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## Mast cell tumor

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<i>Items</i>	<i>Mast cell tumor</i>
<i>Test result</i>	<i>High risk</i>
<i>Relative risk</i>	<i>96.29%</i>
<i>Gene</i>	<i>AP1M1 near; HYAL4 near</i>
<i>Genotype</i>	<i>G.G;G.G</i>

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\*The relative risk of Mast cell tumor in this sample is higher than 96.29% of dogs.

## Osteosarcoma

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<i>Items</i>	<i>Osteosarcoma</i>
<i>Test result</i>	<i>High risk</i>
<i>Relative risk</i>	<i>89.68%</i>
<i>Gene</i>	<i>FBL near;KIAA1462;None</i>
<i>Genotype</i>	<i>G.G;C.C;C.A</i>

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\*The relative risk of Osteosarcoma in this sample is higher than 89.68% of dogs.

## Canine hip dysplasia

Items	Canine hip dysplasia
Test result	High risk
Relative risk	85.89%
Gene	CHST3;RPN1 near;CCND1 near;SRBD1;none
Genotype	C.C;T.T;T.T;C.C;A.G

\*The relative risk of Canine hip dysplasia in this sample is higher than 85.89% of dogs.

## Congenital megaesophagus

Items	Congenital megaesophagus
Test result	Medium risk
Relative risk	65.48%
Gene	FBXL14 near
Genotype	G.G

\* The relative risk of Congenital megaesophagus in this sample is higher than 65.48% of dogs.

## Obsessive-compulsive disorder

Items	Obsessive-compulsive disorder
Test result	Medium risk
Relative risk	57.02%
Gene	CPQ;DSC3
Genotype	C.C;G.A

\* The relative risk of obsessive-compulsive disorder in this sample is higher than 57.02% of dogs.

## Hemangiosarcoma

Items	Hemangiosarcoma
Test result	Medium risk
Relative risk	46.21%
Gene	ANGPTL5-TRPC6
Genotype	C.C

\* The relative risk of Hemangiosarcoma in this sample is higher than 46.21% of dogs.

## Lymphoma

Items	Lymphoma
Test result	Low risk
Relative risk	31.85%
Gene	MCC
Genotype	G.G

\* The relative risk of Lymphoma in this sample is higher than 31.85% of dogs.

## Congenital Sensorineural Deafness

Items	Congenital Sensorineural Deafness
Test result	Low risk
Relative risk	7.74%
Gene	HNF4G near; CRIM1; FRMD8; FUBP1
Genotype	T.T;A.A;C.C;G.A

\* The relative risk of Congenital Sensorineural Deafness in this sample is higher than 7.74% of dogs.

## Portosystemic Vascular Anomaly

Items	Portosystemic Vascular Anomaly
Test result	Low risk
Relative risk	4.27%
Gene	None
Genotype	A.G

\*The relative risk of Portosystemic Vascular Anomaly in this sample is higher than 4.27% of dogs.



## 2.3 Hair trait

### Hair Trait Report

The genes most likely to be carried by the next generation of this sample are yellow, white and red.

The hair type most likely to carry in the next generation of this sample is short straight hair.

Items	Trait
Coat color	Yellow/white/red
Hair type	Short straight hair



## 2.4 Behaviour

<b>Behavior Characteristics</b>	<b>Test sample Result</b>	<b>Average of dogs</b>
Concentration	3.61	3.62
Desire of gaming	2.72	2.77
Excitement	4.25	4.2
Obedience	3.09	3.31
IQ	5	1.38
Escaping	1.39	5
Courage	3.45	2.77
Irritability	3.68	3
Barking		3.09
Ability to be alone	4.07	3.02
Urination	3.69	2.23
Vitality	2.03	4.28



## Explanation of Results

### Clear

The test result „clear“ indicates that the tested dog does NOT carry a mutation for a specific genetic disease.

### Carrier

The test result „carrier“ indicates that the tested dog carries ONE copy of the mutation for a specific genetic disease. However, the tested dog may not be clinically affected by this mutation because two copies of the mutation are usually required to cause disease.

### Carrier / At Risk

The test result „carrier / at risk“ indicates that the tested dog carries ONE copy of the mutation that causes a specific genetic disease. Based on the mode of inheritance ONE mutant copy of the gene can cause symptoms. Dogs with only one copy may develop less severe symptoms as compared to dogs with two copies of this mutation.

### At Risk

The test result „carrier / at risk “indicates that the tested dog carries ONE copy of the mutation that causes a specific genetic disease. Based on the mode of inheritance ONE mutant copy of the gene can cause symptoms. Dogs with only one copy may develop less severe symptoms as compared to dogs with two copies of this mutation.

### No results

The test result „No result “indicates that no result for a specific disease/trait of your dog could be determined during analysis. This does not mean that your dog is a carrier or at risk for this disorder. There are several reasons why a particular analysis may fail. Unique variations in certain regions of the DNA may exist and cause a test to fail for what reason no result can be obtained. It is also possible that the sample material was not sufficient for a successful analysis. In addition, growth of bacteria or fungi can have a negative effect on sample quality and analysis. Results with at least 90% of successful analysis are considered as acceptable. In the case that your dog shows an unacceptable number of failed results, we will contact you for sending new sample material.