

**Report of the American
transplantation congress; May 2011
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The annual American transplantation congress (ATC) is organized for basic and clinical scientists working in the field of solid organ and tissue transplantation. This year's (2011) congress was held in the Pennsylvania convention centre in Philadelphia, the fifth largest city in the US. 460 basic science abstracts and over 1200 clinical abstracts were presented during this year's meeting. This edition focused on urinary, genomic and proteomic biomarkers, diagnosis issues, accessibility to organs, innovations in immunosuppression and stem cell therapy, tolerance induction, and improvements in clinical practice. In this report I will highlight my experiences, the sessions I attended and the topics which were most intriguing concerning renal transplantation.

On Saturday april 30th, one day before the official start of the congress, pre-meeting symposia were held. At this meeting I attended the session "essential immunology for the clinician". The mechanisms of action of atacicept and bortezomib were discussed and how CD8 T cells can kill pathogens via perforin, granzyme B and the caspase pathway was also extensively discussed.

Later on in the morning in a session on B cells an article by Tago et.al published in the Journal of Clinical investigation was explained. It concerned tolerant patients who have more regulatory IL-10 producing B cells. The results of the benefit study with belatacept were presented. Short after transplantation patients had more rejections. These were well treatable though and overall they had better graft function up to 3 years post transplantation than the cyclosporine control arm. The Ceasar study by Ekberg et. al. showed that CNI removal in the 1st year after transplantation leads to more rejections and that biomarkers are needed to determine which patients are eligible for CNI removal. One of the last talks of the day was from dr. Meier-Kriesche with a summary of the clinical trials data of new immunosuppressants in the pipeline, belatacept, tofacitinib (CP690,550) and sotrastaurin (AEV-071). Clinical trials with sotrastaurin were stopped, since patients had more rejections in the 1st year after transplantation. Now two new strategies are being tested with this compound in phase II trials. It will be combined with sirolimus and in another trial with low dose CNI.

Sunday the ATC officially started. Still running on Dutch hours, it wasn't hard to attend the sunrise symposium at 7am on the effects of regulatory CD8 T cells. These are CD8+Cd28- or CD8+CD122+PD1+. In the plenary session later that morning the results of the phase 2b study with tofacitinib were presented by dr. Flavio Vincenti. Tofacitinib showed similar efficacy to the CNI arm, along with a higher risk of infections (CMV and BK-nephropathy). Tofacitinib treated patients did have lower

blood pressure and better renal function. The phase III study with tofacitinib will soon be initiated.

In the next days I attended a very usefull manuscript writing workshop, presentations on memory T cells and their recovery after depletion therapy; and several sessions on biomarkers, microRNA's and their clinical applications. On monday night I had the opportunity to present my two posters on pharmacodynamic monitoring of the P38 MAPK pathway. One of them was recognized as "poster of distinction" by the ATC committee.

On the last day the congress was summarized during the "What's Hot, What's New" session presented by Dr. Roslyn Mannon and Dr. Seth Karp. Overall this congress gave a very good overview for me of the latest developments in transplantation research. Next year's ATC meeting will be held in June in Boston, MA and I hope to be there as well.