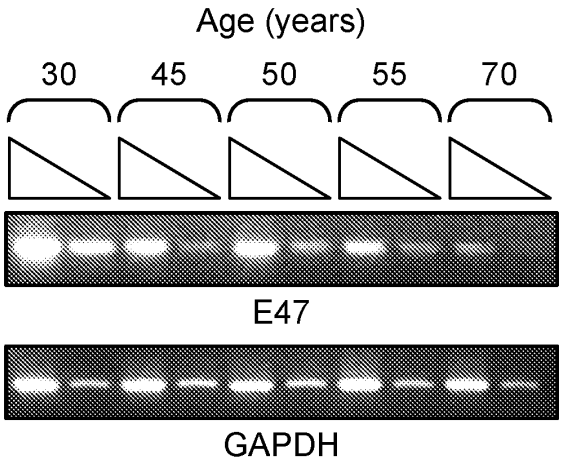

Age (years)
30
45
50
55
70
E47
GAPDH

FIG. 1A

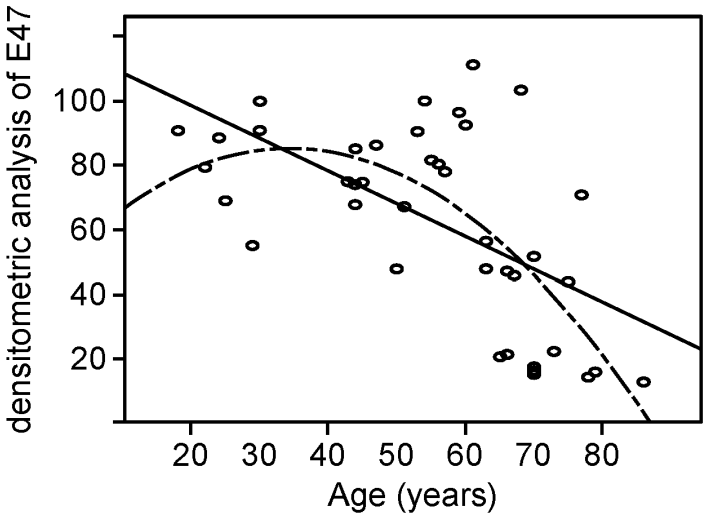

densitometric analysis of E47
100
80
60
40
20
20
30
40
50
60
70
80
Age (years)

