



## **REGUMATE®**

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Regumate® is the trade name for a synthetic hormone called altrenogest. It is the only such medication proven to have progesterone-type biologic activity in the horse. Clinical uses of Regumate® include management of the transition period, suppression of heat in performance mares, and maintenance of pregnancy in problem mares.

### Management of the Transition Period

A majority of mares have limited ovarian follicular development and do not exhibit estrus or heat during the winter months. Growth of follicles begins in the late winter or early spring in response to increased daylength. Mares may develop several successive waves of follicles that grow and regress without ovulating during this transition between winter anestrus and the physiologic breeding season. Transitional mares may exhibit irregular and/or prolonged periods of sexual receptivity associated with each follicular wave. The goal of Regumate® therapy during the transition period is to suppress the long erratic estrous periods and to advance the first ovulation of the year. It has been reported that treatment is more effective late in the transition period (i.e. after the middle of March) than early in the transition period or during deep winter anestrus when the ovaries are inactive. A 14- to 18-day treatment period is generally recommended.

### Suppression of Estrous Behavior

Mares may occasionally be difficult to train or not perform up to their potential when they are in heat. Consequently, it may be advantageous to suppress the expression of estrous behavior in these individual mares during critical training or performance sessions. Regumate® is the hormone most commonly prescribed for suppression of estrus in mares. Treatment should begin a minimum of 3 to 4 days prior to a show or event and must be continued daily in order to attain and maintain estrous suppression. Regumate® may be administered for an extended period of time without adverse effects on future reproductive performance or fertility.

### Ovulation Control

In an embryo transfer program, it may be necessary to synchronize the ovulations of a donor mare with a specific recipient mare. Similarly, it may be necessary to alter or manipulate the estrous cycle of a mare for a scheduled breeding due to stallion availability. Regumate® can be used to accomplish both tasks. The progestin is administered once daily for 10 to 14 days and a dose of prostaglandins is typically administered on the last day of treatment. Mares should come into heat in 3 to 5 days after the conclusion of therapy and are usually able to be bred 7 to 9 days after the end of treatment.

### Maintenance of Pregnancy

Progesterone production by the corpus luteum is required for maintenance of pregnancy during the first 2 to 3 months of gestation. After 90 days of pregnancy the placenta takes over the role of progesterone production. Inadequate production of progesterone by the corpus luteum has been proposed to be a contributing factor to early embryonic loss in some mares. Supplementation with exogenous progesterone is often suggested for mares with a history of repeated early pregnancy loss. Treatment with Regumate<sup>®</sup> is also very effective in maintaining pregnancy in mares that appear to be coming back into heat even though an embryo can clearly be observed during an ultrasound examination 14 to 16 days after ovulation.

Serum progesterone levels greater than 4.0 ng/ml are generally considered to be adequate to maintain pregnancy. Mares with concentrations below 4.0 may be at some risk of pregnancy loss. It is often recommended that supplementation with Regumate<sup>®</sup> begin either 1 to 2 days after ovulation or after pregnancy is confirmed. Therapy is usually continued until day 120 of pregnancy, at which time production of progesterone by the placenta is adequate to maintain pregnancy.

In addition to problem pregnancies, Regumate<sup>®</sup> is often administered to embryo transfer recipient mares, pregnant mares with medical issues (i.e. colic), pregnant mares subjected to lengthy transportation and following manual reduction of a twin pregnancy to assist with the maintenance of the remaining embryo.

Prudent use of the progestin Regumate<sup>®</sup> can be very beneficial in the reproductive management of mares. However, the use of exogenous progestins is not warranted in many instances and many mares are administered the drug without a clear medical indication. Please consult with your equine veterinarian regarding the safe and effective use of this product.