

GESTALAB

How to get full benefit from the test

Jean Durocher
veterinarian, dairy herd
health coordinator

Julie Baillargeon
agronomist, research project and
technology transfer coordinator

Both authors are part of the Valacta
R&D department.

No pregnancy test is perfect. That's as true for GESTALAB, a pregnancy detection test conducted on milk samples, as it is for ultrasound. Learning as much as you can about the tool, however, will enable you to make the best use of it, depending on the situation.

There are three ways to use the GESTALAB test: 1) to detect pregnancy from 28 days post-breeding, 2) to confirm pregnancy from 60 to 90 days, or 3) for a late pregnancy confirmation before drying off. The following information will help you to better understand the features of the GESTALAB test in these circumstances.

1-GESTALAB: To detect pregnancy as early as possible!

The goal of a pregnancy test is to identify open cows and take action as soon as possible. It may seem strange, but the level of PAG*, the protein that indicates pregnancy, is higher at 30 days of gestation than it is at 60 days. Consequently, results may be interpreted differently depending on when the test is done.

Accordingly, if the test result shows a PAG level below the threshold value for pregnancy diagnosis (ELISA value < 0.10):

- between 28 and 45 days post-breeding: the report will indicate the cow is "open."

To compare the reliability of the milk detection test, we conducted a trial on Quebec dairy farms in conjunction with veterinarians who use ultrasound for pregnancy diagnosis. The results show that between 28 and 45 days of gestation, the reliability of the GESTALAB test (99.6 per cent) is equivalent to that of an ultrasound examination (99.2 per cent). So, in both cases, a negative result means that the producer can take immediate action with the same level of confidence.

- after 45 days post-breeding: the report will indicate that the cow is "probably open."
After 45 days of gestation, the prob-

ability that a cow is truly open based on a negative test result decreases somewhat. This is referred to as the negative predictive value. In this situation, the GESTALAB report will indicate "probably open" and will recommend that the cow be examined by a veterinarian to confirm the result.

Why use GESTALAB before 45 days of gestation?

- To reduce the number of days open (the average economic loss is estimated at \$4.50/open day)
- To use the test more efficiently, since it provides an accurate diagnosis
- To better document the incidence of embryonic mortality in the herd

2-GESTALAB: To confirm pregnancy between 60 and 90 days post-breeding

Most veterinarians recommend that a pregnancy detected by an early test be confirmed, regardless of the technique (ultrasound or GESTALAB) used for that first test. The goal is to identify the cows that have lost an embryo.

Between 60 and 90 days of gestation, a cow with a PAG level below the diagnostic threshold (ELISA value < 0.10) is reported to be "probably open" and should be examined by a veterinarian.

The inconvenience associated with a "probably open" result is, however, less restrictive in these circumstances, since most of the cows are pregnant.

3-GESTALAB: For a late confirmation of pregnancy before dry off

A pregnancy confirmation test is sometimes done before dry off to avoid any unpleasant surprises. Many producers, particularly those whose animals are



"Since my cows are in open housing, I find this a really practical tool because it saves me time and makes my work easier," says Ferme Lanormande owner Claude Normand.

*PAG (pregnancy-associated glycoproteins)

PAG is an acronym that refers to pregnancy-associated glycoproteins, molecules that are secreted by the placenta and released into the maternal circulatory system. The GESTALAB test enables us to detect PAGs and use that information as a pregnancy indicator in cows.

housed in free-stall barns, see the benefit of this practice. Ferme Lanormande, in Victoriaville, for example, has been able to reduce the handling time for their herd of 153 milking cows by using GESTALAB.

"Since my cows are in open housing, I find this a really practical tool because it saves me time and makes my work easier," says farm owner Claude Normand. "The veterinarian initially diagnoses pregnancies around 30 days. Then I have the pregnancies confirmed at around 100 days and again before dry off."



At Ferme Fertily, in Sainte-Thècle, Francis Tessier and Stéphanie Généreux use GESTALAB between preventative medicine visits to quickly identify open cows in their herd of 30 milking Holsteins. "At each veterinarian visit, we identify the cows that will be tested with GESTALAB before the next visit," Mr. Tessier explains.



Why share the GESTALAB results with my veterinarian?

"By sharing information with my veterinarian, I can manage herd reproduction more efficiently." –Francis Tessier, co-owner of Ferme Fertily
"To choose the best approach for each cow, the information on the GESTALAB report needs to be included in the animal's health records. It also helps us make the best decisions for the herd as a whole." –Dr. Yves Caron, Clinique vétérinaire Saint-Tite

Basic guidelines to help you take full advantage of GESTALAB

1-Provide the breeding date

Because the test results are interpreted according to the stage of gestation, you can increase the accuracy of the test interpretation by providing us with a breeding date that can be entered in the database.

2-Follow the milk sampling protocol

In a conventional milking system, carry-over of residual milk from the previous cow has little effect on the GESTALAB result, as long as milk recording procedures are followed. With a robotic milking system, consult your Valacta technician or advisor before using GESTALAB.

3-Share the information with your veterinarian

By sharing the information contained in your GESTALAB report with your veterinarian, you can optimize the reproductive management of your herd.

GESTALAB is an additional tool you can use to optimize reproduction in your herd. Don't hesitate to get all the information you need and use GESTALAB to its fullest potential.