FIG. 1B

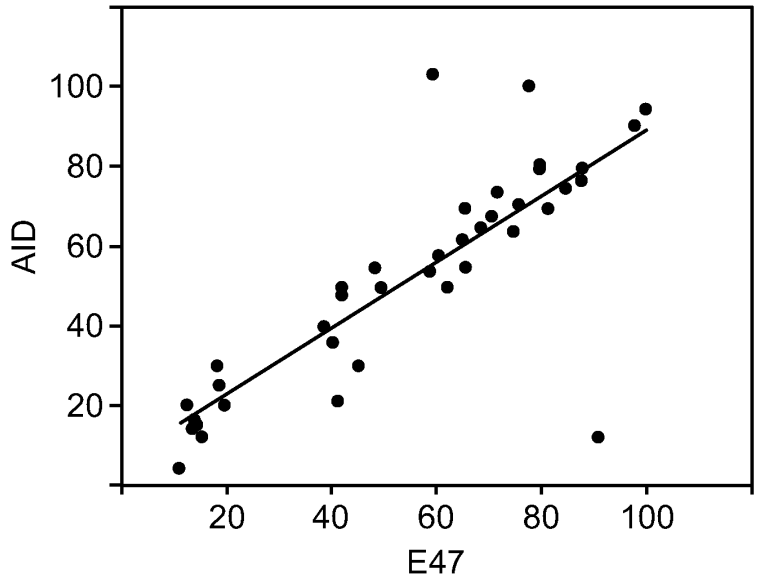
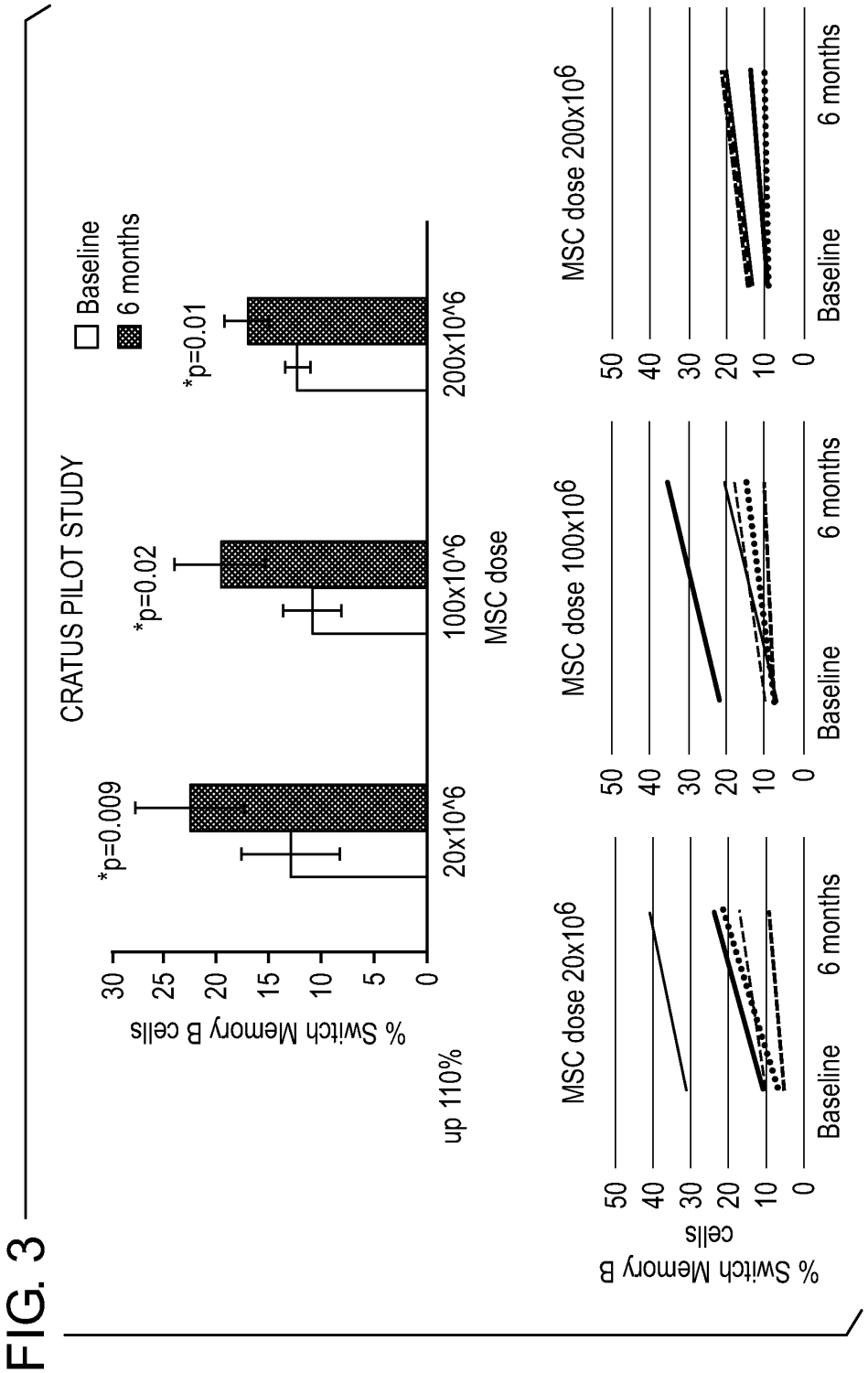


FIG. 2

FIG. 3


CRATUS PILOT STUDY
Baseline
6 months
% Switch Memory B cells
*p=0.009
*p=0.02
*p=0.01
20x10^6
100x10^6
200x10^6
MSC dose
up 110%
MSC dose 20x10^6
MSC dose 100x10^6
MSC dose 200x10^6
Baseline
6 months

