



**Supplemental figure 5. SIRT1 prolongs the survival of Naged through mitophagy.**

(A) Glycolysis rate of aged and non-aged neutrophils from 2-week tumor-bearing mice were measured under basal conditions and in response to treatment with the indicated drugs (2.5  $\mu$ M Rotenone and Antimycin A and 100 mM 2-DG). (B) The glycolysis rate of neutrophils from the BM of naïve mice treated with SRT1720 was measured under basal conditions and in response to treatment with the indicated drugs (2.5  $\mu$ M Rotenone and Antimycin A and 100 mM 2-DG). (C) Representative images of mitophagy in neutrophils in the PB from patients with breast fibroadenoma and the BM of naïve mice treated with SRT1720, in condition of pepstatin A and leupeptin (inhibitors of autophagy clearance) for 4 hours *in vitro*. Scale bar, 20  $\mu$ m. (D) Flow cytometry analysis of mitophagy of aged neutrophils from the PB of patients with breast cancer and lung of 2-week tumor-bearing mice treated with SIRT1 inhibitor (EX527) for 4 hours *in vitro*. Data are presented as the means  $\pm$  SD from one representative experiment. Similar results were obtained from three independent experiments, unless indicated otherwise. Statistical analysis was performed by repeated-measures ANOVA (A, B) two-tailed unpaired Student's t test (D). ns, not significant, \* $p$ <0.05, \*\* $p$ <0.01, and \*\*\* $p$ <0.001.