Berlin Symposium on Xenotransplantation

Program and Abstracts

October 30 and 31, 2013, Isola di San Servolo, Venice, Italy

Transregio Collaborative Research Centre 127 of the German Research Society (DFG) and the 16th Minisymposium Xenotransplantation of the German Working Group Xenotransplantation (DAX)
**Wednesday, October 30, 2013**

2.00 p.m.
Get-together

2.30 p.m.
Opening
Discordant cellular and organ transplantation from bench to bedside
Bruno Reichart, Speaker of the German transregio collaborative research centre xenotransplantation, Munich, Germany

2.40 p.m.
Comment about the Ethics Meeting of the Academy of Catholic Theology (Z1, October 4-6, 2013, Munich, Germany)
Bruno Reichart, Speaker of the German transregio collaborative research centre xenotransplantation, Munich, Germany

3.00 p.m.
A1
Modulation of immune responses to porcine xenoantigen by targeting stimulatory and inhibitory signalling pathways
Reinhard Schwinzer, Medizinische Hochschule Hannover, Hannover, Germany

3.20 p.m.
A2
Thymosin β4 signalling and its potential for therapeutic neovascularization
Rabea Hinkel, Ludwig Maximillians University, Munich, Germany

3.40 p.m.
A3
Early islet xenograft dysfunction in humanized mice
Soeren Reinke, Technische Universität Dresden/MTZ, Dresden, Germany

4.00 p.m.
A4
Xenospecific regulatory T cells generated on porcine B cells are capable in controlling xenogeneic immune responses in humanized mice
Elmar Jaeckel, Medizinische Hochschule Hannover, Hannover, Germany

4.20-4.40 p.m.
Coffee Break

4.40 p.m.
Z2
Gene expression profiling of porcine cells and tissues by microarray analysis
Antonia W. Godehardt, Paul Ehrlich Institute, Division of Medical Biotechnology, Langen, Germany
5.00 p.m.
Z2
Microbiological characterization of Göttingen minipigs
Joachim Denner, Robert Koch Institute, Berlin, Germany

5.20 p.m.
Special lecture
Experts, policy-makers and citizens: Actor constellations and xenotransplantation policies in international comparison
Erich Griessler, Institute for Advanced Studies, Department of Sociology, Vienna, Austria

5.40 p.m.
Poster presentation

6.30 p.m.
Invited presentations

Functional evaluation of hTM, CD46 and HLA-E transgenes in vitro and in pig leg xenoperfusion experiments
Robert Rieben, University of Bern Department of Clinical Research, Bern, Switzerland

The complement system and the principles of xeno-reactivity: Hurdles and challenges to overcome the humoral immune response in xenotransplantation
Wilhelm Schwaeble, University of Leicester, United Kingdom

7.30-8.00 p.m.
Break

8.00 p.m.
Dinner and poster awards

Thursday, October 31, 2013

9.00 a.m.
C1
Comparative analysis of human and porcine islets of Langerhans in situ and upon xenotransplantation
Christian Cohrs, Paul Langerhans Institut Dresden, Germany

9.20 a.m.
C3
Xenotransplantation of transgenic porcine islets expressing immunomodulatory molecules
Jochen Seissler, Ludwig Maximillians University, Munich, Germany

9.40 a.m.
C4
Transplanting allo-islets without immunosuppression
Barbara Ludwig, University Hospital Carl Gustav Carus, Dresden, Germany
10.00 a.m.
Special lecture
Bio artificial pancreas - The immune barrier and oxygen deficiency
Zohar Gendler, Beta-O2 Technologies Ltd., Israel

10.20 a.m.
C6
Analysis and reduction of ischemia/reperfusion injury in a porcine model of kidney transplantation
Wolf-Rüdiger Ramackers, Medizinische Hochschule Hannover, Hannover, Germany

Coagulation and endothelial cell activation in xenotransplantation
Wolf-Rüdiger Ramackers, Medizinische Hochschule Hannover, Hannover, Germany

10.40 a.m.
C7
Reduction of xeno-antigens in porcine pulmonary heart valves by decellularization and glycolytic enzymatic treatment
Andres Hilfiker, Medizinische Hochschule Hannover, Hannover, Germany

11.00 a.m.
C8
Ex-vivo testing and preclinical heterotopic thoracic cardiac xenotransplantation of multi-transgeneic organs.
Jan-Michael Abicht, Ludwig Maximillians University, Munich, Germany

11.20-12.00 a.m.
Lunch intermezzo

12.00 a.m.
B1
Production of multi-transgenic pigs tailored for xenotransplantation by using zinc-finger nuclease and Sleeping Beauty transposons
Björn Petersen, Institute of Farm Animal Genetics, Friedrich Loeffler Institute, Mariensee, Germany

12.20 a.m.
B2
Effective combination of xenoprotective transgenes
Konrad Fischer, Technische Universität München, Freising, Germany

12.40 a.m.
B3
Evaluating the functionality of xeno-relevant transgenes
Andrea Bähr, Ludwig Maximillians University, Munich, Germany

1.00-2.30 p.m.
Discussions and conclusions
Posters and additional abstracts

Theological-ethical legitimization of xenotransplantation and challenges regarding the hospital chaplaincy including the pastoral psychological companionship
Jochen Sautermeister

B cell activation and induced antibody responses to porcine antigen can be diminished by PD-L1-mediated triggering of PD-1
Anna Buermann et al.

Decellularization followed by PNGase F treatment efficiently removes immunogenic αGal epitopes and other N-acetylglucosamine structures on the glycocalyx of porcine pulmonary heart valve matrices
Katja Findeisen et al.

After decellularization of porcine heart valves: no non-Gal antigeneic epitopes detectable by non conditioned human sera
Robert Ramm et al.

Production of high expressing A20/DAF- transgenic pigs on a GGTA1-KO background
Hellen E. Ahrens et al.

Generation of transgenic pigs carrying siRNA vector directed against human Tissue Factor expression
Hellen E. Ahrens et al.

Cloning and characterization of replication-competent ecotropic porcine endogenous retroviruses (PERV-C) in the genome of pigs used and intended for clinical pig-to-human xenotransplantation
Michael Rodrigues Costa et al.

RNase A in (Xeno)Transplantation
Eike Kleinert et al.