

### INTRODUCTION

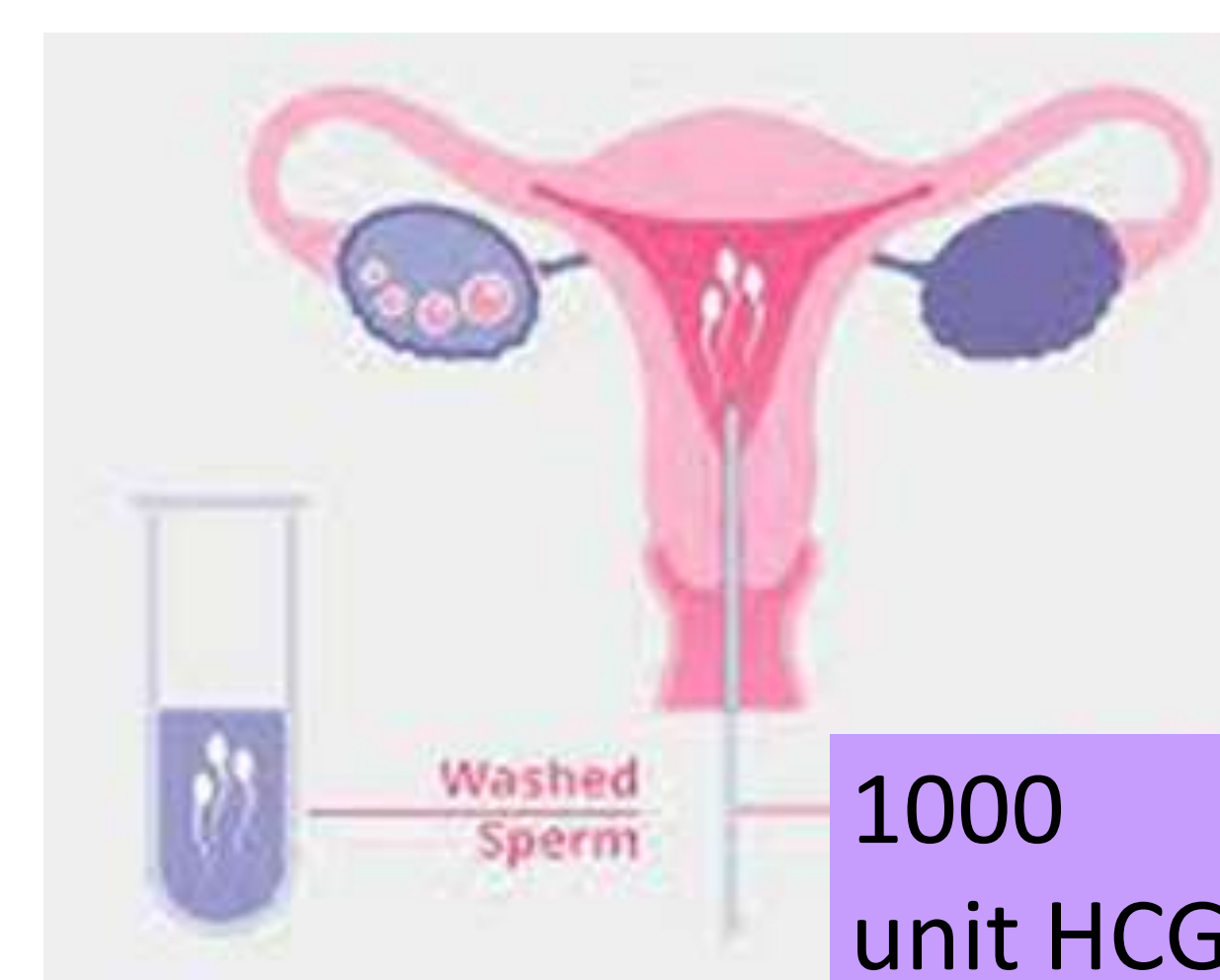
Embryo successful implantation depends on a complex embryo-maternal crosstalk. Aside from euploidy, the receptivity of the endometrium is most crucial for successful implantation. Human chorionic gonadotropin is a major player in implantation, being involved in decidualization, trophoblastic invasion, proliferation of uterine natural killer cells, endometrial angiogenesis, maintenance of progesterone secretion and a shift in endometrial gene expression. The addition of hCG to semen preparation media before IUI has not yet been studied.

