Supplemental Digital Content

Differential effect of mode of conception and infertility treatment on fetal growth and prematurity

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SUPPLEMENTARY METHODS

Clinical protocol for hormone stimulation.

All patients received standard ovarian stimulation with follicle-stimulating hormone (FSH) under pituitary suppression with agonist gonadotrophin releasing hormone according to a routinely used protocol. In all women, pituitary desensitization was achieved by subcutaneous administration of triptorelin acetate (Decapeptyl 0.1 mg; Ipsen Pharma, Barcelona, Spain / 0.1 mg daily, which was reduced to 0.05 mg after ovarian arrest was confirmed) started in the mid-luteal phase of the previous cycle. Gonadotropin stimulation of the ovaries was started when serum estradiol concentrations declined to <50 pg/ml and a vaginal ultrasonographic scan showed an absence of follicles >10 mm diameter. On days 1 and 2 of ovarian stimulation, 450 IU and 300 IU/day of recombinant r-FSH (Gonal-F; Merck-Serono S.A., Madrid, Spain), respectively, were administered subcutaneously. On days 3 and 4 of ovarian stimulation, 150 IU per day of FSH were administered to each patient. From day 5 onward, FSH was administered on an individual basis according to the ovarian response as assessed by sequential transvaginal ultrasonography and serum estradiol measurements. The criteria for administration recombinant human chorionic gonadotrophin (r-hCG; 250 µg) (Ovitrelle; Merck-Serono S.A.) were the presence of ≥ 2 follicles ≥ 18 mm in diameter with ≥ 4 follicles measuring ≥ 14 mm in association with a consistent rise in serum estradiol concentration.

Figure S1. Flow diagram of the study groups.

IVF, in vitro fertilization; ICSI, intra-cytoplasmic sperm injection.