

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

Summary results of the
Purebred Dog Health Survey
for the Hungarian Puli 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 Hungarian Puli breed

A total of 98 forms were sent out and 30 were returned, representing 79 live dogs. This breed had a 30.6% response rate (30/98) and it represented 0.22% of all returns (30/13,741).

Mortality data

A total of 26 deaths were reported and this represents 0.16% of all deaths reported in the survey (26/15,881). The median age at death for the Hungarian Puli breed was 12 years and 5 months (min = 1 year, max = 17 years and 11 months) and this was higher than the overall median of 11 years and 3 months (Figure 1). Table 1 shows the causes of death for the Hungarian Puli 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 Hungarian Puli breed.

Cause of death	N	%	Most common specific causes in descending order
1 Cancer	9	34.6	Unspecified
2 Old age	7	26.9	Old age
3 Cardiac	5	19.2	Heart failure
4 Behaviour	2	7.7	Unspecified
5 Cerebral vascular	1	3.8	Stroke or cerebral vascular accident
6 Combinations	1	3.8	Multiple organ failure
7 Neurologic	1	3.8	Seizures
Total	26	100.0	

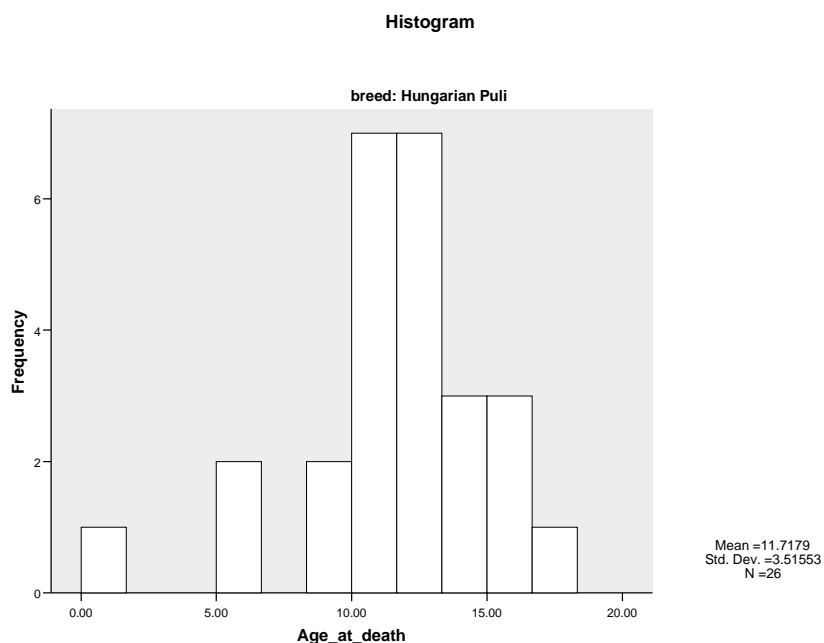


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 26 Hungarian Puli deaths with age at death reported.

