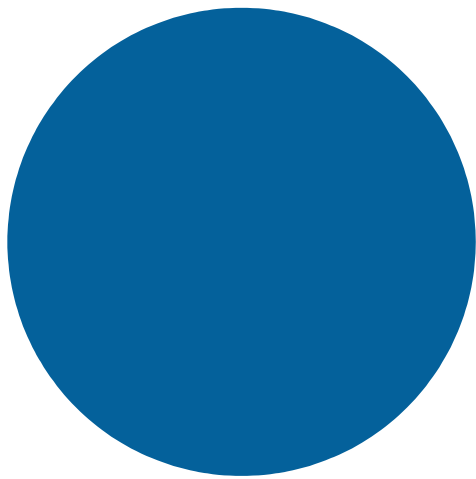


DISCOVER ALL  
**ABOUT MILO**

The results are in! Let's take a look at what the DNA told  
us about Milo's ancestry...

## MILO'S BREED BY PERCENTAGE



● 100%  
Pomeranian

Exciting news, the results are in! Here's what makes Milo so unique. Using the data generated from Milo's DNA, our sophisticated computer algorithm performed over 17 million calculations! What you see here is Milo's ancestry by percentage.

# POMERANIAN

## A UNIQUE CHARACTER AND A CHEEKY APPEARANCE.

- Active, intelligent, and alert dogs.
- Eager to learn and responds well to reward-based training using treats or favorite toys.
- Pomeranians seem to enjoy dog sports such as agility, musical canine freestyle, rally and competitive obedience.
- They tend to bark. They can be reserved around strangers and may require careful socialization to prevent or reduce defensive aggressive tendencies.

