**Fig. S1** The effect of tranexamic acid on the plasmin level of the ovary in 24-month-old female mice. We measured using Plasmin Activity Assay Kit (AnaSpec Inc., Fremont, CA, USA). The groups were the 9-week-old control, 24-month-old control, 24-month-old water administration and 24-month-old TA administration female mice groups. The values are expressed as mean ± SD from ten animals. TA: tranexamic acid. \*p< 0.05. Scale bar = 100.

**Fig. S2** Effect of tranexamic acid administration on plasma level of 17β-estradiol in female mice. Three times a week, tranexamic acid was administered at each concentration of 0, 12. 50 or　100 mg/kg during 180 days. The plasma level of 17β-estradiol in female mice was measured on the 0, 30, 90, and 180 days. As a result, there was no change in the level of 17β-estradiol concentration. Bar is pooled SEM.