| ID  | Gender | Survival (Wks) | Tumor                  | Inflammation | Other abnormalities        |
|-----|--------|----------------|------------------------|--------------|---------------------------|
| 5   | F      | 134            | -                      | -            | -                         |
| 7   | F      | 117            | -                      | -            | -                         |
| 16  | F      | 100            | -                      | -            | -                         |
| 22  | F      | 109            | -                      | -            | -                         |
| 25  | F      | 109            | -                      | -            | -                         |
| 44  | F      | 90             | -                      | -            | -                         |
| 55  | F      | 104            | T-LBL                  | -            | -                         |
| 64  | F      | 120            | -                      | -            | -                         |
| 2   | M      | 127            | -                      | -            | -                         |
| 3   | M      | 117            | Liver                  | -            | -                         |
| 12  | M      | 127            | -                      | -            | -                         |
| 13  | M      | 127            | -                      | -            | -                         |
| 20  | M      | 122            | -                      | -            | -                         |
| 23  | M      | 122            | -                      | -            | -                         |
| 26  | M      | 127            | Liver/Salivary gland   | -            | -                         |
| 34  | M      | 124            | DLBCL                  | -            | -                         |
| 37  | M      | 134            | -                      | -            | -                         |
| 62  | M      | 128            | -                      | -            | -                         |
| 45  | M      | 133            | -                      | -            | -                         |
| 49  | M      | 117            | -                      | -            | -                         |
| 50  | M      | 113            | T-LBL/ DLBCL           | -            | -                         |
| 56  | M      | 117            | DLBCL                  | -            | -                         |
| 59  | M      | 119            | DLBCL                  | -            | -                         |
| 65  | M      | 106            | -                      | -            | -                         |
| 69  | M      | 102            | DLBCL                  | Spleen hyperplasia | -                         |
| 70  | M      | 103            | -                      | Thymus hyperplasia | -                         |
| 71  | M      | 90             | -                      | -            | -                         |
| 1-24-2 | M  | 83             | -                      | -            | Liver steatosis            |
| 2-15-2 | F  | 140            | Lymphoma               | EMH in liver | -                         |
| 2-19-6 | M  | 132            | -                      | Pancreas     | EMH in Spleen             |
| 2-19-2 | F  | 143            | -                      | EMH in Spleen | -                         |
| 3-11-3 | M  | 129            | -                      | -            | -                         |
| 3-28-5 | F  | 85             | -                      | EMH in spleen/Liver steatosis | -                         |
| 5-12-3 | M  | 129            | -                      | -            | -                         |
| 7-9-9   | F    | 116            | -                      | EMH in Spleen               | -                         |
| 8-2-6   | M    | 120            | -                      | -            | -                         |
| 10-24-7 | F   | 130            | Pancreas               | EMH in spleen     | -                         |
| 10-26-6 | F   | 129            | Histiocytic sarcoma    | EMH in spleen/liver          | -                         |
| 11-10-7 | M   | 121            | -                      | -            | -                         |
| 11-7-3  | F    | 121            | -                      | -            | -                         |
| 11-29-2 | F  | 144            | -                      | EMH in spleen/Liver steatosis | -                         |
| 12-2-4  | F    | 113            | -                      | -            | -                         |
| 12-20-7 | F   | 115            | -                      | EMH in Spleen     | -                         |
| 11-9-6  | F    | 96             | DLBCL                  | Skin          | -                         |
| 11-19-1 | F    | 86             | -                      | Skin          | -                         |
| 11-10-15 | F   | 105            | -                      | Skin/Pancreas  | -                         |
| 12-25-6 | M   | 111            | -                      | -            | Hepatocirrhosis           |
| 1-19-5  | F    | 109            | Lymphoma               | -            | -                         |
| 7-22-4  | M    | 86             | -                      | -            | -                         |
| 7-22-7  | M    | 126            | -                      | Kidney        | -                         |
| 11     | M    | 111            | N/A                    | Found dead    | -                         |
| 42     | M    | 111            | N/A                    | Found dead    | -                         |
| 43     | M    | 107            | N/A                    | Found dead    | -                         |
| 46     | M    | 117            | N/A                    | Found dead    | -                         |
| 52     | M    | 101            | N/A                    | Found dead    | -                         |

