

Figure S1

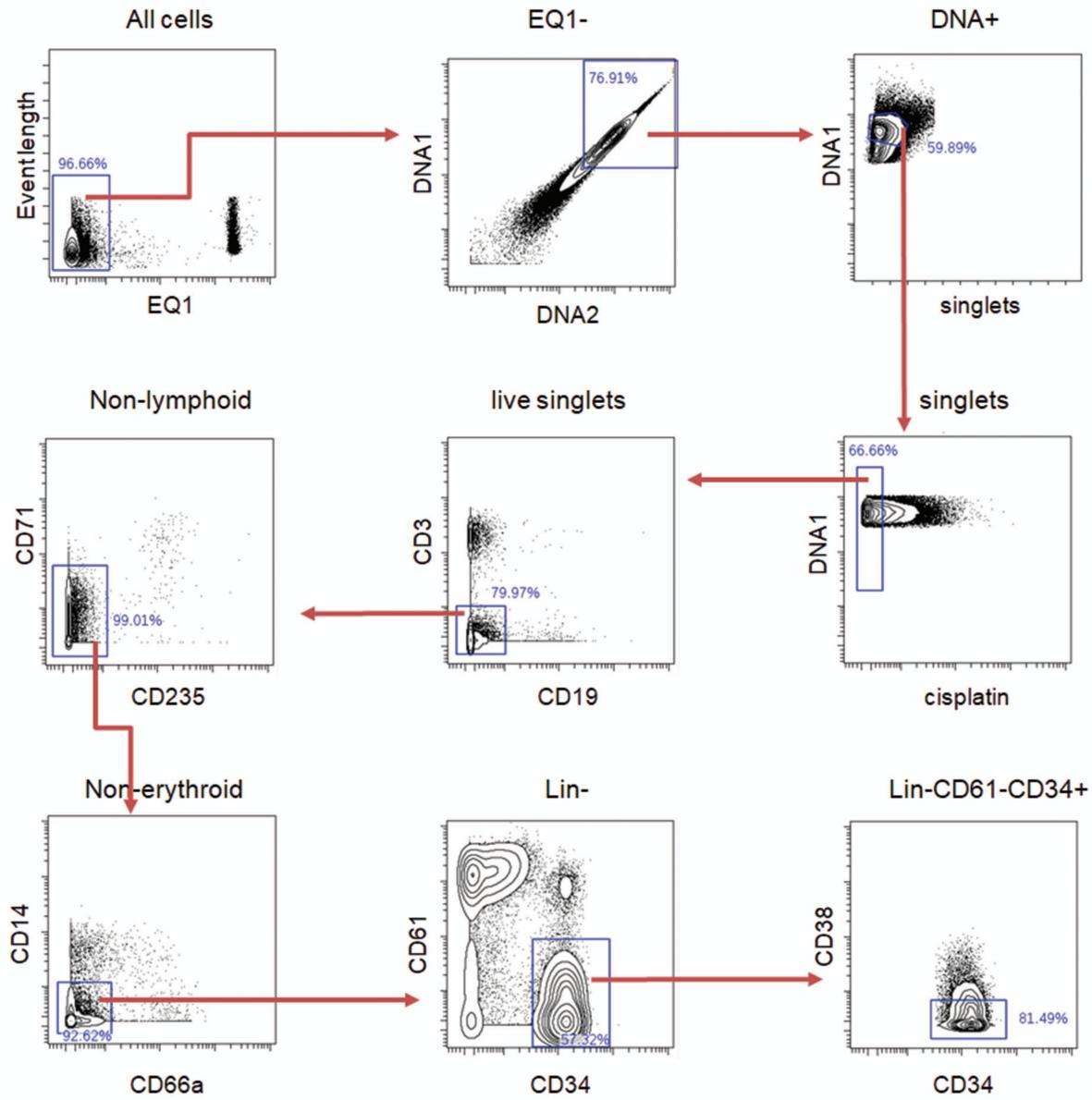


Figure S2

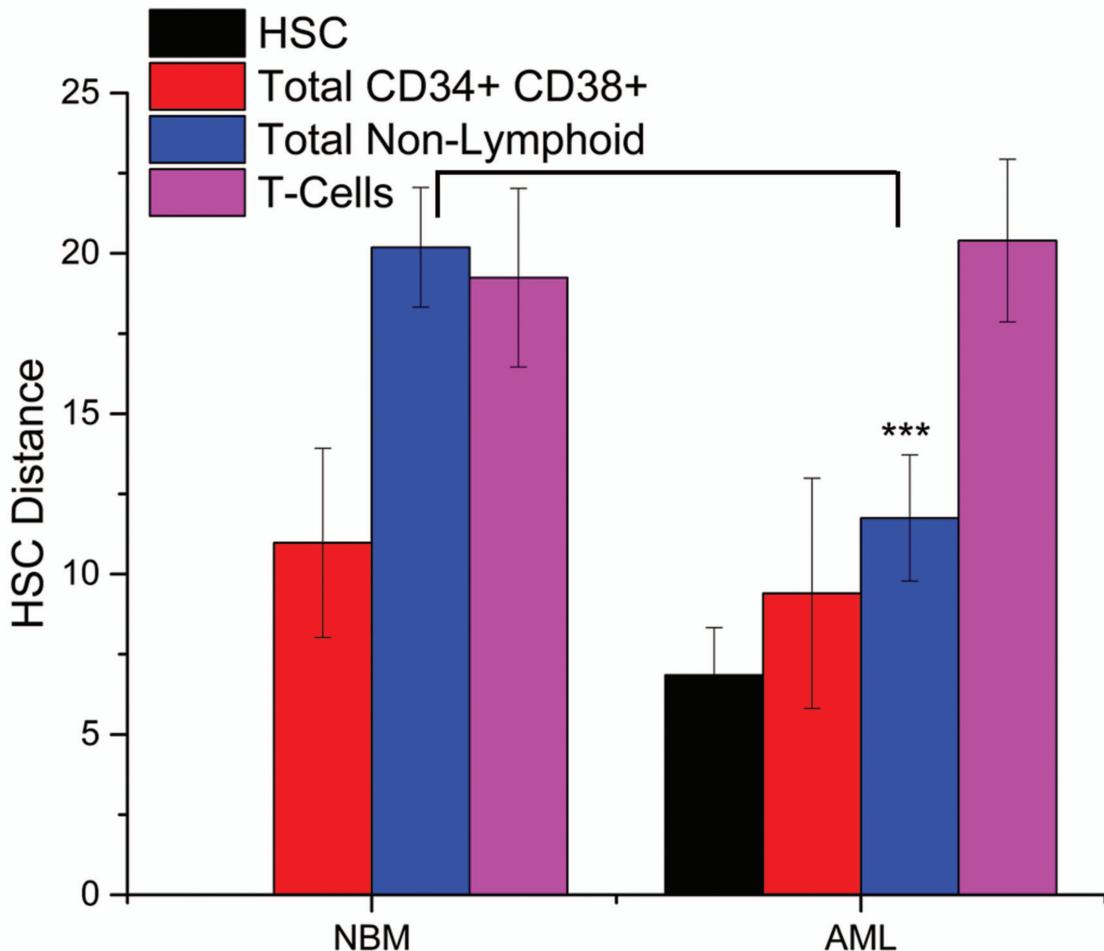


