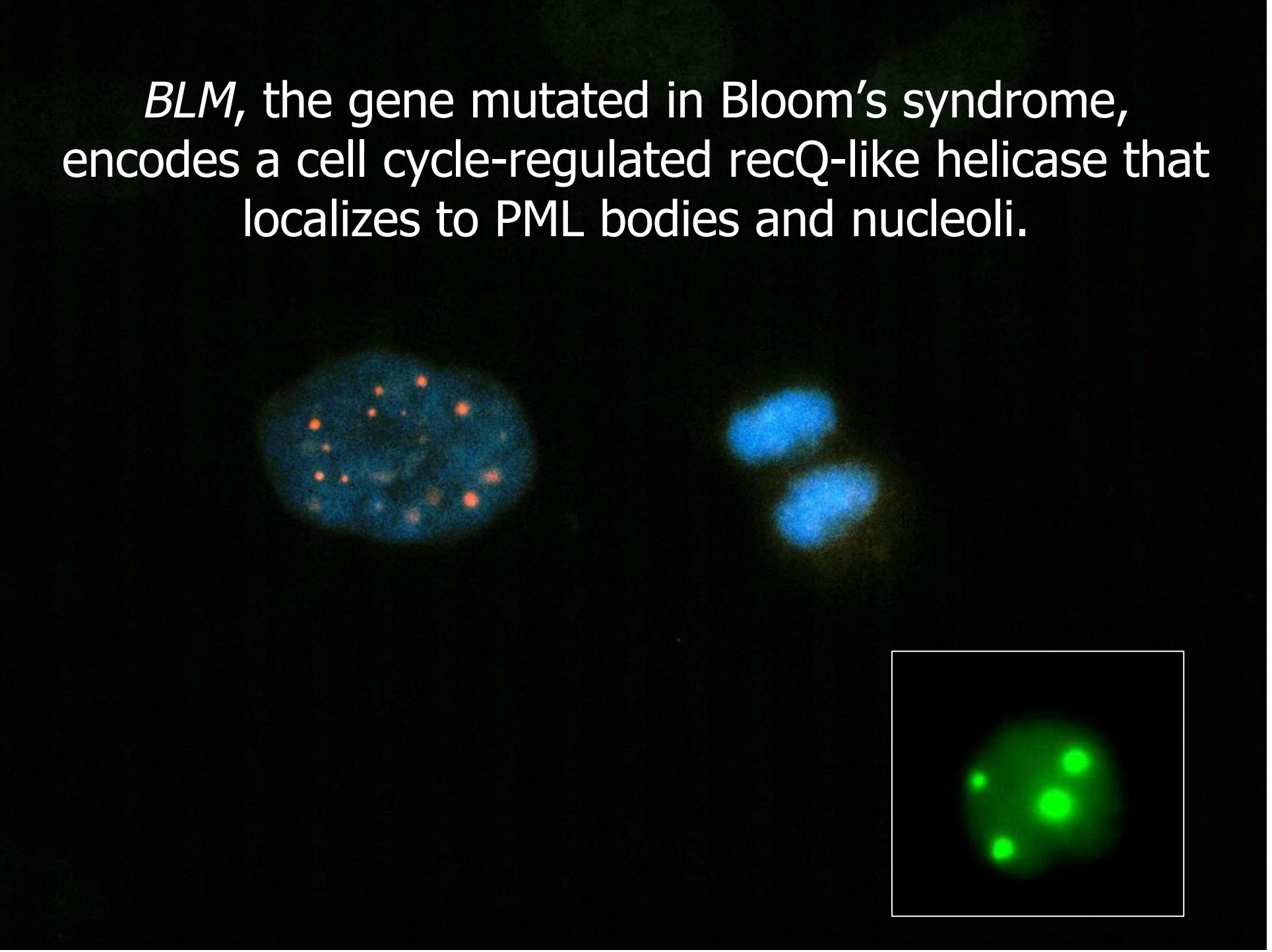
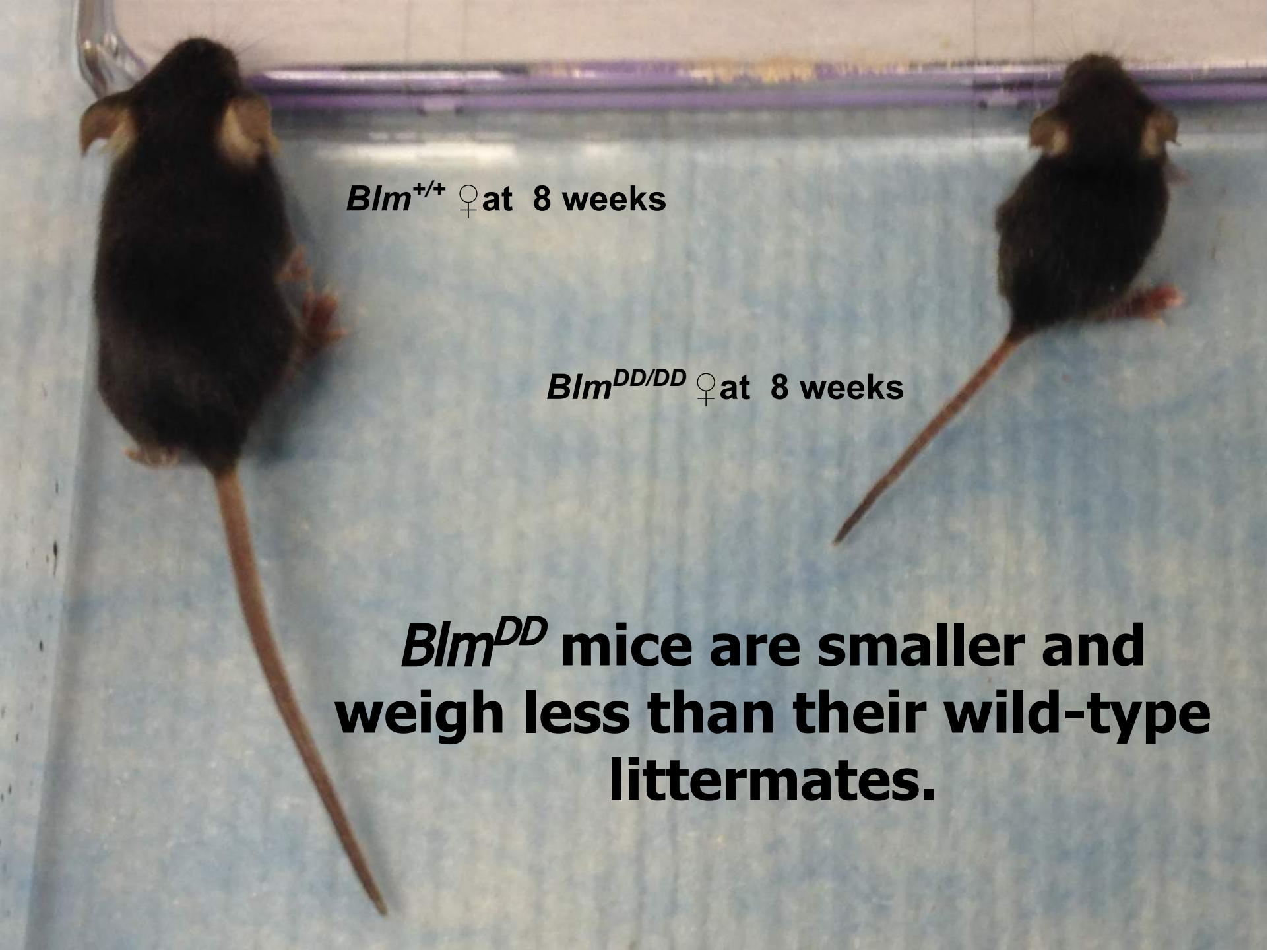
BLM, the gene mutated in Bloom's syndrome, encodes a cell cycle-regulated recQ-like helicase that localizes to PML bodies and nucleoli.





