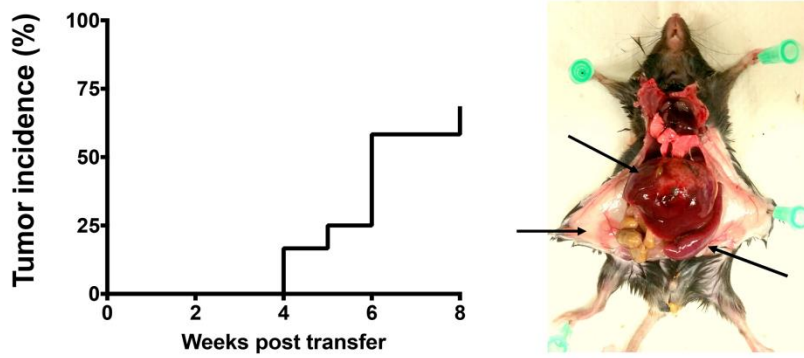
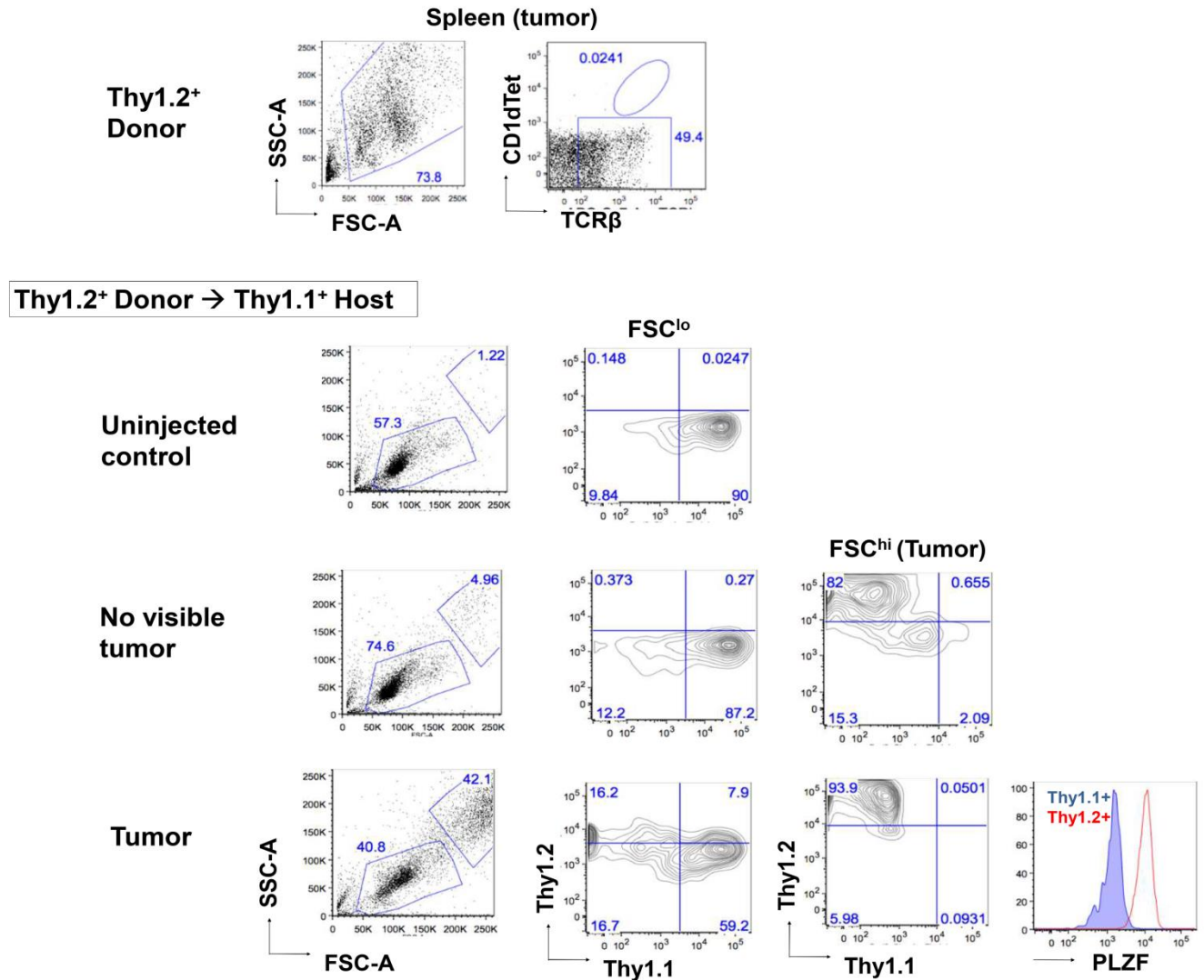


