

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

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

A total of 247 forms were sent out and 37 were returned, representing 124 live dogs. This breed had a 15.0% response rate (37/247) and it represented 0.27% of all returns (37/13,741).

### Mortality data

A total of 42 deaths were reported and this represents 0.26% of all deaths reported in the survey (42/15,881). The median age at death for the Maltese breed was 12 years and 3 months (min = 1 year and 1 month, max = 19 years and 2 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 Maltese 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 Maltese breed.

| Cause of death      | N  | %     | Most common specific causes in descending order      |
|---------------------|----|-------|--|
| 1 Cancer            | 8  | 19.0  | Brain tumour; unspecified                            |
| 2 Old age           | 8  | 19.0  | Old age  |
| 3 Cardiac           | 7  | 16.7  | Heart attack; congenital heart defect; heart failure |
| 4 Urologic          | 4  | 9.5   | Chronic kidney failure                               |
| 5 Cerebral vascular | 3  | 7.1   | Stroke or cerebral vascular accident                 |
| 6 Combinations      | 3  | 7.1   |  |
| 7 Neurologic        | 3  | 7.1   | Seizures; spinal paralysis                           |
| 8 Hepatic           | 2  | 4.8   | Chronic liver failure                                |
| 9 Trauma            | 2  | 4.8   | Road traffic accident; unspecified                   |
| 10 Gastrointestinal | 1  | 2.4   | Twisted bowel  |
| 11 Other            | 1  | 2.4   | Uncodeable   |
| Total               | 42 | 100.0 |  |

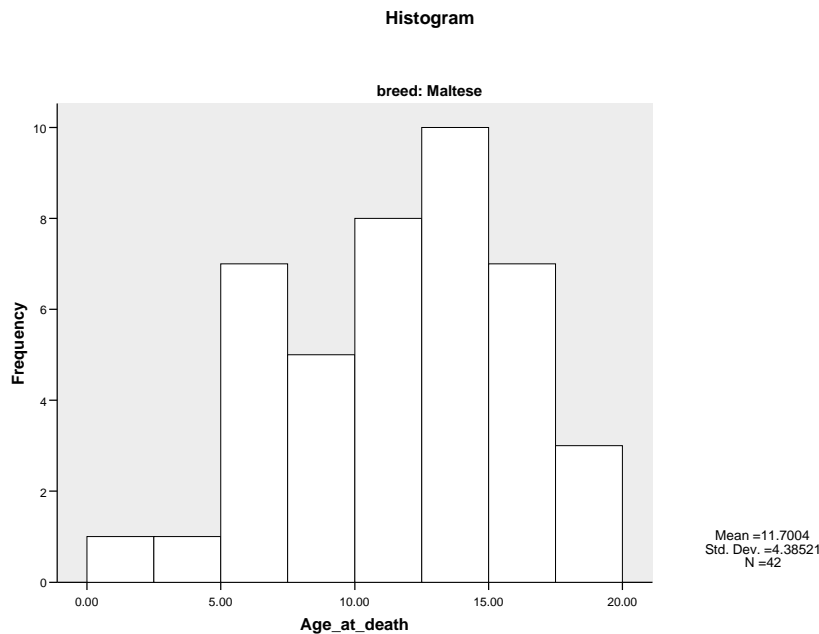


Figure 1. Histogram showing the frequency (as number of dogs) of age at death (in years) for the 42 Maltese deaths with age at death reported.