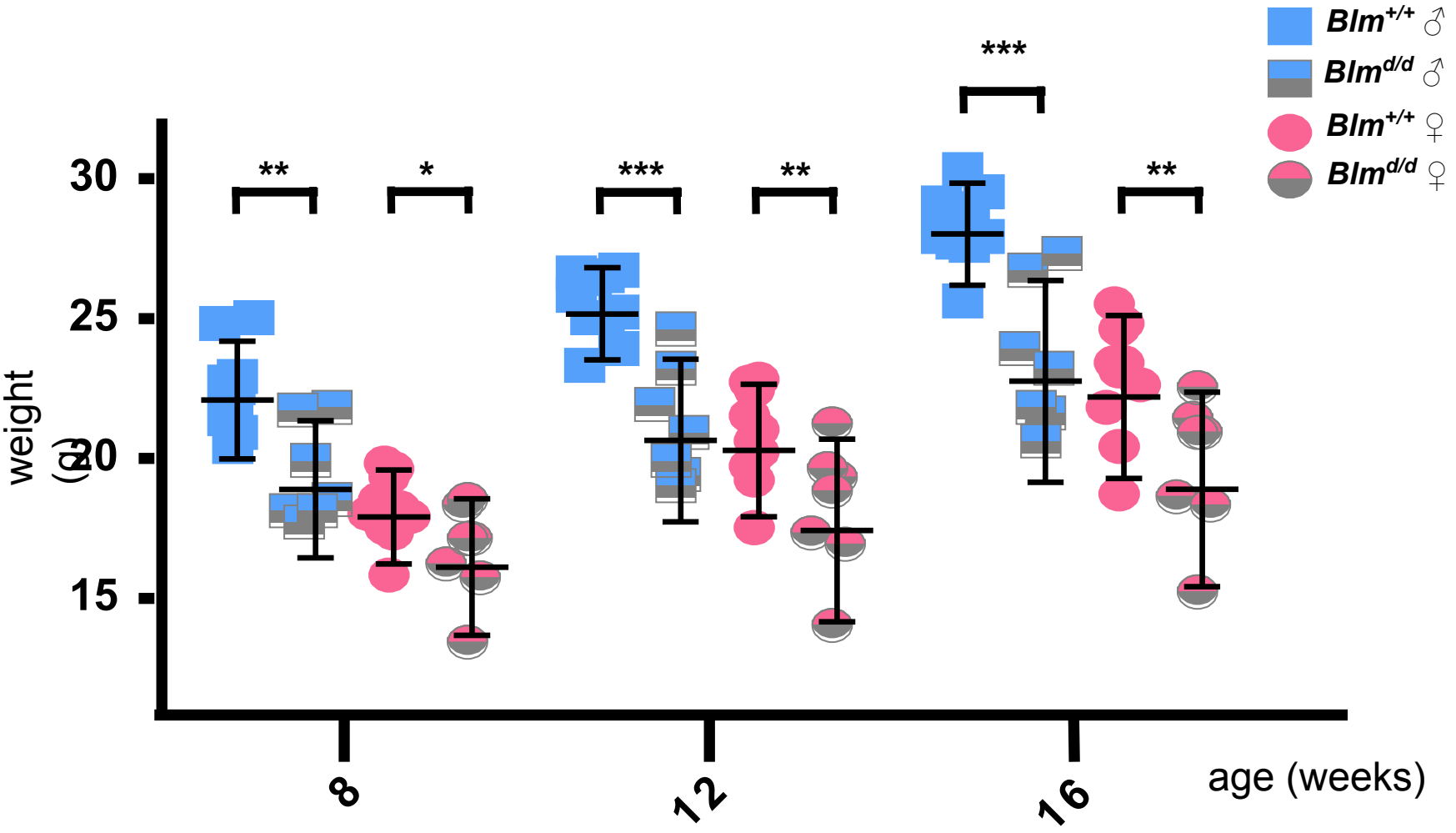
Blm^{DD} mice are smaller and weigh less than their wild-type littermates.