A

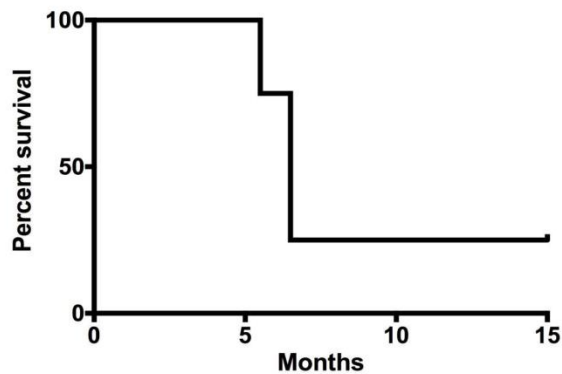


B

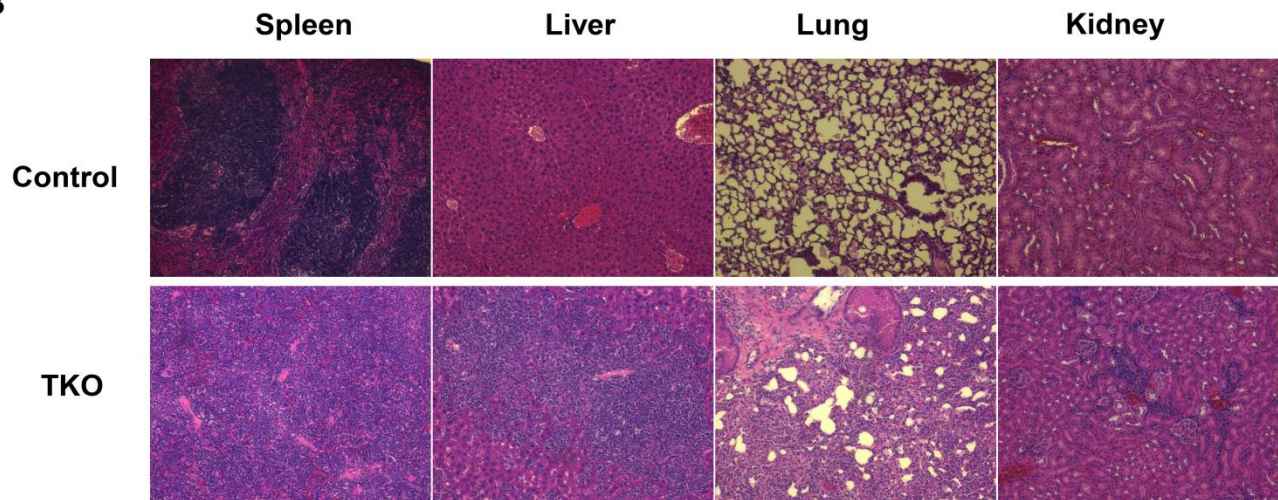
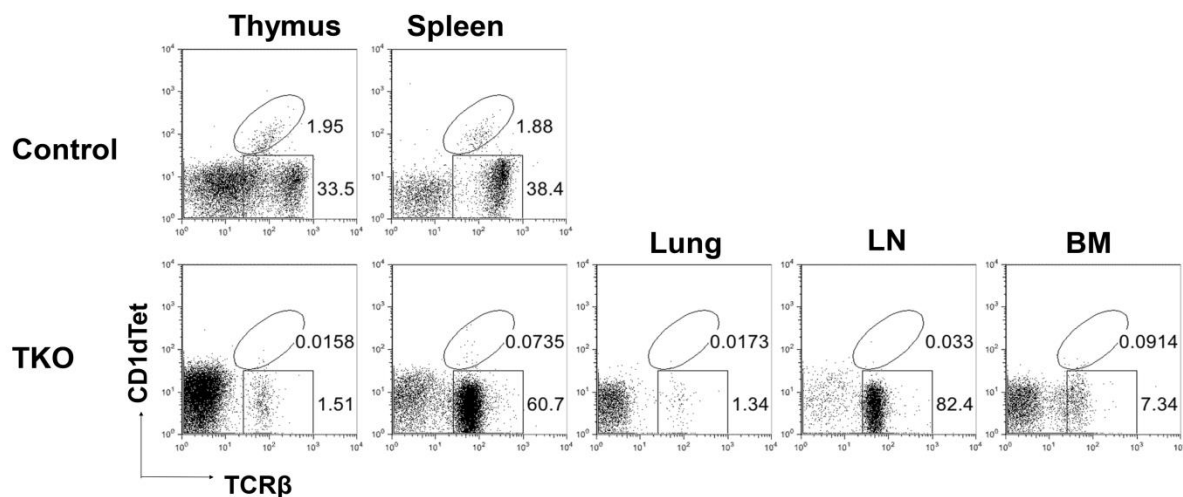