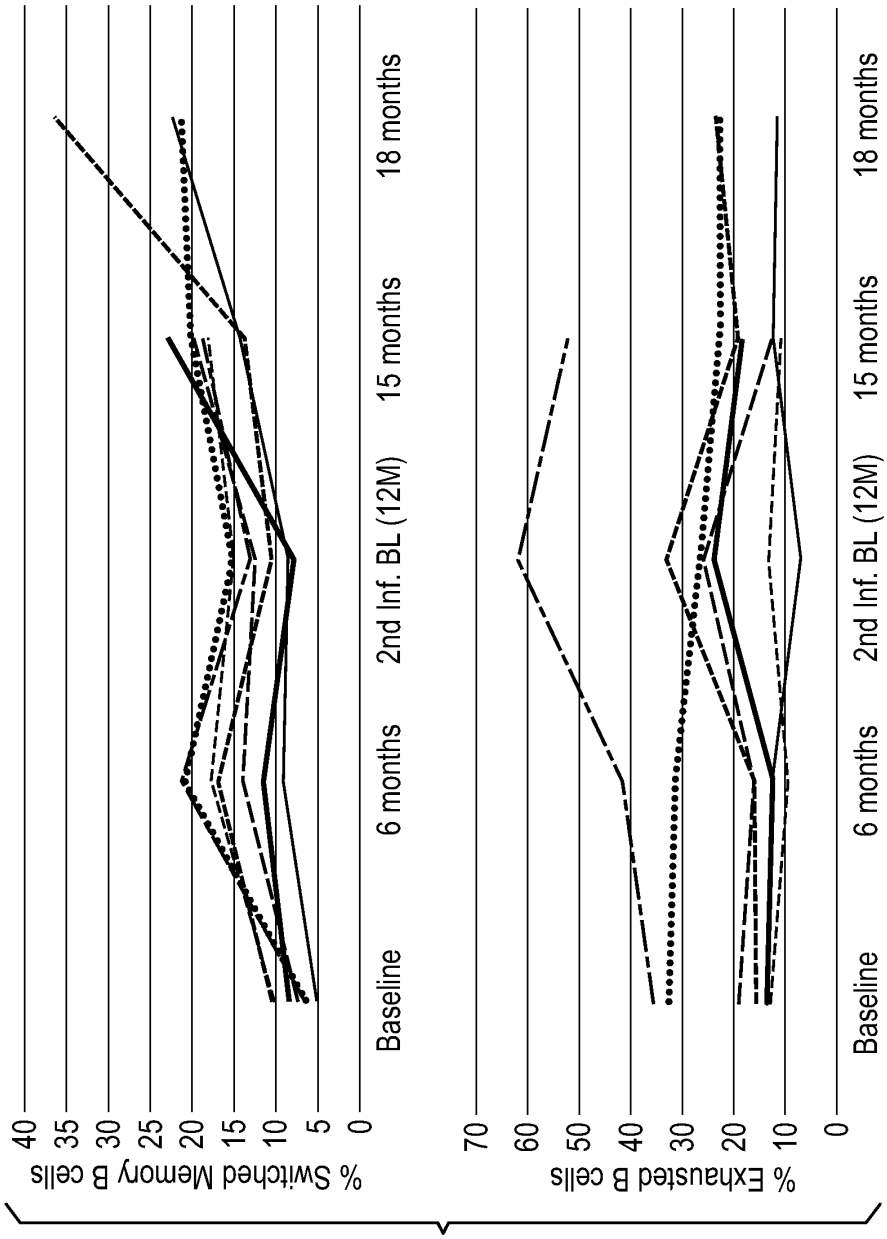

% Switched Memory B cells
40
35
30
25
20
15
10
5
0
Baseline
6 months
2nd Inf. BL (12M)
15 months
18 months
% Exhausted B cells
70
60
50
40
30
20
10
0
Baseline
6 months
2nd Inf. BL (12M)
15 months
18 months