### ► Height

**7 - 12 in**

### ► Weight (show)

**3 - 7 lb**

### ► Weight (pet)

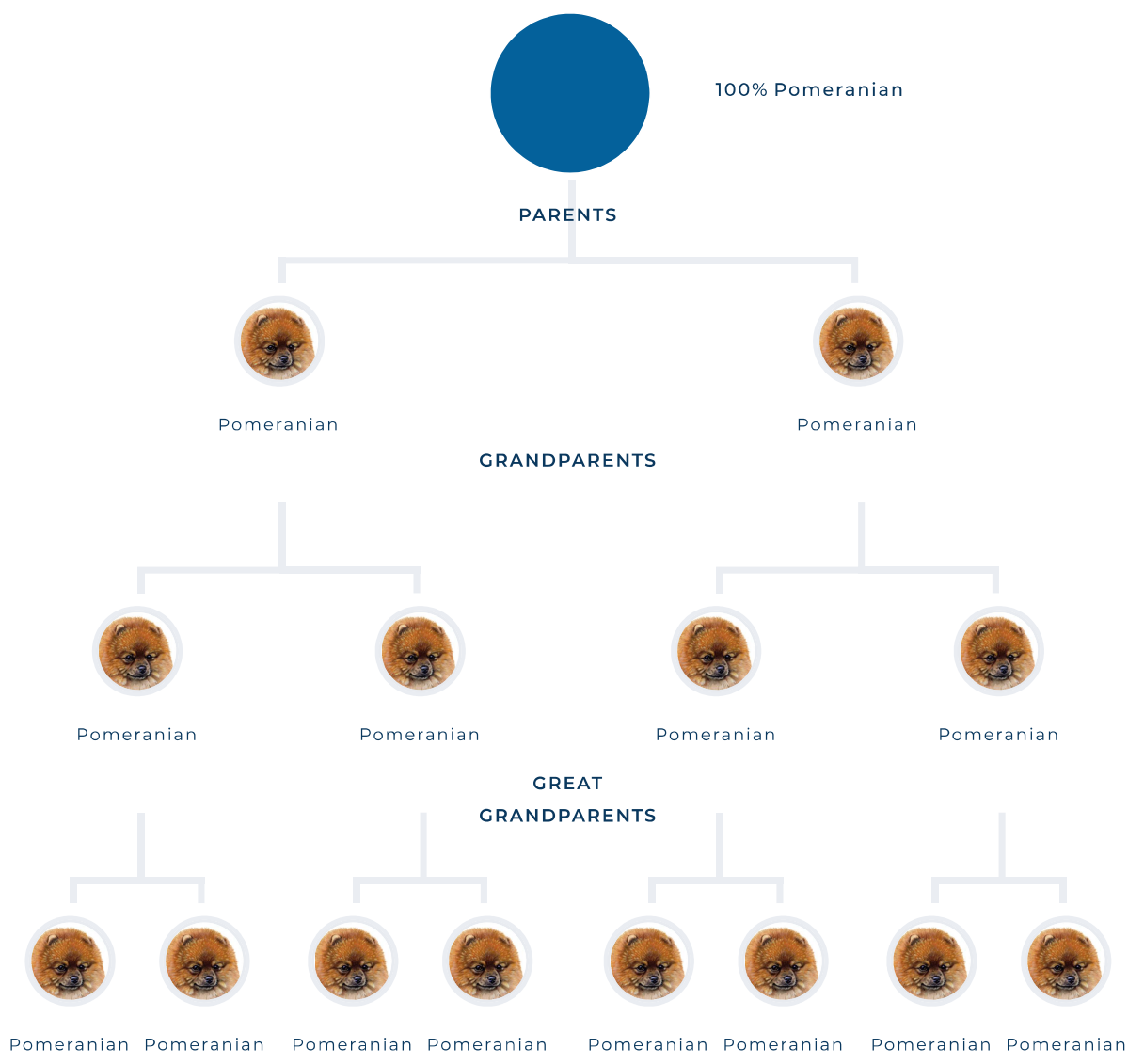
**3 - 10 lb**



## DID YOU KNOW?

With their unique character and cheeky appearance, these great little companions have been captivating people for over 150 years. The 'Poms' you see nowadays are toy dogs, but they didn't always look like this. Think more Golden Retriever, with a bushy tail, and you'd be closer. It was Queen Victoria who influenced the change. She was given a tiny one as a present in 1888, which launched a fashion for the 'pocket-sized' dogs that went global. And the trend continues today, as breeders maintain the quality that keeps these trustworthy little fellows as popular as ever. Pomeranians unsurprisingly are from Pomerania in north-eastern Europe, and were originally known as Zwergspitz. Zwerg means 'dwarf' and 'spitz' is the German breed of its bigger ancestor. From the freezing Prussian Baltics, bred to a dinky size, and with a royal connection, the Pomeranian has been on a worldwide journey of success. No wonder this tiny dog is a giant favorite.

# MILO'S FAMILY TREE



# MILO'S HEALTH RESULTS

We have tested Milo's DNA for the following important genetic health conditions.  
The results can be seen below.

## MULTIDRUG SENSITIVITY (MDR1)



**CLEAR**

Milo has no copies of the MDR1 mutation and should not be affected by the disorder due to this genetic cause.

## EXERCISE-INDUCED COLLAPSE (EIC)



**CLEAR**

Milo has no copies of the EIC mutation and should not be affected by the disorder due to this genetic cause.

# MILO'S TRAITS

<b>Base Pigment Color</b>	Milo carries the gene for the 'expression' of black pigment. This means that even though their overall coat color may not be black, they are still able to make black pigment. They will also likely have black around their eyes, a black nose, and may even have black pads on their feet.
<b>Furnishings</b>	Milo does not carry any copies of the gene for 'furnishings' (which would give them a fuzzy beard and eyebrows). This means they probably have smooth, short facial hair. Did you know you can often get 'furnished' and 'unfurnished' dogs within the same breed?
<b>Coat Color Main Possibilities</b>	Milo appears to be a yellow or tan color. Dogs with this result can actually show colors from white all the way to deep red. (Did you know because your dog has this genotype, they cannot make black pigment in their coats, so won't have even a single black hair?)
<b>Coat Length and Type</b>	Milo's coat is probably on the long side. The exact length of a dog's coat is down to several factors so it can vary. Did you know long hair is actually a recessive trait and results from inheriting two 'broken' copies of the gene that tells hairs to stop growing and shed?
<b>Tail Length</b>	Milo likely was born with a long tail - although the exact length can vary from dog to dog. Long tails are sometimes known as 'coffee table clearers'. (If you've ever seen a long-tailed dog get excited near one, you'll know exactly why.)
<b>Ear Carriage</b>	A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Milo probably has perk or upright ears. Did you know this type of ear is recessive (which means you need a copy from each parent to show it)? Common breeds with upright ears include German Shepherd, Chihuahua and Husky.
<b>Leg Length</b>	Milo's legs should be relatively long in length, based on this marker (though there can be other genes that affect leg length). Did you know different dogs can have different leg lengths even if they are the same breed?

