

SUPPLEMENTAL DATA

Table S1. Table of experimentally validated mRNA targets of miR-9-5p and miR-9-3p. Validated targets were identified by miRTarBase. Only targets that have been validated by reporter assay, western blot, or RT-qPCR are represented.

miRNA	Validated Targets
miR-9-5p	CCND1, FOXO3, ID2, SOCS5, TGFB1, SIRT1, SRF, MMP13, REST, CDH1, STMN1, POU2F2, BCL6, ETS1, RAB34, BACE1, FOXG1, PRDM1, YBX3, HER9, NFKB1, RUNX1, HER5, FGFR1a, CNPY1, FGF8a, NR2E1, ONECUT2, FOXP1, CDX1, HES1, ZFP521, AP3B1, CCNG1
miR-9-3p	RCOR1, SAP97, ITGB1, GNAI1, SRSF2

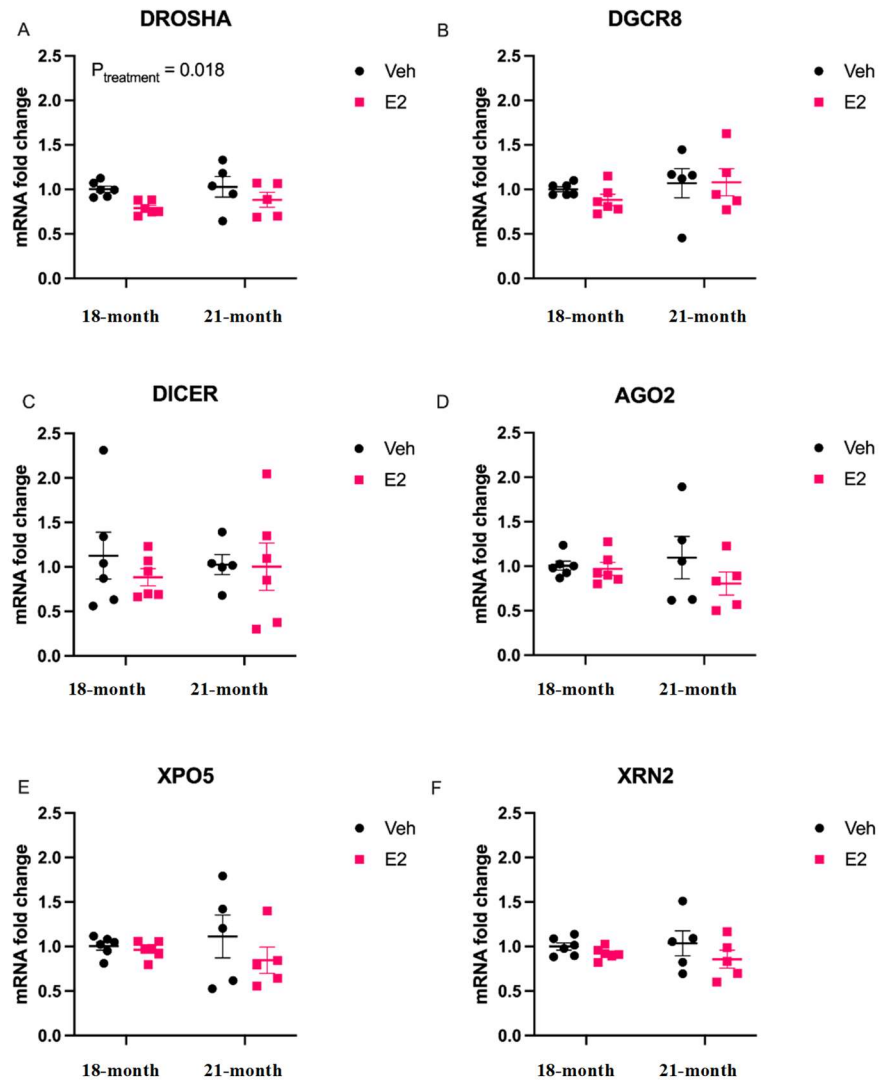


Figure S1. Effects of E2 treatment on mRNA levels of miRNA processing machinery in the paraventricular nucleus of the hypothalamus (PVN) in a rat model of menopause. RT-qPCR results depicting relative fold change of (A) *Drosha*, (B) *Dgcr8*, (C) *Dicer*, (D) *Ago2*, (E) *Xpo5*, and (F) *Xrn2* mRNA in the PVN of aged female rats treated with vehicle or E2 treatment at 1- or 12-weeks following OVX, 18 mo. and 21 mo. old respectively. Results are represented as mean \pm SEM (N = 6/group) and analyzed using two-factor ANOVA for Age and Treatment. Significance was noted when $p < 0.05$. Significant main effects of factors are noted as $P_{\text{subscript}}$.