Supplementary Figure 1: Adoptive transfer of lymphoma cells gives rise to tumors in WT hosts

(A) Tumor incidence (left) in WT hosts (N = 10) after receiving 5×10^6 lymphoma cells from L-DKO donor mice with CD1dTet⁻ tumor (N = 2). Representative picture of host with tumor in liver, spleen and LN (marked with arrows). (B) Representative flow cytometry analysis of CD1dTet⁻ lymphoma donor cells from spleen (top panel), and cells recovered from spleen of Thy1.1⁺ WT hosts, 10 weeks after receiving Thy1.2⁺ lymphoma donor cells, or uninjected control. Retention of the innate-like phenotype of lymphoma donor cells was verified by upregulated PLZF expression in FSC^{hi} TCRβ⁺Thy1.2⁺ cells (large lymphoma cells) as compared to FSC^{lo}TCRβ⁺Thy1.1⁺ cells.

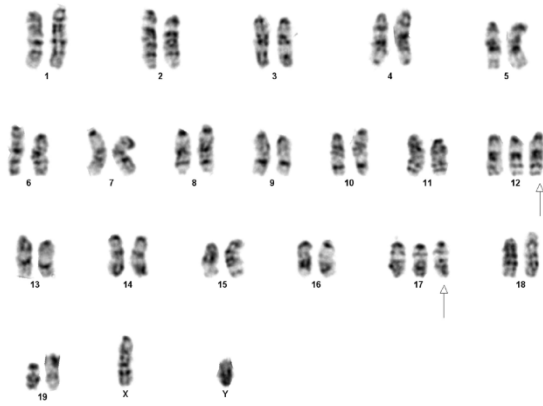
A

| Mouse ID | Age (Weeks) | Involvement |
|----------|-------------|-------------|
| CV2 | 26 | T S L G |
| CV55 | 22 | T |
| CV | 22 | LN |

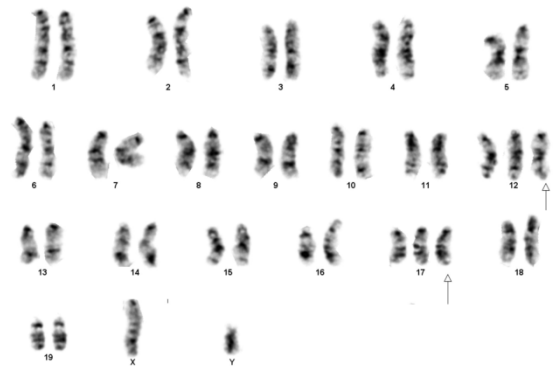
B**C**

Supplementary Figure 2: CD1d-independent CD1dTet-TCR β ⁺ T cells give rise to lymphomas in TKO mice

(A) Survival curve for TKO mice (N=4) along with details of mice that developed tumor. (B) Representative pictures of H&E staining of spleen, lung, liver and kidney tissue sections from Cre⁻ control and TKO mice (100X). (C) Representative distribution of TCR β ⁺CD1dTet⁺ and TCR β ⁺CD1dTet⁻ cells in thymus, spleen, lung, lymph node (LN) and bone marrow (BM) of Cre⁻ mice and TKO mice with tumors.