Euthanized for experiments below

These mice were from published studies (Zhang et al, 2014, PNAS, 111 (52) 18637-18642; Zhang et al, 2017, Genes & Dev, 31:1243-56)
T-LBL: Thymic lymphoblastic lymphoma; DLBCL: Diffuse large B-cell lymphoma; N/A: not applicable; EMH: extramedullary hematopoiesis
| ID     | Gender | Survival (Wks) | Tumor                          | Inflammation                          | Other abnormalities                       |
|--------|--------|----------------|--------------------------------|---------------------------------------|-------------------------------------------|
| 1-12-2 | M      | 100            | Lymphoma                       | Pancreas/Lung/Liver/Salivary gland    | EMH in spleen                            |
| 1-24-5 | M      | 83             | -                              | Lung/Liver                            | -                                         |
| 1-11-3 | M      | 100            | -                              | Lung                                  | -                                         |
| 1-11-14| F      | 110            | Histiocytic sarcoma            | Pancreas/Lung/Liver/Salivary gland/Kidney | EMH in spleen                            |
| 2-14-2 | M      | 109            | -                              | Lung                                  | EMH in spleen                            |
| 2-14-3 | M      | 101            | -                              | -                                     | EMH in spleen                            |
| 2-25-1 | F      | 107            | Lymphoma                       | -                                     | EMH in spleen                            |
| 3-7-2  | F      | 101            | Lymphoma                       | Lung/Liver                            | EMH in spleen                            |
| 3-7-5  | M      | 129            | Lymphoma                       | Kidney/Liver                          | EMH in liver                             |
| 3-7-4  | M      | 129            | Hepatoma                       | Pancreas/Kidney/Liver                 | EMH in spleen                            |
| 6-15-3 | F      | 90             | -                              | Liver/Lung                            | EMH in spleen and liver;Liver steatosis   |
| 8-2-3  | F      | 94             | -                              | Kidney                                | EMH in spleen                            |
| 9-30-4 | M      | 102            | Angiosarcoma                   | Pancreas/Lung/Liver                  | EMH in spleen and liver                  |
| 10-26-3| F      | 75             | -                              | Pancreas/Lung                          | EMH in spleen                            |
| 11-3-14| M      | 77             | -                              | -                                     | EMH in spleen                            |
| 11-10-10| M    | 124           | Lymphoma and angiosarcoma      | Pancreas/Lung/Kidney/Salivary gland   | EMH in spleen and liver                  |
| 11-16-14| M   | 128           | -                              | Lung                                  | EMH in spleen and liver                  |
| 11-16-7| F      | 125            | Hepatoma and lymphoma          | Pancreas/Lung/Liver/Salivary gland    | EMH in spleen                            |
| 12-19-3| M      | 123            | Lymphoma                       | Salivary gland                        | EMH in spleen                            |
| 12-19-8| M      | 118            | Hepatoma                       | Pancreas                              | EMH in spleen and liver                  |
| 12-19-6| F      | 87             | -                              | -                                     | -                                         |
| 12-24-2| M      | 122            | -                              | Liver                                 | Liver steatosis                          |
| 12-28-5| F      | 102            | Hepatoma and lymphoma          | Pancreas/Lung/Liver/Salivary gland    | EMH in spleen                            |
| 5-13-1+2| M    | 83             | -                              | Lung/Salivary gland                   | -                                         |
| 11-26-1| F      | 100            | -                              | Kidney/Lung/Salivary gland            | EMH in spleen, Lymphoid hyperplasia       |
| 8-31-6 | M      | 100            | -                              | Kidney;Lung                           | EMH in spleen                            |
| 7-16-1 | M      | 83             | -                              | Kidney/Lung/Liver/Salivary gland      | EMH in spleen, Liver steatosis           |
| 6-17-2 | M      | 95             | Lymphoma                       | Kidney                                | EMH in spleen                            |
| 6-9-3  | F      | 96             | Lymphoma                       | Salivary gland                        | EMH in spleen, Lymphoid hyperplasia       |
| 5-13-6 | M      | 101            | Hemangioma                     | Kidney/Lung/Salivary gland            | EMH in spleen, Steatosis                 |

The data of the first 23 mice were from published studies (Zhang et al, 2014, PNAS, 111 (52) 18637-18642)

EMH: extramedullary hematopoiesis
### Supplemental Table S3: D/D mice (n=32) - survival time, tumor spectrum, inflammation, and other abnormalities

