Course Unit Descriptor

Study Programme: Veterinary medicine

Course Unit Title: Efficacy and safety of drugs in clinical veterinary practice

Course Unit Code: 3DVM2I27

Name of Lecturer(s): Full professor Stojanović M. Dragica, Assitant professor Zorana Kovačević

Type and Level of Studies: doctoral studies

Course Status (compulsory/elective): elective

Semester (winter/summer): summer

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims:

The aim of the course is to train students to monitor the efficacy and safety of medications for indications of target species and categories of animals, provided with instruction for application of the drug. The purpose of this course is to train students to recognize the profile of adverse reactions in certain groups of drugs, and to treat and to register new adverse reactions which are not provided in instruction and that may be incurred due to impaired pharmacokinetics, pharmacodynamics or hypersensitivity certain types or categories of animals on given drug. Another important aim is monitoring the therapeutic efficacy of drugs applied at the recommended therapeutic doses in clinical conditions. This pharmacodynamic parameter is monitored based on changes in the value of appropriate biochemical, microbiological and parasitological parameters of blood, urine, feces and other secretions and excretions of various species and organ systems, particularly the antimicrobial agents, antiparasital and anti-inflammatory drugs in the treatment of septic shock and endotoxemia , applied for different indications.

Learning Outcomes:

Upon passing the exam, students will be trained to conduct rational pharmacotherapy, apply effective and safe drugs and conduct pharmacovigilance.

Syllabus:

Theory

Checking the antibacterial efficiency of older registered representative of antibiotics and chemotherapeutics in efficiency newly registered drugs from the same chemical group in clinical trials to target animals and in the indications provided in vitro. Determining compatibility of application of newly registered antimicrobial agents using several times higher than the recommended therapeutic dose, monitoring of the changes in blood biochemistry and urinalysis, clinical signs of possible toxicity, production results and consumption of food in target species and categories of animals. Checking the efficiency of older registered representative antiparasitic drugs in efficiency of newly registered ektocids and endektocids and less sensitive to endo- and ectoparasitic infections in clinical trials and in vitro. Determining compatibility - security applications, especially the newly registered ektocids and endektocids in target animal species, according to the indications laid down by the manufacturer. Examinations compatibility of used anti-inflammatory drugs with potentially sensitive species monitoring local gastric tolerability, blood parameters and changes in the blood, as well as systemic and local anti-inflammatory efficacy. Testing the effectiveness of new drugs and their dosage regimen (dose size, frequency and duration of therapy) in preventing and treating septicemia and septic shock.

Practice

Monitoring the efficacy and safety of the medicinal product by a medication guide for the recommended indications, target species and categories of animals in the post-registration period. Identify the adverse reactions profiles of certain groups of drugs and their treatment, as well as to observe new adverse reactions that are not foreseen by the instructions that may occur.

Required Reading:

1. Veterinary pharmacology and therapeutics, Adams, H. R., 8th edition. Iowa State University Press/Ames, 2001.

2. The Complete Drug Reference, 34th edition, Martinadale, Sean C. Sweetman, Grayslake, USA, 2007.

3. The Merck Veterinary Manual, 9th edition, Cynthia Kahn, Merck and Co., Inc. Rahway, N. J., USA, 2005.

4. Antimicrobial Therapy in Veterinary medicine, Giguere, S., Prescott, J. F., Baggot, J.D., Walker, R. D., Dowling, P., 4th edition, Iowa State University press/Amess, 2007.

5. Antimicrobal resistance, Clarce R.C., Vet Clin Small Anim, 2006.

Weekly Contact Hours:	**Lectures: 3**	**Practical work: 3**

Teaching Methods:

Oral presentation with video beam presentation. Term paper.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Active class participation		written exam	30
Practical work		oral exam	70
Preliminary exam(s)		…….	
Seminar(s)			

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.