**Table 1** Regular expressions used for the search in the database was

|  |  |
| --- | --- |
| Reg. expression  | lymphoma|doxo|vincr|cyclop|lymphade|(lsa\s)|ln+((ln|lymph).{0,15}(?=enlarg|rais|[\+]|big|huge))|((?<=enla|rais|big[\s]|huge).{0,15}(ln|lymph)) |

**Table 2** Types of actions/treatment performed per group

|  |  |  |  |
| --- | --- | --- | --- |
| Owners’ decision per group | **Subgroup** | **Number of the dogs in the subgroup** | **% a** |
| ML-S (410 dogs) | Euthanasia without treatment | 79 | 19.27 |
| Monotherapy corticosteroids | 256 | 62.44 |
| Other  | 41 | 10.00 |
| Chemotherapy | 10 | 2.44 |
| No treatment given  | 24 | 5.85 |
| ML-C (264 dogs) | Euthanasia without treatment | 12 | 4.55 |
| Monotherapy corticosteroids | 123 | 46.59 |
| Chemotherapy | 100 | 37.88 |
| Other | 18 | 6.82 |
| No treatment given  | 8 | 3.03 |
| No data available | 3 | 1.14 |

aPercentage of the whole population

ML-S: suspected cases of multicentric lymphoma

ML-C: confirmed cases of multicentric lymphoma

**Table 3:** Results from a univariable logistic regression model assessing the association between age and a range of categorical variables with the pursuit of diagnosis (a), treatment with corticosteroids (b), chemotherapy (c), euthanasia (d) and other treatment (e).

A. Pursuit of diagnosis

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **Category** | **β b** | **SE c** | **OR d (CI e)** | ***P*** |
| **Categorical factors** |  |
| Neutering status | Entire | -0.72 | 0.15 | **-** | **-** |
|  | Neutered | 0.39 | 0.18 | 1.48 (1.05 - 2.11) | **0.03** |
| Gender | Female | -0.47 | 0.12 |  |  |
|  | Male | 0.06 | 0.16 | 1.06 (0.77 - 1.46) | 0.91 |
| Interaction between gender and neutering status | Male:Neutered | 0.05 | 0.37 | 1.05 (0.51 - 2.16) | 0.69 |
|  | 2nd | 0.64 | 0.26 | 1.90 (1.14 -3 .17) | **0.06** |
|  | 3rd | 0.13 | 0.26 | 1.13 (0.68 -1.90) | 0.82 |
|  | 4th | 0.77 | 0.26 | 2.16 (1.31 - 3.57) | **0.003** |
| Insurance | Not insured | 0.77 |  | - | - |
| 0.11 |
|  | Insured | 0.79 | 0.17 | 2.20 (1.59 - 3.05) | **1\*10-7** |
| **Continuous factors** |  |
| Age (years) | Age - linear | 0.30 | 0.13 | 1.35 (1.05 -1.72) | **0.02** |
| Age- quadratic | 0.02 | 0.01 | 0.98 (0.97 - 0.99) | **0.001** |

a Standard error

b Odds ratio

c 95% Confidence interval

B. Corticosteroids

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **Category** | **β b** | **SE c** | **OR d (CI e)** | ***P*** |
| **Categorical factors** |  |
| Neutering status | Entire | 0.37 | 0.14 | - | - |
|  | Neutered | -0.1 |  | 0.87(0.62 -1.22) | 0.43 |
| Gender | Female | 0.23 | 0.12 | - | - |
|  | Male | 0.07 | 0.16 | 1.08 (0.79 - 1.47) | 0.64 |
| Interaction between gender and neutering status | Male:Neutered | 0.17 | 0.35 | 1.19 (0.59 - 2.37) | 0.63 |
| Index of multiple deprivation (quartiles) | Intercept | 0.28 |  | - | - |
| 0.19 |
|  | 2nd | -0.06 | 0.24 | 0.91 (0.56 -1.48) | 0.71 |
|  | 3rd | 0.23 | 0.25 | 1.26 (0.78 - 2.04) | 0.35 |
|  | 4th | -0.15 | 0.24 | 0.86 (0.54 - 1.39) | 0.54 |
| Insurance |  | 0.44 |  |  |  |
| Not insured | 0.10 |
|  | Insured | -0.42 | 0.16 | 0.66 (0.48 - 0.9) | **0.01** |
| Diagnosis confirmed |  | 0.51 |  |  |  |
| No | 0.10 |
|  | Yes | -0.60 | 0.16 | 0.55 (0.40 - 0.76) | **2\*10-4** |
| **Continuous factors** |  |
| Age (years) | Age - linear | 0.00 | 0.02 | 1.00 (0.95 - 1.05) | 0. 97 |