## IDEAL WEIGHT

Based on our findings, we've calculated that Milo's ideal, adult weight should be:

**8 lbs - 16 lbs**

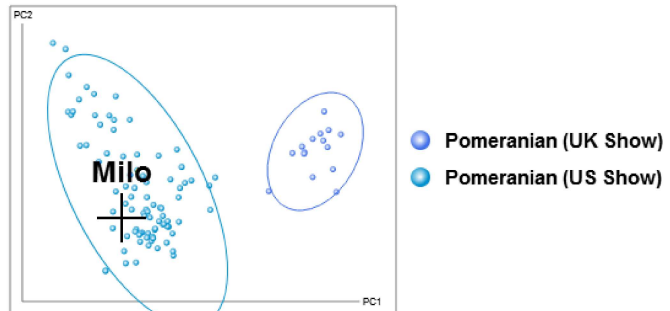
Maintaining a healthy weight is a key factor in Milo having a long and healthy life.

# ADDITIONAL BREED TESTS

Our family tree analysis shows that Milo closely resembles a single dog breed, based on the samples in the WISDOM PANEL™ database. We have included some extra tests free of charge to investigate this in more detail.

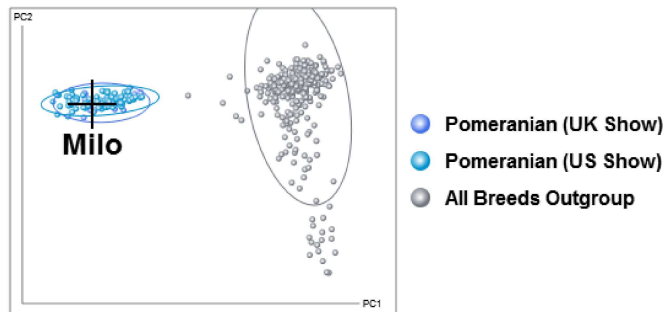
## Single Breed Comparison

This analysis shows the relationship between Milo and the Pomeranian samples in our database with each individual dog represented as a dot. The closer the dots on the chart the closer the genetic relationship. Milo's sample falls within the Pomeranian cluster showing that Milo's genetic profile closely resembles the other dogs from this breed in the Wisdom Panel database.



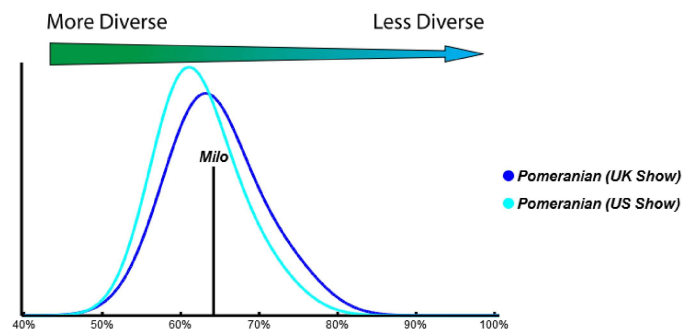
## Single Breed Vs. All Breeds

Here we have compared Milo's data to Pomeranian samples, and also a single representative sample from the other breeds in the WISDOM PANEL database. This is another way of showing that Milo's data is more like the Pomeranian than any other breed. Milo's sample falls within the Pomeranian cluster showing that Milo's genetic profile closely resembles the other dogs from this breed in the WISDOM PANEL database.



## Homozygosity

Homozygosity is a measure of how many of Milo's genetic markers are identical because the same version was passed down from both the mother and father. Purebred dogs tend to have a higher homozygosity score than most mixed breed dogs, and each breed within the WISDOM PANEL database has a specific range of scores. Milo's homozygosity score falls within the range for the Pomeranian samples found in the WISDOM PANEL database.





# WISDOM<sup>TM</sup> PANEL



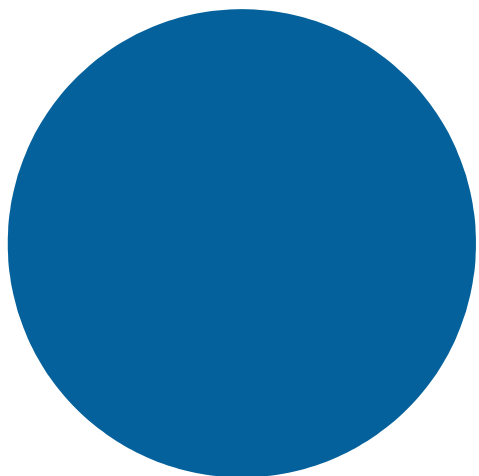
## STATEMENT OF AUTHENTICATION

Owner's Name: **Rod Allrich**

Dog's Name: **Milo**

Date: **December 8, 2018**

This certifies the authenticity of Milo's canine genetic background as determined, following the careful analysis of more than 1800 genetic markers, by the WISDOM PANEL<sup>TM</sup> Canine DNA Test. The purebred breed signature matches included in the analysis are those that were detected in the last three generations of Milo's ancestry using the Wisdom Health proprietary breed detection algorithm.



● 100% Pomeranian