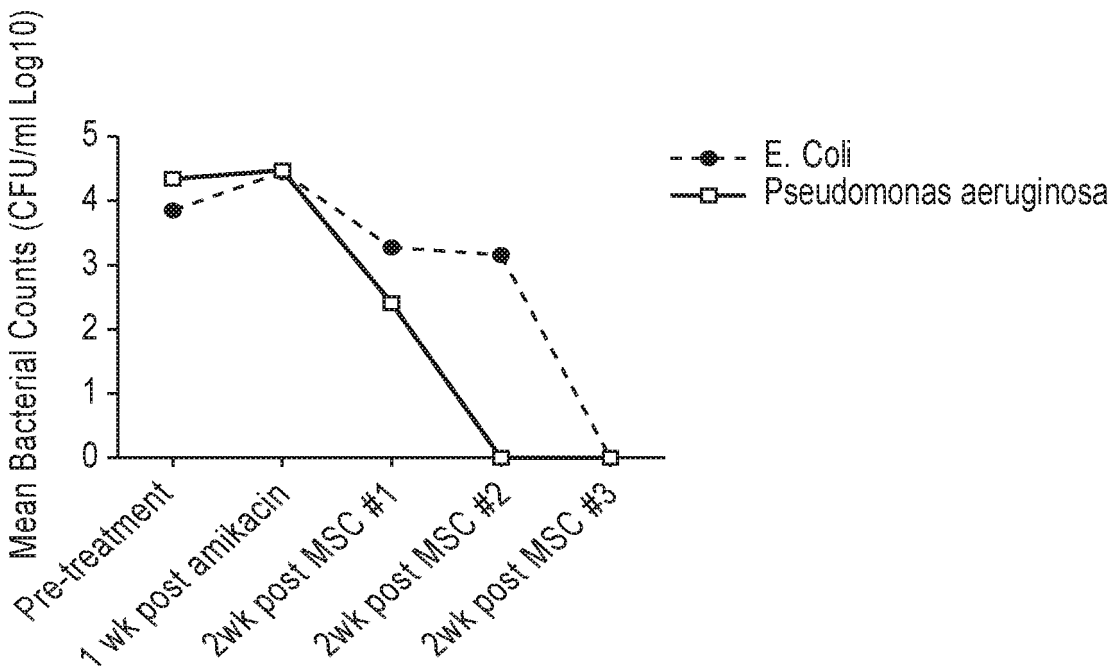

Mean Bacterial Counts (CFU/ml Log10)
0
1
2
3
4
5
Pre-treatment
1 wk post amikacin
2wk post MSC #1
2wk post MSC #2
2wk post MSC #3
E. Coli
Pseudomonas aeruginosa

Figure 18

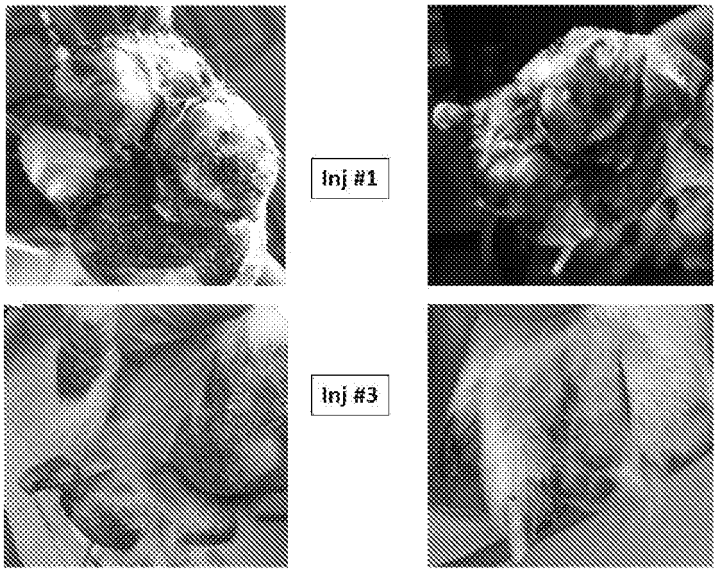
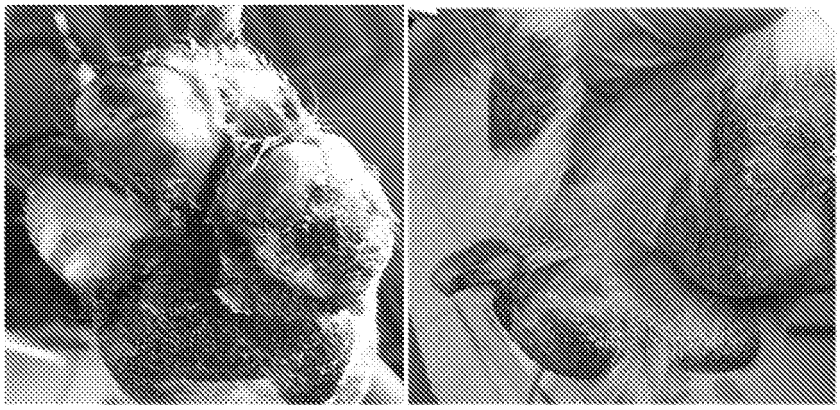