a Standard error

b Odds ratio

c 95% Confidence interval

C. Chemotherapy

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **Category** | **β b** | **SE c** | **OR d (CI e)** | ***P*** |
| **Categorical factors** |  |
| Neutering status | Entire | -1.85 | 0.21 | - | - |
|  | Neutered | 0.32 | 0.24 | 1.38 (0.86 - 2.22) | **0.18** |
| Gender | Female | -1.61 | 0.16 | - | - |
|  | Male | -0.01 | 0.21 | 0.99 (0.66 - 1.50) | 0.97 |
| Interaction between gender and neutering status | Male:Neutered | 0.21 | 0.49 | 1.24 (0.48 - 3.23) | 0.66 |
| Index of multiple deprivation (IMD quartiles) |  | -1.91 |  | - | - |
| Intercept | 0.29 |
|  | 2nd | 0.28 | 0.32 | 1.32 (0.66 - 2.64) | 0.43 |
|  | 3rd | 0.13 | 0.32 | 1.14 (0.57 - 2.29) | 0.72 |
|  | 4th | 0.61 | 0.34 | 1.83 (0.95 - 3.55) | **0.07** |
| Insurance |  | -2.20 |  |  |  |
| Not insured | 0.17 |
|  | Insured | 1.19 | 0.22 | 3.28 (2.13 - 5.04) | **4\*10-4** |
| Diagnosis confirmed |  | -3.65 |  |  |  |
| No | 0.32 |
|  | Yes | 3.18 | 0.35 | 24.03 (12.22-47.27) | **0.005** |
| **Continuous factors** |  |
| Age (years) | Age - linear | 0.43 | 0.19 | 1.53 (1.06 - 2.21) | **0.02** |
|  | Age- quadratic | -0.03 | 0.01 | 0.97 (0.95 -0.99) | **1\*10-4** |

a Standard error

b Odds ratio

c 95% Confidence interval

D. Euthanasia

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **Category** | **β b** | **SE c** | **OR d (CI e)** | ***P*** |
| **Categorical factors** |  |
| Neutering status | Entire | -1.44 | 0.18 | - | - |
|  | Neutered | -0.69 | 0.24 | 0.50 (0.31 - 0.80) | **6\*10-4** |
| Gender | Female | -1.91 | 0.17 | - | - |
|  | Male | 0.05 | 0.23 | 1.05 (0.67 - 1.66) | 0.83 |
| Interaction between gender and neutering status | Male:Neutered | -0.36 | 0.49 | 0.70 (0.27 - 1.81) | 0.46 |
| Index of multiple deprivation (IMD quartiles) |  | -1.32 |  | - | - |
| Intercept | 0.23 |
| 2nd | -0.55 | 0.32 | 0.58 (0.31 - 1.09) | **0.08** |
|  | 3rd | -0.77 | 0.33 | 0.46 (0.24 - 0.89) | **0.01** |
|  | 4th | -0.81 | 0.33 | 0.45 (0.23 - 0.86) | **0.01** |
| Insurance | Not insured | -1.85 |  | - | - |
| 0.15 |
|  | Insured | -0.07 | 0.24 | 0.93 (0.58 - 1.48) | 0.76 |
| Diagnosis diagnosis | No | -1.43 | 0.13 | - | - |
|  Confirmed | Yes | -1.76 | 0.35 | 0.17 (0.09 - 0.34) | **1\*10-5** |
| **Continuous factors** |  |
| Age (years) | Age - linear | -1.12 | 0.36 | 0.33 (0.16 - 0.67) | **1\*10-4** |
| Age- quadratic | 0.13 | 0.04 | 1.14 (1.05 - 1.24) | **3\*10-4** |
|  | Age- cubic | 0.00 | 0.00 | 1.00 (0.99 - 1.00) | **0.01** |

a Standard error

b Odds ratio

c 95% Confidence interval

E. Other treatments

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **Category** | **β** | **SE b** | **OR c (CI d)** | ***P*** |
| **Categorical factors** |  |
| Neutering status | Entire | -2.66 | 0.29 | - | - |
|  | Neutered | 0.40 | 0.33 | 1.50(0.79 - 2.85) | 0.22 |
| Gender | Female | -2.14 | 0.19 | - | - |
|  | Male | -0.45 | 0.28 | 0.64(0.37 - 1.11) | **0.11** |
| Interaction between gender and neutering status | Male:Neutered | -0.98 | 0.70 | 0.37(0.09 - 1.48) | **0.16** |
| Index of multiple deprivation (IMD quartiles) | Intercept | -2.68 | 0.39 | - | - |
| 2nd | 0.47 | 0.47 | 1.60 (0.64 - 3.99) | 0.32 |
|  | 3rd | 0.03 | 0.49 | 1.03 (0.39 - 2.71) | 0.94 |
|  | 4th | 0.55 | 0.46 | 1.73 (0.71 - 4.25) | 0.23 |
| Insurance | Not insured | -2.32 |  | - | - |
| 0.18 |
|  | Insured | -0.11 | 0.29 | 0.90 (0.51 - 1.58) | 0.71 |
| Diagnosis confirmed | No | -2.24 | 0.17 | - | - |
|  | Yes | -0.34 | 0.30 | 0.71 (0.40 - 1.28) | 0.26 |
| **Continuous factors** |  |
| Age (years) | Age - linear | -0.07 | 0.04 | 1.08 (0.99 - 1.18) | **0.10** |

Standard error

b Odds ratio

c 95% Confidence interval