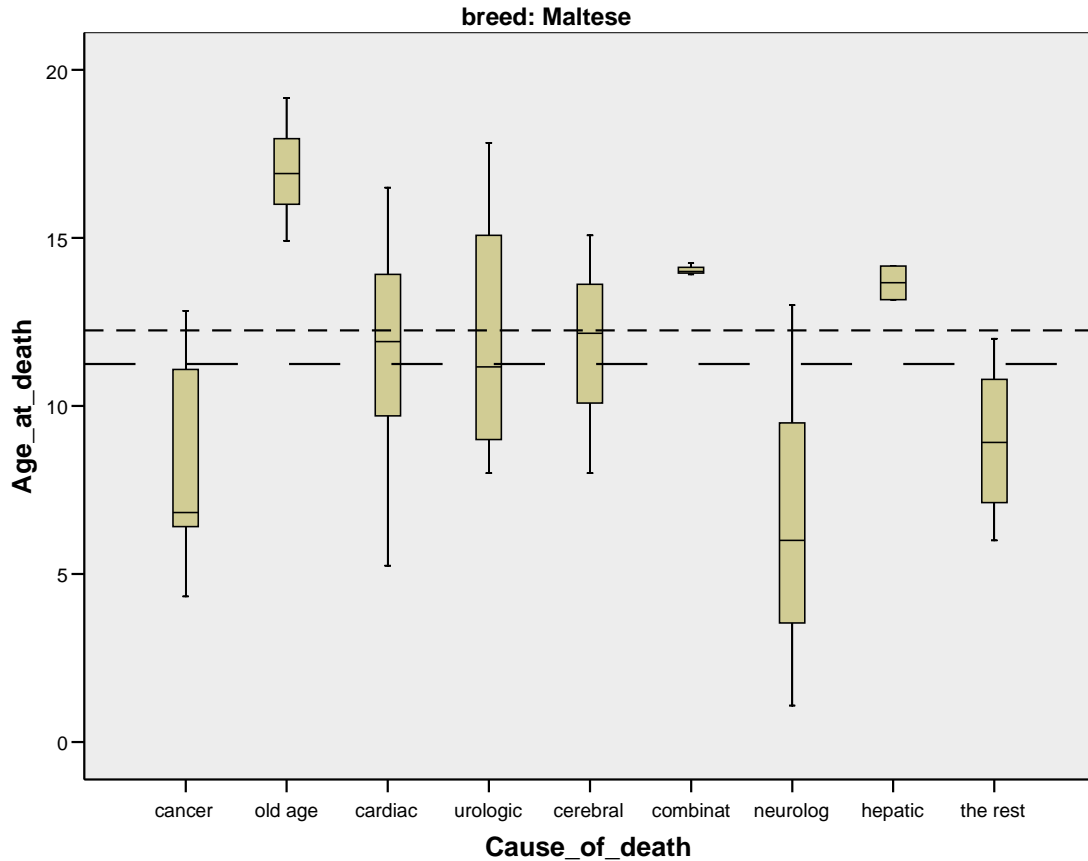


Figure 2. Box and whisker plot of age at death in years for the most common causes of death in the Maltese breed (N=42). The dashed line (---) is the overall median age at death for all dogs in the survey and the dotted line (----) is the overall median age of death for the Maltese breed. The solid line within each grey box represents the median age at death from the condition.

### Morbidity data

The median current age of the 124 live dogs with a reported age was 4 years and 7 months (min=6 months, max=16 years and 6 months, Figure 3). Health information was reported for 124 live dogs of which 69 (56%) were healthy and 55 (44%) had at least one reported health condition, resulting in a total of 88 reported conditions with a median of 1 condition/dog (min=1, max=7).

The median current age of all healthy dogs with a reported age (N=69) was 3 years and 6 months (min=6 months, max=16 years and 6 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=51) was 6 years and 1 month (min=8 months, max=15 years and 2 months). The median age at diagnosis for all disease occurrences with a reported age at diagnosis (N=83) was 3 years and 4 months (min= 2 months, max= 14 years and 9 months, Figure 4). Table 3 shows the disease conditions for the Maltese breed. Age at diagnosis is presented for the most common disease conditions (Figure 5).

Table 2. Distribution of gender and neuter status for the 124 Maltese breed with reported gender and neuter status.

| Gender | Neuter status |          | Totals     |
|--------|---------------|----------|------------|
|        | Intact        | Neutered |            |
| Female | 57            | 22       | 79 (64%)   |
| Male   | 34            | 11       | 45 (36%)   |
| Totals | 91 (73%)      | 33 (27%) | 124 (100%) |

There was no association between gender and neuter status (P=0.6801).

