

#### ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

VICTORY CHARLIE

registered name

**POODLE** 

breed

908462 film/test/lab #

99100301191892

tattoo/microchip/DNA profile

2469553

application number

06/29/2023 date of report

RESULTS:

Based upon the exam dated 06/17/2023, this dog has been found to be free of observable inherited eye disease and has been issued an Eye Certification Registry Number which is valid for one year from the time of the exam.

A.P. Pups

www.ofa.org

OHABA1930902003 registration no.

M sex

09/16/2021 date of birth

age at evaluation in months



A Not-For-Profit Organization

PO-EYE11090/21M-VPI O.F.A. NUMBER

This number issued with the right to correct or revoke by the Orthopedic Foundation for Animals.

**NORMAL** 

OFA eCert G.G.KELLER. D.V.M., M.S., DACVR CHIEF OF VETERINARY SERVICES

This electronic OFA certificate was generated on: 06/29/2023

This certification can be verified on the OFA website by entering the dog's registration number into the orange search box located at the top of the page or by scanning the QR code above.

If there are any errors on this certificate, please email CORRECTIONS@OFFA.ORG to request a correction.

Orthopedic Foundation for Animals, Inc. 2300 E. Nifong Blvd. Columbia, MO 65201-3806

OFA website: www.ofa.org E-mail address: ofa@offa.org Phone number: 573-442-0418 Fax number: 573-875-5073

## **Orthopedic Foundation for Animals**

#### Preliminary Hip Dysplasia Evaluation Report



VICTORY CHARLIE

registered name

**POODLE** 

breed

film/test/lab #

99100301191892

tattoo/microchip/DNA profile

G.G. KELLER, DVM, MS, DACVR CHIEF OF VETERINARY SERVICES

2469553

application number

07/10/2023 date of report

OHABA1930902003

registration no.

M sex

09/16/2021 date of birth

21

age at evaluation in months

Veterinarian

SINN VETERINARY SERVICES 55854 703 RD MAHASKA KS 66955

Owner A.P. Pups

Preliminary Hip Dysplasia Evaluation Report

EXCELLENT HIP JOINT CONFORMATION  superior hip joint conformation as compared with other individuals of the same breed and age	BORDERLINE HIP JOINT CONFORMATION marginal hip joint conformation of indeterminate status with respect to hip dysplasia at this time Repeat study in six months
GOOD HIP JOINT CONFORMATION	MILD HIP DYSPLASIA
well formed hip joint conformation as compared with other individuals of the same breed and age	radiographic evidence of minor dysplastic changes of the hip joints
$\sqrt{}$ FAIR HIP JOINT CONFORMATION	MODERATE HIP DYSPLASIA
minor irregularities of the hip joint conformation as compared with other individuals of the same breed and age	well defined radiographic evidence of dysplastic changes of the hip joints
	SEVERE HIP DYSPLASIA radiographic evidence of marked dysplastic changes of the hip joints
RADIOGRAPHIC FINDINGS	
subluxation	unilateral left right
remodeling of femoral head/neck	transitional vertebra
osteoarthritis/degenerative joint disease	spondylosis
shallow acetabula acetabula acetabular rim/edge change	panosteitis
AA Keller DIM	

2300 E Nifong Blvd | Columbia MO 65201 | Phone (573) 442-0418 | Fax (573) 875-5073 | ofa@offa.org | www.ofa.org



# **Coat Color and Trait Certificate**

Call Name:

Charlie

Laboratory #:

289088

**Registered Name:** 

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Registration #: Microchip #:

991003001191892

Breed: Sex: Poodle Male

Certificate Date:

March 3, 2022

DOB:

Sept. 2021

### This canine's DNA showed the following genotype(s):

Coat Color/Trait Test	Gene	Genotype	Interpretation	
Chondrodysplasia (CDPA)	CFA18 FGF4	cd/cd	No Leg Shortening Associated with CDPA	
E Locus - e (Apricot/Cream/Red/Yellow, Common Variant Found in Many	MC1R	E/e	Black (carries yellow/red)	
Breeds) IC Locus (Improper Coat/Furnishings)	RSPO2	not be note i my flo note F/Fso: "bejutil uned voolon (see s	Furnishings	
K Locus (Dominant Black)	CBD103	k <sup>y</sup> /k <sup>y</sup>	Agouti expression allowed	
M Locus (Merle)	PMEL	m/M	*See detailed interpretation	
S Locus (White Spotting, Parti, or Piebald)	MITF	crete bour2/2 les ariations in genet	No white spotting, flash, parti, or piebald	

