

# **Combination of FSH priming and hCG priming for in-vitro maturation of human oocytes**

黃建榮

**Lin YH;Hwang JL;Huang LW;Mu SC;Seow KM;Chung  
J;Hsieh BC;Huang SC;Chen CY;Chen PH**

摘要

## **Abstract**

**BACKGROUND:** The purpose of this study was to determine if there is any additional benefit from FSH priming in addition to hCG priming on in-vitro maturation (IVM) programmes. **METHODS:** Sixty women with polycystic ovary syndrome (PCOS) who underwent 68IVM cycles were randomized by computer-generated numbers to receive FSH stimulation or not. Thirty-five cycles were pretreated with 75 IU rFSH for 6 days, and 33 cycles were not. Every cycle was given hCG 10,000 IU 36 h before oocyte retrieval. Immature oocytes were matured in vitro and fertilized by ICSI, and the resulting embryos were replaced on day 2 or 3. **RESULTS:** A total of 1528 immature oocytes were recovered. The overall maturation and fertilization rates were 74.2 and 72.8% respectively. After embryo transfer, 23 pregnancies resulted (33.8%). The oocyte numbers and endometrial thickness were similar between FSH-primed and non-FSH-primed groups. Serum estradiol level on the day of hCG injection was significantly higher in the FSH-primed group than in the non-FSH-primed group (377.2 pmol/l versus 143.8 pmol/l,  $P=0.001$ ). The maturation rate, fertilization rate and pregnancy rate were 76.5, 75.8 and 31.4% respectively for FSH-primed group, and 71.9, 69.5 and 36.4% respectively for non-FSH-primed group (all not significant). **CONCLUSIONS:** IVM is a feasible treatment for women with PCOS. FSH priming has no additional beneficial effect on IVM.