



Vcheck Progesterone

To Predict Estrus Cycle and Sufficient Progesterone Levels in Mares

Progesterone is initially produced by the primary corpus luteum. It begins to increase after ovulation in diestrus, irrespective of pregnancy status, with the development of the corpus luteum.¹ Progesterone plays a crucial role in the maintenance of pregnancy until 120 days of gestation when the placenta becomes the primary maintainer.^{2,3} In non-pregnant mares, progesterone can also be used in tracking heat cycles and hormone influxes to detect if behavioral intervention is required.

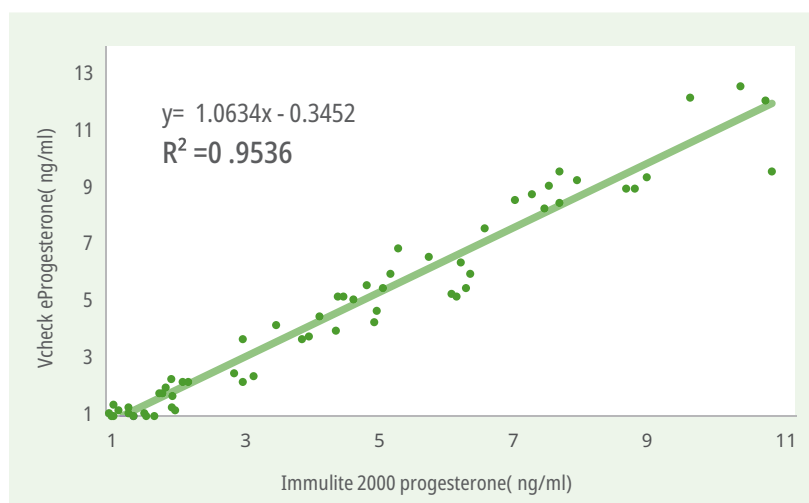


Clinical Applications

- ▶ To predict estrus cycles in mares
- ▶ To predict progesterone levels in mares
- ▶ To track heat cycles
- ▶ To monitor and manage behavior

A Closer Look: eProgesterone

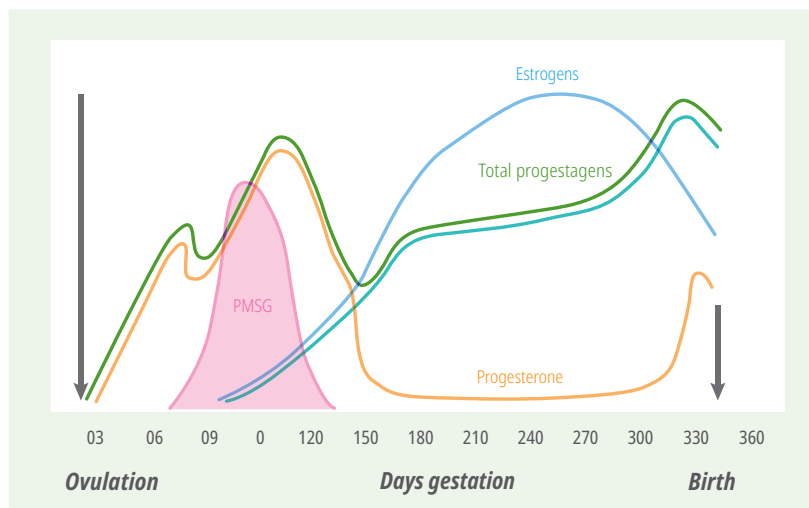
Vcheck eProgesterone has a strong correlation ($R^2=0.9536$, $y=1.0634x-0.3452$) with the reference method (chemiluminescent assay), which has been used in reference laboratories.



*Internal Evaluation Data

Specific Clinical Application

A progesterone concentration of 2 ng/mL is considered the minimum endogenous amount necessary to support pregnancy. Generally, a progesterone concentration below 2 ng/ml in the blood is associated with embryonic loss, whereas a concentration above 4 ng/ml is considered to be adequate to maintain pregnancy.^{2,4}



Hormone levels and corresponding ovarian activity in mares^{5,6}

Reference

1. Kelleman AA, Act D. Equine pregnancy and clinical applied physiology. In: Proceedings of the 59th Annual Convention of the American Association of Equine Practitioners (AAEP); 7-11 December, 2013. Nashville, Tennessee, USA. pp. 350-358 2. Grabowska A, Kozdrowski R. Relationship between estrus endometrial edema and progesterone production in pregnant mares two weeks after ovulation. BMC Veterinary Research. 2022 Nov;18(1):414. 3. Allen W. Luteal Deficiency and Embryo Mortality in the Mare. Reproduction in Domestic Animals 2001;36. <https://doi.org/10.1046/j.1439-0531.2001.00312.x>. 4. Shideler RK, Squires EL, Voss JL, et al. Progestogen therapy of ovariectomized pregnant mares. J Reprod Fertil Suppl 1982;32:459-464. 5. Michelle LeBlanc, Cheryl Lopate and Derek Knottenbelt. Pregnancy Chapter 7. Posted in Jun 18, 2016. Veterian Key. 6. Equine Female Reproductive Testing. Animal Health Diagnostic Center (AHDC), Cornell University College of Veterinary Medicine.

Specifications

Species	Equine
Sample Type	Serum, Plasma (heparin)
Measurement	Quantitative
Range	1 ~ 30 ng/ml
Testing Time	15 minutes
Storage Condition	2 ~ 8° C

Simple Testing Procedure



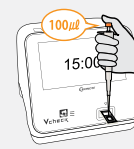
Dilute Sample

Add 50 µl of the sample to the assay diluent tube (100 µl)



Mix & Incubate

Mix thoroughly with 5 ~ 6 pipetting



Measure

Add 100 µl of the mixed sample into the test device

Product Name	Product Number	Product Type	Packing Unit
Vcheck eProgesterone	VCF142DC	Device	5 Tests/Kit



For More Information on
Vcheck V200 or V2400
analyzers visit:
bionote.com
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800-727-5169

LEARN MORE
about the eProgesterone test

