

Figure S1: Aerobic exercise increased the expression of BDNF and its receptor in the hippocampus. Rats received DHEA for the induction of polycystic ovarian syndrome, together with or without exercise treatment. (A-B) Hippocampal neurons were assessed by Nissl's staining (40×) and H&E staining (20×). (C-D) The level of BDNF in CA1, CA3 and DG of hippocampal was measured with immunohistochemical staining. (E-F) The expression of BDNF, TrkB, and p75NTR in Hippocampal was assessed by western blot assay. $n=10$ in each group. Data are shown as mean \pm SEM. ** $P < 0.05$, vs. control group; ## $P < 0.01$, vs. PCOS group.

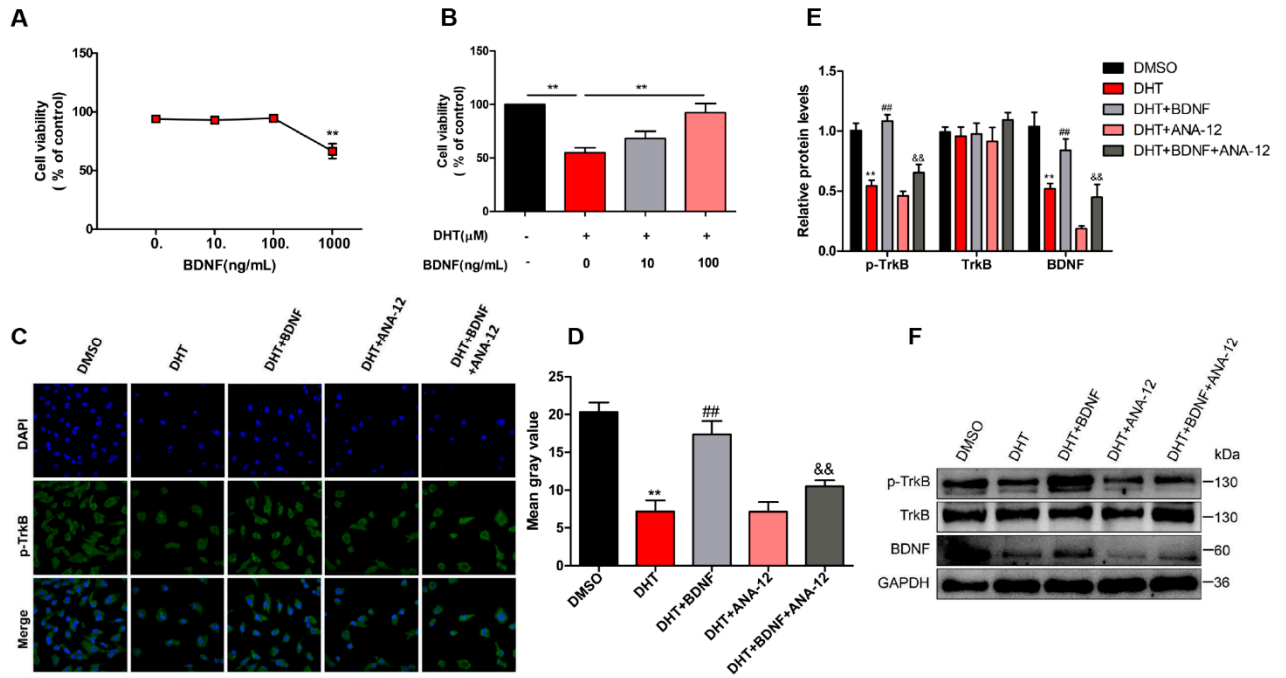


Figure S2: BDNF treatment increased the cell viability of DHT-induced GCs and provoked p-TrkB activation. Primary GCs were treated with BDNF and ANA-12 with or without DHT. (A-B) Cell viability of GCs after tunicamycin-induced was analyzed by CCK-8 kits. (C-D) Images of confocal laser scanning microscopy acquisitions of immunofluorescence staining of p-TrkB conjugate with Alexa Fluor™ 488 goat anti-rabbit IgG (H + L) in GCs treated with BDNF and ANA-12 (60×). (E-F) The expression level of TrkB, p-TrkB, and BDNF were detected by western blot assay. Data are shown as mean ± SEM. ** $P < 0.05$, vs. DMSO group; ## $P < 0.01$, vs. DHT group; && $P < 0.01$, vs. DHT + BDNF group.