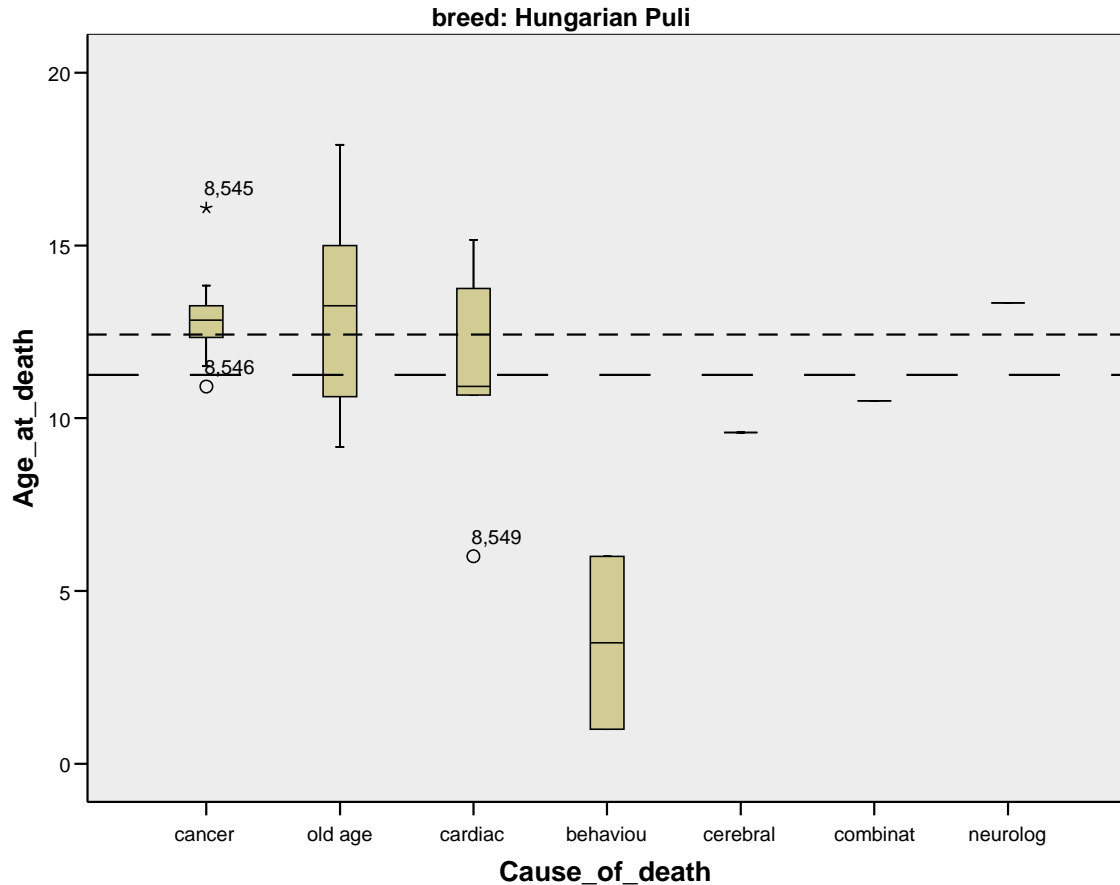


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in the Hungarian Puli breed (N=26). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for the Hungarian Puli breed. The solid line within each grey box represents the median age at death from the condition.

Morbidity data

The median current age of the 79 live dogs with a reported age was 6 years and 2 months (min=6 months, max=14 years and 9 months, Figure 3). Health information was reported for 79 live dogs of which 48 (61%) were healthy and 31 (39%) had at least one reported health condition, resulting in a total of 58 reported conditions with a median of 2 conditions/dog (min=1, max=5).

The median current age of all healthy dogs with a reported age (N=48) was 4 years and 11 months (min=6 months, max=14 years and 9 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=31) was 8 years (min=1 year and 4 months, max=14 years and 4 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=58) was 4 years and 9 months (min= 2 months, max= 14 years, Figure 4). Table 3 shows the disease conditions for the Hungarian Puli breed. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for the 79 Hungarian Puli breed with reported gender and neuter status.

Gender	Neuter status		Totals
	Intact	Neutered	
Female	24	20	44 (56%)
Male	28	7	35 (44%)
Totals	52 (66%)	27 (34%)	79 (100%)

Significantly more females were neutered (P=0.0178).

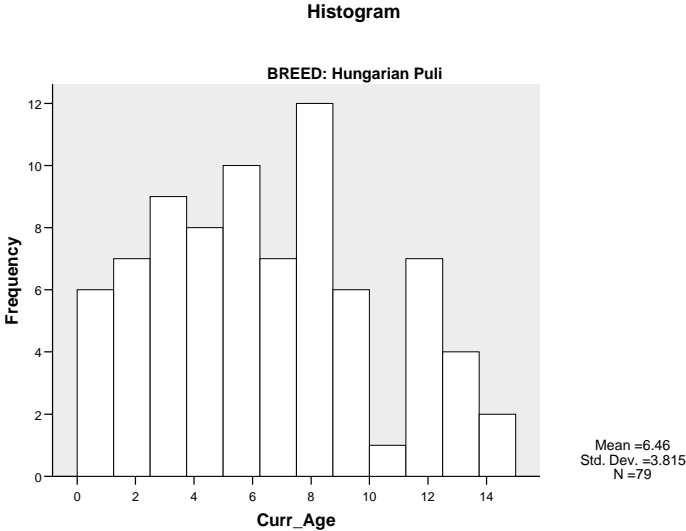


Figure 3. Histogram showing frequency of current age in years for the 79 live Hungarian Puli breed with age reported.

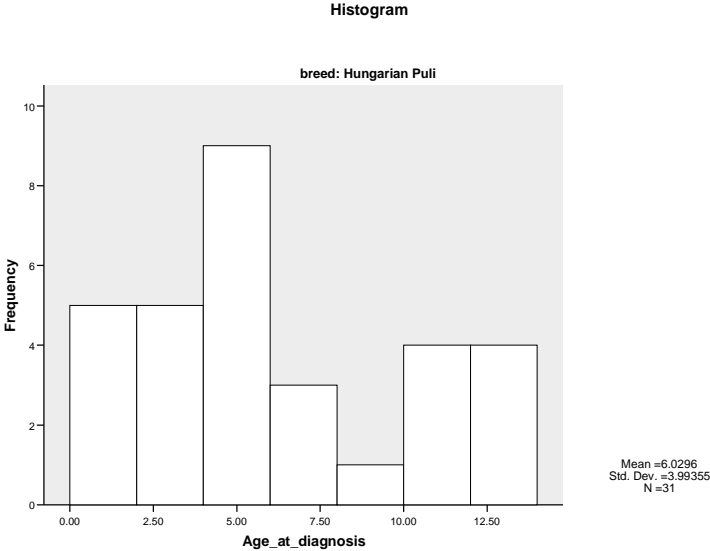


Figure 4. Histogram showing frequency of age at diagnosis for the 31 Hungarian Puli breed with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