Figure S3

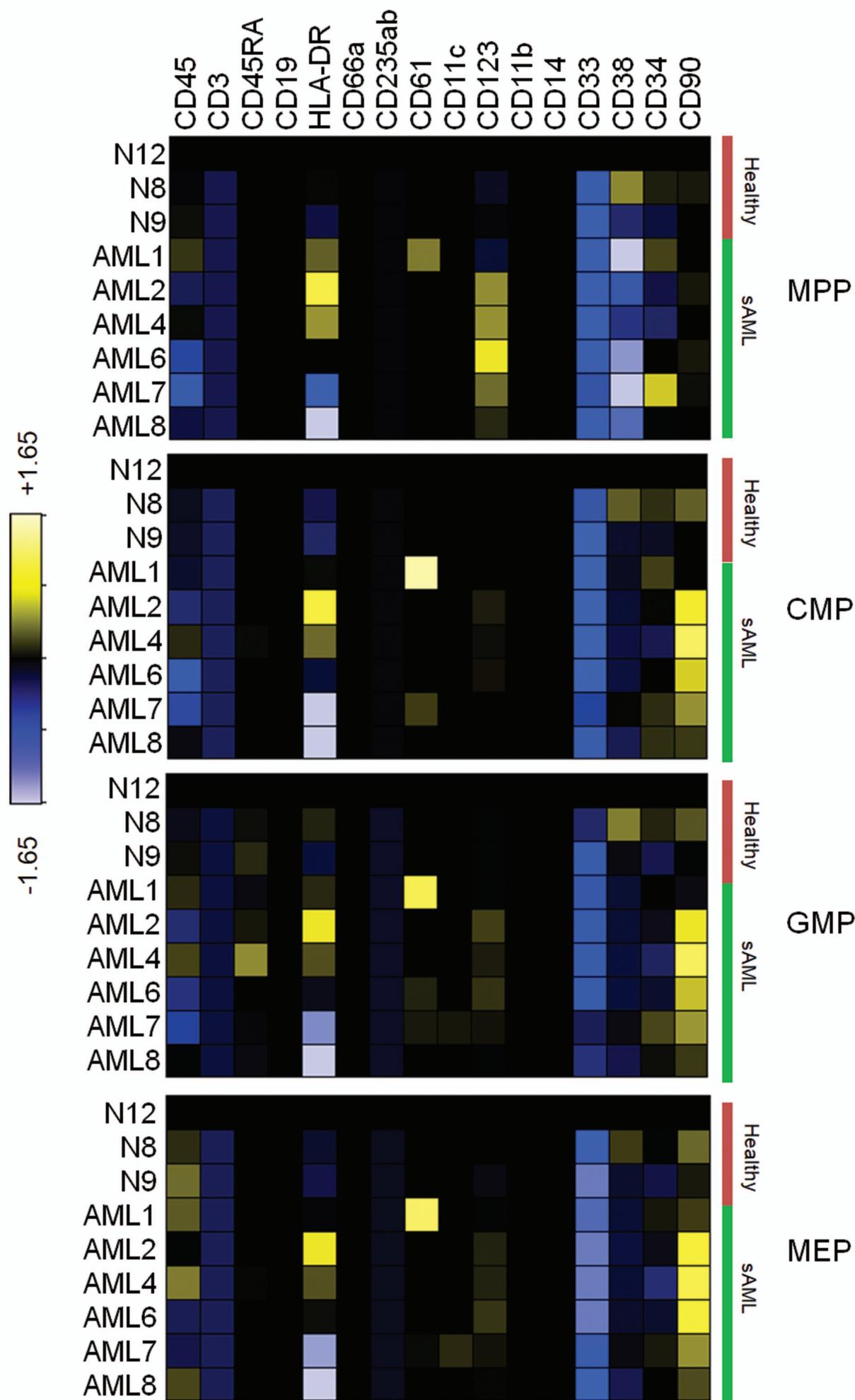


Figure S4

