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Supplemental Material to:

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Somatic inactivation of Tp53 in hematopoietic stem cells or thymocytes predisposes mice to thymic lymphomas with clonal translocations

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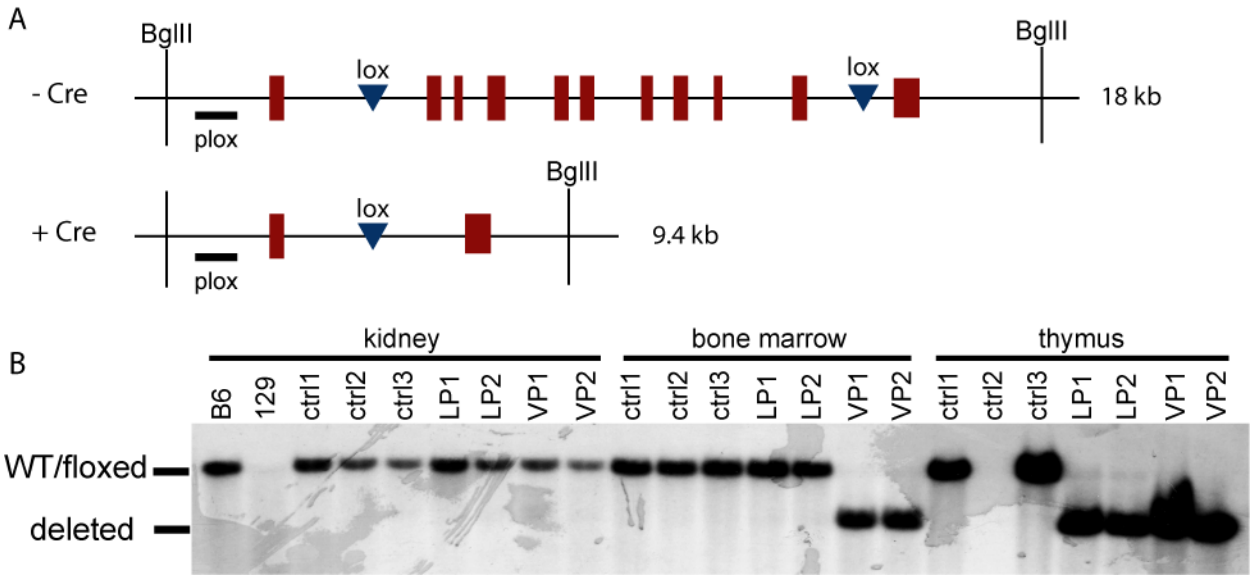
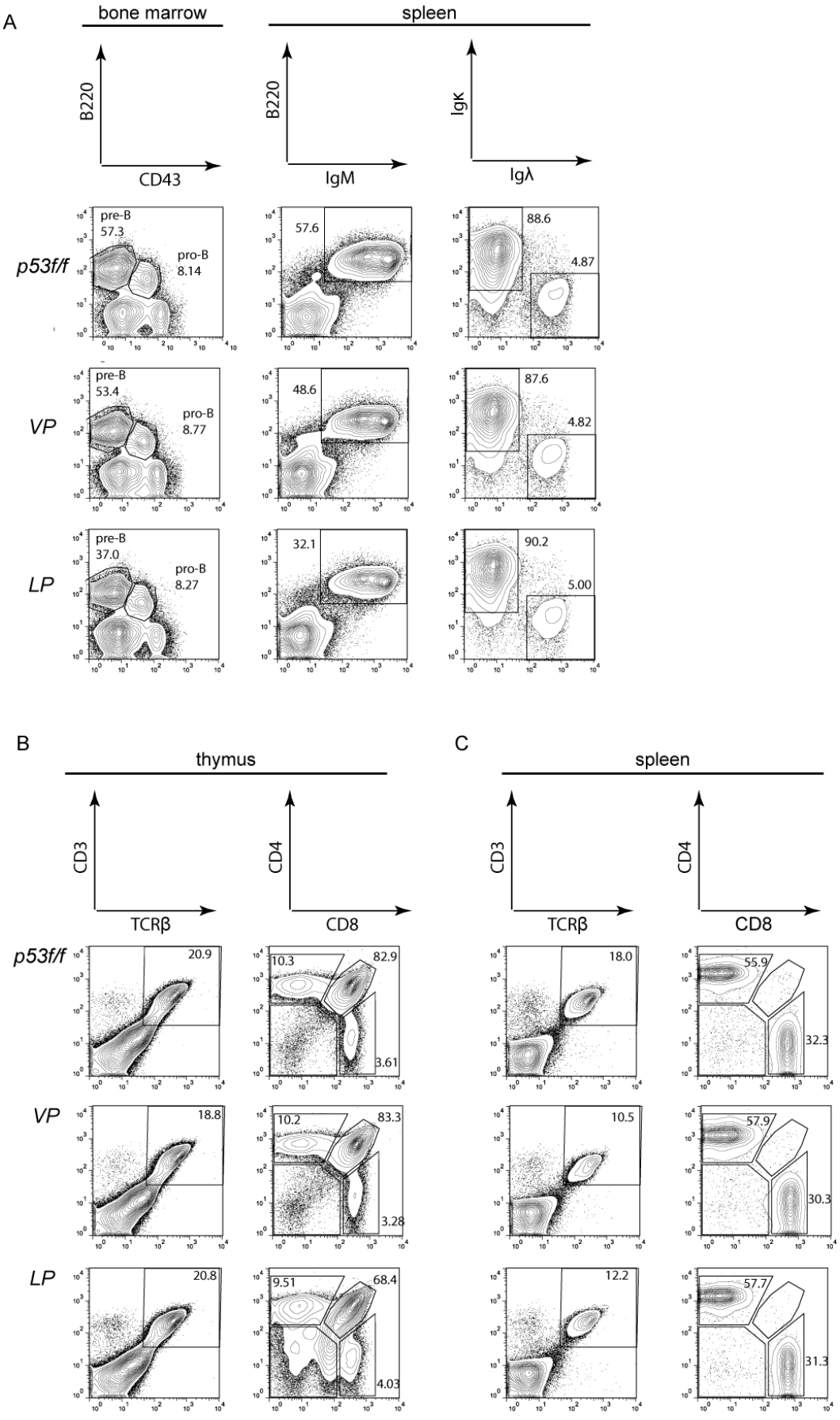
Supplementary figure 1.



