



Introduces Test for **Progressive Ataxia in Charolais**

Genetic Visions-ST™, the livestock genomic testing leader and innovator, has developed a commercially available genomic test for progressive ataxia in Charolais cattle.

“Our Research and Development team used public database sequence flanking the mutation to design a rapid genotyping assay,” says Alan Mileham, Lead Researcher at Genetic Vision-ST™. “The test was validated using normal and heterozygous animals (determined by DNA sequencing) from STgenetics® Charolais cattle.”

According to the Board of Directors of the American-International Charolais Association (AICA), progressive ataxia was first described in Charolais cattle in England in the early 1970s and in the following years cases were reported in the breed worldwide. Ataxia involves uncontrolled movement in the hind limbs and generally develops before the affected animal is two years old. It progresses during the following few months and leads to permanent recumbency and euthanasia of affected animals.

An increase in the number of cases has been recorded by the French National Observatory of Genetic Diseases since the early 2000s. A scientific paper published in 2018 reported that the causative mutation for progressive ataxia in Charolais cattle is an A to G single nucleotide polymorphism in the coding region of the KIF1C gene on Chromosome 19, which changes an arginine amino acid in the corresponding protein to a glutamine and leads to a functional knock-out of the gene. Animals homozygous for the G allele develop progressive ataxia.

Producers can arrange testing for their cattle by talking with their STgenetics® sales representative or by contacting Genetic Visions-ST™ directly by phone at 608-662-9170 or email at info@geneticvisions.com.

Genetic Visions-ST™ is a division of STgen®Inc. Located in Navasota, Texas, STgen®Inc. is making the world greener, more sustainable and profitable. By improving herd genetics through science and technology, we believe that the best way to predict the future is to create it, while feeding the world with our passion for the beef and dairy industries. The STgen®Inc. Integrated Approach to management combines cutting edge genetics, innovation driven programs and gender-sorted semen to aid farmers in advancing their genetic progress while attaining herd goals.