Figure 19



Pre-treatment paw wound

Paw wound after 2 infusions of activated canine MSC.

Figure 20

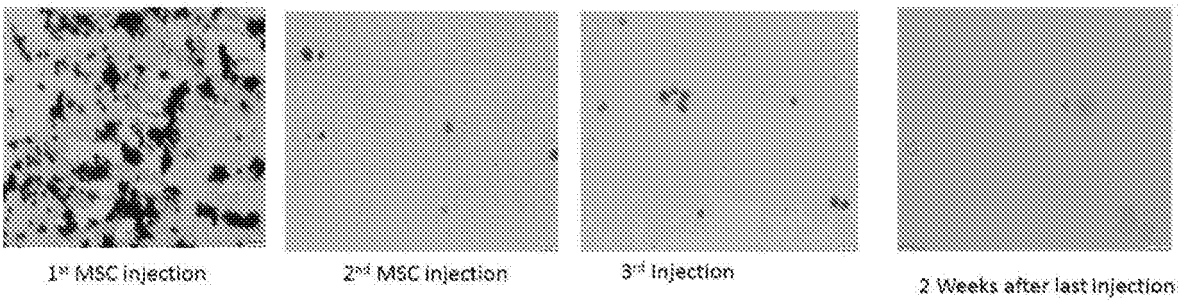

1st MSC injection
2nd MSC injection
3rd injection
2 Weeks after last injection

Figure 21

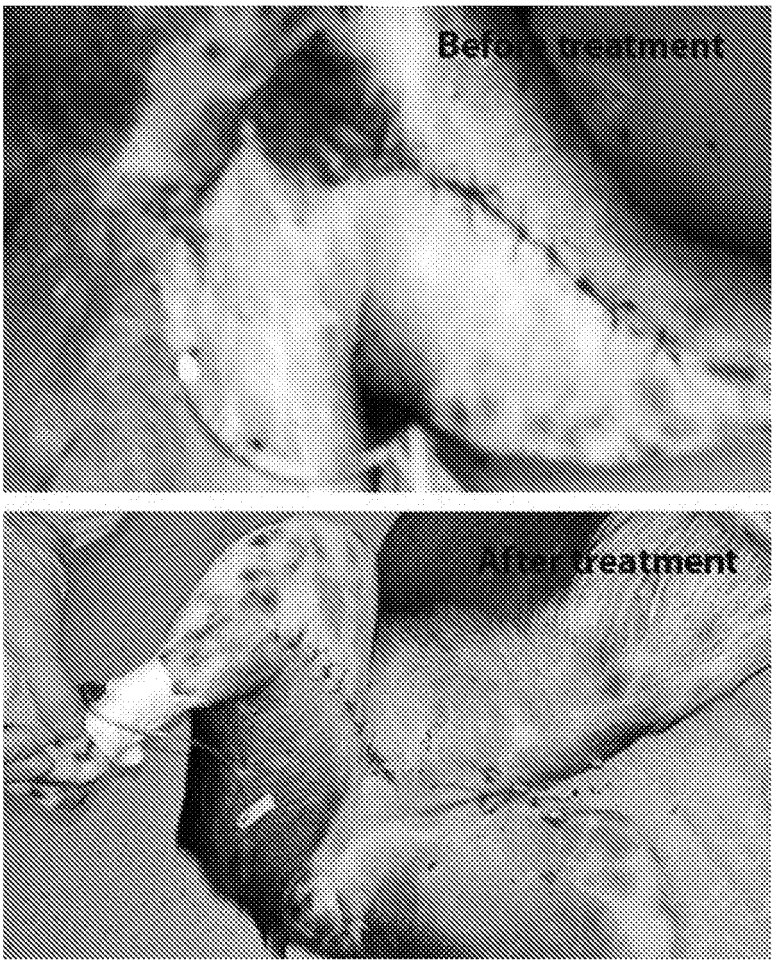
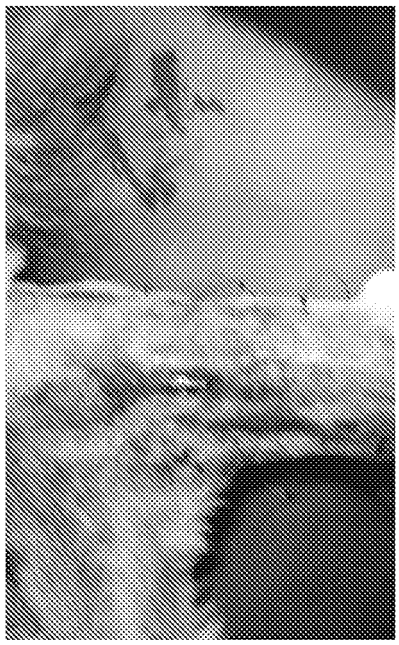