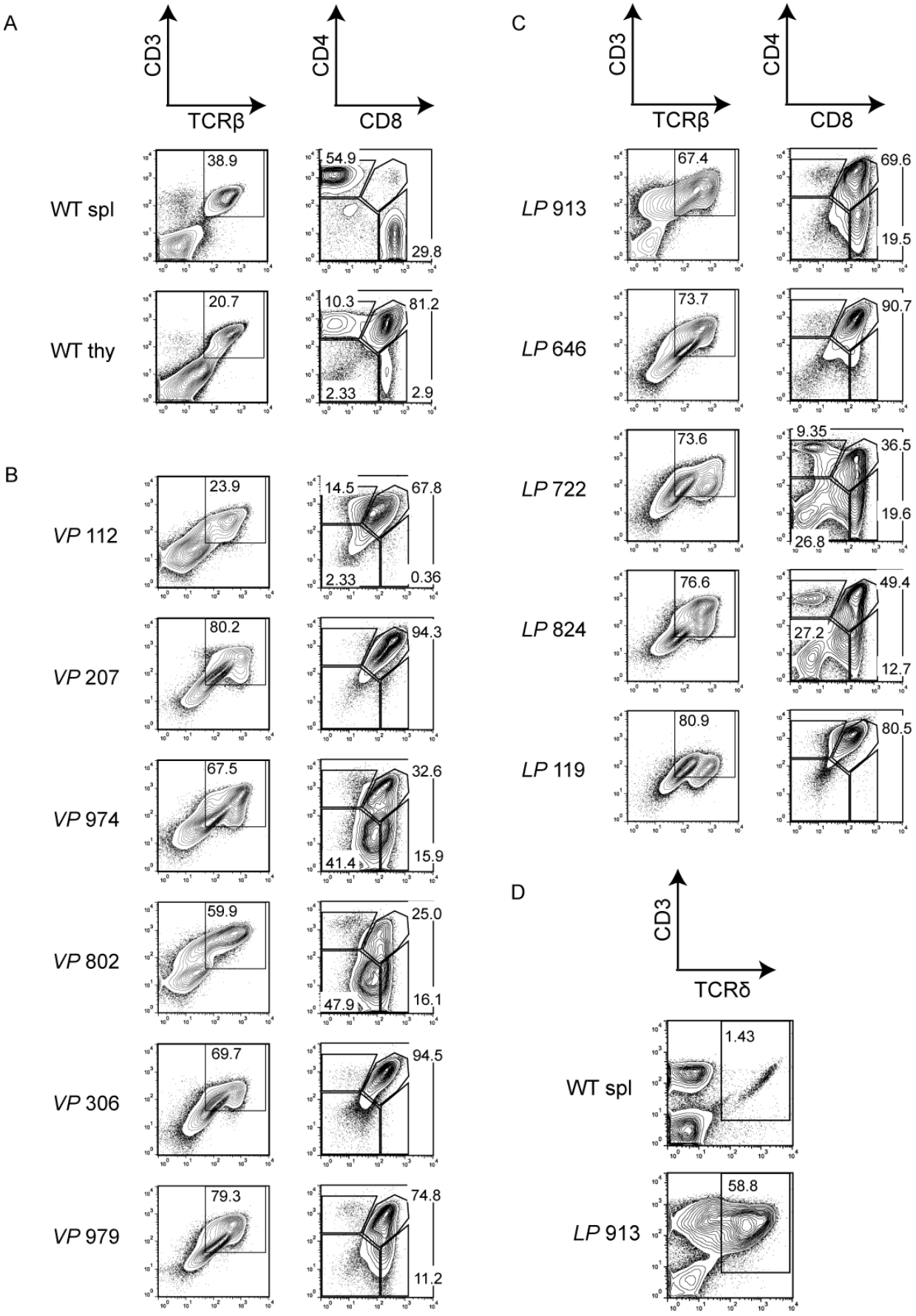
Supplementary figure 1. Cre-mediated deletion of floxed *Tp53* exons is robust and limited to expected tissues. (A) Schematic of the *Tp53* locus showing relative locations of exons (red boxes) and loxP sites before or after Cre-mediated recombination (-/+Cre). Locations of *Bgl*II restriction sites and the plox probe are also shown. (B) Southern blot analysis of *Bgl*II-digested DNA isolated from indicated tissues of wild type C57BL/6 (B6), 129/SvEv (129), $p53^{flox/flox}$ (ctrl), *VP*, or *LP* mice using the plox probe. Lack of signal in 129 kidney and ctrl2 thymus sample lanes is due to inadequate DNA loading.