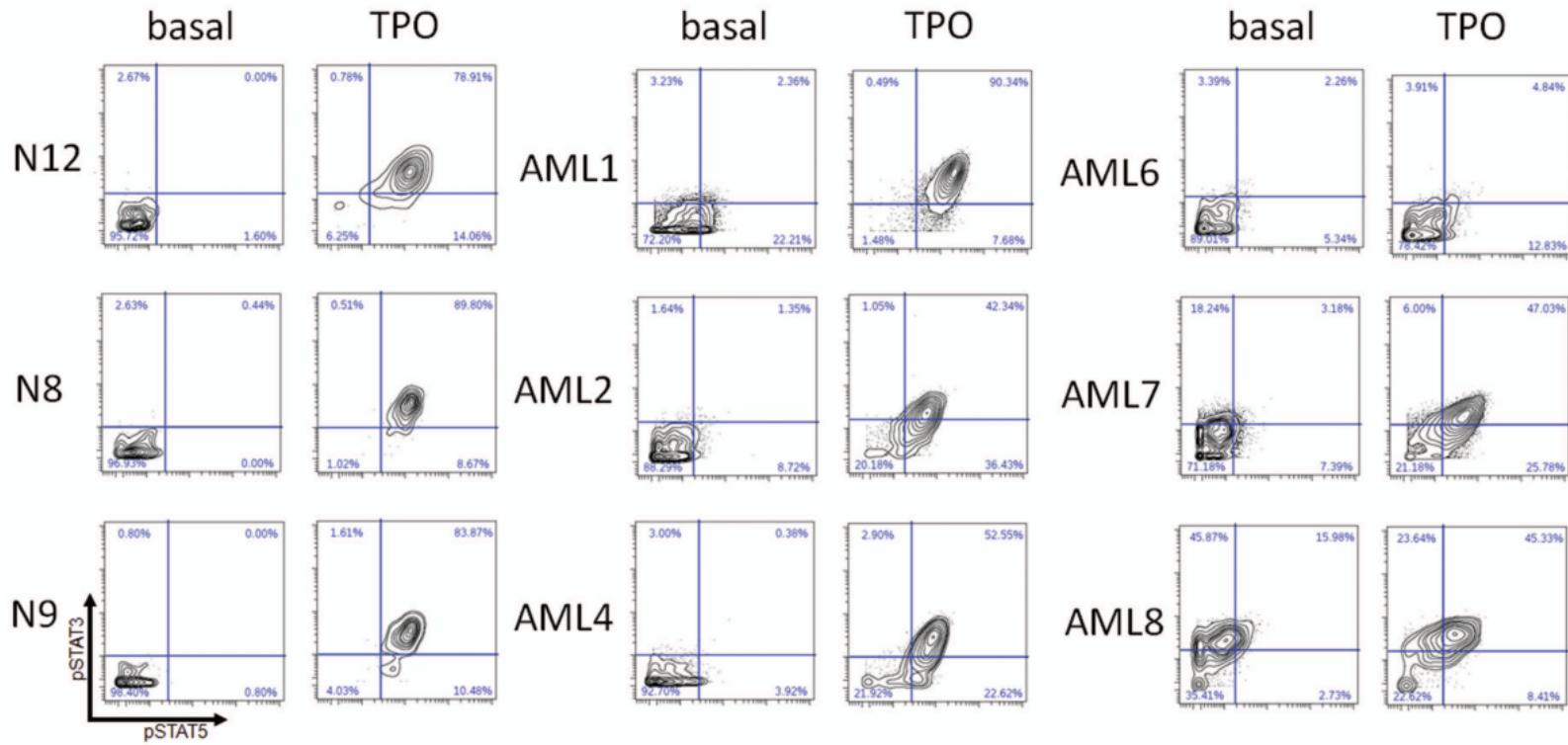
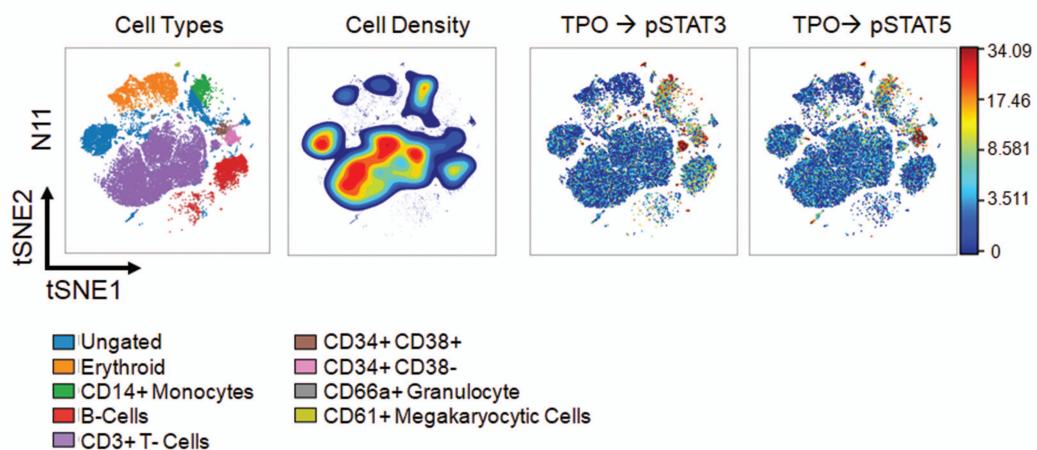


Figure S5

a)



b)