The small size and lower weight of the *Blm*$^{DD/DD}$ mice persist as they mature to adults.

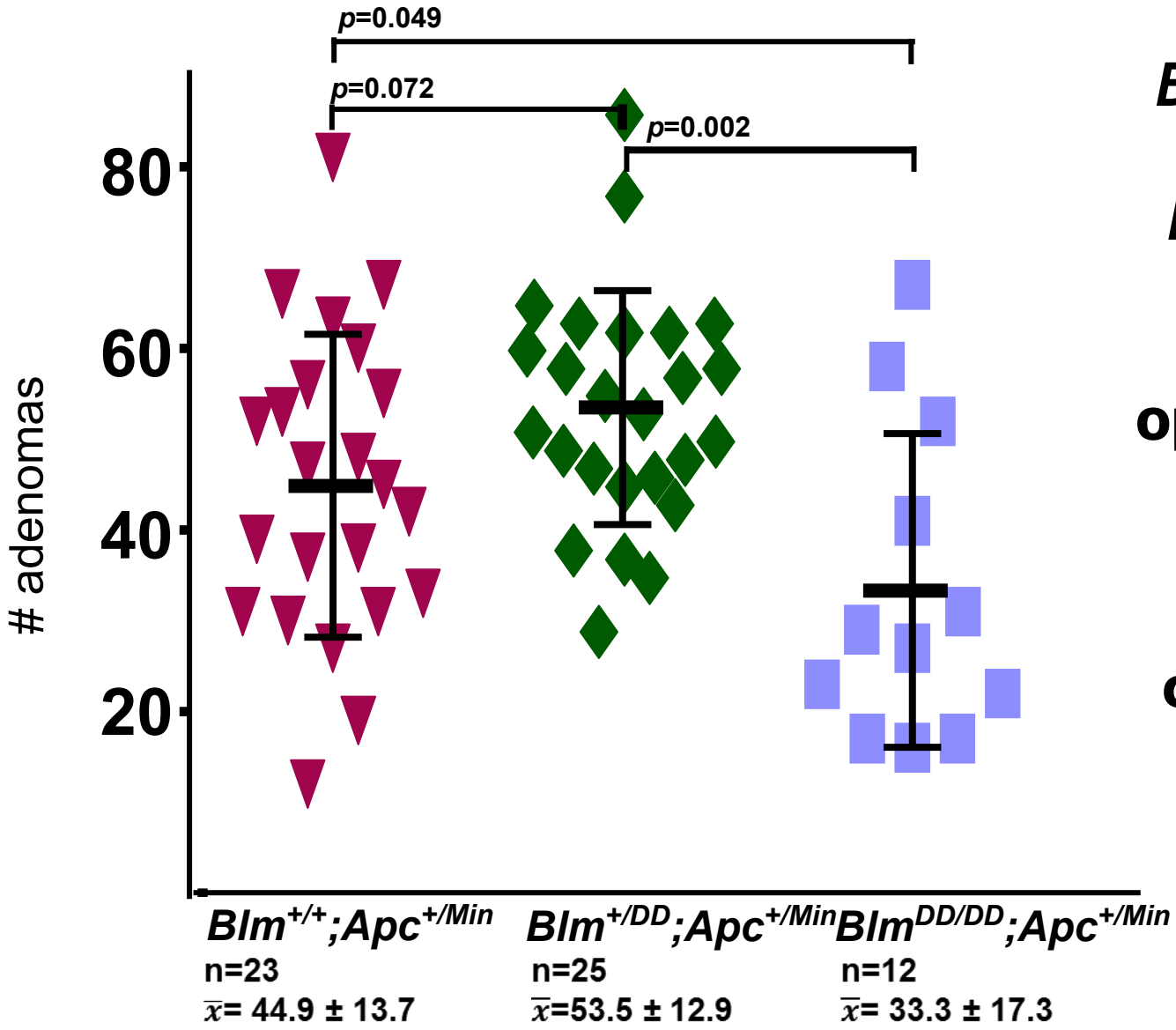
Blm$^{DD/DD}$ ♀ at 12 weeks

Blm$^{+/+}$ ♀ at 12 weeks

Blm$^{DD/DD}$ mice are smaller than wild-type littermates.