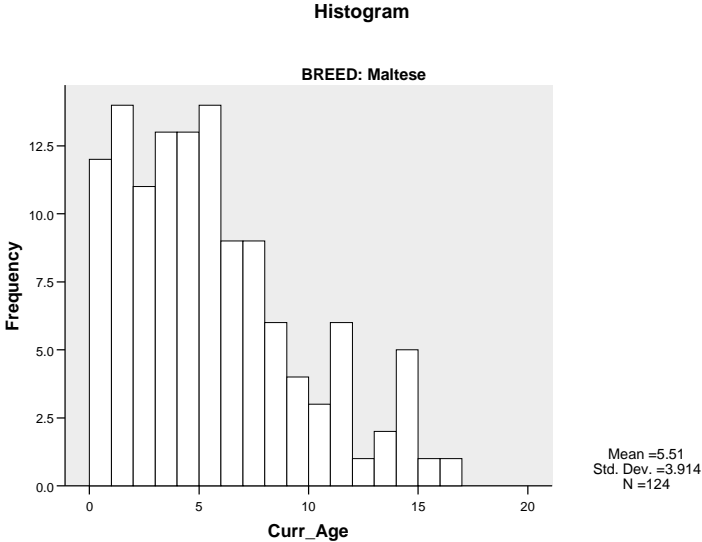


Figure 3. Histogram showing frequency of current age in years for the 124 live Maltese breed with age reported.

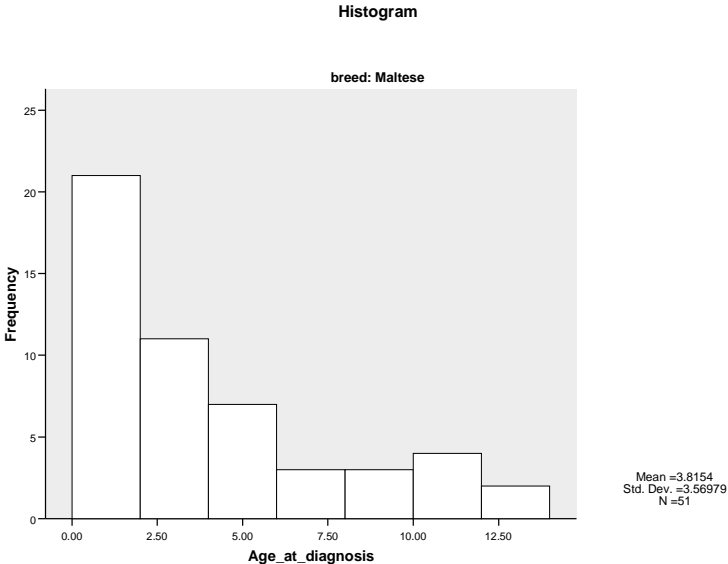


Figure 4. Histogram showing frequency of age at diagnosis for the 51 Maltese breed with one or more disease conditions, using the youngest age at which a disease condition was first reported for those dogs with more than one disease condition or episode.

