



# Effects of icariin on the expression of ER, VEGF, and KDR in the endometrial cells of thin endometrium

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**ABSTRACT.** We explored the effects of icariin on the expression of estrogen receptor (ER), vascular endothelial growth factor (VEGF), and kinase insert domain receptor (KDR) in the endometrial cells of the thin endometrium. Primary endometrial cells were obtained and divided into a blank control group, a high-, a middle-, and a low-dose icariin groups, as well as an estrogen treatment group to undergo cellular identification by immunocytochemistry. The expression levels of ER, VEGF, and its receptor were estimated by western blotting. The expression levels of ER, VEGF, and KDR gradually increased from the control group to the estrogen (E2) treatment and icariin treatment groups; the differences were statistically significant. However, the differences were not statistically significant among the different icariin dose groups. The endometrium may be thickened by icariin treatment by increasing the expression levels of ER, VEGF, and KDR in endometrial cells.

**Key words:** Thin endometrium; Vascular endothelial growth factor; Estrogen receptor