Figure 22



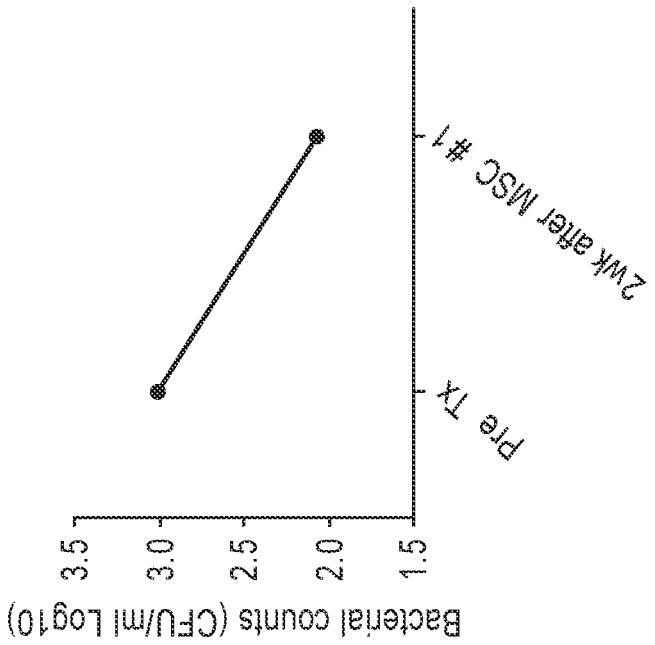
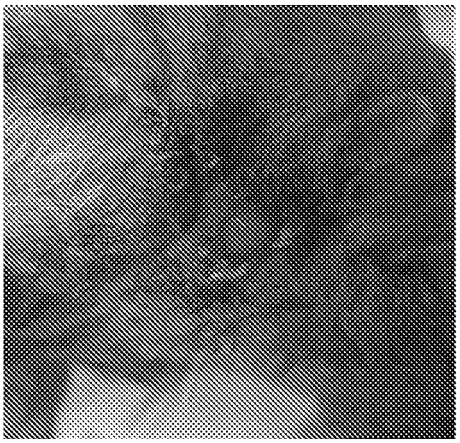

Bacterial counts (CFU/ml Log10)
3.5
3.0
2.5
2.0
1.5
Pre Tx
2Wk after MSC #1

Figure 23

(Pre-treatment; MDR Staph +)



(Week 3; MDR Staph +)



(Week 5, culture negative)



(Week 7, culture negative)

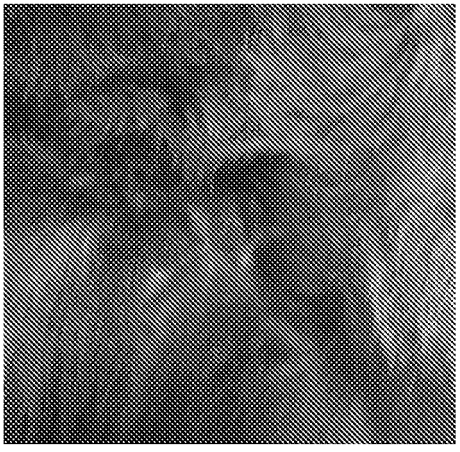
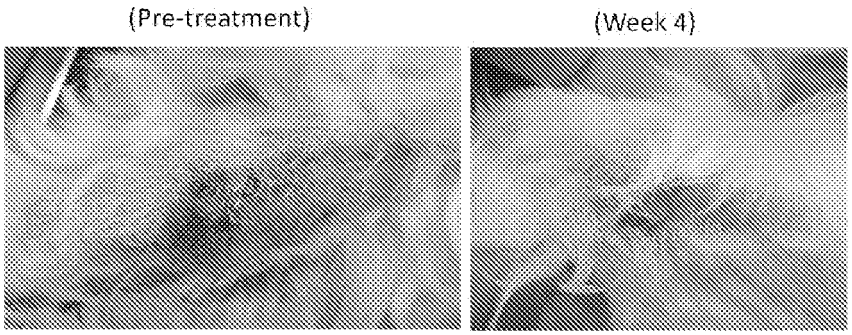