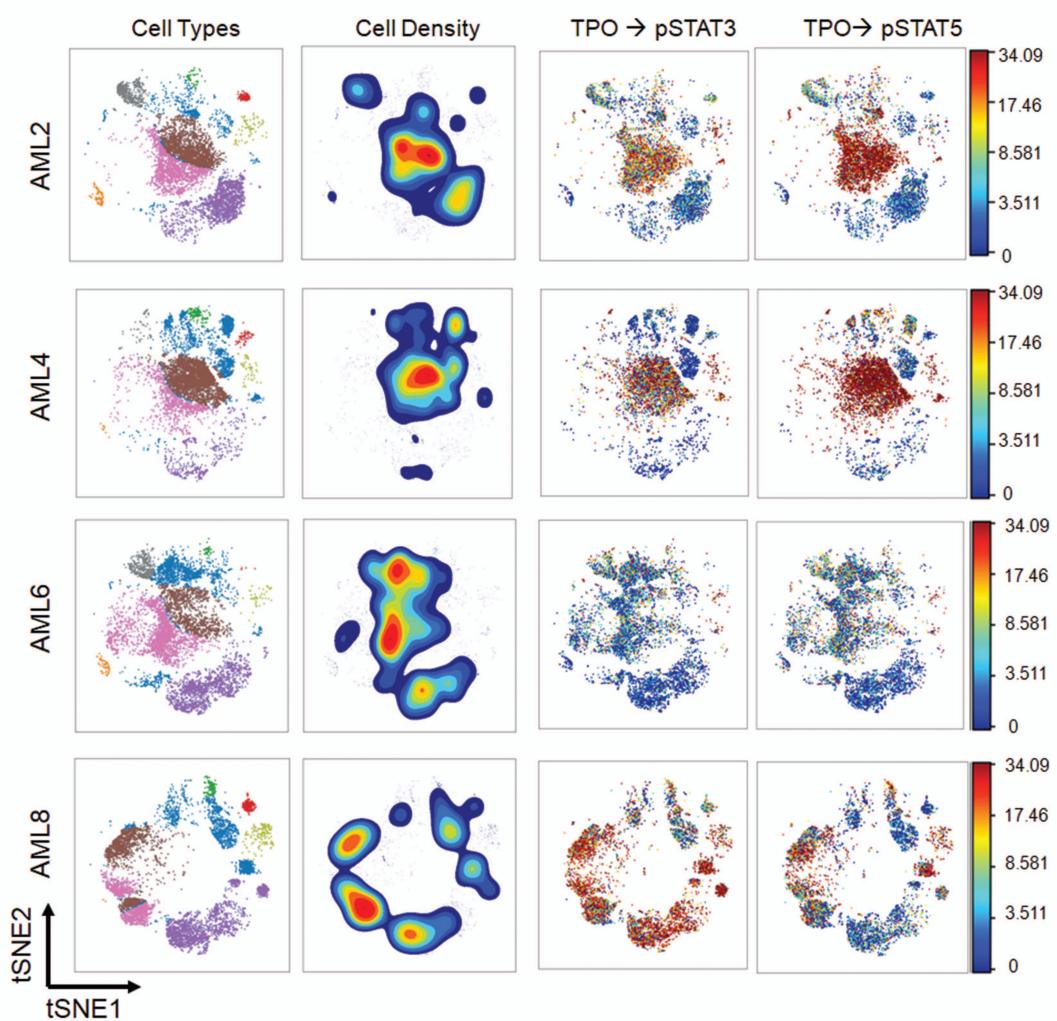
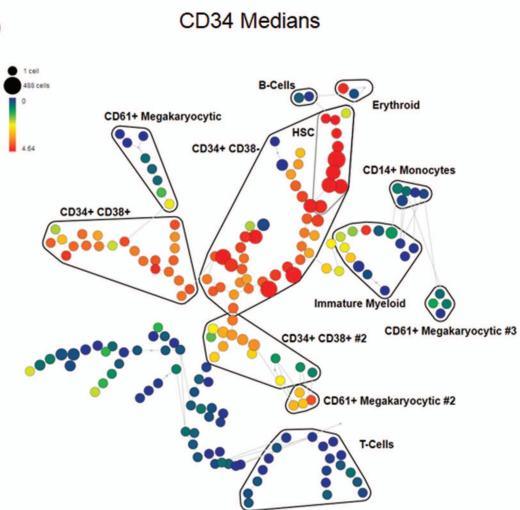
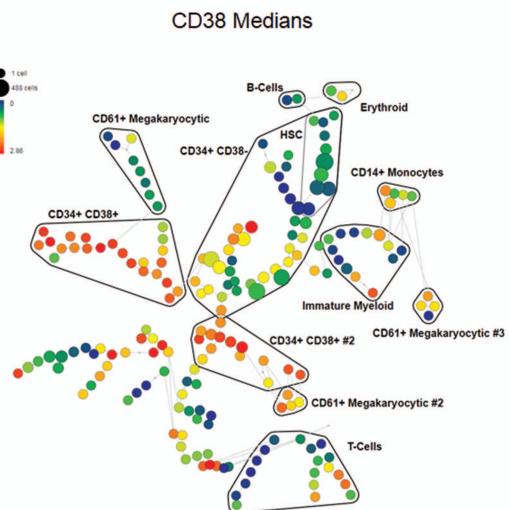


Figure S6

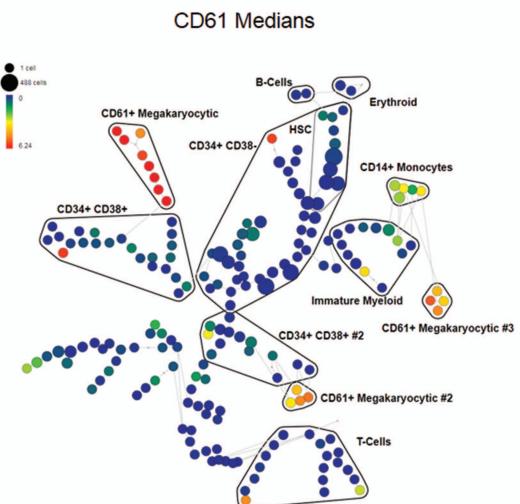
a)



b)



c)



d)

