# The Oncology Service THE UNIVERSITY of EDINBURGH The Royal (Dick) School of Veterinary Studies

# Welcome to the Oncology Service at The Riddell-Swan Veterinary Cancer Centre

At the Riddell-Swan Veterinary Cancer Centre, we work with owners and their vets to diagnose and treat pets with cancer.

Our main goal is to design a bespoke therapy to suit our patients and their family. For this, we work closely with other specialist services in our hospital.

Advancements in veterinary oncology have led to specialist surgery, radiation therapy, conventional chemotherapy, targeted therapy, metronomic therapy and immunotherapy becoming increasingly available for our pets. As oncologists, we are here to guide our clients and tailor individual treatment plans for our patients as there are many tumour types each requiring different approaches. Our goal is to help our clients with the decision making process, allowing them to make the right choice for their pet and family, balancing outcomes and quality of life for our patients.

# The Oncology Service

The oncology team is comprised of medical oncologists, a radiation oncologist, oncology residents and interns, specialised oncology nurses and a HPC registered radiation therapist.

During the first visit to the service, we aim to fully inform the owner about the diagnosis, additional diagnostic tests if necessary, treatment options and prognosis of a pet's particular cancer, enabling them to make informed decisions. As oncologists, we play a key role in developing the field of oncology, improving treatments and outcomes for our patients. We collaborate closely with The Roslin Institute, which is a world leader in research. We also perform studies or clinical trials at the Hospital for Small Animals. If our patients are eligible for participating in a study, this may be offered during your visit. Participation is always voluntary and we respect our clients' wishes.

### State-of-the-art equipment

Our advanced equipment and techniques such as CT, MRI, LINAC, nuclear medicine and interventional radiology allow us to diagnose tumours, to perform staging to define the extent of disease within the body and to help us with treatment planning.



### About cancer in pets

Cancer is the uncontrolled growth of abnormal cells on or in the body. Cancer is relatively common in pets but not all cancers are the same. Some tumours are removed by surgery but many types require long term control with specialised cancer care. Cutting edge treatments offered for cancer in humans are becoming increasingly available for pets, including radiation therapy, chemotherapy and advanced surgical techniques.

## **Cancer Specific Treatments**

### Radiation therapy

Radiation therapy uses high energy ionizing radiation to induce DNA damage within cancer cells, ultimately leading to cell death. Treatment planning software and a Varian Linear accelerator with a multi-leaf collimator (the main tool for beam shaping) allow us to shape the RT beams and deliver the highest dose to the tumour, minimising radiation to the surrounding normal tissues. Depending on the tumour type and the aim of treatment, either definitive or palliative radiation can be planned. Definitive radiation consists of daily treatments (given from Monday to Friday) for 3-4 weeks in a row. This treatment option aims to provide a long term outcome, minimising the chance of long term irreversible radiation—induced toxicity. Palliative RT typically involves 2-10 treatments administered either daily or once weekly. The aim of this treatment is to improve the quality of life in pets with advanced disease.

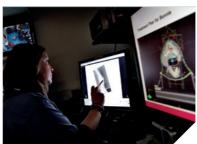
### Chemotherapy

Chemotherapy is a systemic treatment, meaning that unlike surgery and radiation therapy, which target one particular area, chemotherapy affects the body as a whole. It kills rapidly dividing cells, thereby killing or slowing down the growth of tumour cells. The goal of chemotherapy is to try and improve control of a tumour (by delaying time to tumour regrowth or metastasis)

whilst maintaining an excellent quality of life. Chemotherapy in dogs and cats is very different to chemotherapy in people. While the same drugs are often used for similar cancers, the dosages are aimed at minimising side effects. Most chemotherapy protocols yield a less than 5% chance of significant toxicity requiring hospitalisation. Chemotherapy is the sole treatment for certain tumours (such as lymphoma) however often used as an adjuvant treatment (in combination with surgery and/or radiation).







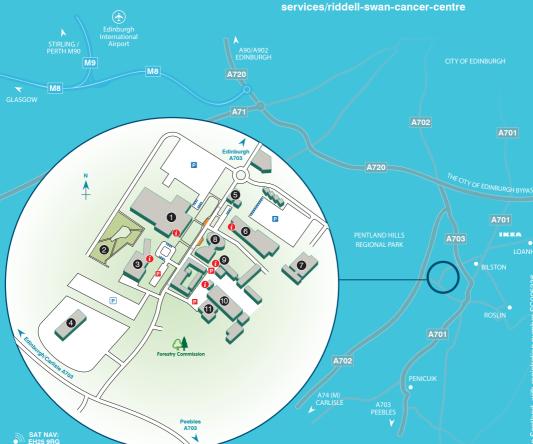


At the Riddell-Swan Veterinary Cancer Centre we pride ourselves in excellent communication with our clients and incorporate their wishes and point of view in the individually tailored treatment plans. We develop a strong relationship with our patients and are focused on their quality of life at all times.

### The Riddell-Swan Veterinary Cancer Centre

The Royal (Dick) School of Veterinary Studies The University of Edinburgh Easter Bush Campus Midlothian EH25 9RG

telephone 0131 650 7650 fax 0131 650 7652 www.ed.ac.uk/vet/services/small-animals/



- The Hospital for Small Animals and Riddell-Swan Veterinary Cancer Centre

- Disabled parking
  Main entrance & reception
- P Parking

The Power of Three: The unique offering of Excellence in Clinical, Teaching and Research make up the three pillars of The Royal (Dick) School of Veterinary Studies.