Slide10-PP cells 2/26-3 Cell: 32



Slide: 3_PP cells Cell: 8

Mouse 57 : Cd1dTet⁺ tumor (Abnormal karyotype)

42,XY,+12,+17[8]/43,XY,+Y,+12,+17[4]/41,X,-Y,+12,+17[4]/40,XY[27]

Tissues

| | | |
|-------------------------------------|----------|--------------------------|
| Lymph Node (LN) (10 cells) | Normal | 4 cells |
| | Abnormal | 42,XY,+12,+17_2 cell |
| | | 43,XY,+Y,+12,+17_3 cells |
| Spleen (SP) (11 cells) | Normal | 7 cells |
| | Abnormal | 42,XY,+12,+17_2 cells |
| | | 41,X,-Y,+12,+17_2 cells |
| Peyer's patch (PP)(23 cells) | Normal | 16 cells |
| | Abnormal | 42,XY,+12,+17_4 cell |
| | | 43,XY,+Y,+12,+17_1 cell |
| | | 41,X,-Y,+12,+17_2 cell |

Mouse 75 : CD1dTet⁻ tumor (Normal karyotype)

40,XY[20]

| | | |
|---------------------------|--------|----------|
| Lymph Node (LN) | Normal | 4 cells |
| Peyer's patch (PP) | Normal | 6 cells |
| Thymus | Normal | 10 cells |

Supplementary Figure 3: Karyotyping analysis of lymphoma samples

Karyotyping analysis of lymphoma samples from one mouse with CD1dTet⁺ tumor and one with CD1dTet⁻ tumor. Karyotypes for individual tissue samples are described.

Supplementary Table I: Cluster definitions according to Self-Organizing Map (SOM) analysis¹

| Cluster ID | Row | Column | Gene Names |
|------------|-----|--------|---|
| 1 | 1 | 1 | Ifit1, Sh3bgrl2, Secisbp2l, Ifih1, Cmpk2, Irgm2, Irf7 |
| 2 | 1 | 2 | Scn11a, Rps4y2, Hivep3, Ddx24, AY036118, Tprgl |
| 3 | 1 | 3 | F2rl1, Btg2, Coro2a, Atg14, Chd7, Rasa1, Osbp15 |
| 4 | 1 | 4 | Arl4d, Itgae, Trip4, Pcgf2, Rgs3 |
| 5 | 1 | 5 | Marveld2, Ahnak, Smpdl3a, Fgd6 |
| 6 | 2 | 1 | Phxr4, Brdt, Arl4c, Ndr3, Dgka, Ifi2712a, Vangl2 |
| 7 | 2 | 2 | Parg, H2-T24, Cox6b2, Ccs, Hmbox1, Ldlrap1, Emilin1, Fam189b, Ndr3 |
| 9 | 2 | 4 | Cxcr3, Rhob, Cd244 |
| 10 | 2 | 5 | Adam19, Hip1, Cttd |
| 11 | 3 | 1 | Ccr7, Igfbp4, Rag2 |
| 13 | 3 | 3 | Tmem176a, Tnc, Pld4, Lgals1, Wbp5, Colec12, Ggta1, Cdh5, Vcam1, Mmp2, Rab34, Sdc1, Rhoj |
| 14 | 3 | 4 | Pygl, Cst7, Slc39a4, Ifngr1, Syng2 |
| 15 | 3 | 5 | Ifitm3, Ms4a6c, Ccl5, Swap70, Il10ra, Ccr5, Naip2 |
| 16 | 4 | 1 | Figl1, Cdk1, Emp3 |
| 17 | 4 | 2 | Tbc1d24, Sepp1, Fhl1 |
| 18 | 4 | 3 | Cpe, Adm, Cfp, Slc15a3, Cd83, Cd86, Ms4a1, Cd79b, Fabp5, Ccl11 |
| 19 | 4 | 4 | Frmd4b, Grn, Mt2, Ctsz, Hgfac |
| 20 | 4 | 5 | Icosl, Naip5, Irf5, Txndc5 |
| 21 | 5 | 1 | Prss23, Cd81, Pdzd3, Slc27a2 |
| 22 | 5 | 2 | Myh3, Fscn1, Mertk, Cd74, Lepr, Lpcat1, H2-DMA |
| 23 | 5 | 3 | Ms4a7, Spon1, Papss2, Bgn, Ccdc88a, Relb, Gns, Procr, Mospd2, Ankrd33b, Nfkbie, Pawr |
| 24 | 5 | 4 | Csf2rb, Lpl, 2610528A11Rik, Ryr1, Cebpdl, Ly6d, Myadm, Ncf1, Serpina10, Cp, Slc4a8 |
| 25 | 5 | 5 | Chi3l3, Mrc1, Gja1, Rsph1, Pkd2, Lrrk1, Steap4, Emp1, Rgs18, Uap1, Ccr1, Prcp |

¹List of genes in each cluster (identified by row and column number in map) as defined by the Self-Organizing Map (SOM) analysis shown in Figure 7B.