

Submission No.: PG04-9126

Session Title: PG Education 4 (Kidney Transplantation)

Date & Time, Place: April 27 (Thu), 10:30 - 12:00, Room 5

## **Immunology and Clinical Patterns of Allograft Rejection**

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Kidney transplantation (KT) is considered the best approach for enhancing the quality of life and survival of individuals with end-stage kidney disease. However, after KT, the adaptive immune system plays a crucial role in the development of rejection via multiple pathways. Hence, suppressing or modulating these pathways is essential for the survival of the allograft. Although advancements in immunology and the development of immunosuppressants have decreased the rate of acute rejection and improved short-term transplant outcomes, the emergence of de novo donor-specific antibodies and subsequent chronic rejection remains a significant concern that can exacerbate long-term survival outcomes. Additionally, patients who return to dialysis following graft failure experience high morbidity and mortality rates. Therefore, developing an optimal treatment strategy that focuses on de novo antibodies is necessary to enhance the long-term outcomes of KT. This session will cover the basic principles of transplant immunology, diagnostic tools and medications required for successful KT, as well as the latest developments in immunosuppressants.