From: AmiciLeale
Sent: Saturday, 28 January 2017 7:33 PM
To: lagottoandbernese@hotmail.com
Subject: LSD Result of genetic test AMICILEALE ARCOBALENO COSMA

From: Amicileale POP [mailto:trish@lagottoqld.com]
Sent: Saturday, 28 January 2017 2:25 PM
To: lagottoandbernese@hotmail.com
Subject: LSD Result of genetic test AMICILEALE ARCOBALENO COSMA

From: Koirien ja kissojen geenitutkimus [mailto:lgl-kyselyt@helsinki.fi]
Sent: Thursday, 15 May 2014 9:23 PM
To: trish@lagottoqld.com
Subject: Result of genetic test AMICILEALE ARCOBALENO COSMA

STORAGE DISEASE IN LAGOTTO ROMAGNOLOS – THE RESULT OF GENETIC RESEARCH

DEAR LAGOTTO ROMAGNOLO OWNER,

You have donated a sample from your Lagotto to the Canine Genetics Research Group at the University of Helsinki, Finland. Your dog's sample has now been tested for the storage disease mutation, and here we report the result:

****DOG'S RESULT: AMICILEALE ARCOBALENO COSMA 4100222392 IS normal****

STORAGE DISEASE IN LAGOTTOS

The genetic and clinical studies concerning the Lagotto storage disease have been performed as a collaboration between the Universities of Helsinki and Bern. Altogether 1300 Lagottos were initially tested as a part of the research. Out of these dogs, 11 % were carriers of the recessive mutation and 1 % were affected. The Lagotto storage disorder is characterized by movement incoordination, which is seen for instance as a staggering gait. Some affected dogs have also suffered from involuntary eye movements (nystagmus) and behavioral changes, such as aggression. The onset of symptoms has varied from 4 months to 4 years. The condition is progressive and affected dogs deteriorate to the point where they need to be euthanized. On the pathological level, storage material accumulates to the affected dogs' cerebellar neurons and other cells, causing dysfunction and cell death.

INTERPRETATION OF RESULTS

Patricia Wyllie

68 Behs Rd

4615 Nanango

Australia

GENOSCOPER

Lab.No:
GS13 - D14523

Juvenile Epilepsy Test (Lagotto Romagnolo)

Name	Breed	Result
Female 7 - Red	Lagotto Romagnolo	**Carrier**

The test results are interpreted as follows:

Normal:	No epilepsy mutation and therefore no predisposition to juvenile epilepsy
Carrier:	Heterozygous for the juvenile epilepsy mutation (carries one copy of the juvenile epilepsy mutation)
Affected:	Homozygous for the juvenile epilepsy mutation (carries two copies of the juvenile epilepsy mutation)

Puppies that have increased risk of developing juvenile epilepsy can be born if both parents are heterozygous. The probability of having affected puppies in that case is approximately 25%. If one parent is heterozygous and the other homozygous (affected) the probability of having affected puppies is 50%. If both parents are homozygous only affected puppies will be born. Puppies homozygous for the mutation become affected and experience seizures of variable extent and severity. Few individual heterozygous carriers have also been reported with seizures. The reason for this is unclear with the following possible explanations under further investigations: the carrier puppy has another mutation in the same gene, or there is another mutation in another gene, or the heterozygosity for the mutation lowers the seizure threshold in some puppies. The breed suffers also from a persisting and progressive juvenile ataxia resulting often to the euthanasia of the affected puppy. In addition, there is an adult-onset epilepsy caused by other genetic factors. If your Lagotto was tested as a carrier but has experienced seizures please contact our customer service (info@genoscoper.com) for further investigation. We are also looking for more ataxia and adult-onset epilepsy cases from the breed to study the genetics of these disorders.

On behalf of Genosoper Oy

Helsinki 25.1.2013

Heidi Karjalainen