GnRH-induced ovulation of small dominant follicles was associated with reduced late embryonic/fetal survival around the time of embryo-uterine attachment. Bovine pregnancy associated glycoproteins (bPAGs) are secreted into the maternal circulation and have been used to monitor embryo/fetal mortality. The overall objective was to examine the relationship between ovulatory follicle size and circulating bPAG concentrations. Postpartum cows were artificially inseminated following the CO-Synch protocol and classified into one of four groups based on the size of the ovulatory follicle. The first increase in bPAG occurred on d 24. There was an effect of day on bPAG but no effect of ovulatory follicle size or ovulatory follicle size by day interaction from d 20 to 60 (d 0 = insemination) or from 3 months of gestation to calving. In summary, there was no effect of ovulatory follicle size on serum concentrations of bPAG in pregnant cows.