## Report from the Kennel Club/ British Small Animal Veterinary Association Scientific Committee

Summary results of the Purebred Dog Health Survey for the Akita breed

Warning: The results of this survey and particularly the breed-specific analyses should be interpreted with caution. The overall response rate was only 24% with breed-specific response rates from 4.5% to 64.7%.

## The Akita breed

A total of 176 forms were sent out and 23 were returned, representing 87 live dogs. This breed had a 13.1 % response rate (23/176) and it represented 0.17% of all returns (23/13,741).

## **Mortality data**

A total of 28 deaths were reported and this represents 0.18 % of all deaths reported in the survey (28/15,881). The median age at death for the Akita breed was 9 years and 11 months (min = 4 months, max = 13 years and 8 months) and this was lower than the overall median of 11 years and 3 months (Figure 1). Table 1 shows the causes of death for the Akita breed. Age at death is presented for the most common causes of death (Figure 2).

Table 1. Causes of death by organ system/category for the Akita breed.

		No. of	% of	
Cause of death		deaths	deaths	Most common specific causes in descending order
1	Cancer	9	32.1	Type unspecified, lymphoma, carcinoma
2	Cardiac	4	14.3	Heart failure, cardiomegaly (enlarged heart)
3	Gastrointestinal	4	14.3	Gastroenteritis unspecified, gastric dilatation/volvulus (GDV)
4	Old age	3	10.7	Old age
5	Combinations	2	7.1	
6	Endocrine	2	7.1	Hypothyroidism, Cushings disease (hyperadrenocorticism)
7	Hepatic	2	7.1	Chronic liver failure, liver disease unspecified
8	Dermatologic	1	3.6	Skin disease unspecified
9	Infection	1	3.6	Viral infection
	Total	28	100.0	

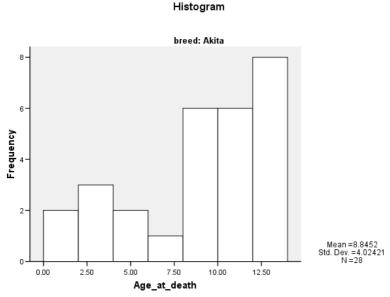


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 28 Akita deaths with age at death reported.

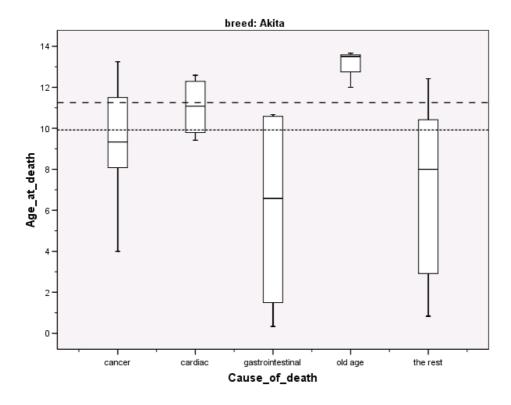


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in the Akita breed (N=28). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for the Akita breed. The solid line within each grey box represents the median age at death from the condition.

## Morbidity data

The median current age of the 87 live dogs with a reported age was 4 years and 6 months (min=2 months, max=13 years and 5 months, Figure 3). Health information was reported for 87 live dogs of which 54 (62%) were healthy and 33 (38%) had at least one reported health condition, resulting in a total of 50 reported conditions with a median of 1 condition/dog (min=1, max=4).

The median current age of all healthy dogs with a reported age (N=54) was 3 years and 7 months (min=2 months, max=11 years and 4 months). The distribution of gender and neuter status is shown in Table 2.

The median current age of all dogs with one or more disease conditions and a reported age (N=33) was 7 years and 2 months (min=1 year and 8 months, max=13 years and 5 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=48) was 4 years and 2 months (min= 6 months, max= 12 years and 2 months, Figure 4). Table 3 shows the disease conditions for the Akita breed. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for 87 the Akita breed with reported gender and neuter status.

