

Submission No.: PG07-5383

Session : Postgraduate Course 7 (Basic)

Date & Time, Place : November 17 (Thu), 13:00-14:30, Room 6F-1

Session Title : Immunology

B cells in transplantation

Tae Jin Kim

Sungkyunkwan University, Republic of Korea

B cells have an important role in graft rejection by producing donor-specific Abs (DSAs), but the roles of B cells in transplantation are more than DSA production. B cells are one of the important antigen-presenting cells to CD4+ T cells and can support T cell-mediated rejection. B cells also participate in tertiary lymphoid tissues within the graft, which are the headquarter of perpetuating local immune responses. The specificities of graft-infiltrating B cells are now being investigated intensively. Although anti-HLA Abs are easily confirmed as DSAs, non-HLA-directed Abs are also important, but difficult to identify. Recently, the proportion of autoreactive B cells in healthy individuals has been shown to be higher than previously expected and active players in humoral immune responses. Since the graft encounters a lot of stresses, graft cells expose stress-related epitopes that are targets of natural polyspecific Abs. Here the roles of polyspecific (and therefore autoreactive) B cells in graft rejection will be discussed.