

**Supplementary Table 3: Summary table on vector integrations in *Cdkn2a*<sup>-/-</sup> and *Cdkn2a*<sup>+/-</sup> mice**

| Treatment group <sup>1</sup>           | SIN.LV.PGK.<br>GFP.PRE       | SIN.LV.<br>SF.GFP.PRE        | SIN.LV.<br>SF.PRE            | INS.SIN.LV.<br>SF.GFP.PRE    | LV.SFLTR                     | SIN.LV.SF                    | SIN.LV.<br>SF.GFP.PRE        | LV.SFLTR                     | SIN.LV.SF                    |
|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Mice Genotype                          | <i>Cdkn2a</i> <sup>-/-</sup> | <i>Cdkn2a</i> <sup>+/-</sup> | <i>Cdkn2a</i> <sup>+/-</sup> | <i>Cdkn2a</i> <sup>+/-</sup> |
| N° mice                                | 31                           | 14                           | 9                            | 22                           | 38                           | 6                            | 13                           | 9                            | 7                            |
| N° Total Ints                          | 926                          | 1928                         | 633                          | 2117                         | 1282                         | 1015                         | 2037                         | 239                          | 455                          |
| N° Liver ints                          | 926                          | 1522 (79%)                   | 542 (85,6%)                  | 2117                         | 1098<br>(85,6%)              | 831<br>(81,9%)               | 2037                         | 239                          | 455                          |
| N° Spleen Ints*                        | -                            | 338 (17,5%)                  | 57 (9,0%)                    | -                            | 83 (6,5%)                    | 89 (8,8%)                    | -                            | -                            | -                            |
| N° Common Ints *<br>(Liver and Spleen) | -                            | 68 (3,5%)                    | 34 (5,4%)                    | -                            | 101 (7,9%)                   | 95 (9,3%)                    | -                            | -                            | -                            |
| N° Liver Analyzed                      | 17                           | 14                           | 9                            | 16                           | 37                           | 6                            | 13                           | 9                            | 7                            |
| N° Spleen Analyzed                     | -                            | 14                           | 2                            | -                            | 6                            | 6                            | -                            | -                            | -                            |
| N° Genes targeted                      | 775                          | 1420                         | 544                          | 1537                         | 1010                         | 800                          | 1547                         | 196                          | 411                          |
| N° CIS Abel                            | 12                           | 38                           | 10                           | 64                           | 15                           | 18                           | 26                           | 4                            | 5                            |
| N° CIS Abel/Grub's                     | 8                            | 18                           | 6                            | 30                           | 6                            | 10                           | 11                           | 3                            | 4                            |

\*The vast majority of vector integrations (average 82%) were exclusively retrieved from livers (range 79% to 86%), about 6% of vector integrations were shared between liver and spleen (range 3.5% to 9.3%), and 12% of the integrations were exclusively retrieved from spleens (range 6.5% to 17%).