

# VETERINARSKA ONKOLOGIJA V VETERINARSKI MEDICINI IN NJEN POMEN ZA TRANSLACIJSKO MEDICINO

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Veterinarska onkologija se ukvarja s preprečevanjem, ugotavljanjem in zdravljenjem rakastih obolenj, ki predstavljajo najpogostejsi vzrok pogina ali humane usmrtnitve živali. Pogosto je ob napredovanju bolezni namen stroke izboljšati kakovost življenja in podaljšati preživetje. Predvsem za uspešnost zdravljenja je izjemnega pomena medsebojno sodelovanje strokovnjakov s področja bazičnih ved, predkliničnih in različnih kliničnih področij veterinarske medicine, ki bistveno prispevajo h kompleksnemu pristopu zdravljenja in oskrbe vsakega individualnega bolnika. Ker se relativno mlada stroka intenzivno razvija, je za vsakega onkologa izjemnega pomena sprotno spremljanje novih doganj in pristopov. Tako v humani, kot še posebej v veterinarski onkologiji, je bolnike z napredovalo boleznijo, za katero ni znanega uspešnega standardnega zdravljenja, smiselno vključevati v klinične študije, ki so v veterinarski onkologiji pomemben del translacijske medicine.

Veterinarska onkologija je bila že od samega začetka močno vpeta v raziskave na področju humane onkologije, saj živali predstavljajo pomemben model za raziskave potencialnih etioloških dejavnikov, kot posledice delitve življenjskega prostora, nastanek in razvoj bolezni ter načinov zdravljenja.

Na VF UL se je naše strokovno in raziskovalno delo na področju veterinarske onkologije dokončno uveljavilo z letom 2007 z uvedbo izbirnega predmeta Klinična onkologija v veterinarski medicini na dodiplomske študije, ki ga je do danes absolviralo preko 100 študentov. Na Kliniki za male živali se vsakoletno izobražuje in praktično usposablja več podiplomskih študentov različnih naravoslovnih in tehničnih smeri (študij Biomedicine - Metode zdravljenja onkoloških obolenj v veterinarski medicini in Specializacija na nacionalni ravni – veterinarska medicina psov in mačk).

Poleg razvoja strokovnega dela pa že več kot 20 let uspešno sodelujemo z Onkološkim inštitutom v Ljubljani, kar se kaže v številnih znanstvenih objavah in vodilni vlogi na področju uspešne translacije elektrokemo in elektrogenske terapije.

## **Veterinary oncology: Its place in veterinary and translational medicine**

Veterinary oncology covers prevention, diagnosis and treatment of cancers, which are the most common cause of death or euthanasia in animals. The purpose of the treatment, especially in cases of an advanced disease, is often to improve the quality of life and prolong survival. To improve the outcomes of the treatment, it is of an outmost importance for the experts from different fields of basic and preclinical sciences to collaborate with veterinary

clinicians and hence contribute to the success of the complex treatment and care for each individual patient.

As a relatively young profession, veterinary oncology is developing intensively; it is, therefore, extremely important that oncologists continually follow recent advances in management of oncologic patients. In human, and even more so in veterinary oncology, it is very important that patients with advanced disease, for which no known effective standard treatment currently exist, are possibly enrolled in the clinical studies.

Veterinary oncology has always been an important part of the research in the field of human oncology, as animals are considered an excellent model in studies on potential etiological factors, as they share the environment with humans, the emergence and development of diseases and treatments.

At VF UL veterinary oncology was officially established in 2007 with the introduction of Clinical Oncology in veterinary medicine as an elective part of the curriculum at the undergraduate level. Over 100 students have since attended the course. Small Animal Clinic Oncology department also hosts several postgraduate students annually(postgraduate program in Biomedicine - Methods of treatment of oncological diseases in veterinary medicine - and specialization program at the national level – Canine and feline veterinary medicine).

In addition to the development of our clinical activities in the field of veterinary oncology, we have been collaborating with the Institute of Oncology in Ljubljana for more than 20 years. The fruitful research collaboration has resulted in numerous scientific publications and leadership in successful translation of electrochemotherapy and electrogene therapy.