Supplementary figure 2.



Supplementary figure 2. Lymphocyte development is normal in young *LP* and *VP* mice. (A-C) Flow cytometry was performed on lymphocytes from (A) bone marrow and spleen, (B) thymus, or (C) spleen using the indicated antibodies. Numbers inside or next to gates indicate the percentage of cells in those gates. This experiment was performed twice with a total of two control, 3 *VP*, and 3 *LP* mice. (C) CD4 and CD8 expression is shown for $CD3^{+}TCR\beta^{+}$ cells.

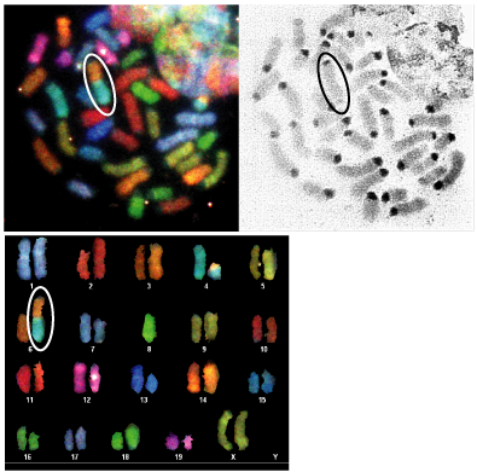
Supplementary figure 3.



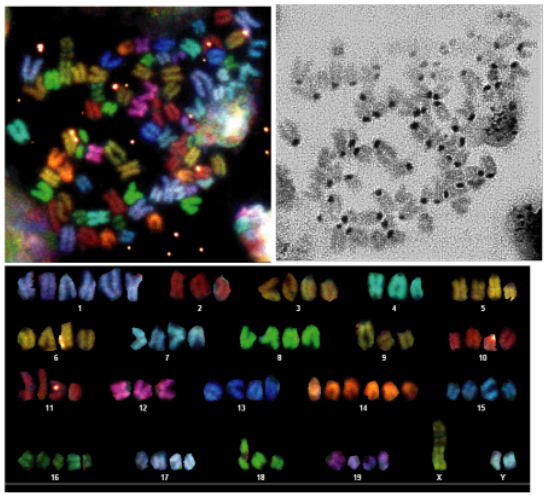
Supplementary figure 3. Flow cytometry analysis of *VP* and *LP* thymic lymphomas. (A-C) Flow cytometry analyses of (A) spleens (spl) and thymuses (thy) from normal mice, (B) *VP* lymphomas, or (C) *LP* lymphomas showing surface expression of CD3 and TCRβ or CD4 and CD8. Gates were drawn on normal cells and applied to lymphomas. The percentages of cells in each gate are indicated. Numbers were omitted when fewer than 10% of cells fell in a gate. (A) For splenocytes only, CD4 and CD8 expression is shown for $CD3^{+}TCR\beta^{+}$ cells. (D) Flow cytometry analysis of wild-type spleen and *LP* lymphoma no. 913 showing surface expression of CD3 and TCRδ. Percentages of $CD3^{+}TCR\delta^{+}$ cells are indicated. This was the only *VP* or *LP* lymphoma that expressed TCRδ.

Supplementary figure 4.