FIG. 4

FIG. 5A

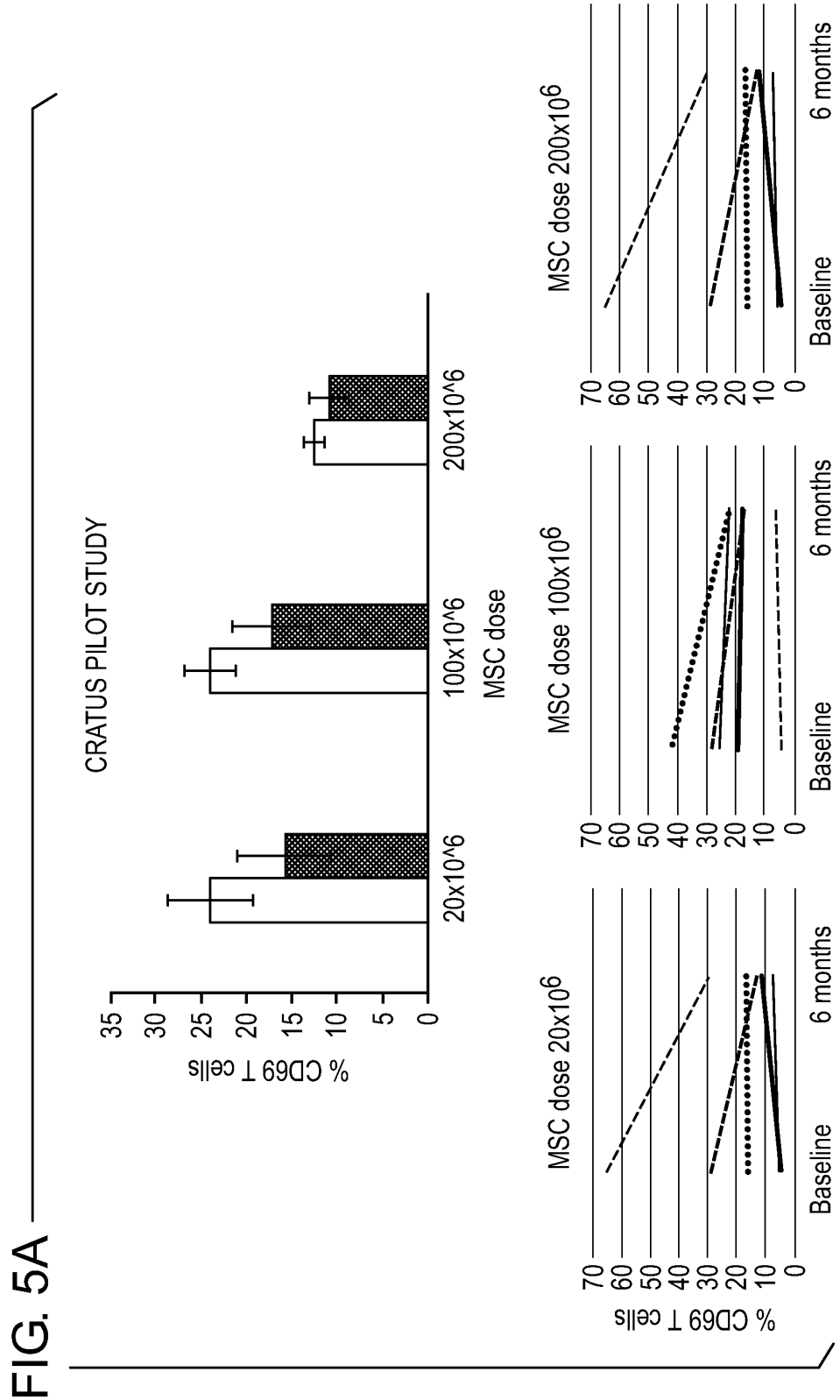