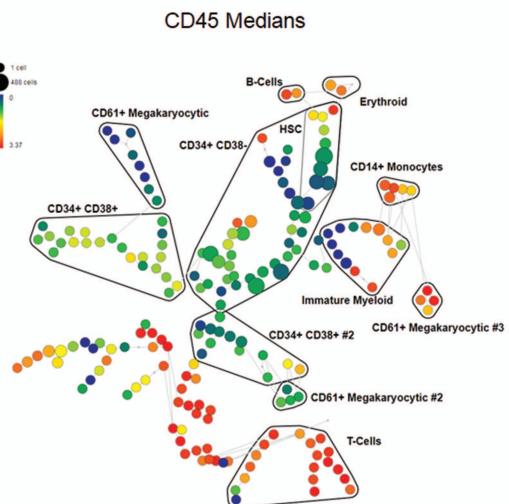


Figure S7

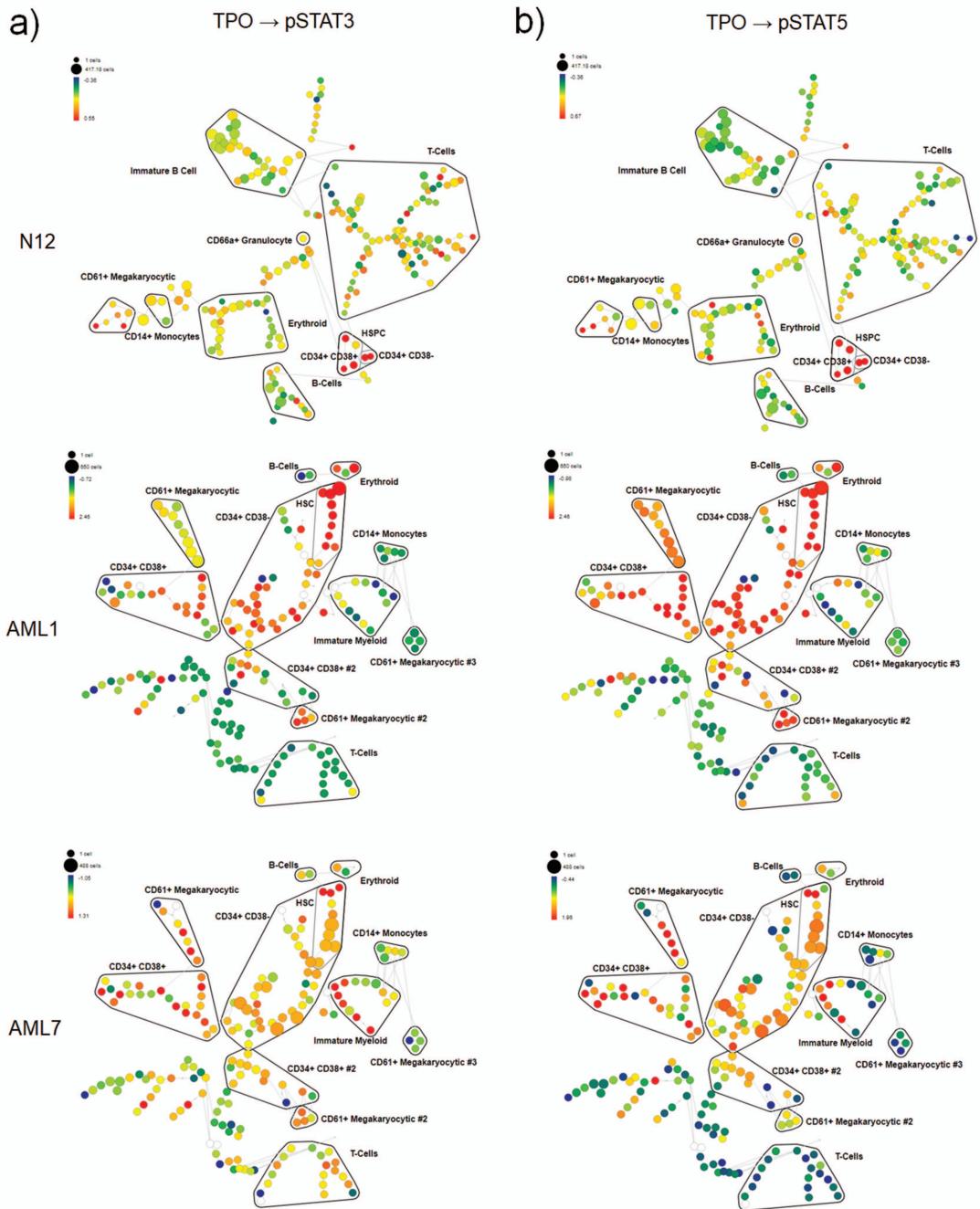
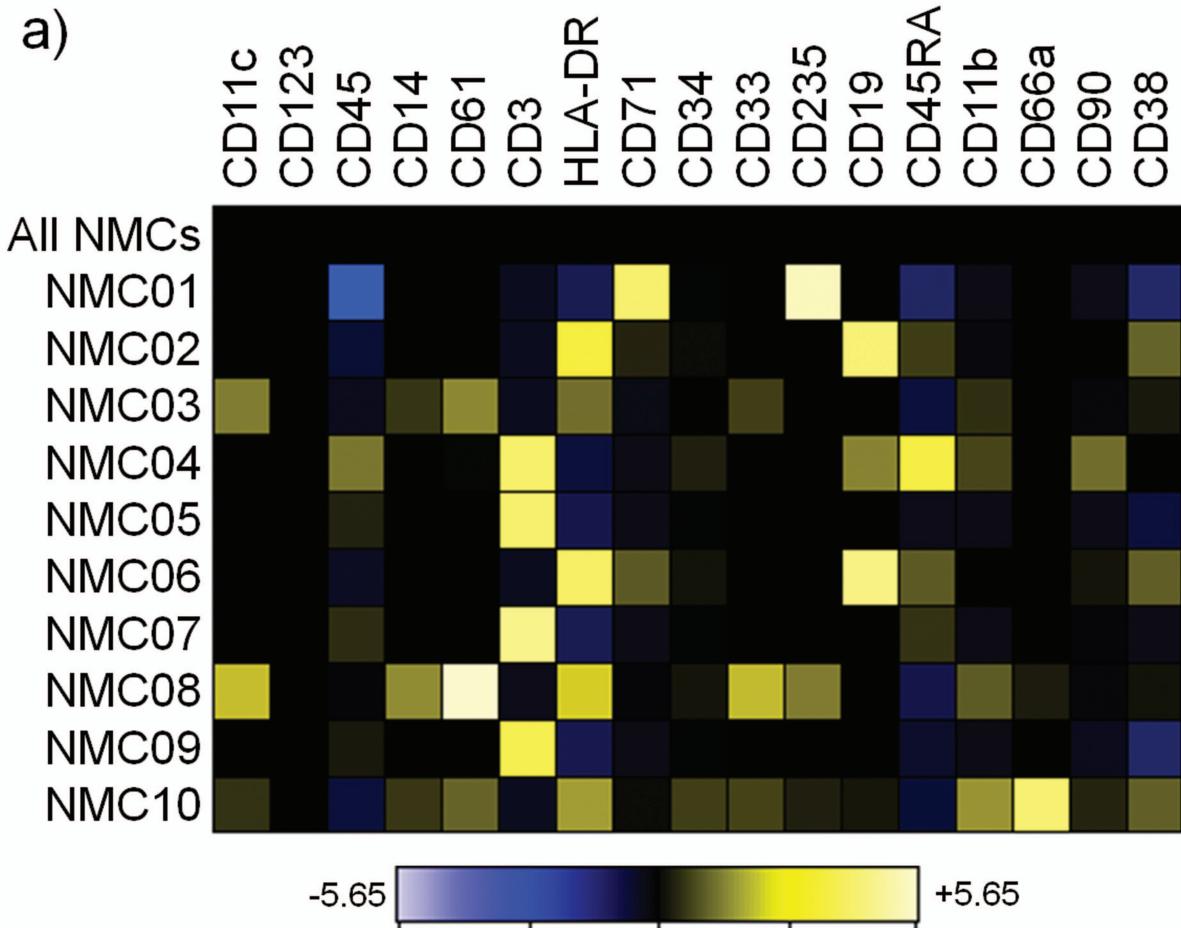


