# **Titre d’article**: Color-Doppler Ultrasonography to Predict the Moment of Ovulation in the Bitch

**Abstract :**

We used a color-coded Doppler ultrasound procedure to determine the exact moment of ovulation during the preovulatory phase in 10 bitches.   Preovulatory changes in the coloured area were converted into pixels and calculated using image processing software (ImageJ). The number of pro-oestrus follicles and the diameter of the preovulatory follicles were calculated for both ovaries of each bitch pro-oestrus preovulatory. A significant increase in colored surfaces was observed over the preovulatory period, which reached a maximum on the day of ovulation (p < 0,0001). However, the mean results of the colored area on the day of ovulation showed an increased standard deviation (±600,804 pixels for the left ovary and ±647,240 pixels for the right one) and a sizeable statistical range (1770 pixels for the left ovary and 1950 pixels for the rignt one) , making it impossible to determine a threshold to predict the exact moment of ovulation. Further to this, statistical analysis revealed no correlation between the number of pro-oestrus follicles and the intensity of blood flow, as well as between follicular diameter and the intensity of blood flow at the time of ovulation.