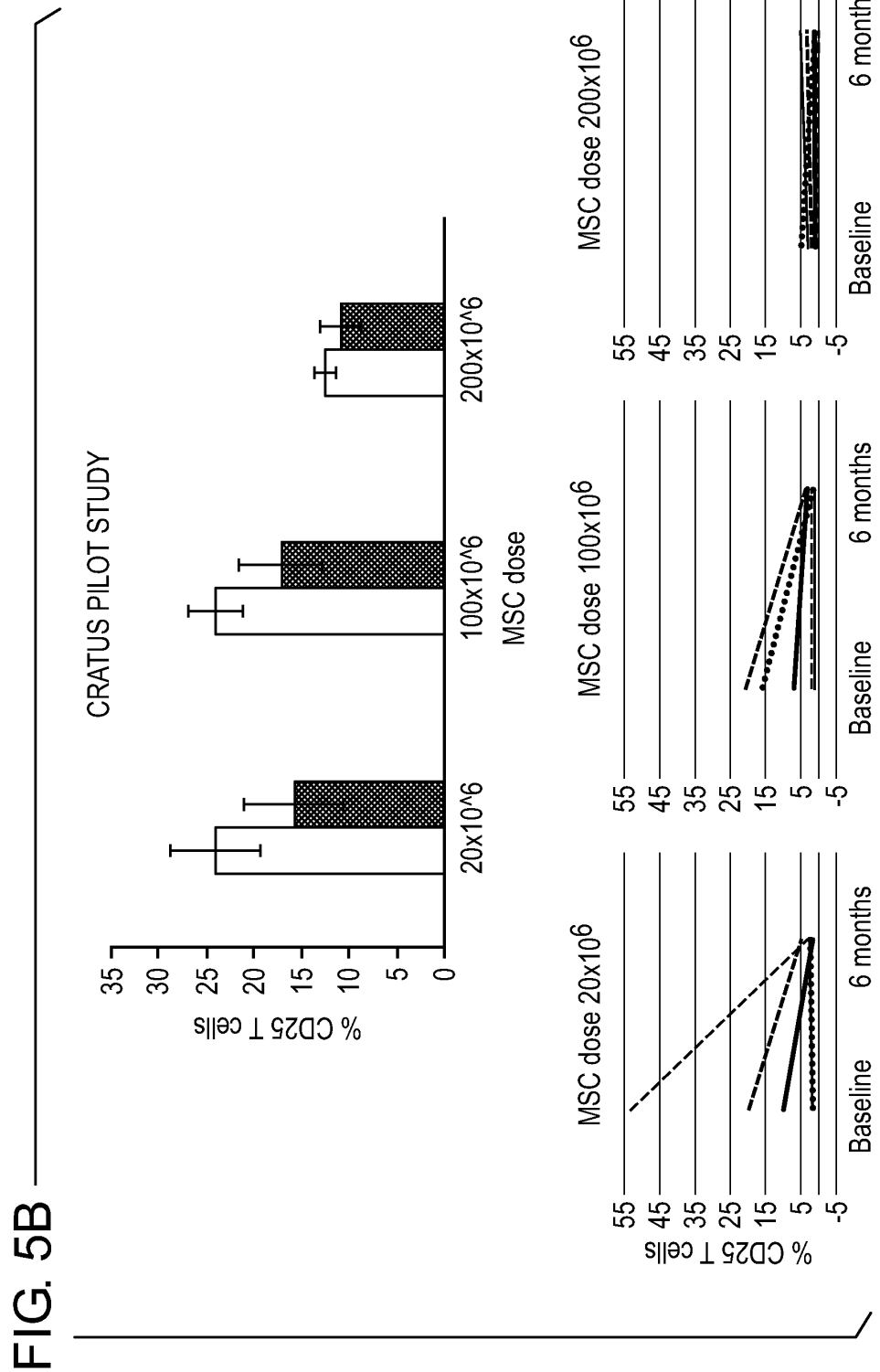