Figure S8

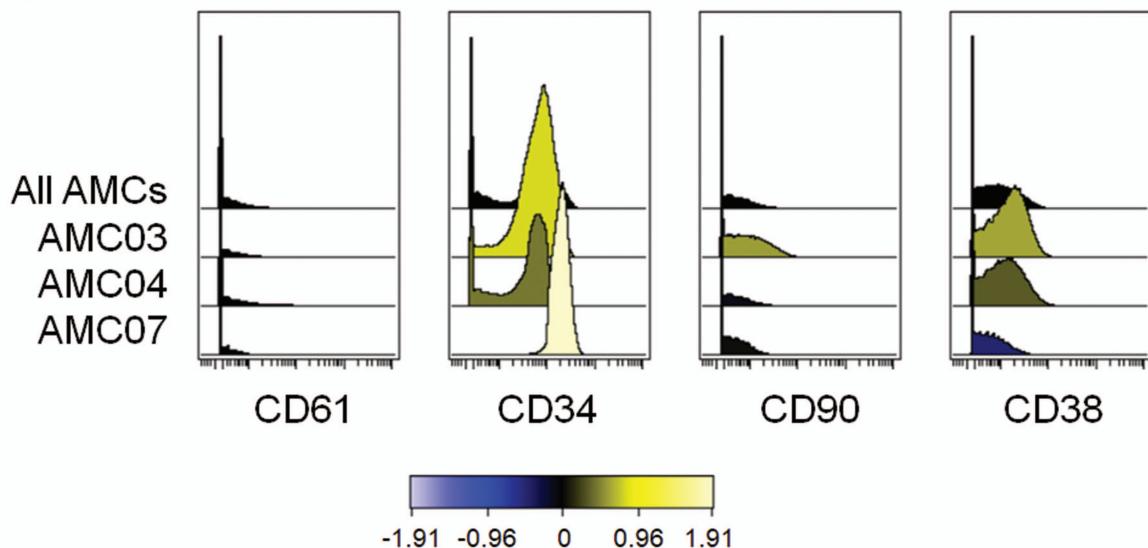


b)

| Metacluster # | Surface Marker Expression | Classification | Justification |
|---------------|--|--|---|
| 1 | CD71+ CD235+ CD45- | Erythroid | Expression of CD71 and CD235 |
| 2 | CD19 + HLA-DR+ CD45RA+ CD38+ | B-Cells | CD19 and HLA-DR expression indicative of B-Cells |
| 3 | CD11c+, CD14+ CD33+, CD11b+, CD38+ | Late Myeloid Progenitors/Myeloid Cells | Expression of mature myeloid markers, small population of CD34+ cells |
| 4 | CD3+ CD45RA+ CD90+ | Naïve T Cells | CD3 and CD45RA expression |
| 5 | CD3+ CD45RA - | Active T-Cells | CD3 and lack of CD45RA |
| 6 | CD19+ HLA-DR+, CD45RA+, CD38+ | B-Cells | CD19 and HLA-DR expression indicative of B-Cells |
| 7 | CD3+ CD45RA- | Active T-Cells | CD3 and lack of CD45RA |
| 8 | CD11c+ CD14+ CD61+ HLA-DR+ CD11b+ CD38+ CD33hi | Monocytes | CD14, CD33, and CD11b expression along with lack of CD34. CD61 suggests monocyte-platelet aggregates. |
| 9 | CD3+ CD45RA - CD90- CD38 | Active T Cells | CD3 and lack of CD45RA expression |
| 10 | CD34+ CD38+ CD66a+ | Early Myeloid Cells | CD34 and CD38 expression. Includes some mature myeloid cells with CD66a |

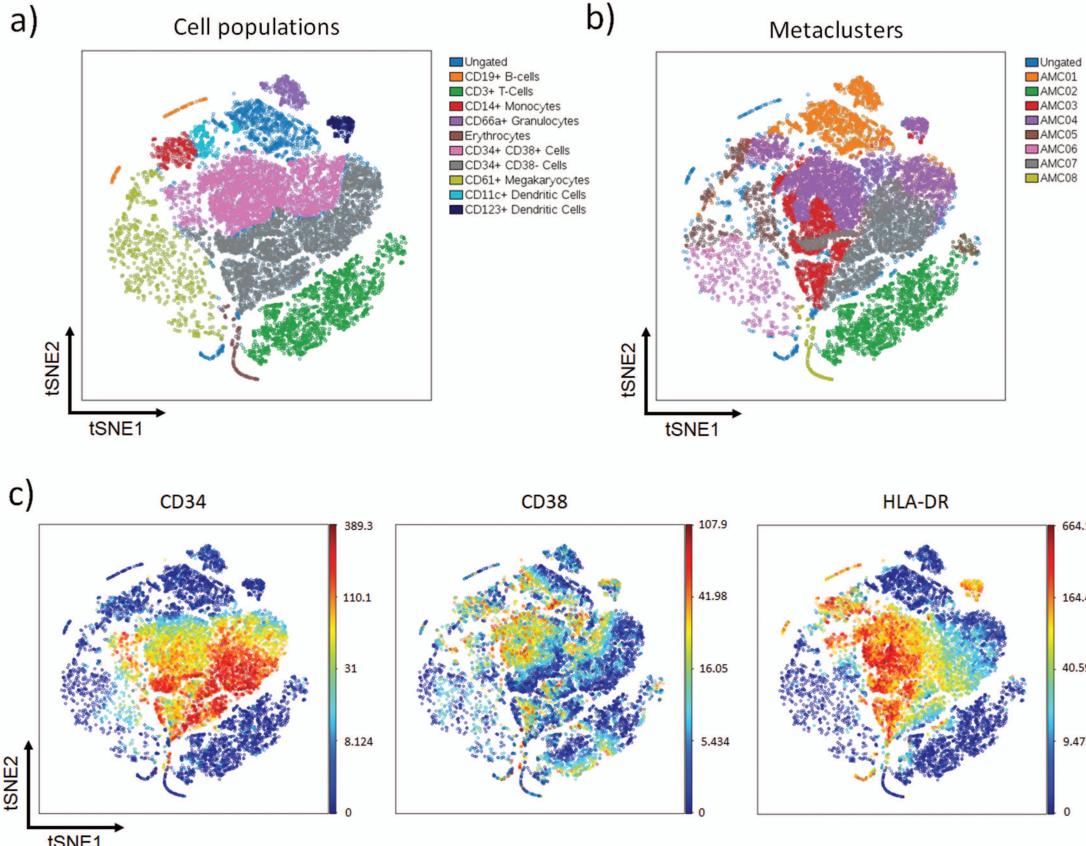
Figure S9

a)



b)

| | CD61 | CD34 | CD90 | CD38 |
|----------|------|------|------|-------|
| All AMCs | 0.0 | 0.0 | 0.0 | 0.0 |
| AMC03 | 0.0 | 0.81 | 0.59 | 0.62 |
| AMC04 | 0.0 | 0.45 | -0.1 | 0.34 |
| AMC07 | 0.0 | 1.91 | 0.04 | -0.45 |



d)

| Metacluster | % CD34 positive | % CD38 positive | % HLA-DR positive |
|-------------|-----------------|-----------------|-------------------|
| AMC03 | 87.52 | 61.89 | 99.96 |
| AMC04 | 69.99 | 52.33 | 70.1 |
| AMC07 | 99.99 | 21.83 | 77.24 |

