Electrochemotherapy: Second international users’ meeting

Bologna, Italy, March 1-2, 2013.

In 1997, the ‘World Congress for Electricity and Magnetism in Biology and Medicine’ took place in Bologna, Italy. We were a limited number of people working with electroporation-based drug and gene delivery; in fact, we assembled at a small family pizzeria in the evening for dinner. A daughter of the pizzeria owner came out to get help with her English homework. We could all fit around one table.

Returning for the Second User’s Meeting on Electrochemotherapy in Bologna in 2013 was a revisitation of this lovely city – but at the same time a completely different experience. Although the mood in 1997 was one of great ambition and hope for the future, I do not think that anyone had actually foreseen over 350 participants from 21 countries, discussing electrochemotherapy as a standard of care for treatment-resistant cutaneous metastases, as well as electrochemotherapy for liver metastases, brain metastases, bone metastases, pancreatic tumors… the list continues.

The program was extensive, condensed, and with parallel sessions to accommodate the many talks. There was a lively discussion during the all breaks, as the participants were discussing cases, how to proceed with clinical trials and investigations, and how to perceive the future role of electrochemotherapy.

At this point, electrochemotherapy is being used in over 100 cancer centers around Europe, the Standard Operating Procedures published in 2006 are widely adopted, and have formed an excellent foundation for the introduction of the therapy. Several interesting next steps are now unfolding; first of all, electrochemotherapy is still expanding in use, and we do not yet have a final verdict on how the technology is to be positioned in the clinic.
From the meeting it was clear that many felt that electrochemotherapy should be offered earlier on in the course of treatment of patients, and also in combination with other treatments. Secondly, electrochemotherapy for tumors in internal organs is being pursued, and novel electrode systems are being tested and employed. Related fields, such as how to image treatment areas in internal organs by e.g. MRI, PET, and ultrasound were also discussed. Finally electroporation for gene therapy is in clinical trials, and it was felt that this may be another, and rapidly expanding, use of the technology.

The meeting was sponsored and organised by the IGEA company (Carpi, Italy), and was as such not a scientific meeting, but a convening of users of the technology. At the same time, it was a striking example of how a European Framework Program intended to help European small and medium-sized enterprises to develop technology, is very successful indeed.

The feeling at the end of this meeting was that this was a very fine example of a technology developed and furthered out of a European Framework Program collaboration, now benefiting patients all around Europe, and in further development to new and interesting applications also within our COST Action.