

**THE EFFECT OF PREGNANT MARE SERUM GONADOTROPIN (PMSG)  
ON THE MAMMARY GLAND DEVELOPMENT DURING ESTROUS  
CYCLE IN RAT (*Rattus sp*)**

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**ABSTRACT**

The objectives of this research is to identify the effects of PMSG on the development of mammary gland during estrous cycle in Rat (*Rattus sp.*). This study used completely randomized design with four treatments PMSG dosages (0, 37.5, 75, 150 IU/kg BW), and five replications. The treatments were carried out by peritoneal injection during the estrous cycle (follicular, luteal 1, luteal 2, luteal 3). The results indicated that the PMSG dosages influenced the mammary development. The index of the mammary development which it given PMSG injection were greater than control. The mammary development indeks on luteal phase were greater than follicular phase. It conclusion, the dosages of PMSG could increase the development of mammary gland, during estrous cycle.

Keyword: estrous cycle, mammary gland, PMSG hormone.