



## Newsletter No. 84

### 6<sup>th</sup> Veterinary Workshop on Electroporation-based Treatments

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6<sup>th</sup> Veterinary workshop on electroporation-based treatments took place on 25<sup>th</sup> and 26<sup>th</sup> of April in 2023 in Ljubljana at the Veterinary faculty of the University of Ljubljana. It was organized by the Institute of Oncology Ljubljana and Veterinary faculty University of Ljubljana. It was co-financed by Ministry of Higher Education, Science and Innovation and the European union – NextGenerationEU (The Recovery and Resilience Plan). There were 7 participants of the workshop, four on-site and three on-line. The participant came from Italy, Croatia, Poland, New Zealand, United Kingdom, and Slovenia. During the first day of the workshop, lecturer prof. dr. Damijan Miklavčič (Faculty of Electrical Engineering, University of Ljubljana, Slovenia) presented the basics of electroporation of cells and tissues. Followed by topic on Tumor biology and preclinical electrochemotherapy and its use in human clinic practice presented by prof. dr. Gregor Serša (Institute of Oncology Ljubljana). The use of electrochemotherapy in veterinary oncology was introduced by prof. dr. Nataša Tozon (Veterinary faculty, University of Ljubljana) with the lecture on experience in dogs and cats and assoc. prof. dr. Joško Račnik (Veterinary faculty, University of Ljubljana) with the lecture on experience in exotic animals. The lectures were followed by practical work, where two patients, both with mast cell tumor, were treated. First was the dog with mast cell tumor on distant part of hind leg, treated by the combination of electrochemotherapy (cisplatin intratumorally) and gene electrotransfer of plasmid encoding canine IL-12. The first treatment was followed by a repetitive treatment of oral mast cell tumor in Maltese dog, again with the combination of electrochemotherapy (with bleomycin) and gene electrotransfer of IL-12.

The second day of the workshop started with the lecture of Filippo Torrigiani presenting the results the electrochemotherapy treatment of soft tissue sarcoma in dogs (Department of Veterinary Sciences, University of Pisa, Italy). Next, dr. Nina Milevoj (Veterinary faculty, University of Ljubljana) presented an on-going clinical study on spontaneous tumors in dogs using electrochemotherapy in combination with gene electrotransfer of IL-12.

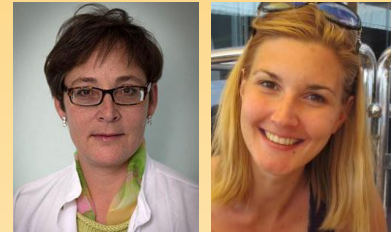
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**9<sup>th</sup> School on Pulsed Electric Field Applications in Food and Biotechnology**  
Vienna, Austria 4 – 8 September, 2023



International Society  
for Electroporation-Based  
Technologies and Treatments **ISEBTT**



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Then, assist. prof. Ana Nemeč Dip. AVDC, Dip. EVDC presented the work on Treating oral tumors in dogs with electrochemotherapy and gene electrotransfer followed by the lecture of assist. Masa Vilfan on the research of biomarkers in clinical study of treating mast cell tumor in dogs by electrochemotherapy and IL-12 gene electrotransfer. The second day of the lectures were concluded by a lecture of dr. Ursa Lamprecht Tratar (Institute of Oncology Ljubljana) who presented preclinical and clinical use of gene electrotransfer and by lecture from dr. Joe Impellizeri, DACVIM MRCVS, a veterinary oncology diplomate from New York, USA. He presented the use of electrochemotherapy on nasal tumors.

After that, the practical work followed where the participants could observe the follow up visits of patients from an ongoing clinical study. There were four patients, three dogs with mast cell tumors treated with the combination of electrochemotherapy and IL-12 gene electrotransfer and one cat with squamous cell carcinoma treated by electrochemotherapy. After the practical work, the workshop ended with concluding remarks of prof. Tozon and a vibrant discussion about the practical use of electrochemotherapy.



The School's on-site participants.

## Forthcoming events

### ISEBTT Webinar Series – 23 May, 2023

on-line, May 23, 2023 at 2 p.m. CEST (Central Europe Summer Time)

<https://www.electroporation.net/webinar-may-23-2023/>

### 17<sup>th</sup> interdisciplinary postgraduate course and international workshop Electroporation Based Technologies and Treatments (EBTT)

Ljubljana, November 12 – 18, 2023 (on-site and on-line event)

<https://2023.ebtt.org>

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Lectures on the use of ECT in exotic animals.



Follow up visit 3 months after the ECT + IL-12 GET procedure.

Newsletter is issued in electronic form only by The International Society for Electroporation-Based Technologies and Treatments (ISEBTT).

ISSN: 2463-9850

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