

P.13.- BSE confirmatory testing with the new TeSeE bovine Western Blot assay

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Platelia[®] BSE and TeSeE[™] assays are used for systematic screening of BSE in cattle in most European Countries. The confirmation of samples identified positive in the field by the rapid assays is made by the demonstration of typical spongiform changes with histopathology methods, or localisation of abnormal PrP with Immunohistochemistry (IHC), or Scrapie Associated Fibrils (SAFs) with electron microscopy.

Bio-Rad has developed a new highly sensitive assay which can be used as a confirmatory method for confirmation of bovines detected BSE positives. The TeSeE[™] bovine WESTERN BLOT assay is based on the PAGE/WB technique. It combines the initial purification/concentration stages of the TeSeE[™] screening rapid assay, a new combination of monoclonal antibodies selected for their high sensitivity to bovine PrPres and a chemiluminescent signal.

The presented data clearly indicate that the TeSeE[™] bovine WESTERN BLOT assay has the capacity to confirm all the BSE detected samples in the field with rapid screening assays.

The analytical sensitivity of the new TeSeE[™] bovine WESTERN BLOT assay is at least equivalent to the Platelia[®] BSE assay (assuming that the visualization of a single band at the expecting molecular weight is accepted).

This is an important issue since the Bio-Rad screening assay was shown to detect BSE before the onset of clinical symptoms in cases with low levels of PrPres. (Ref.: J. GRASSI et al. Vet. rec.,145, nov. 10th, 2001).]

Keywords

Evaluation, rapid tests, TSE, bovine.