## Interpretation:

Two genetic mutations are associated with shortened legs in dogs. Both mutations consist of copied sections (duplication) of the canine *FGF4* gene (called an *FGF4*-retrogene) that have been inserted into two aberrant locations in the genome; one in chromosome 12 (*CFA12 FGF4*; associated with CDDY and IVDD risk) and one in chromosome 18 (*CFA18 FGF4*; associated with chondrodysplasia [CDPA], but not associated with IVDD). Appropriate breeding decisions regarding dogs which have inherited the *CFA12 FGF4* mutation (WT/M or M/M) need to address both the potential loss of genetic diversity in a population which would occur if dogs with this mutation were prohibited from breeding as well as the loss of the short-legged appearance that is a defining physical characteristic for some breeds. In breeds which inherit both mutations, breeders may use genetic testing results to selectively breed for the CDPA (*CFA18 FGF4*) mutation while breeding away from the CDDY and IVDD risk (*CFA12 FGF4*) mutation to reduce IVDD risk and retain the short-legged appearance. However, the frequency of each mutation varies between breeds and, in some cases, may not be conducive to such a breeding strategy. For example, breeds with extreme limb shortening (e.g. Basset hound, Dachshund, Corgi) typically develop their appearance due to inheritance of both the *CFA12 FGF4* and *CFA18 FGF4* mutations. In addition, depending on the breed, offspring born without either the *CFA12 FGF4* or *CFA18 FGF4* mutations may display longer limbs than cohorts and, therefore, not meet specific breed standards.

This dog carries two copies of the **cd** allele which does not result in leg shortening. However, the actual leg length of the dog is a result of a combination of factors including the mutation associated with CDDY and IVDD risk (*CFA12 FGF4*) as well as variants in other genes. This dog will pass one copy of **cd** to 100% of its offspring.

This dog carries one copy of **E** and one copy of **e** which allows for the production of black pigment. However, this dog's coat color is also dependent on the K, A, and B genes. This dog will pass **E** on to 50% of its offspring and **e** to 50% of its offspring, which can produce a yellow/red coat (including shades of white, cream, yellow, apricot or



# Canine Genetic Health Certificate™

Call Name:

Charlie

**Registered Name:** 

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**Breed:** 

Poodle Male

Sex: DOB:

Sept. 2021

Laboratory #:

289088

Registration #:

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Microchip #:

991003001191892

Certificate Date:

March 3, 2022

### This canine's DNA showed the following genotype(s):

Disease	Gene	Genotype	Interpretation
Chondrodystrophy with Intervertebral Disc Disease Risk Factor (CDDY with IVDD)	CFA12 FGF4	M/M	Increased IVDD Risk Associated with CDDY
Degenerative Myelopathy	SOD1	WT/WT	Normal (clear)
Ehlers-Danlos Syndrome (Variants 1 and 2)	TNXB	WT/WT	Normal (Clear)
GM2 Gangliosidosis (Poodle Type)	HEXB	WT/WT	Normal (clear)
Hereditary Cataracts	HSF4	WT/WT	Normal (clear)
Multidrug Resistance 1	ABCB1	WT/WT	Normal (clear)
Neonatal Encephalopathy with Seizures	ATF2	WT/WT	Normal (clear)
Osteochondrodysplasia	SLC13A1	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration	PRCD	WT/WT	Normal (clear)
Progressive Retinal Atrophy, Rod-Cone Dysplasia 4	C2orf71	WT/WT	Normal (clear)
Von Willebrand Disease I	VWF	WT/WT	Normal (clear)

WT, wild type (normal); M, mutant; Y, Y chromosome (male)

Helm Sunt

Helen F Smith, PhD

Associate Laboratory Director

Christina J Ramirez, PhD, DVM, DACVP

Medical Director

Ckf

Paw Print Genetics® performed the testing on the dog listed on this certificate. See the Laboratory Report for interpretation and recommendations based on these findings. The genes/diseases reported here were selected by the client. Normal results do not exclude inherited mutations not tested in these or other genes that may cause medical problems or may be passed on to offspring. The results included in this report relate only to the items tested using the sample provided. These tests were developed and their performance determined by Paw Print Genetics. This laboratory has established and verified the test(s)' accuracy and precision with >99.9% sensitivity and specificity. The presence of mosaicism may not be detected by this test. Non-paternity may lead to unexpected results. This is not a breed identification test. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think these results are in error, please contact the laboratory immediately for further evaluation. In the event of a valid dispute of results claim, Paw Print Genetics will do its best to resolve such a claim to the customer's satisfaction. If no resolution is possible after investigation by Paw Print Genetics with the cooperation of the customer, the extent of the customer's sole remedy is a refund of the fee paid. In no event shall Paw Print Genetics be liable for indirect, consequential or incidental damages of any kind. Any claim must be asserted within 60 days of the report of the test results. Genetic counseling is available at Paw Print Genetics.