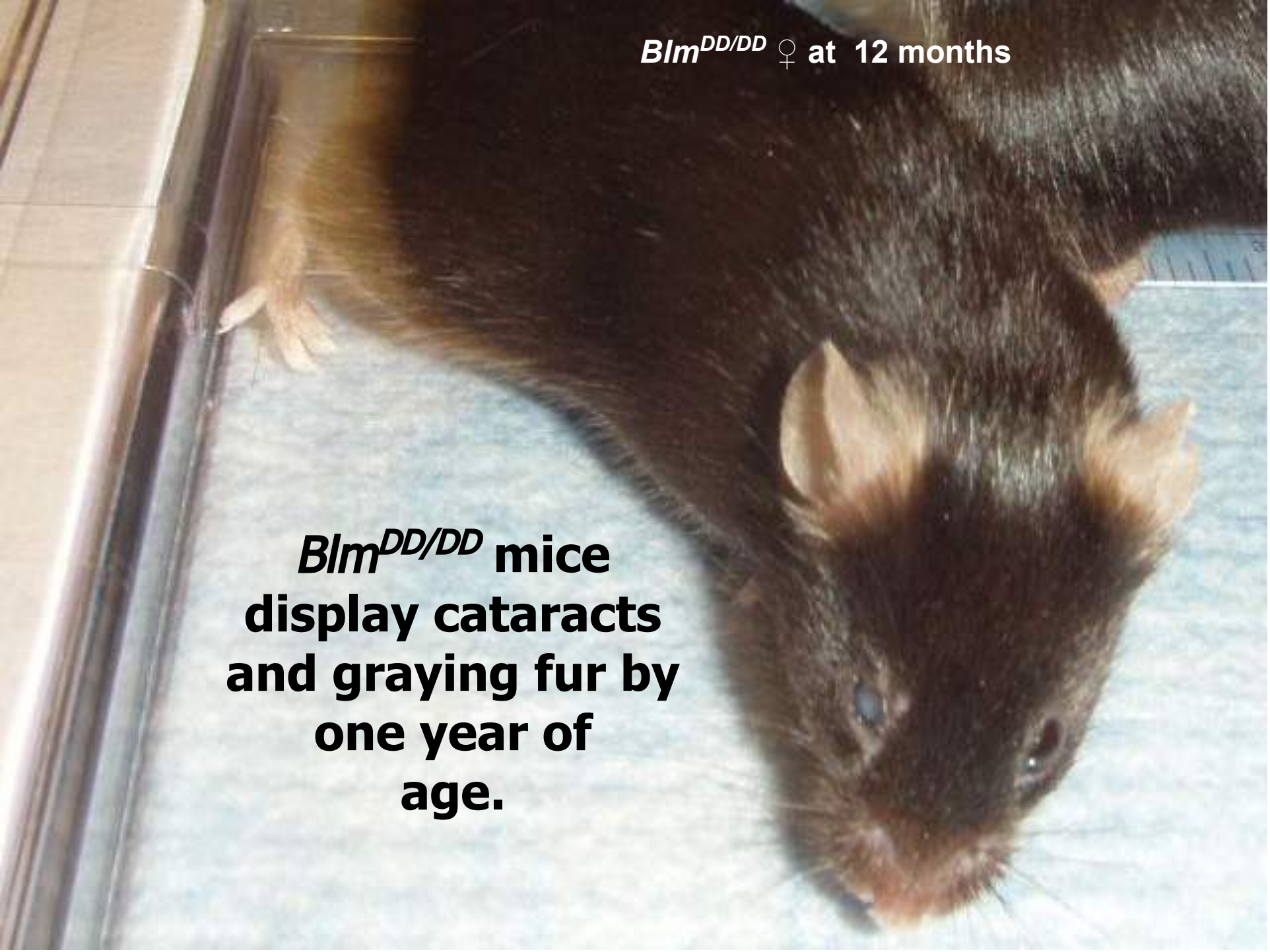


Groups of wild-type *Blm* and *Blm*$^{D/D}$ littermate ♂ and ♀ mice were weighed at 8, 12 and 16 weeks of age. The mean weight ± σ is shown by the horizontal bars. (*, $p \leq 0.05$; **, $p \leq 0.01$; ***, $p \leq 0.001$).



$Blm^{DD/DD};Apc^{Min/+}$ and $Blm^{DD/+};Apc^{Min/+}$ mice demonstrate opposing trends in intestinal adenoma numbers in comparison to wild-type littermates.


Blm$^{DD/DD}$ mice display signs of premature aging before one year of age.
Blm$^{+/+}$ ♀ at 320 days
Blm$^{DD/DD}$ ♀at 320 days


Blm$^{DD/DD}$ ♀ at 12 months
Blm$^{DD/DD}$ mice display cataracts and graying fur by one year of age.

At one year, *Blm*$^{DD/DD}$ mice demonstrate greater 18S *rDNA* copy number variation with age than wild-type littermates.