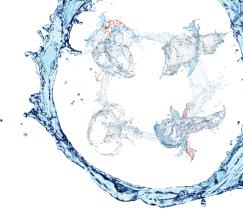
Symposium for Organ Protection: Paths to the future, Buenos Aires

11th September 2022 in Buenos Aires at the TTS 2022







About the event

Dr. Franz Köhler Chemie held its Symposium for Organ Protection – Paths to the future, on the occasion of the TTS 2022 in Argentina. Worldwide renown top-class key opinion leaders presented their topics.

Despite being it the Sunday symposium just before the official opening ceremony, the auditorium reached its full capacity with more than 150 participants and some even standing at the back.

Speakers, participants and Köhler distribution partners helped to make this event a great success.



Chairmen



Oscar Imventarza (Buenos Aires, Argentina):

Past President STALYC 2019-2021, Past President IHPBA 2016-2018, Chairman, Liver & Transplant Division – Hospital Dr Juan P Garrahan, Buenos Aires, Chairman, Liver & Transplant Division – Hospital Dr C Argerich, Buenos Aires, General Coordinator, Liver & Transplant Unit – Sanatorio Trinidad Mitre, Buenos Aires, Chairman, Liver & Pancreas Transplant Division – Hospital de Alta Complejidad, Formosa – Argentina, European Board of Transplantation Surgery



John J. Fung (Chicago, USA):

President-Elect TTS 2022, Professor, Department of Surgery, University of Chicago Pritzker School of Medicine, Chicago, Chief, Section of Transplant Surgery, University of Chicago, Chicago, University of Chicago, Co-Director, UChicago Medicine Transplantation Institute

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Speakers



Static Abdominal Organ Preservation: looking for the best solution

Prof. Dr. Gabriel Eduardo Gondolesi, MD, MAAC, FACS

Solid organ transplantation has been established as the therapeutic alternative for terminal and irreversible organ failure. Transplants save lives, improve life expectancy, and allow patients to gain quality of life. The success of transplantation depends upon multiple variables, including

the adequate preservation of the organ to be engrafted. Static cold preservation remains as the "gold standard" technique for abdominal organ preservation in most countries. The composition of the preservation solution facilitates the control of biochemical changes occurred during the cold storage and ischemic period, while maintaining organ viability. University of Wisconsin solution (UW) (Viaspan), developed in the late 1980s, containing a high potassium concentration, lactobionate/raffinose, hydroxyethyl starch and glutathione, was the most accepted alternative until discontinuation. HTK solution, from Histidine-Tryptophan-Ketoglutarate, developed by Bretschneider, became the successor option in most countries. Controversies have been raised regarding its use, and the possible negative impact on graft survival. But primary graft dysfunction, delayed graft function, and other consequences such as pancreatitis, or ischemic biliopathy, for pancreas and liver grafts respectively, that also affect long term outcomes, had in the preservation solution one of the responsables. Its choice depends on availability, individual center policies and actions, logistics, etc., while other factors, like surgical times in the donor operation, ischemic time, the engraftment, and the donor and recipients' condition, were found as other co-players. Variations on the osmotic and oncotic power of the solution and the changes observed during the cooling process, the addition of glutathione, the use of O₂-carriers, or immunosuppressive drugs, are some of the new promising innovations in the composition, that aim to expand preservation times while improving organ viability. Classic and innovative international, regional, and local basic and clinical reports were critically revised along the talk.



Long-term Normothermic Machine Perfusion – First liver transplantation in Human *Pierre-Alain Clavien, MD, PhD*

Current organ preservation methods provide a narrow window (usually <12 hours) to assess, transport and implant donor grafts for human transplantation. Here we report the transplantation of a human liver discarded by all centers, which could be preserved for several days using ex situ

normothermic machine perfusion. The transplanted liver exhibited normal function, with minimal reperfusion injury and the need for only a minimal immunosuppressive regimen. The patient rapidly recovered a normal quality of life without any signs of liver damage, such as rejection or injury to the bile ducts, according to a 1-year follow up. This inaugural clinical success opens new horizons in clinical research and promises an extended time window of up to 10 days for assessment of viability of donor organs as well as converting an urgent and highly demanding surgery into an elective procedure.



Preservation Solutions for Static Cold Storage in DCD and DBD Liver Transplantation in the United States

John J. Fung, M.D., Ph.D., FACS, FAASLD

Static cold preservation remains the cornerstone for storing donor livers following procurement, however, the choice between University of Wisconsin (UW) and Histidine-Tryptophan-

Ketoglutarate (HTK) solution remains controversial. Recent ILTS guidelines have recommended avoiding HTK solution for donation after circulatory death (DCD) grafts based on older reports. We studied the latest US adult graft outcomes in 3 recent eras (2006-2010; 2011-2015; 2016-2020) comparing HTK and UW solutions among 5,956 DCD LTs: 3,873 (65.0%) used UW and 1,944 (32.7%) used HTK; and 82,679 donation after brain death (DBD) liver transplantations (LTs): 63,511 (76.8%) used UW and 15,855 (19.2%) used HTK. The HTK group had higher 1- and 5-year graft survival rates of 89.7% and 74.3%, respectively, compared with 85.9% and 70.8% in the UW group in the 2016-2020 era (p=0.005). This difference remained when adjusted for important potential confounders (HR 0.78, 95% CI: 0.60, 0.99). There were no differences between groups among DCD LTs in the earlier eras, and among DBD LTs in all eras (all p-values>0.05). The latest US data suggests that HTK is superior to UW for preserving DCD livers. These data support HTK use in DCD LT and contradict ILTS guidance.