CRATUS PILOT STUDY
% CD69 T cells
35
30
25
20
15
10
5
0
20x10^6
100x10^6
200x10^6
MSC dose
MSC dose 20x10^6
MSC dose 100x10^6
MSC dose 200x10^6
70
60
50
40
30
20
10
0
Baseline
6 months

FIG. 5B


CRATUS PILOT STUDY
% CD25 T cells
35
30
25
20
15
10
5
0
20x10^6
100x10^6
200x10^6
MSC dose
MSC dose 20x10^6
MSC dose 100x10^6
MSC dose 200x10^6
55
45
35
25
15
5
-5
Baseline
6 months

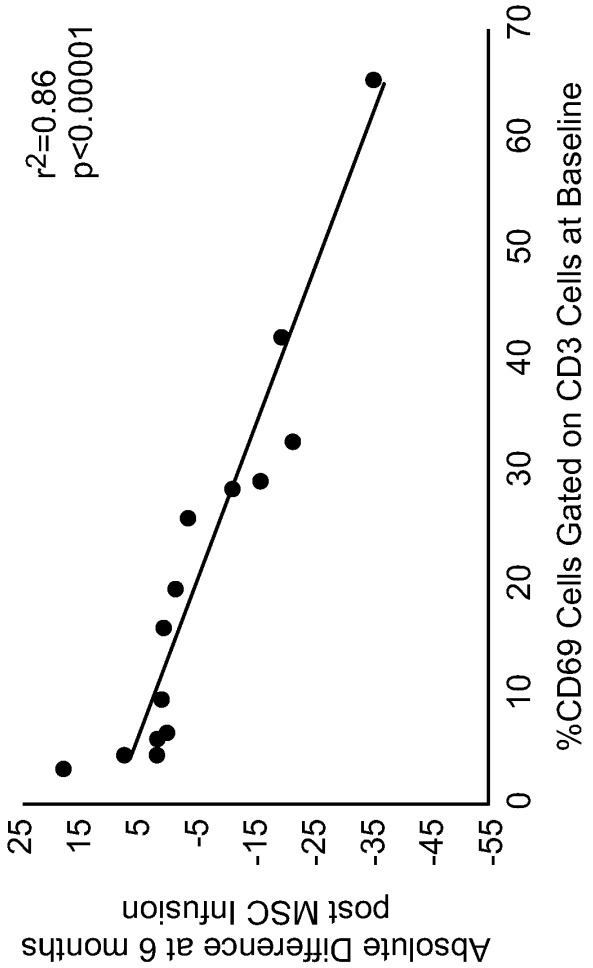

r2=0.86
p<0.00001
25
15
5
-5
-15
-25
-35
-45
-55
0
10
20
30
40
50
60
70
Absolute Difference at 6 months post MSC Infusion
%CD69 Cells Gated on CD3 Cells at Baseline

FIG. 5C

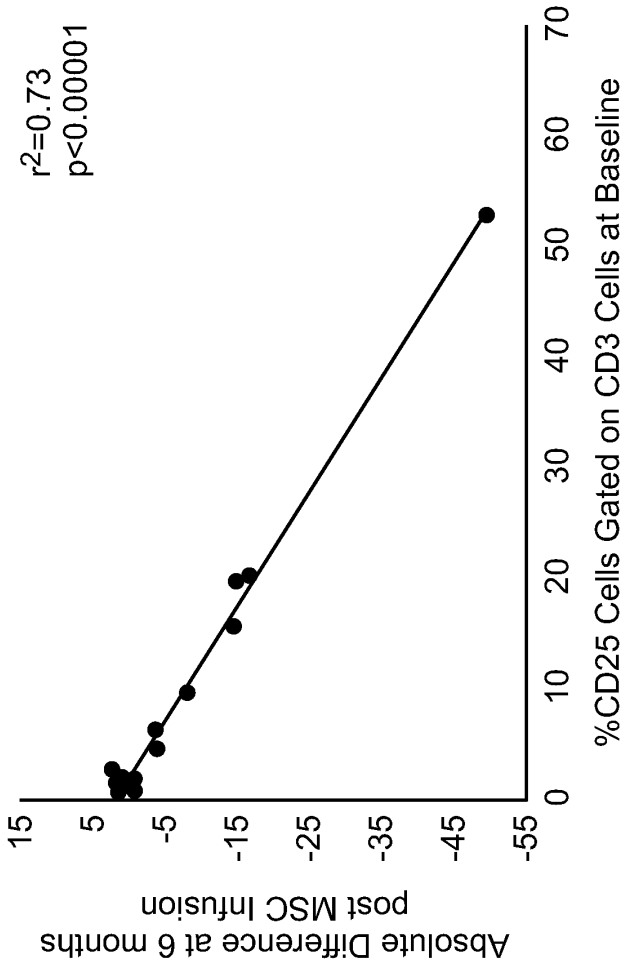

r2=0.73
p<0.00001
Absolute Difference at 6 months
post MSC Infusion
15
5
-5
-15
-25
-35
-45
-55
0
10
20
30
40
50
60
70
%CD25 Cells Gated on CD3 Cells at Baseline

FIG. 5D

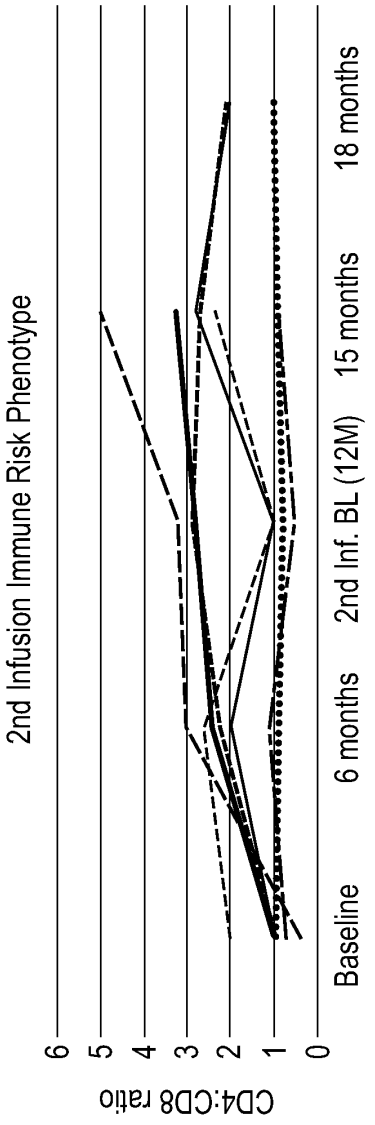

2nd Infusion Immune Risk Phenotype
CD4:CD8 ratio
6
5
4
3
2
1
0
Baseline
6 months
2nd Inf. BL (12M)
15 months
18 months

