# **Titre d’article**: *Effects of GnRH or hCG on day 11 after artificial insemination in cows luteal activity*

**Abstract :**

. In order to optimize luteal function, human chorionic gonadotrophin (hCG) or gonadotrophin releasing hormone (GnRH) were used on day 11 after artificial insemination (AI). 33 cows synchronized by the Ovsynch and divided into 3 groups according to the type of treatment: 1) hCG (1500 IU, n=11); 2) GnRH (100 µg, n=11) and 3) control (2 mL of saline, n=11). Blood samples were collected from all animals every 3 days from day 5 to day 23 to determine progesterone concentration. Ultrasonography was used to monitor the luteal surface structures at the time of blood sample collection. An accessory corpus luteum (CL) formed in 63.63% of cows treated with GnRH or hCG, resulting in an increase in the total luteal tissue area compared with the controls. Compared with the controls, the principal CL area was increased by hCG but not by GnRH. Additionally, compared with the control group, hCG-treated cows had increased progesterone concentrations