

C. Pegram, D. Brodbelt, D. Chuch, N. Kennedy, D. G. O'Neill

Epidemiological facts alone don't change animal welfare; a limiting factor is often dissemination strategies.

VetCompass™ aims to package epidemiological findings in to palatable formats and share these widely.

## THE FINAL PRODUCT

**Osteosarcoma (bone cancer) in dogs**

**STUDY SUMMARY**  
Osteosarcoma is an aggressive and painful bone cancer. This study included 1,756 laboratory-confirmed osteosarcoma cases in dogs and a comparator population of 905,211 dogs under primary veterinary care in the VetCompass programme during 2016.

**Location of osteosarcoma lesions**

Location	Percentage of Cases
APPENDICULAR (Limb and pelvis)	~65%
AXIAL (Head, spine, sternum and ribs)	19.5% (Skull), 14.4% (Femur), 12.9% (Humerus)
EXTRASKELETAL (Non-bony tissue)	~15%

**How do breeds differ in risk of osteosarcoma?**

**PREDISPOSED BREEDS**

Breed	Relative breed risk compared to crossbreeds
Rottweiler	13.3 x
Rhodesian Ridgeback	11.3 x
Great Dane	10.0 x
Mastiff	9.1 x
German Pointer	8.8 x

**PROTECTED BREEDS**

Breed	Relative breed risk compared to crossbreeds
Jack Russell Terrier	2.6 x
Border Terrier	2.9 x
Bluetick Frise	3.3 x
French Bulldog	3.3 x
Cavalier King Charles Spaniel	4.8 x

**Other risk factors for osteosarcoma**

Risk Factor	Relative risk of osteosarcoma
Overweight	1.2 x
Bodyweight	5.9 x
Skull length	7.3 x
Large	15.8 x
Medium	1.9 x
Long	2.8 x

**CONCLUSIONS:**

- Larger breeds have greater risk of osteosarcoma than smaller breeds. These results can inform breed health reforms, especially in predisposed breeds such as the Rottweiler and Rhodesian Ridgeback.
- Osteosarcoma can affect any dog breed. However, owners of high-risk breeds should be especially alert for signs of osteosarcoma. These include lameness and painful bony swelling. Owners should contact their veterinarian if concerned.

**CLICK TO READ**  
Edmunds et al. (2021) 'Dog breeds and body conformations with predispositions to osteosarcoma in the UK: a case-control study' Canine Medicine and Genetics  
RVC VetCompass <https://www.rvc.ac.uk/vetcompass> carries out welfare research based on anonymised clinical information shared from over 30% of UK veterinary practices. We are very grateful to the owners and veterinary professionals who contribute to VetCompass research.

## THE KEY INGREDIENTS

- TITLE
- STUDY SUMMARY
- RELEVANT IMAGE
- KEY FINDINGS
- GRAPHICAL DATA



## KEY AIM

To widen the reach of VetCompass information even further, we aimed to produce owner-friendly infographics based on published papers. These are shared on the VetCompass website, social media platforms and are freely available to download.

Other than infographics, dissemination strategies for these findings and recommendations often include:

1. General and veterinary-specific press releases
2. Radio and other media interviews
3. Social media posts
4. Onward sharing by partners such as the Kennel Club or British Veterinary Association

## THE REPRODUCIBILITY - the same infographic format is used for each VetCompass publication

**Border Terriers**  
HEALTH STUDY RESULTS  
Dogs in study: 2,841  
Average lifespan: 12.7 years  
Average adult bodyweight: 10.9kg (Males), 9.7kg (Females)

**What are the most common disorders diagnosed in dogs in the UK?**  
STUDY SUMMARY  
This study reported all diagnoses recorded in a single year (2016) in the veterinary clinical records of a random sample from 905,211 UK dogs in the VetCompass Programme.

**Lymphoma cancer in cats**  
HEALTH STUDY RESULTS  
What is lymphoma? Lymphoma is a cancer of lymphocytes, a type of white blood cell, and is one of the most common cancers in cats.

**Papers open access to reduce information sharing barriers.**

**CONCLUSIONS:**

- Border Terriers are a relatively long-lived breed. Owners should carefully consider the diet and dental care of their Border Terrier to prevent and resolve dental issues which can cause pain and infection.
- Dental problems are especially common in Border Terriers.
- Owners of dogs with diagnosed dental issues should be alert to diseases with increased risk according to their dog's age and sex.
- The risk of dogs with diagnosed dental issues increases with age. A dog should consider only responsible breeders, including asking for a pedigree.
- Owners should check their dog's mouth and teeth regularly for signs of disease and consider their dog's weight carefully. Preventative care should always be followed with a balanced diet.

**CONCLUSIONS:**

- Owners of older and male cats should be alert to the possibility of lymphoma.
- Increased diagnosis in insured cats suggests strong welfare gains for insured cats.

**CLICK TO READ**  
Edmunds et al. (2021) 'Border Terriers under primary veterinary care in England: demography and disorders' Canine Medicine and Genetics  
Pegram et al. (2021) 'Prevalence of commonly diagnosed disorders in UK dogs under primary veterinary care: results and applications.' O'Neill DG, James H, Brodbelt DC, Church DB and Pegram C (2021). BMC Veterinary Research.  
Edmunds et al. (2020) 'Incidence and risk factors for feline lymphoma in UK primary-care practice.' Economu L, Stell A, O'Neill DG, Schofield I, Stevens K and Brodbelt DB (2020). Journal of Small Animal Practice.

## References:

1. Dog breeds and body conformations with predispositions to osteosarcoma in the UK: a case-control study. Edmunds G, Smalley MJ, Beck S, Errington J, Gould S, Winter H, Brodbelt DC and O'Neill DG (2021). Canine Medicine and Genetics.
2. Border Terriers under primary veterinary care in England: demography and disorders. O'Neill DG, Darwent EC, Church DB and Brodbelt DC (2017). Canine Medicine and Genetics.
3. Prevalence of commonly diagnosed disorders in UK dogs under primary veterinary care: results and applications. O'Neill DG, James H, Brodbelt DC, Church DB and Pegram C (2021). BMC Veterinary Research.
4. Incidence and risk factors for feline lymphoma in UK primary-care practice. Economu L, Stell A, O'Neill DG, Schofield I, Stevens K and Brodbelt DB (2020). Journal of Small Animal Practice.



Miss Camilla Pegram  
cpegam@rvc.ac.uk