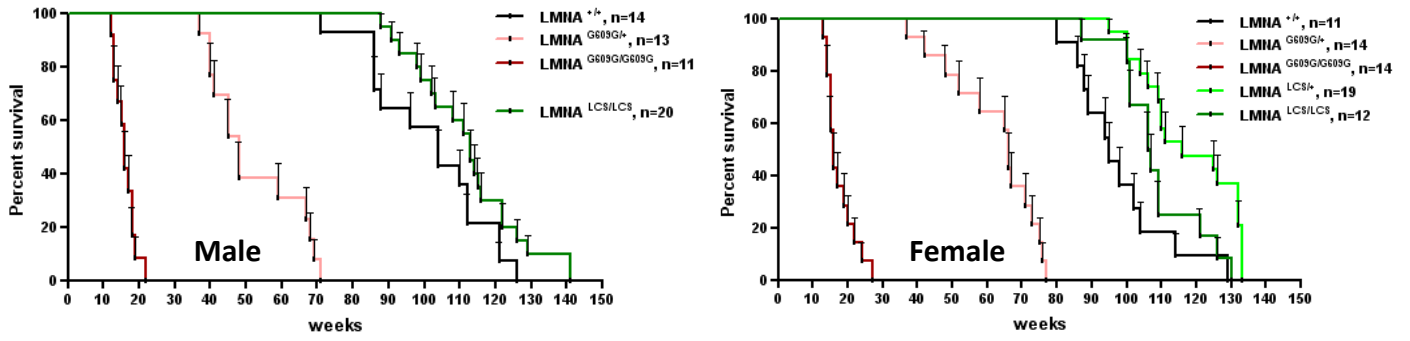
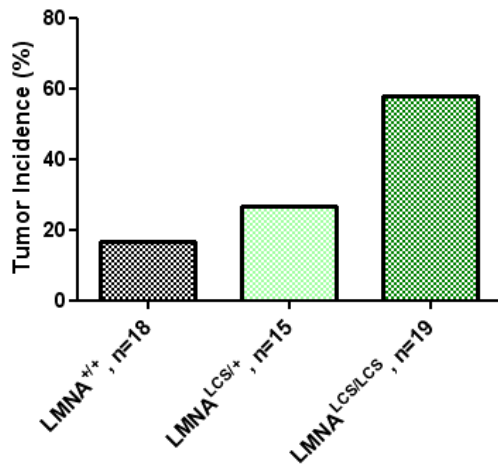


# Supplemental Figure 1

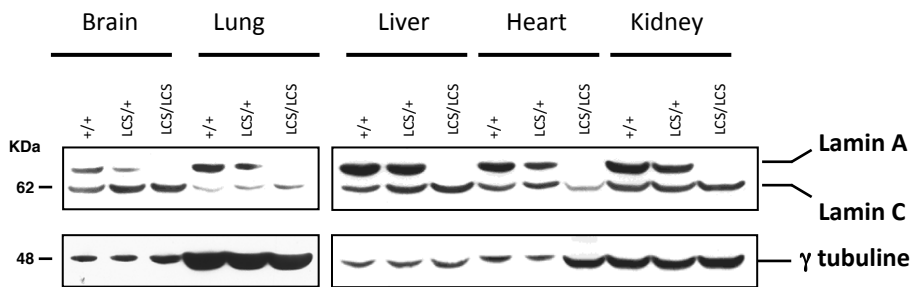
**A**



**B**



**C**



**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>LCS/+</sup> (n=15) and *Lmna*<sup>LCS/LCS</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 ( $\gamma$ -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.