

## ECTORS and ESOT Congresses 2019, Copenhagen, Denmark. J.M. Sierra-Parraga

The European Cell Therapy and Organ Regeneration Section (ECTORS) meeting is a subdivision from the European Society of Organ Transplantation (ESOT) in which a more fundamental research in the field of transplantation is presented. This congress, held the days 14-15 of September, was a perfect platform to network with researchers working in similar subjects in a closer way. During the ECTORS meeting, researchers working on regenerative medicine came from around the world to present their data on stem cells, organoids and machine perfusion applied to the field of transplantation. During these two days I had my two presentations, as shown in the pictures below, entitled “Effect of normothermic machine perfusion on mesenchymal stromal cells” and “Delivery of mesenchymal stromal cell therapy via renal intra-arterial infusion”. I had the opportunity to discuss the ins and outs of my work with other



researchers after the presentations and during the congress itself, which led to future collaborations. Overall, the most covered subjects during these two days were the latest developments of mesenchymal stromal cells (MSC) and the products of their metabolism such as secreted cytokines or vesicles as regenerative mediators, the *in vitro* culture of organoids of different organs (kidney, liver, pancreas, among other) as the future of disease modelling and drug testing and the use of *ex vivo* machine perfusion as a platform to resuscitate and repair organs prior to transplantation in possible combination with other drug or cell therapy treatments.

From the 15 until the 18 of September I attended the ESOT congress held also at Copenhagen. This time I had the chance to learn about a more clinical approach to the research I am performing as this congress was more focus on clinical data coming from animal and human studies. The main focuses of this congress were:

The allocation of organs for transplantation and the repair of organs prior to transplantation: the latest developments in machine perfusion were presented ranging from the introduction of new devices to protocols to resuscitate and treat organs in a pump. In a similar way, xenotransplantation had its time during the congress.

Individualized medicine: The use of huge amount of data from individualized “-omic” studies resulting in specialized treatment for each patient and how the handling of these data promote AI and machine learning protocols which will support doctors and the creation of ambitious projects such as the human cell atlas to map all the cells from every organ in the human body.

Platforms towards better research in transplantation: The use of organoids from human origin was discussed and presented as the way to go to model diseases *in vitro*, which will then allow for safer, more reliable results when testing newly discovered drugs and therapies.

During this congress the Rotterdam Transplant Group earned again the Stroger Together award, for the institution with a higher number of submitted abstracts.

