



## Newsletter No. 73

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

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5<sup>th</sup> Veterinary workshop on electroporation-based treatments took place on 12<sup>th</sup> and 13<sup>th</sup> of May in 2022 in Ljubljana at the Veterinary faculty of the University of Ljubljana. It was organized by the Institute of Oncology Ljubljana, University of Ljubljana and SiSAVA (Slovenian Small Animal Veterinary Association). The workshop was co-financed by ISEBTT (International Society for Electroporation-Based Technologies and Treatments). There were 7 participants of the workshop, five on-site and two on-line. The participant came from Italy, Croatia, Hungary, Taiwan and Slovenia. During the first day of the workshop, lecturer prof. dr. Damijan Miklavčič (University of Ljubljana, Faculty of Electrical Engineering, Slovenia) presented the basics of electroporation of cells and tissues. Tumor biology and preclinical electrochemotherapy was presented by prof. dr. Maja Čemažar (Institute of Oncology Ljubljana) and its use in human clinic practice by prof. dr. Gregor Serša (Institute of Oncology Ljubljana) and assist. dr. Mihajlo Đokić (University Medical Center 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. These lectures were followed by a guest lecture by dr. Joe Impellizeri, DACVIM MRCVS, a veterinary oncology diplomate from New York, USA. He presented the use of electrochemotherapy on inoperable soft tissue sarcomas. The lectures were followed by practical work, where two patients were treated. First was the dog with mast cell tumour 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 cat with squamous cell carcinoma on the nasal planum and was treated by electrochemotherapy with intravenous application of bleomycin.

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4<sup>th</sup> World Congress on Electroporation  
& Pulsed Electric Fields in Biology, Medicine  
Food and Environmental Technologies  
Copenhagen - Denmark  
9 - 13 October 2022

Photo: Wonderful Copenhagen



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The second day of the workshop started with the lecture of dr. Urša Lampreht Tratar (Institute of Oncology Ljubljana) who presented preclinical and clinical use of gene electrotransfer. Next, dr. Nina Milevoj (Veterinary faculty, University of Ljubljana) presented an on-going clinical study on spontaneous tumours in dogs using electrochemotherapy in combination with gene electrotransfer of IL-12. The lecture was followed by Filippo Torrigiani presenting the results the electrochemotherapy treatment of soft tissue sarcoma in dogs (University of Pisa, Department of Veterinary Sciences, Italy). The last lecture of the day was presented by prof. dr. Nataša Tozon about the communication between the owner and the veterinarian considering electrochemotherapy and gene electrotransfer. After that, the practical work followed where the participants could observe the follow up visits of patients from an ongoing clinical study. There were three patients, all dogs with mast cell two to three months after the combination of electrochemotherapy and IL-12 gene electrotransfer. After the practical work, the workshop ended with concluding remarks of prof. Tozon and a vibrant discussion about the practical use of electrochemotherapy in veterinary medicine.

The participants showed great interest in the electrochemotherapy and the results of this treatment. Moreover, according to the survey which was organized after the workshop, participants were satisfied with the lectures and the practical work. The majority of the participant stated that more than 50 % of the information heard in the workshop were new to them. Some of the participants also suggested additional workshop for more advanced users of electrochemotherapy in veterinary oncology. Altogether the 5th Veterinary workshop on electroporation-based treatments was a successful event.

Unrelated note: The ISEBTT has created a new Social Media Committee to promote the society in social media. The goal is to communicate and disseminate ISEBTT activities and related news, scientific content and events. This is a great step to increase society's exposure and promote interaction with other scientific societies. Committee members are listed to the right, along with LinkedIn and Twitter links you are invited to follow. If you have any suggestions or ideas, please contact us at: [socialmedia@electroporation.net](mailto:socialmedia@electroporation.net).

## Forthcoming events

### One-day PFA school: meet the electroporation experts

Barcelona, August 25, 2022

<https://tinyurl.com/1day-PFA-school>

### 4<sup>th</sup> World Congress on Electroporation and Pulsed Electric Fields in Biology, Medicine, and Food & Environmental Technologies

Copenhagen, October 9 – 13, 2022

<https://wc2022.electroporation.net>

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

Ljubljana, November 14 – 20, 2021 (*on-site* and *on-line* event)

<http://www.ebtt.org>

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*Hands-on patient treatment  
during practical work part of  
the programme.*

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