Figure S8

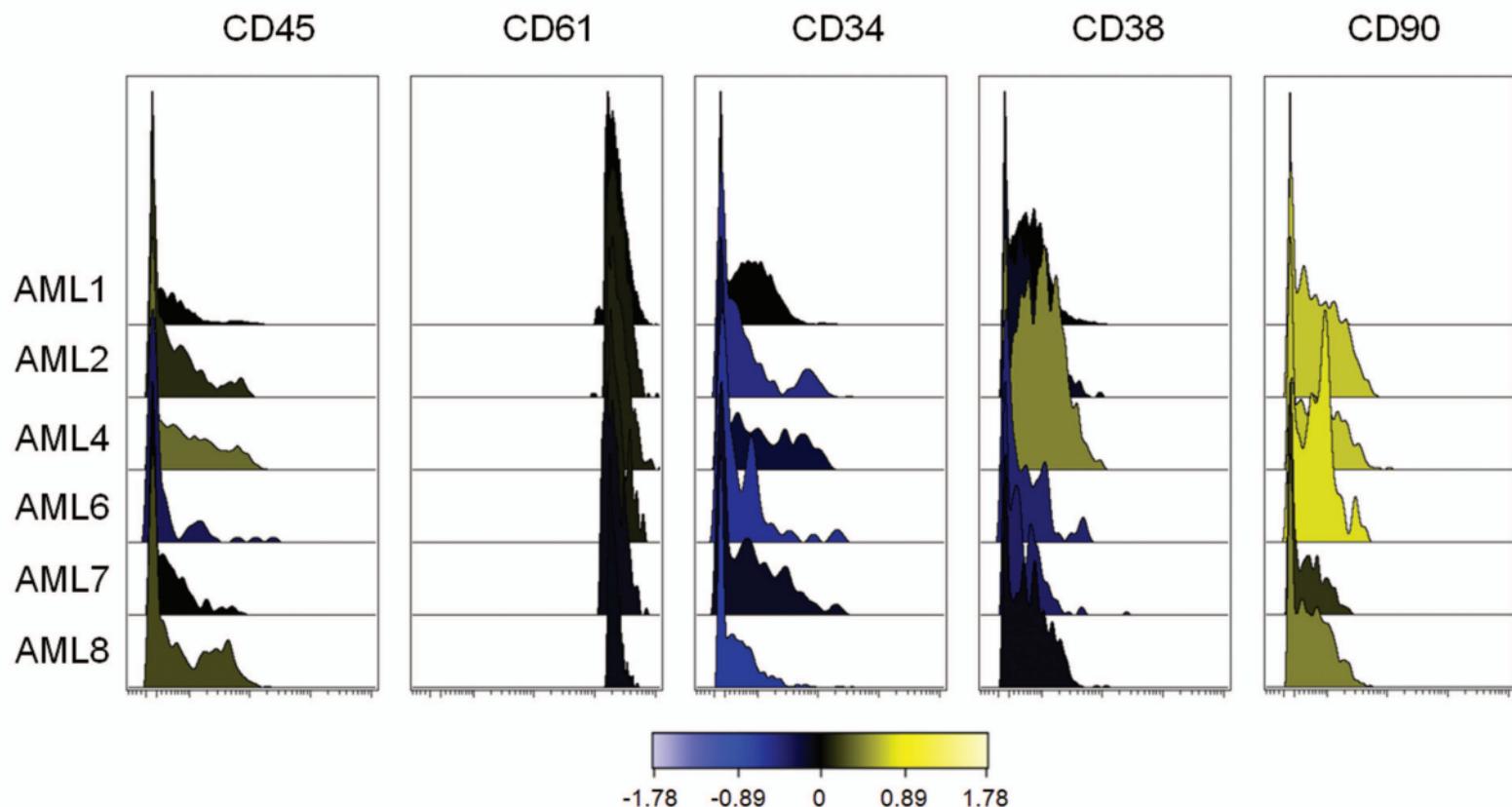
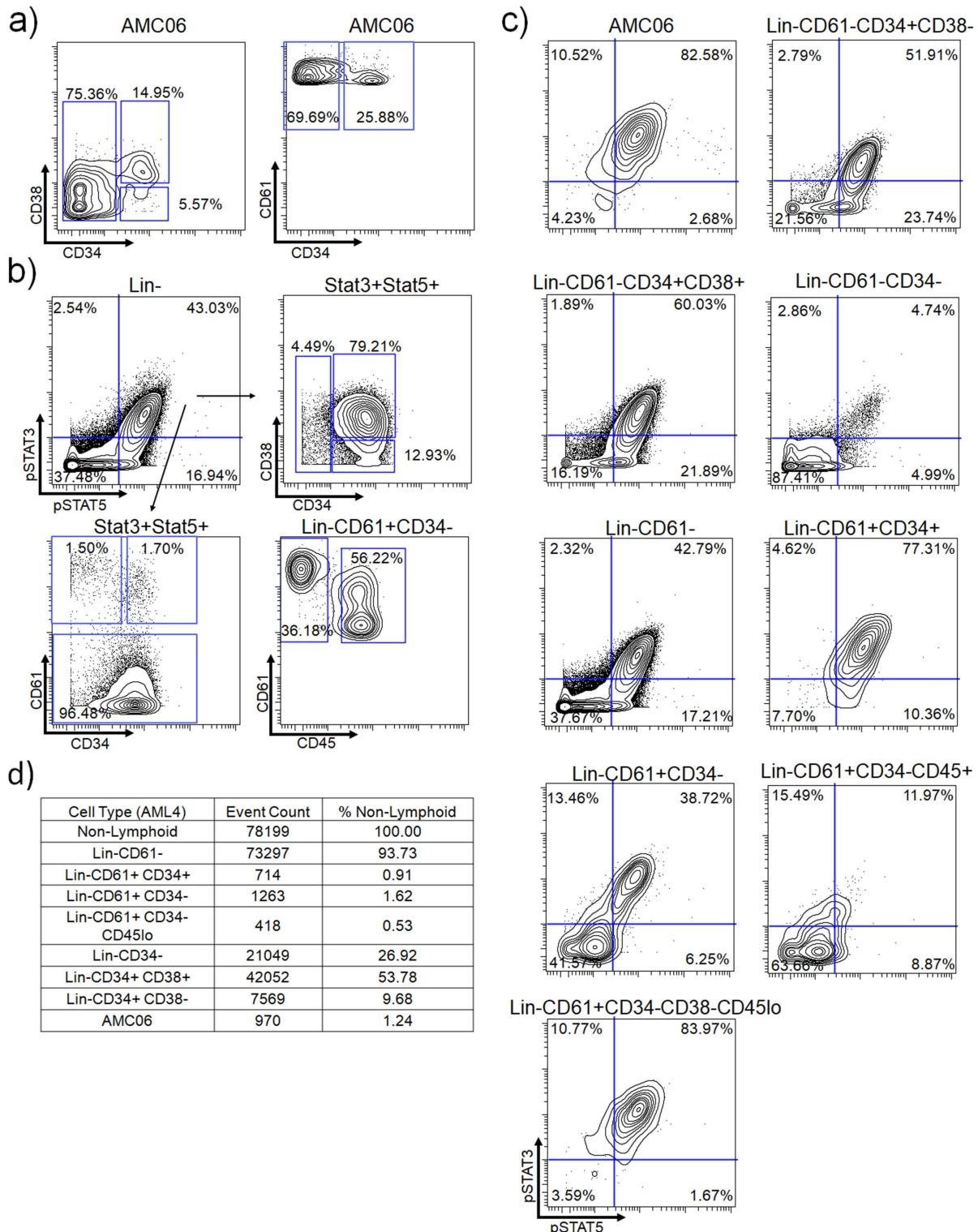
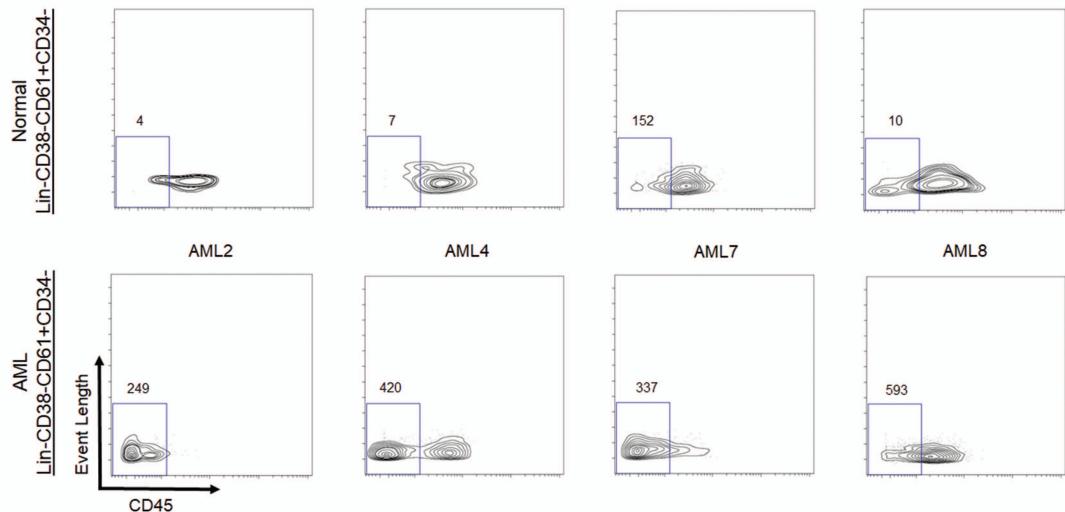