| ID      | Gender | Survival (Wks) | Tumor                                      | Inflammation                                      | Other abnormalities                                      |
|---------|--------|----------------|--------------------------------------------|---------------------------------------------------|-----------------------------------------------------------|
| 9-14-2  | F      | 100            | DLBCL                                      | Kidney/Pancreas/Salivary gland/liver              | Liver steatosis/SWPH/EMH in spleen                      |
| 9-14-7  | M      | 101            | -                                          | Lung/Kidney/Pancreas/Salivary gland/liver        | Liver steatosis/SWPH                                    |
| 10-13-3 | M      | 101            | -                                          | Liver/Lung/Kidney/Pancreas/Salivary gland        | SWPH/EMH in spleen                                      |
| 4-9-9   | F      | 81             | -                                          | Liver/Lung/Kidney/Pancreas/Salivary gland        | SWPH                                                     |
| 12-23-1 | M      | 103            | -                                          | Lung/Kidney/Pancreas/Liver                       | Liver steatosis/SWPH                                    |
| 12-23-3 | M      | 103            | -                                          | Liver/Lung/Kidney/Pancreas/Salivary gland        | SWPH                                                     |
| 6-8-2   | M      | 91             | PG                                         | Liver/Kidney/Pancreas/salivary gland/Lung        | SWPH/EMH in spleen                                     |
| 9-14-1  | F      | 117            | DLBCL                                      | Kidney/Lung/Pancreas/Salivary gland/Liver        | SWPH                                                     |
| 3-8-2   | M      | 106            | Adenopapillary carcinoma                   | Kidney/Lung/Pancreas/Salivary gland/Liver        | SWPH/EMH in spleen                                     |
| 3-8-6   | M      | 106            | -                                          | Lung/Kidney/Pancreas/Salivary gland/Liver        | SWPH                                                     |
| 3-8-5   | M      | 106            | -                                          | Lung/Liver                                      |                                                          |
| 3-8-1   | M      | 106            | -                                          | Liver/Lung/Kidney/Pancreas/Salivary gland        | SWPH                                                     |
| 4-9-4   | F      | 101            | DLBCL                                      | Kidney/Lung/Pancreas/Salivary gland/Lung         | SWPH/EMH in spleen                                     |
| 4-9-7   | F      | 106            | SCL                                        | Liver/Salivary gland                            | Liver steatosis/SWPH/EMH in spleen                      |
| 6-8-5   | F      | 98             | SCL/Colonic adenoma                        | Liver/Kidney/Salivary gland                      | SWPH/EMH in spleen                                     |
| 6-8-3   | F      | 98             | DLBCL                                      | Kidney/Lung/Pancreas/Salivary gland/Lung         | SWPH                                                     |
| 8-12-1  | M      | 89             | -                                          | Liver/Kidney/Salivary gland                      | SWPH                                                     |
| 12-23-2 | M      | 100            | -                                          | Kidney/Liver/Salivary gland                      | SWPH                                                     |
| 10-13-7 | F      | 113            | DLBCL                                      | Liver/Pancreas/Salivary gland/Lung               | SWPH                                                     |
| 4-9-5   | F      | 103            | DLBCL/SAT                                  | Kidney/Liver/Salivary gland                      | SWPH                                                     |
| 3-8-3   | M      | 106            | Histioytic sarcoma                         | Kidney/Lung/Salivary gland                       | SWPH                                                     |
| 9-17-7  | F      | 117            | Adenocarcinoma                             | Kidney/Lung/Pancreas/Salivary gland/Pancreas     | SWPH                                                     |
| 6-8-6   | M      | 98             | DLBCL                                      | Salivary gland/Liver                             | Liver steatosis                                         |
| 6-8-4   | M      | 98             | -                                          | Liver/Salivary gland                             | Liver steatosis/Islet hyperplasia/SWPH                  |
| 6-8-7   | M      | 98             | -                                          | Lung/Pancreas/Salivary gland/Liver               | Liver steatosis/Islet hyperplasia/SWPH                  |
| 6-8-1   | M      | 98             | -                                          | Salivary gland/Liver                             | Liver steatosis/SWPH                                    |
| 8-12-2  | M      | 87             | -                                          | Kidney/Liver/Lung/Salivary gland                 | SWPH                                                     |
| 4-9-3   | M      | 107            | -                                          | Kidney/Lung/Pancreas/Salivary gland/Liver        | SWPH                                                     |
| 4-9-11  | F      | 109            | DLBCL                                      | Kidney                                         | EMH in spleen/Serous cyst in ovary                      |
| 4-9-8   | M      | 105            | -                                          | Kidney/Liver/Lung/Salivary gland                 | SWPH                                                     |
| 3-8-7   | M      | 105            | N/A                                        | -                                               | Found dead                                               |

Euthanized for experiments below

8-4-8   | M      | 4              | -                                          | -                                               | Fig. 6A                                                  |
4-9-9   | F      | 81             | -                                          | -                                               | Supplemental Fig. 5B                                   |
8-12-2  | M      | 87             | -                                          | -                                               | Supplemental Fig. 5B                                   |
4-9-7   | F      | 106            | -                                          | -                                               | Supplemental Fig. 5D                                   |

SWPH: Spleen white pulp hyperplasia; EMH: extramedullary hematopoiesis; PG: Pyrogentic granuloma; SCL: Spindle cell lipoma
SAT: Skin adnexal tumour; DLBCL: Diffuse large B-cell lymphoma