FIG. 6

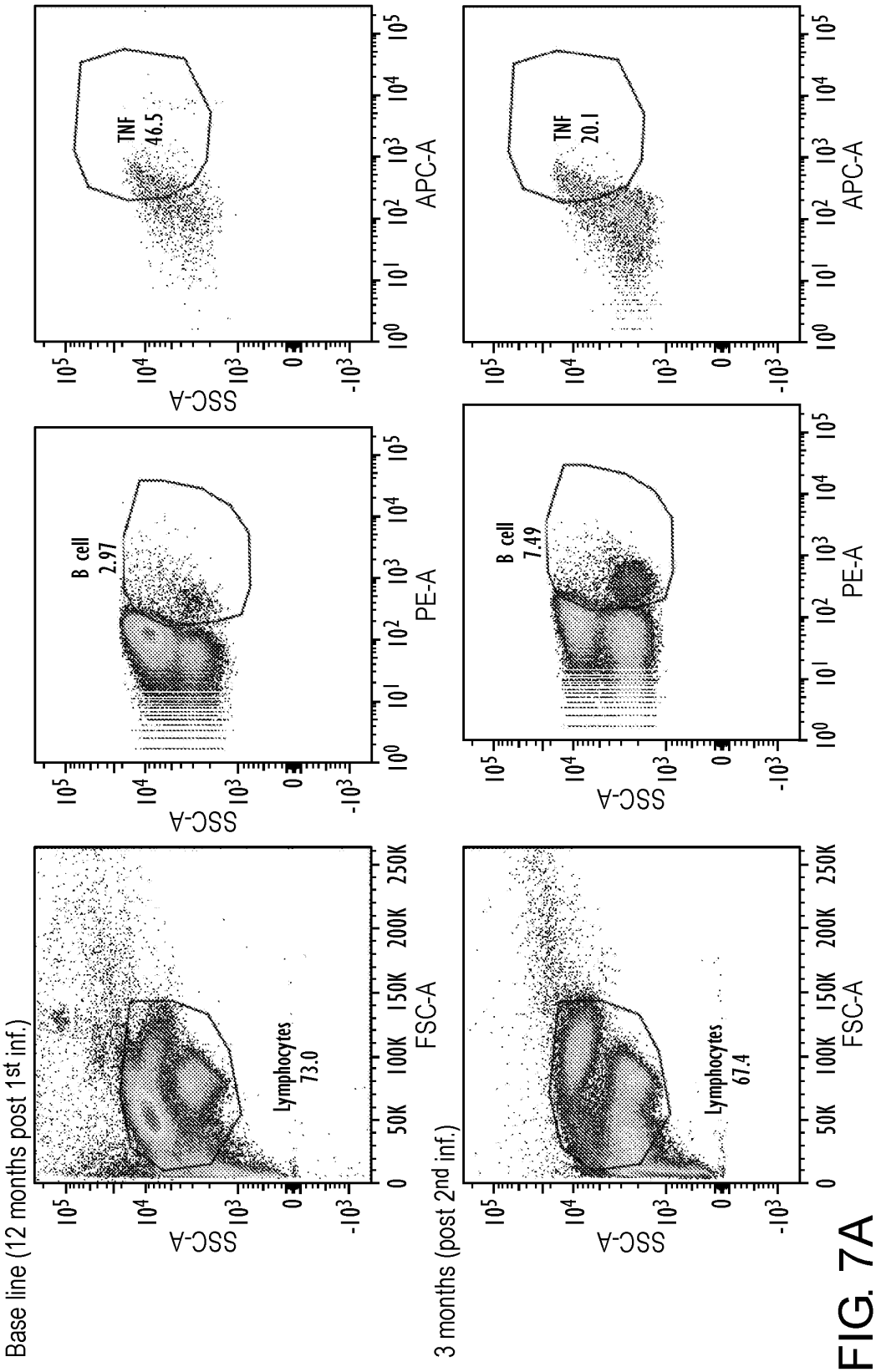

Base line (12 months post 1st inf.)
3 months (post 2nd inf.)
Lymphocytes 73.0
Lymphocytes 67.4
B cell 2.97
B cell 7.49
TNF 46.5
TNF 20.1
SSC-A
FSC-A
PE-A
APC-A

