

Combine genomic and disease testing for decision-making

Combining genomic and bovine viral diarrhoea (BVD) testing will help to ensure the optimum return on investment in heifer rearing. British Dairying reports.

At a time when heifers are costing at least £1,700 to rear, breeding replacements from only the best animals must be a core business priority. Now dairy farmers can base this decision on the best available data, saving costs, reducing expensive mistakes and ensuring the optimum genetic progress for their herd.

“It is invaluable to be able to rank your females on genetic merit.”

“Only rearing your best calves is the foundation to a resilient herd,” says Rob Horn, Technical Sales Specialist at independent genomics and animal safety specialist Neogen. The firm now offers a combined genomic and BVD testing service from a single sample in the UK.

Genetic merit

“With 50% of the genetics in any mating coming from the female, it is invaluable to be able to rank your females on genetic merit for the traits you have identified as key to



Identifying the best genomics and BVD-free status means farmers can choose which calves to rear as replacements

your herd development,” he adds. “However, it’s essential to remember that even the best genetic merit calves may not be suitable for your herd if they also test positive for BVD. To get a complete picture of your calves’ potential you also need to know their BVD status before you decide which calves to rear.”

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BVD costs UK farmers more than £25m/year, so eradication represents a big opportunity to reduce costs and improve efficiency and welfare.

A BVD positive calf will be persistently infected and will be a reservoir of virus, infecting other animals in the herd. At the same time, they will tend to be smaller and slower growing.

“Neogen has recently been designated as an accredited laboratory to test samples taken as part of the BVDFree England Scheme,” explains Rob. “If you want BVD test results transferred to the

BVDFree database for use in the programme, then it is essential to use a lab that is designated to perform the appropriate test.

Combined testing

“If you are investing the time in taking a tissue sample, it makes sense to use it to provide as much information as possible, which is why we offer a combined BVD and genomics test.

“The Igenity UK Select genomic evaluation assesses production, management and health traits. By including the BVD test, you enhance the overall dataset for that calf, making it a more insightful and beneficial analysis.”

Streamlining the process and conducting all tests in Neogen’s specialist laboratory in Ayrshire enables farmers to save valuable time, he adds.

Informed decisions

“Handling and testing animals only once significantly reduces the number of samples sent out, compared to using two different labs.

“The efficient setup ensures swift return of results, enabling prompt decisions on which calves to keep and rear, and which to move on,” says Rob.

“With the possibility of sampling calves as young as two days old, you can quickly make informed choices,

minimising unnecessary time and resource investment in calves not intended for rearing.”

Accurate picture

Using the Igenity Dashboard enables comprehensive comparisons of all animals on the farm, making it advisable to test all calves, adds Rob.

This way, producers gain a complete and accurate picture of the quality of animals present, and can benchmark against all stock tested by Neogen in the UK.

Efficiencies

Genomic specialists can help explain the results, while ranking animals that are BVD clear and possess favourable genetic merit allows for balanced choices on breeding the next generation of replacements, selecting animals for beef, and determining which to sell or cull.

“Heifer rearing has long been an area where efficiencies can be made,” explains Rob.

“Investing in combined genomic and BVD testing will allow farmers to ensure they are only investing in rearing heifers that will benefit the business, combining the best genomics with BVD-free status. You can also make this decision at the earliest possible opportunity for maximum benefit.”



A single sample for joint testing