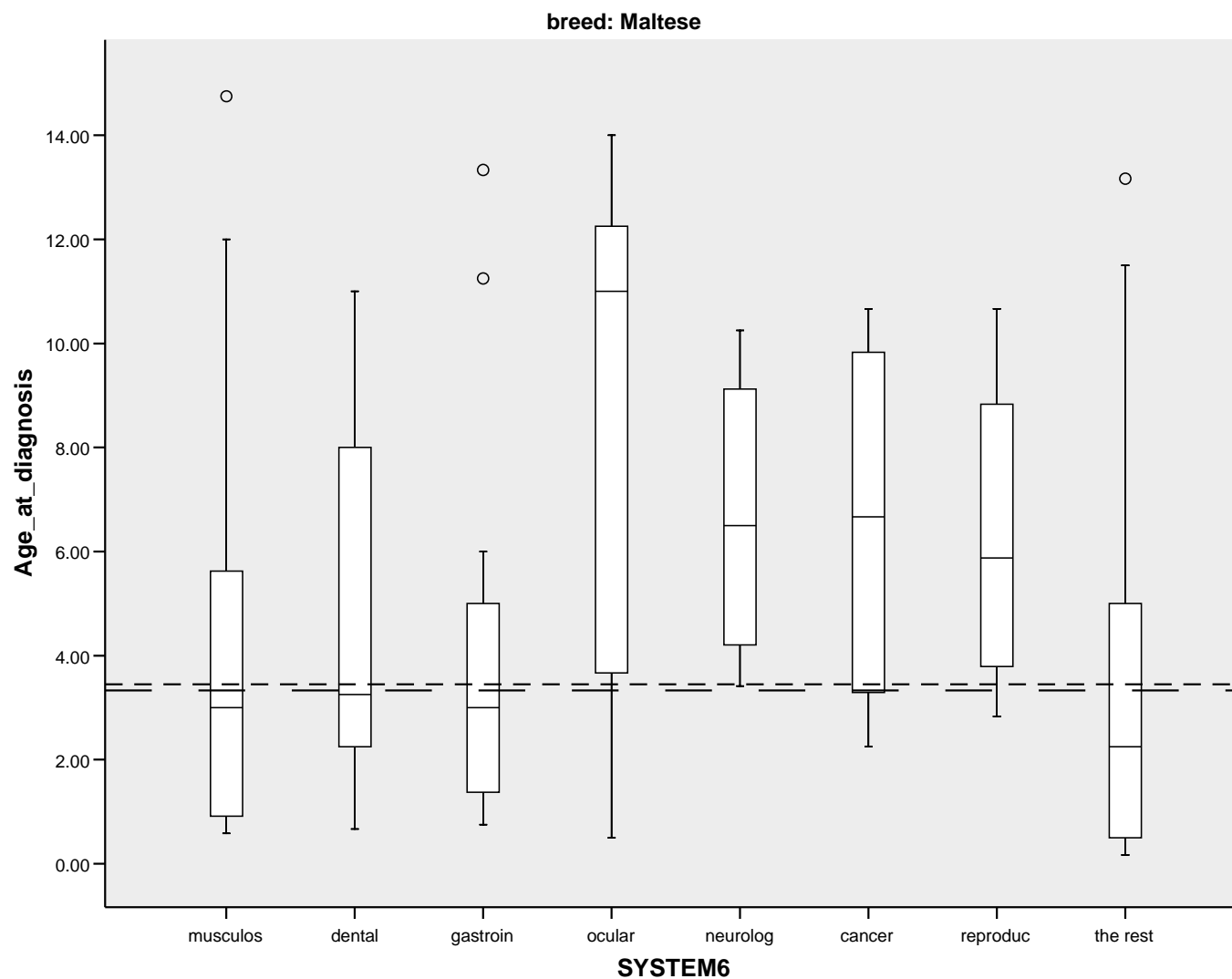


Figure 5. Box and whisker plot of age at diagnosis in years for the most common disease conditions in descending order for the Maltese breed (N=51 dogs with 83 conditions with age reported). The dashed line (---) is the overall median age at diagnosis for all dogs in the survey and the dotted line (----) is the overall median age at diagnosis for the Maltese 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 Maltese breed.

| Disease condition  | All conditions |       | Most common specific conditions in descending order                                       |
|--------------------|----------------|-------|---|
|                    | N              | %     |   |
| 1 Musculoskeletal  | 12             | 13.6  | Patellar luxation; arthritis (hips); avascular necrosis FH; spondylitis; prognathism      |
| 2 Dental           | 11             | 12.5  | Dental disease; retained puppy teeth  |
| 3 Gastrointestinal | 11             | 12.5  | Colitis; constipation; diarrhoea; E. coli infection; IBD; pancreatitis; weight loss       |
| 4 Ocular           | 9              | 10.2  | Cataracts; epiphora; blocked tear duct; conjunctivitis; eye infection; PRA; corneal ulcer |
| 5 Dermatologic     | 7              | 8.0   | Dermatitis; alopecia; fading nose pigment; deformed claws                                 |
| 6 Neurologic       | 5              | 5.7   | Seizures; granulomatous meningoencephalitis (GME)   |
| 7 Cancer           | 4              | 4.5   | Unspecified; mast cell tumour (MCT); squamous cell carcinoma (SCC)                        |
| 8 Reproductive     | 4              | 4.5   | Dystochia (uterine inertia=physical blockage); pyometra; enlarged prostate                |
| 9 Respiratory      | 4              | 4.5   | Other (unspecified)   |
| 10 Other           | 4              | 4.5   | Uncodeable  |
| 11 Hepatic         | 3              | 3.4   | Cholangiohepatitis; enlarged liver  |
| 12 Immune mediated | 3              | 3.4   | Food allergy; other allergies (unspecified)   |
| 13 Unknown         | 3              | 3.4   | Undiagnosed illness   |
| 14 Anal gland      | 2              | 2.3   | Anal sacculitis   |
| 15 Aural           | 2              | 2.3   | Otitis externa; ear mites   |
| 16 Trauma          | 2              | 2.3   | Ocular (eyeball); urologic (bladder)  |
| 17 Cardiac         | 1              | 1.1   | Heart murmur (unspecified)  |
| 18 Endocrine       | 1              | 1.1   | Hypothyroidism  |
| Total              | 88             | 100.0 |   |

avascular necrosis FH=femoral head or Legg Calve Perthes disease