Supplemental Data

AJHG, Volume 85

Short Telomeres are Sufficient to Cause the

Degenerative Defects Associated with Aging

Mary Armanios, Jonathan K. Alder, Erin M. Parry, Baktiar Karim, Margaret A. Strong, and Carol W. Greider

Figure S1. SLAM Cells Have a Similar Frequency in Wildtype Cast/EiJ and C57BL/6 Mouse Strains.



CD150

(A) FACS plot of CD150+CD48- cells in whole bone marrow shows a similar frequency of SLAM cells ~0.04%. (B) In both strains, ~30% of these cells are c-kit+. (C) Depletion of lineage committed cells leads to a 10-fold enrichment of SLAM cells. These data are consistent with the fact that this is a stem-progenitor population in Cast/EiJ mice.

Figure S2. Wildtype Telomerase Elongates Telomeres Incrementally Across Generations, Example of HG3 family is Shown.



(A) Breeding scheme of wt* mice with nomenclature. (B) Frequency distribution of telomere length as examined by quantitative FISH on metaphase splenocytes for each wt* generation compared with true wildtypes are shown in each panel (2 mice/group). Degenerative phenotypes resolve with successive telomere elongation as shown by an increase in testes weight (C) and the decreasing frequency of aberrant tubules in (D). The number of examined mice is shown below each column and testes weight was corrected for body weight. Mice were 6 months of age. Error bars represent standard error of the mean.