

## C-ONC.2 Veterinary Oncology 2: Cancer biology and medical therapy for cancer

**Credits:** 10 (100 hours)

**Provider:** Veterinary Postgraduate Unit – School of Veterinary Science

### RCVS Content Covered

Click [here](#) to view the module content as outlined by the RCVS.

### Aim of the Module

The overall aims of this module are:

1. To develop the depth and breadth of the candidate's knowledge and understanding of cancer biology, and the knowledge, understanding, and expertise in clinical decision making and reasoning skills required by advanced veterinary practitioners in the medical management of veterinary cancer patients.
2. To facilitate reflection of their own standards of practice and strategies for continuous improvement in the future.

### Learning Outcomes

By the end of this module successful candidates will be able to:

1. Apply clinical reasoning skills and evidence-based medicine in the diagnostic approach and management of cancers of haemopoietic system in veterinary patients.
2. Critically evaluate the physiological, pharmacological, and health and safety principles that underpin the use of chemotherapy in the management of veterinary cancer patients.
3. Critically evaluate cancer biology, cancer genetics and susceptibility and the mechanisms by which cancer arises and spreads.
4. Critically appraise the literature relevant to clinical cases in the topics covered, and how the literature can be used to inform practice.

### Module Structure

The syllabus will be divided into three study units:

#### Study Unit 1: Cancer Biology

This study unit will cover the basis of oncogenesis and the hallmarks of cancer, tumour microenvironment, cancer genetics and susceptibility, the causes of cancer and cancer immunology.

#### Study Unit 2: Medical Therapies for Cancer

This study unit will cover the biological basis of chemotherapy and small molecule inhibitors, basic chemotherapy pharmacology, chemotherapy drug classes and modes of action, side

effects and their management, safe handling of drugs and methods of administration, environmental contamination, and setting up a safe chemotherapy environment.

### **Study Unit 3: Diagnosis and Management of Haematopoietic Tumours**

This study unit will cover the management of canine and feline lymphoma, and the medical management of mast cell tumours and histiocytic diseases.

### **Assessment Strategy**

- **2 x 1500-word reflective case reports (60%)**  
On a topic related to the relevant study units, students are required to reflect on their own practice, using evidence-based veterinary medicine to inform their reflection. Reflective case reports are written following the format of published case reports in the veterinary literature. The case report component of the assessment must be passed for successful completion of the module, and is non-compensatory with other assessments, however there is compensation between case reports. Case reports are also submitted to a discussion board for critique and discussion by/with peers. A proportion of marks for this assessment are also allocated to this discussion element.
- **1 x written journal critique (not more than 500 words) and group discussion (10%)**  
Hosted by a staff member online synchronously using MS Teams. 2-4 students critique the same paper, and then discuss their critiques and any variations with the group, and the tutor and the students then hold a discussion of all papers. These are assessed on the submitted critique as well as the discussion.
- **1 x 1-hour open book examination (30%)**  
Based around clinical scenarios/cases, relevant to the module study units.
- **1 x case log – 20 cases (pass/fail)**  
The case log assessment is designed to assist the candidate in developing a solid foundation for everyday practice and demonstrate the necessary knowledge and skill base in the clinical setting.

Assessments are submitted sequentially with feedback being given between assessments to aid in the development of writing skills.

PLEASE NOTE: It is your responsibility to ensure that you have access to sufficient appropriate cases where you were the primary decision maker to produce adequate material for the module. This may not be possible with some internship positions. You must also be aware of any limitations of your facilities that may make the accumulation of appropriate cases difficult or impossible.