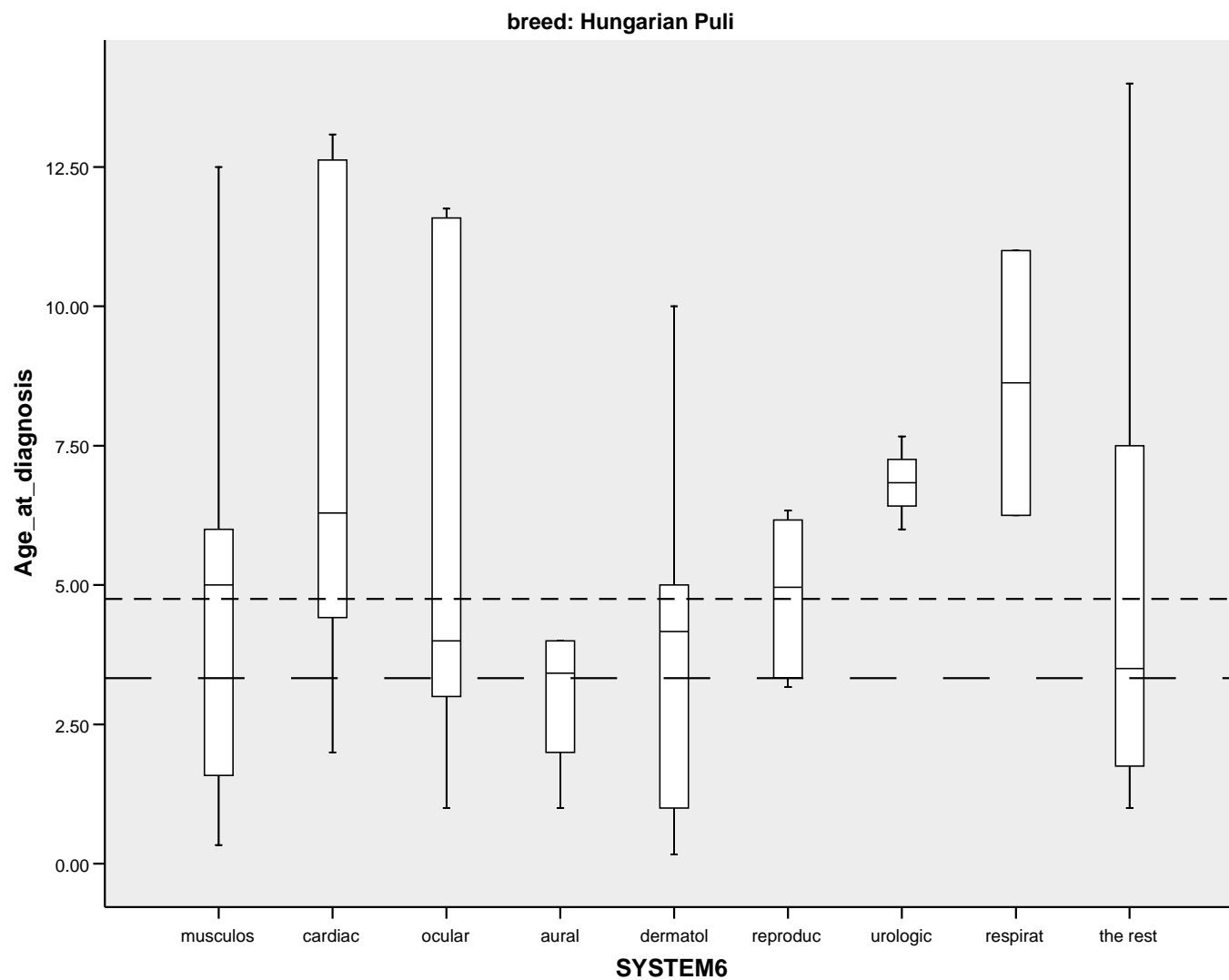


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for the Hungarian Puli breed (N=31 dogs with 58 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for the Hungarian Puli 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 Hungarian Puli breed.

Disease condition	All conditions		Most common specific conditions in descending order
	N	%	
1 Musculoskeletal	9	15.5	Arthritis (unspecified>forelimb; forepaw); CHD; fracture (hindlimb; hind paw)
2 Cardiac	8	13.8	Heart murmur (unspecified>grade 3)
3 Ocular	7	12.1	Cataracts; conjunctivitis; entropion
4 Aural	6	10.3	Otitis externa
5 Dermatologic	6	10.3	Dermatitis; alopecia; seborrhoea
6 Reproductive	6	10.3	Dystochia (uterine inertia>physical blockage); false pregnancy
7 Gastrointestinal	3	5.2	Colitis; constipation; pyloric stenosis
8 Urologic	3	5.2	Cystouroliths (struvite); cystitis
9 Immune mediated	2	3.4	Gluten-sensitive enteropathy; food hypersensitivity
10 Respiratory	2	3.4	Coughing; rhinitis
11 Behaviour	1	1.7	Unspecified
12 Benign neoplasia	1	1.7	Lipoma
13 Cancer	1	1.7	Type unspecified
14 Cerebrovascular	1	1.7	Stroke or cerebral vascular accident
15 Endocrine	1	1.7	Unspecified
16 Unknown	1	1.7	Undiagnosed illness
Total	58	100.0	