

Towards improved immunotherapy

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A study published by Elsevier this month in *Clinical Immunology*, the official journal of the Clinical Immunology Society (CIS), describes a new method that facilitates the induction of a specific type of immune suppressive cells, called 'regulatory T cells' for therapeutic use. These immune suppressive cells show great potential for the treatment of autoimmune diseases and improving transplantation outcomes.

Immunotherapy refers to a collection of treatments based upon the concept of modulating the immune system to achieve a prophylactic and/or therapeutic goal. For example, inducing immune suppression could dampen an abnormal immune response in autoimmune diseases or could reduce a normal immune response to prevent rejection of transplanted organs or cells. Regulatory T cells are an important part of the immune system and can play a suppressive role, but naturally occur in low numbers.

Michael Albert and colleagues from the Ludwig-Maximilians-University in Munich, Germany, describe a unique strategy that facilitates the induction of regulatory T cells *ex vivo* with subsequent expansion to numbers adequate for immunotherapy. Using an inexpensive, fast and simple high-yield method they generated regulatory T cells from small amounts of peripheral blood which, potentially, could be transferred back into a patient enabling a clinically desired immune suppression.

"Feasible protocols to provide large amounts of regulatory T cells are in great demand", said Andy Saxon", the Editor-in-Chief of *Clinical Immunology* (<http://www.elsevier.com/locate/yclim>), "this article

describes a relative simple but exciting method which can be used in clinical settings such as transplantation".

Citation: M.H. Albert, X-Z. Yu, T. Magg, Ethylenecarbodiimide-coupled allogeneic antigen presenting cells induce human CD4+ regulatory T cells, 2008 Clinical Immunology, 129(3): 381-393.
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