Supplemental Figure 1

A

![Graph showing percent survival over weeks for male and female subjects.]

B

![Bar chart showing tumor incidence (%).]

C

![Western blot analysis comparing Lamin A, Lamin C, and γ tubulin expression levels in different tissues.]

Legend:
- Brain
- Lung
- Liver
- Heart
- Kidney
- Lamin A
- Lamin C
- γ tubulin

Tissue samples include:
- LCS/+
- LCS/LCS
- Lamin A+/+
- Lamin C+/+
- γ tubulin+/+
**Supplemental figure 1:**

A- Lifespan curves of male (left panel) and female (right panel) of different genotypes (n are indicated on the graph).

B- histogram showing the tumor incidence in Lmna<sup>+/+</sup> (n=18), Lmna<sup>LC/+</sup> (n=15) and Lmna<sup>LC/LS</sup> (n=19) mice.

C- Western blot of extracts from indicated tissues revealed with an anti-lamin A/C antibody. The bottom panels show the loading control (γ-tubulin).

Western Blot analysis showed that the relative abundance of the two lamin isoforms, lamin A and Lamin C vary between the tissues. In wild type mice, where only lamin C and lamin A are detected, it can be clearly seen that while the brain contains more lamin A than lamin C, all the other tissues contain higher amounts of lamin A than lamin C. Also, the brain accumulated less progerin than lamin C in both homozygous and heterozygous Lmna<sup>G609G</sup> mice {LopezMejia:2011gh}. Recently, it has been demonstrated that the expression of Lamin A in the brain is repressed by a specific miRNA (miR9) {Nissan:2012jp}{Jung:2012km}, highlighting the need to repress lamin A and potentially progerin in the brain. This might also explain why the cognitive functions are preserved in HGPS patients.