# Delivery of alloantigens via apoptotic cells generates dendritic cells with an immature tolerogenic phenotype

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Background: Dendritic cells (DCs) are professional antigen-presenting cells able to induce immunity or tolerance. The interactions of immature DCs with naive T lymphocytes induce peripheral tolerance through mechanisms that include anergy or deletion of lymphocytes or the generation of regulatory T cells. Because of the central role of DCs in the immune response, they are potential targets for the induction of experimental tolerance. Thus, the generation of immature (tolerogenic) DCs able to capture and present alloantigens to T cells represents an important aim in our efforts to achieve better transplant acceptance. Methods: In this work, we generated immature DCs by using vitamin D 3 (VD3) during the process of DC differentiation. Results: The VD3DCs showed an immature phenotype characterized by a low expression of major histocompatibility complex antigens of class II, CD86, and CD80 molecules and the secretion of a tolerogenic cytokine pattern. Furthermore, we showed that VD3DCs pha