

**PROFILE OF PROGESTERONE LEVEL FOLLOWING TREATMENT
USING PROSTAGLANDIN F₂α IN MARE DIAGNOSED
WITH CORPUS LUTEUM CYST**

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ABSTRACT

The purpose of this research was to know the profiles of progesterone level following treatment Prostaglandin F₂α in mare as having corpus luteum cyst. The samples have been used in this researched was blood serum. Ten mare racehorse that had been used in this research from 3 to 6 years old. Mare racehorse were used that the result of crossing a female horse offspring of G3-G4 with a thoroughbred stud. The blood samples collected before Prostaglandin F₂α injection, 24 hours, 48 hours and 72 hours after injection Prostaglandin F₂α. The progesterone concentrations was analyzed using a competitive ELISA technique. Means (+SD) of progesterone levels before Prostaglandin F₂α injection and 24 h, 48 h, 72 h after injection were 4.97 ± 2.7 ng/ml; 1.25 ± 1.0 ng/ml; 0.65 ± 0.7 ng/ml; dan 0.05 ± 0.1ng/ml. Result of this study showed that the Prostaglandin F₂α were able to reduce the progesterone level up to 74,8% within 24 h; 86,9% within 48 h and up to 98,9% within 72 h, respectively. In conclusion, Prostaglandin F₂α is able to reduce the progesterone level at mares as having corpus luteum cyst gradually.

Keywords : mare, corpus luteum cyst, prostaglandin F₂α, progesterone