



## Seminar



### PD Dr. Louisa Steines

Abteilung für Nephrologie  
Universitätsklinikum Regensburg

## Control of Antibody Responses in Kidney Transplantation

The average lifetime of a transplanted kidney is limited to about 10-15 years. Immunological factors are the primary cause of allograft failure. Antibody-mediated rejection (AMR), when donor specific antibodies (DSA) damage the allograft, is the most common cause of kidney transplant failure beyond the first year. In addition, other transplanted organs, such as hearts and lungs, are also prone to attack by DSA. However, there is no effective treatment for this condition, particularly when AMR takes on a chronic course. Strategies to prevent formation or resurgence of DSA are therefore paramount. To achieve this, a thorough understanding of the mechanisms leading to DSA production in organ transplantation are essential. Dr Steines's group is interested in understanding the mechanisms of T and B cell activation in the context of transplantation. We are using patient samples, human in vitro cellular assays and a transplant model in rodents to study cellular and humoral alloresponses. We are particularly interested in T-B cell interactions and the regulation of the germinal center reaction, as a source of high affinity alloantibodies. The aim of Dr. Steines's research is to identify novel targets for more effective immunosuppression in transplant medicine.

**Time:** Monday, November 18, 2024, 16:30h  
**Location:** The talk will take place exclusively via Zoom

**To get the Zoom link please contact:**  
[michaela.kritzenberger@ur.de](mailto:michaela.kritzenberger@ur.de)