RESOLUTION NUMBER: 2 and 18 Combined  
APPROVED

SOURCE: JOINT COMMITTEE ON THE NAHLN COMMITTEE ON CATTLE AND BISON

SUBJECT MATTER: Usage of the Interferon Gamma Test and Approval of National Animal Health Laboratory Network Laboratories to Conduct the Interferon Gamma Test

BACKGROUND INFORMATION:

In 2003, the interferon gamma release assay (IGRA) was approved for use in cattle, primarily for routine movement testing as a replacement for the comparative cervical test and in affected herds to identify a greater percentage of infected animals. Eventually, seven National Animal Health Laboratory Network (NAHLN) laboratories were utilizing the test. In 2014, performance issues were identified, most significantly that an unacceptable number of lesioned animals were not identified as positive on the test. Ongoing issues led to the withdrawal of the IGRA test usage in May 2017. In June 2019, the test was re-introduced with usage limited to the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), National Veterinary Services Laboratory (NVSL) with specific purified protein derivative. Subsequent data analysis indicates a high level of specificity in infected herds. In spring 2021, Canada started requiring the caudal fold tuberculin (CFT) test paired with IGRA within 72 hours for United States rodeo cattle of the breed Corriente, Brahman Texas Longhorns, and American Bucking Bulls in an attempt to better screen for tuberculosis prior to entry. The CFT test has an 80-85% sensitivity but subjectively allows for false negatives. The IGRA also has an 85% sensitivity with very few false positives. When the two tests are used in a parallel protocol, the sensitivity improves from 85% to 97%. In an effort to shorten the two-test interval and improve test sensitivity, states have considered allowing for a CFT test paired with an IGRA. Additionally, use of the IGRA in lieu of the comparative cervical test shortens the testing interval and increases turnaround time.

As a result of the aforementioned inconsistent lab results and trouble with reagents in recent years, NAHLN labs are no longer allowed to run the assay, slowing turn-around time and increasing costs for states. Currently, the test can only be run at USDA-APHIS-NVSL at $74/ head and may be cost prohibitive for industry. USDA is also unable to subsidize the testing required for movement.
RESOLUTION:

The United States Animal Health Association (USAHA) urges the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) to allow expanded use of the interferon gamma release assay (IGRA) in epidemiologic investigations and as an adjunct test for interstate movement. Furthermore, USAHA requests that USDA-APHIS allow National Animal Health Laboratory Network laboratories to resume the use of IGRA to provide reliable, efficient alternatives to testing at lower fees.

INTERIM RESPONSE:

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) recognizes the concerns of the United States Animal Health Association (USAHA) and appreciates the opportunity to respond.

APHIS understands the criticality of reliable tests results in a timely manner, particularly in epidemiologic investigations and to support interstate animal movement. Due to ongoing logistical concerns with the original gamma interferon assay, APHIS has been evaluating an alternative, the Quantiferon Gold (QFT) assay. The QFT assay could significantly advance our tuberculosis diagnostics, while using less laboratory resources and reducing shipping needs. The National Veterinary Services Laboratories (NVSL) is soliciting USAHA and State Animal Health Official support for assistance with the assay validation and trials, through submission of 500-600 presumed negative animals for specificity evaluation. The NVSL already has over 300 presumptive positive samples available to evaluate sensitivity. A report on this effort will be provided at the annual meeting.