At AL HADI MEDICAL CENTER a total of 210 women were randomized into three groups, A, B and C, using computer generated random numbers. Group A patients received intrauterine hCG dose of 500 IU (Choriomon from IBSA) at the time of insemination while group B patients received a dose of 1000 IU at the time of insemination. No hCG were added to group C.

**Group A**



**Group B**



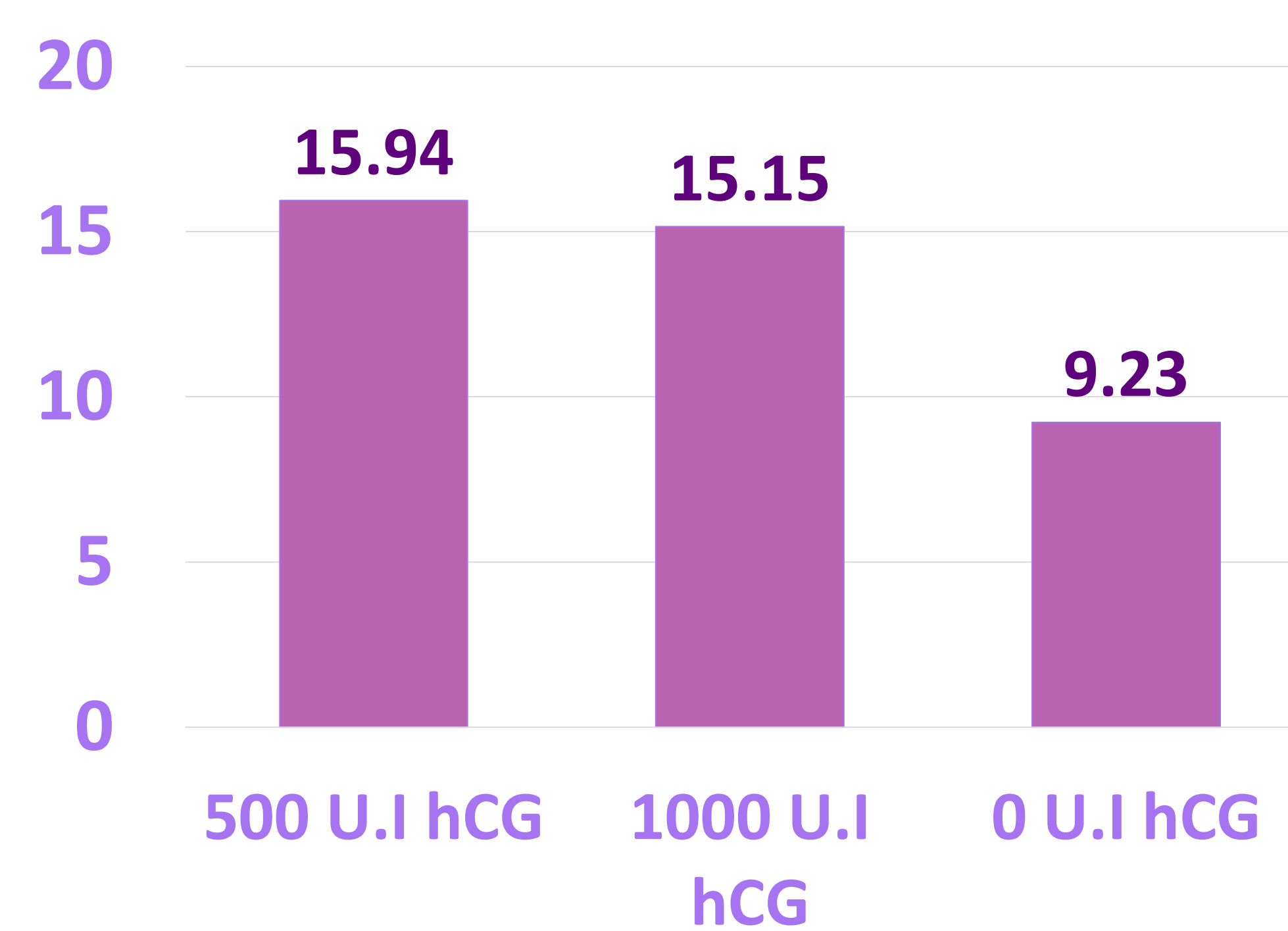
**Group C**



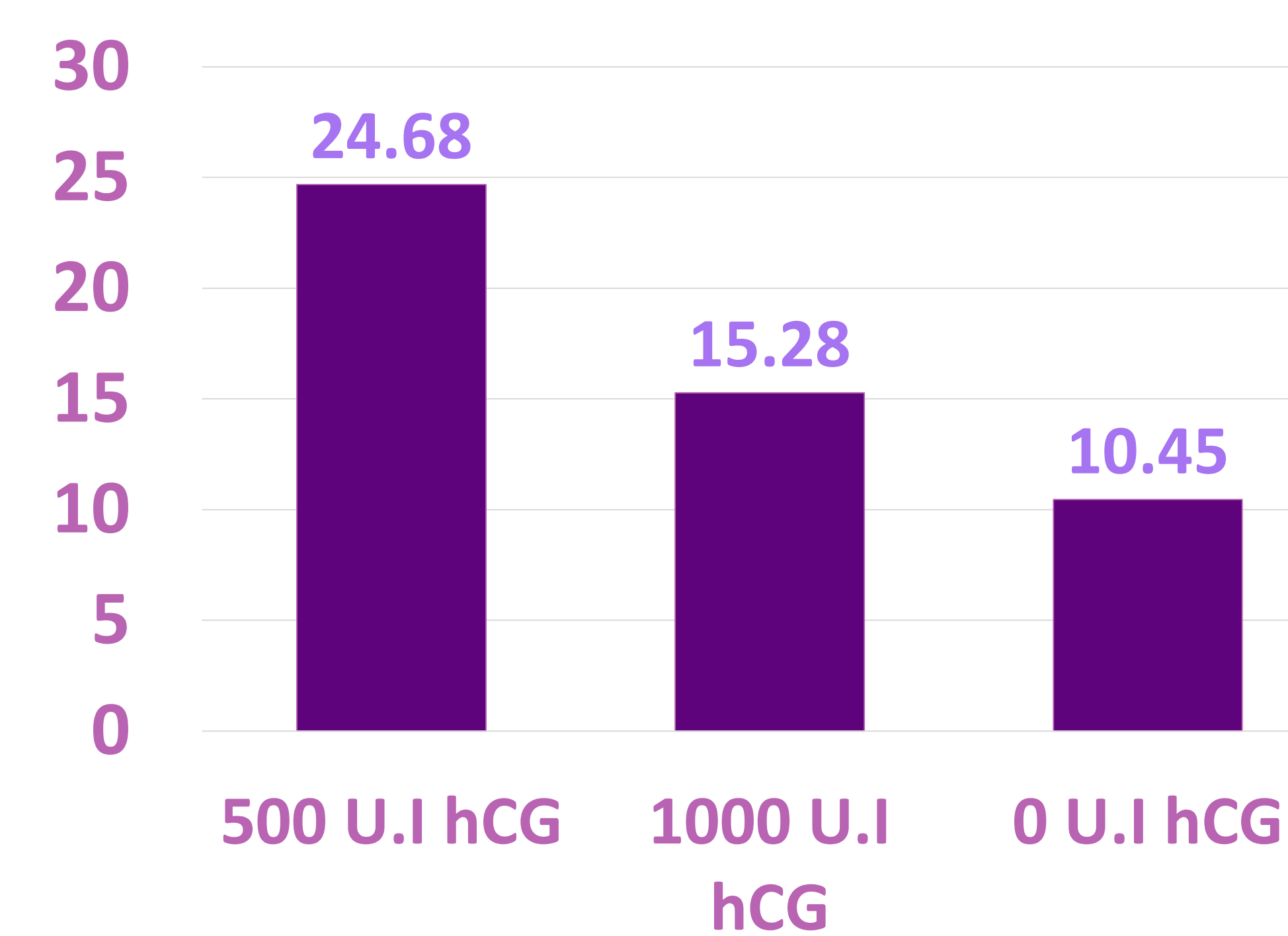
### RESULTS

Patients' demographic and baseline characteristics were comparable. We had statistical difference in clinical pregnancy (p value 0.0471, 15.94% in group A, 15.15% group B, 9.23% group C), the number of implanted sac (p value 0.0283, 24.68% in group A, 15.28% in group B, 10.45% in group C), and live birth rate (p value 0.083, 14.29% in group A, 13.89% in group B, 5.97% in group C). But no statistically significant differences between the 3 groups regarding the miscarriage rate (p value 0.297, 6.49% in group A, 1.39% in group B, 4.48% in group C).