FIG. 7A

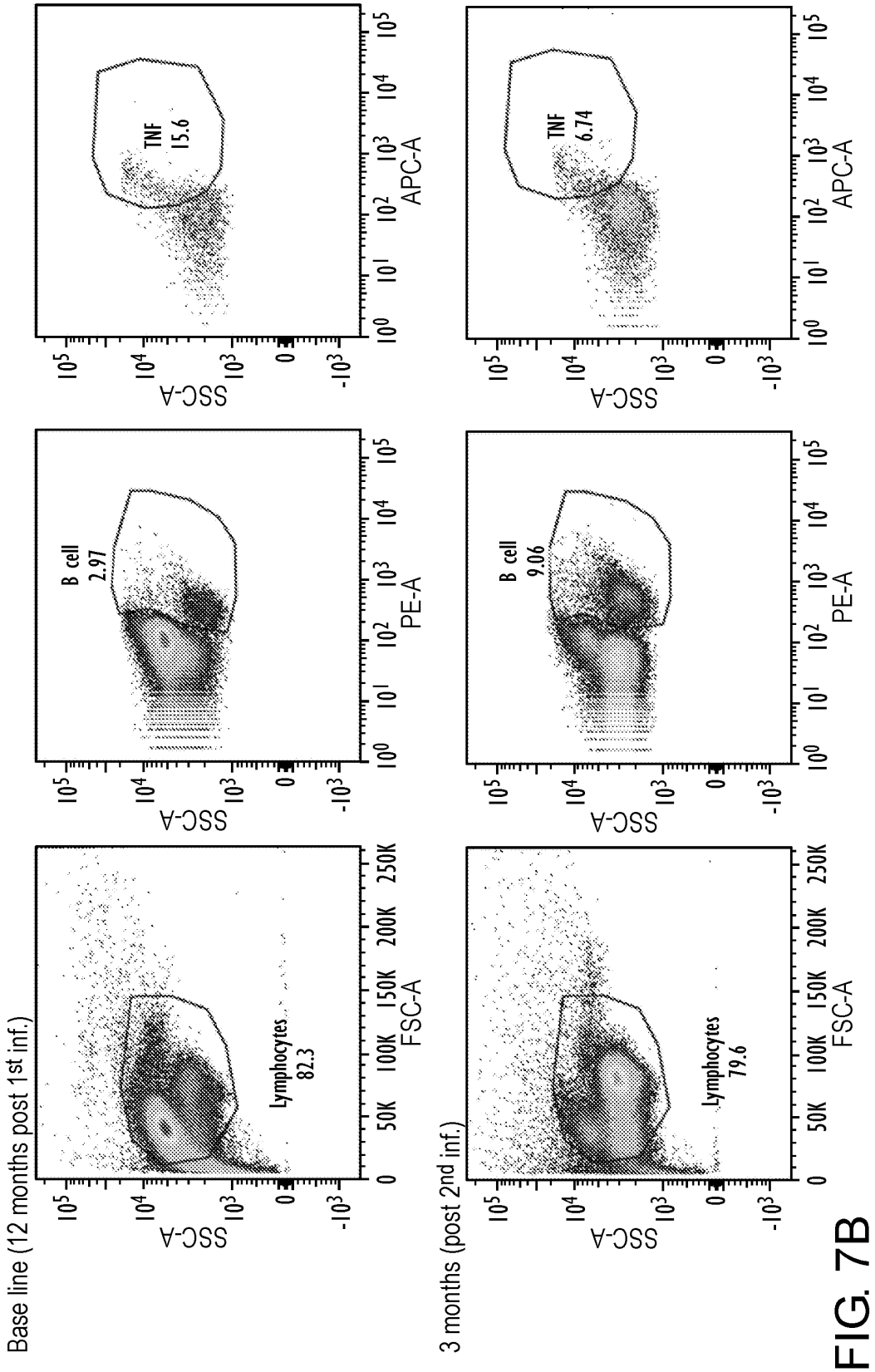

Base line (12 months post 1st inf.)
3 months (post 2nd inf.)
Lymphocytes
82.3
Lymphocytes
79.6
B cell
2.97
B cell
9.06
TNF
15.6
TNF
6.74
SSC-A
FSC-A
PE-A
APC-A
0
50K
100K
150K
200K
250K

FIG. 7B