

第50回グローバルCOE海外研究者講演会

歯と骨の分子疾患科学の国際教育研究拠点
ーデント・メドミクスのインテリジェンスハブー講師: **Dr. Thomas Dörner**Professor of Rheumatology and Clinical Immunology
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日時: 平成23年12月12日(月) 10:30~11:30

場所: M&Dタワー11階 大学院講義室3

演題:

Distinct impact of anti-B cell directed therapy on B cell subsets

Humoral abnormalities are playing a crucial role in SLE. Subsets of plasmablasts characterized by the expression of HLA-DR^{high}/IgG and CD27⁺/CD95⁺ memory B cells have been identified to correlate with anti-DNA production and lupus disease activity. It is important to note that certain plasmablasts occur as IgA steady plasmablasts under healthy conditions which remain stable even under secondary immunizations with tetanus toxoid leading to increased IgG⁺/HLA DR^{high} antigen-specific plasmablasts. In terms of therapeutic strategies, B cells serve as targets of treatment with CD20 and CD22 as prominent targets of direct B cell targeting. In this context, B cell subsets resistant to anti-CD20 depletion have been identified. The mechanism of action induced by the non-depleting anti-CD22 monoclonal epratuzumab comprises inhibition of proliferation, changes of adhesion molecule expression and migration which all may contribute to therapeutic effects in SLE patients. Recent insights into the profiles of normal B cell activation allow differentiations from abnormalities of immune activations under autoimmune conditions and may permit the definition of more selective therapeutic avenues.

Publication:

- Blood-borne human plasma cells in steady-state are derived from mucosal immune responses. *Blood*. 113: 2461, 2009.
- HLA-DR^{high}/CD27^{high} plasmablasts indicate active disease in patients with SLE. *Ann Rheum Dis*. 69: 305, 2010.
- B-cell-directed therapies for autoimmune disease. *Nat Rev Rheumatol*. 5: 433, 2009.