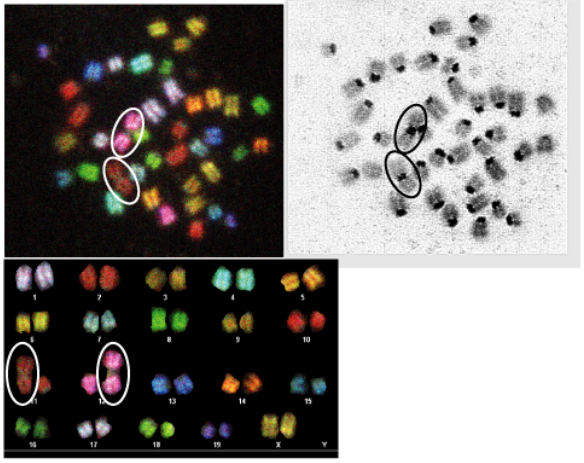
A *VP* 426



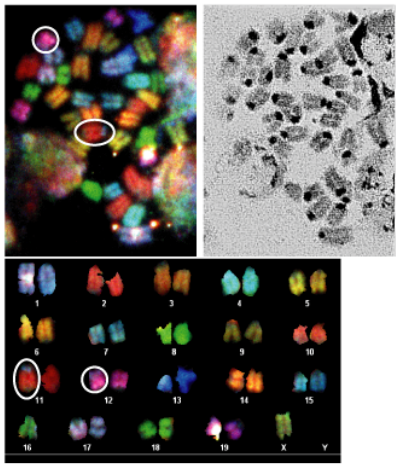
B *VP* 207



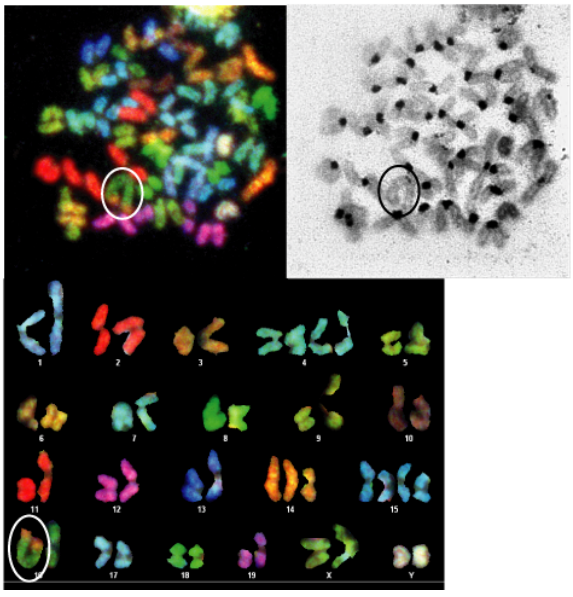
C *VP* 975



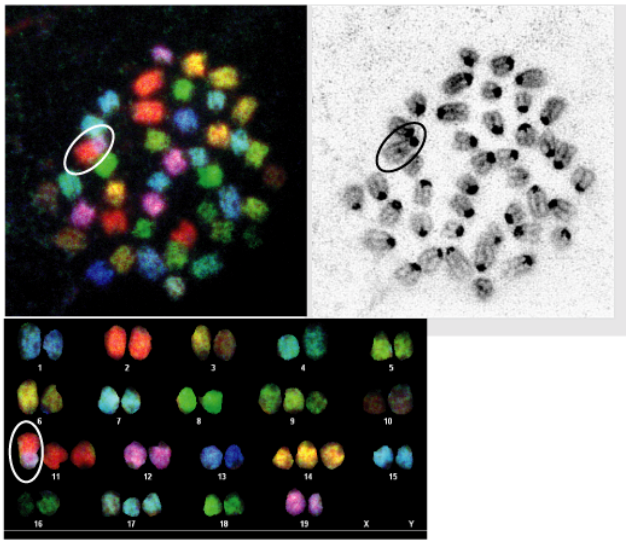
D *VP* 118



E *LP* 976



F *LP* 826



Supplementary figure 4. Spectral karyotyping analysis of *VP* and *LP* lymphomas. (A-F) Cytogenetic analysis of the indicated *VP* or *LP* lymphomas with their clonal or semi-clonal chromosome translocations circled. Spectral images, DAPI images, and karyotype tables are shown for each tumor. (A) *VP* B lineage lymphoma no. 426 with a clonal t(6;4) translocation. (B) *VP* thymic lymphoma no. 207 with aneuploidy and no clonal translocations. (C) *VP* thymic lymphoma no. 975 with t(11;11) and t(12;12) centromeric fusions that were observed together in a third of metaphases. (D) *VP* thymic lymphoma no. 118 with a clonal t(11;15) and t(12;19) translocation found in a third of metaphases. (E) *LP* thymic lymphoma no. 976 with a clonal t(16;14) translocation. (F) *LP* thymic lymphoma no. 826 with a clonal t(11;19) translocation.