Figure 24


(Pre-treatment)
(Week 4)

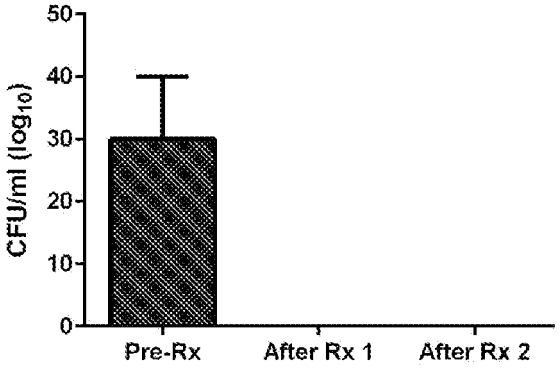

CFU/ml (log10)
50
40
30
20
10
0
Pre-Rx
After Rx 1
After Rx 2

Figure 25

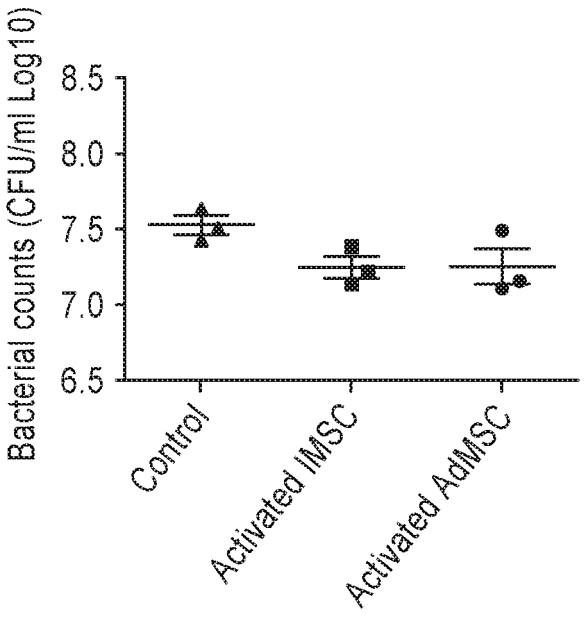

Bacterial counts (CFU/ml Log10)
8.5
8.0
7.5
7.0
6.5
Control
Activated IMSC
Activated AdMSC

Figure 26

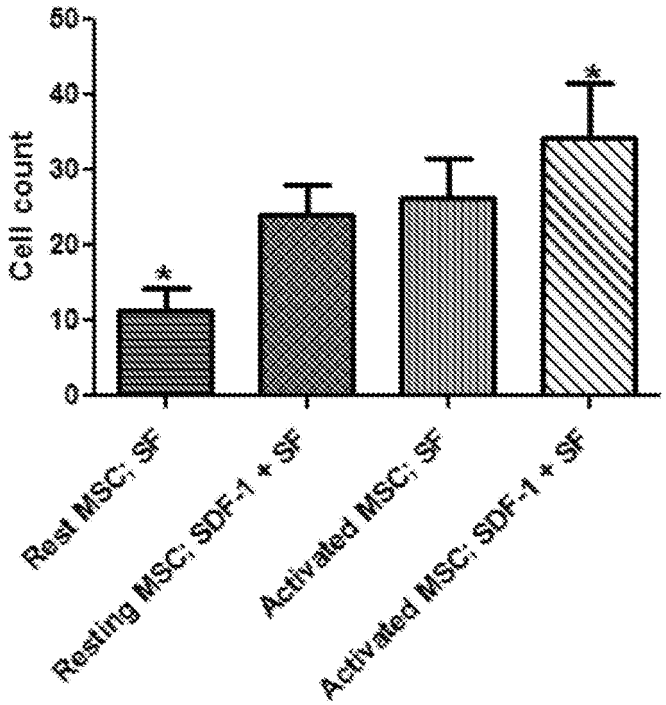

Cell count
50
40
30
20
10
0
*
*
Rest MSC; SF
Resting MSC; SDF-1 + SF
Activated MSC; SF
Activated MSC; SDF-1 + SF

Figure 27

