



# Differential targeting of signaling pathways to expand regulatory T cells subsets

Taku Kambayashi, M.D, Ph.D.

University of Pennsylvania  
- Perelman School of Medicine

平成24年6月18日(月)午後17:00-18:30

臨床講堂B

## 講演要旨

Regulatory T cells (Tregs) play a critical role in preventing autoimmune disease by suppressing inappropriate conventional T cell (Tconv) responses. Tregs can also inhibit Tconv responses in allogeneic transplant settings, also making them an attractive target in suppressing transplant rejection and graft-versus-host disease (GVHD). Tregs can be largely divided into two subsets, natural Tregs (nTregs) that arise from the thymus and inducible Tregs (iTregs) that are borne from peripheral conversion of Tconvs into Tregs. In this seminar, I will provide data to support the role of both nTregs and iTregs in GVHD protection and describe a novel CD8+ iTreg population that arises during allogeneic bone marrow transplantation. Furthermore, I will provide data demonstrating differential signaling requirements for the expansion of Tconvs and Treg subsets. Finally, I will discuss strategies to exploit the differences in signal transduction pathways to our advantage, in order to more effectively treat autoimmunity and GVHD.

問い合わせ先： 免疫学・渋谷 彰 (ashibuya@md.tsukuba.ac.jp)

TEL: 029-853-3281