Figure S12



a)



b)

Normal
Lin- CD38-CD61+CD34-CD45lo

AML
AMC06 population

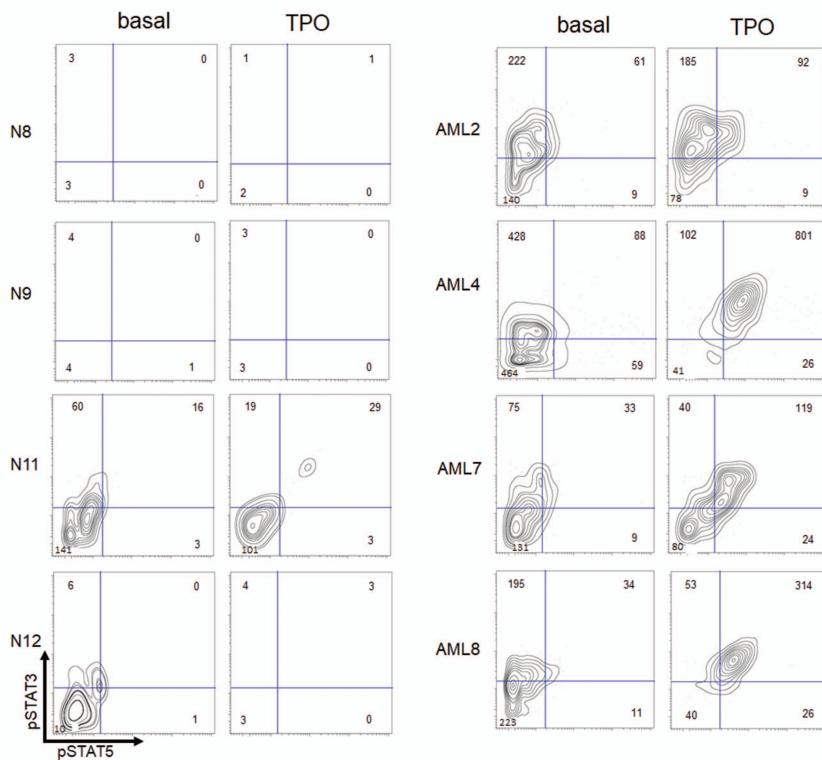


Figure S14

a)

TPO

b)

TNF

pSTAT1
pSTAT3
pSTAT5

pSTAT1
pSTAT3
pSTAT5

N12

AML1

AML2

AML4

AML6

AML7

AML8

AMC06

Lin-CD61-CD34+CD38-

-2.82 +2.82

p-p65-NFkB
tIκB α

p-p65-NFkB
tIκB α

AMC06

Lin-CD61-CD34+CD38-

-3.19 +3.19

Figure S15