_	Neuter	_	
Gender	Intact	Neutered	Totals
Female	35	18	53 (61%)
Male	29	5	34 (39%)
Totals	64 (74%)	23 (26%)	87 (100%)

Significantly more females were neutered (P=0.047).

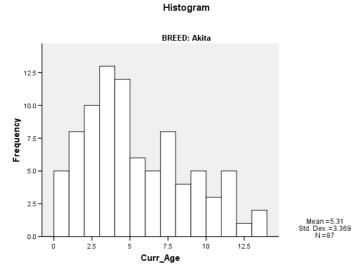


Figure 3. Histogram showing frequency of current age in years for the 87 live dogs in the Akita breed with age reported.

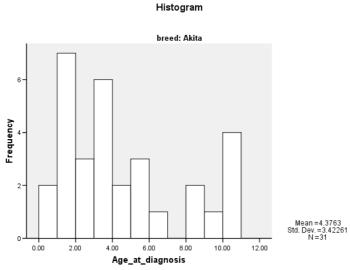


Figure 4. Histogram showing frequency of age at diagnosis for the 31 the Akita breed with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

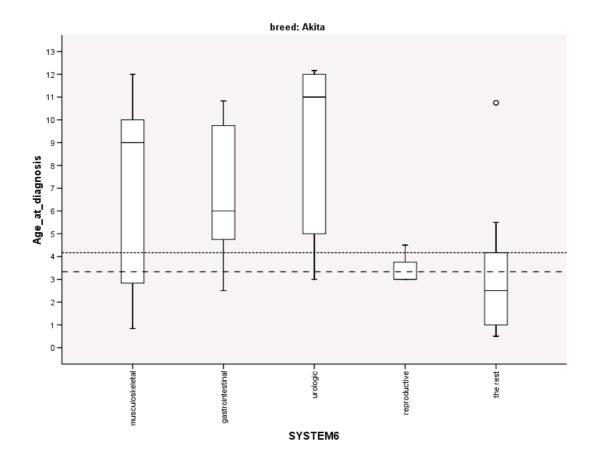


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for the Akita breed (N=48 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for the Akita breed. The solid line within each grey box represents the median age at diagnosis from the condition.

Table 3. Disease conditions by organ system/category for the Akita breed.

		All cor	nditions	Prevalence	
Disease condition		Ν	%	%	Most common specific conditions in descending order
1	Musculoskeletal	10	20.0	11.49	Patellar luxation, arthritis, cruciate ligament rupture
2	Gastrointestinal	8	16.0	9.20	Regurgitation, pancreatitis, intussusception, chronic colitis or large bowel diarrhea, GDV
3	Ocular	6	12.0	6.90	PHPV, epiphora, entropion, conjunctivitis, blocked tear duct, KCS
4	Urologic	6	12.0	6.90	Incontinence, cystitis (bladder infection)
5	Dermatologic	5	10.0	5.75	Dermatitis, sebaceous adenitis, pyotraumatic dermatitis (hot spot or wet eczema)
6	Reproductive	4	8.0	4.60	Pyometra, infertility, inability to breed, false pregnancy
7	Endocrine	3	6.0	3.45	Hypothyroidism
8	Unknown	2	4.0	2.30	Undiagnosed liver disease, undiagnosed illness
9	Aural	1	2.0	1.15	Otitis externa
10	Cancer	1	2.0	1.15	Type unspecified
11	Hepatic	1	2.0	1.15	Hepatitis
12	Immune mediated	1	2.0	1.15	Immune mediated skin disease
13	Neurologic	1	2.0	1.15	Seizures
14	Respiratory	1	2.0	1.15	Kennel cough
	Total	50	100.0	57.47	

Ocular: PHPV=Persistent hyperplastic primary vitreous, epiphora=overflow of tears or excessive tearing, entropion= inward turning eyelid