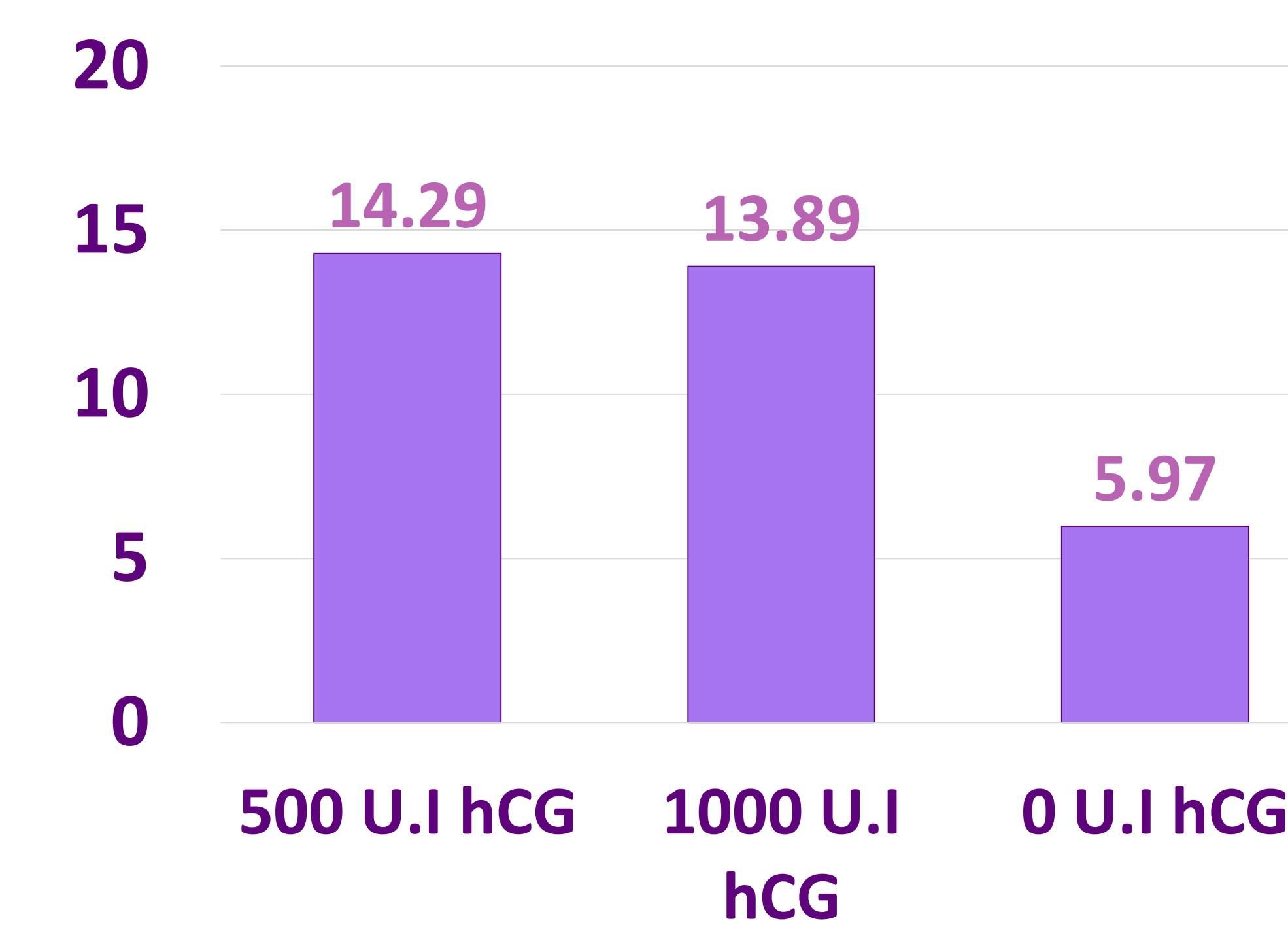
**Clinical Pregnancy**  
P value 0.0471\*



**Number of Implanted Sac**  
P value 0.0283\*



**Live Birth Rate**  
P value 0.083\*



### CONCLUSION

Adding HCG to the semen preparation media before IUI increases its effectiveness on the pregnancy rate, live birth rate and number of implanted sacs without increasing miscarriage rate, the result that will form a landmark in IUI practice.