



Genetic test for polyneuropathy in Greyhounds

Haemophilia B in Rhodesian Ridgeback Dogs-Causative Mutation identified

Primary Lens Luxation (PLL) – Genetic test now available in Germany

Use and uselessness of genetic tests in animals of breeds in which the test has not been validated



**JUST
NEW
AT LABOKLIN:**

Genetic test for polyneuropathy in Greyhounds

Most recently Laboklin acquired permission to perform a genetic test to identify the mutation causing polyneuropathy in Greyhounds. Research on the underlying genetic cause of this disease was done by Prof. C. Drögemüller and colleagues at Vet-Suisse Uni Bern.

Haemophilia B in Rhodesian Ridgeback Dogs-Causative Mutation identified

Haemophilia B is one of the most important inherited disorders of haemostasis in Rhodesian Ridgeback Dogs. The underlying pathomechanism of haemophilia B is a lack or decreased activity of factor IX that plays a critical role in the coagulation cascade. Affected dogs present hemorrhage that can vary from mild to severe depending on the degree of the disease. The clinical signs include haematomas of large sizes, bleeding of the nose, skin, muscles and joints. If the disease is severe and no precautions are taken, affected dogs can bleed to death after surgery or injuries.

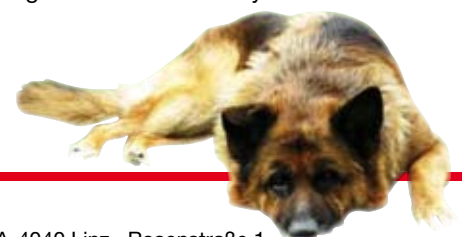
Haemophilia B is a sex-linked disorder (x-chromosomal recessive). As a consequence male dogs are affected much more frequently compared to female dogs because they only possess one x-chromosome. If this one chromosome carries the mutation, the dog develops haemophilia B. Heterozygous conductor female dogs occur with a frequency of about 5% within the population of Rhodesian Ridgeback Dogs. These conductor bitches carry the mutation on one of their two x-chromosomes but do not develop the disease. Conductor bitches pass on the mutation to their offspring and about 50% of the male offspring will get the mutation and develop the disease. Female dogs will develop Haemophilia B if they have 2 x-chromosomes that carry the mutation.

Recently, Laboklin and its collaborators Prof. Dr. Mischke from the Veterinary School in Hannover and Prof. Dr. Thomas Dandekar from the University Würzburg were able to identify the mutation responsible for factor IX deficiency. Laboklin submitted the patent for this test and has now the exclusive permission to perform the genetic test for detection of haemophilia B in Rhodesian Ridgeback Dogs. The genetic test allows for the early detection of affected animals and provides important information to dog breeders enabling them to make responsible decisions in order to avoid the occurrence of the disease and ultimately decrease the frequency of the mutation within the population of Rhodesian Ridgeback Dogs.

Primary Lens Luxation (PLL) – Genetic test now available in Germany

For more than 75 years, Primary Lens Luxation (PLL), is known to be an inherited disease of the eyes in dogs of several different breeds. Damage to the zonulae fibres lead to a displacement or luxation of the lense in the eyes. As a consequence, painful glaucoma or even blindness can occur. The damage of the zonula fibres can be aquired (trauma) or inherited. The inherited form leads to clinical signs at the early age of 20 months. Changes in the structure of the zonulae fibres occur and luxation of the lense typically takes place at the age of 3 - 8 years. At that time most of the affected dogs will have reproduced.

Recently, Cathryn Mellersh and colleagues (Farias et al., 2010) identified a mutation in the gene ADAMTS17 that is responsible for the development of inherited PLL. Based on their investigations, LABOKLIN developed a genetic test to identify the mutation.



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