

## 第 42 回日本免疫学会学術集会 テクニカルセミナー T5

### 日時

2013 年 **12 月 12 日 (木)** 13:20 - 14:20  
December 12, 2013

### 会場

**F 会場** (幕張メッセ 103)

### 演題

## Harnessing regulatory T cells in anti-tumor immunity

### 演者

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### 要旨

Regulatory T (Treg) cells play an essential role in suppressing self-reactive T cells present in the normal immune system. A large number of human tumor-associated antigens identified to date are antigenically normal self-constituents, and tumor immunity is in part a form of autoimmunity. Mechanisms for maintaining immunological self-tolerance such as Treg cells could therefore hinder effective anti-cancer immune responses. Indeed, the numbers of FOXP3+CD25+CD4+ Treg cells present in tumors and, in particular, decreased ratios of CD8+ T cells to FOXP3+CD25+CD4+ Tregs in tumors, correlate with poor prognosis in various types of human cancers. We have shown that human Foxp3+CD4+ T cells are composed of three subsets; CD45RA+Foxp3<sup>lo</sup> naïve Treg cells (Fr. I), CD45RA-Foxp3<sup>hi</sup> effector Treg cells (Fr. II), and CD45RA-Foxp3<sup>lo</sup> non-Treg cells (Fr. III). Tumor-infiltrating T cells contained a higher frequency of effector Treg cells (Fr. II) compared with peripheral blood. These tumor-infiltrating effector Treg cells dominantly expressed CCR4, and CCR4+ Treg-cell depletion augmented induction of both tumor antigen-specific CD4+ and CD8+ T cells, proposing CCR4 as a possible target for Treg-cell control. Here, I would like to discuss how to control Treg cells for augmenting anti-tumor immune responses.

転写因子や DC 関連抗体のバイオニア  
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in Japanese