

Accepted Manuscript

Title: Immune-modulation via IgD B-cell receptor suppresses allergic skin inflammation in experimental contact hypersensitivity models despite of a Th2-favoured humoral response

Author: Tue G. Nguyen

PII: S0165-2478(18)30277-3
DOI: <https://doi.org/10.1016/j.imlet.2018.09.008>
Reference: IMLET 6242

To appear in: *Immunology Letters*

Received date: 7-6-2018
Revised date: 30-7-2018
Accepted date: 11-9-2018

Please cite this article as: Nguyen TG, Immune-modulation via IgD B-cell receptor suppresses allergic skin inflammation in experimental contact hypersensitivity models despite of a Th2-favoured humoral response, *Immunology Letters* (2018), <https://doi.org/10.1016/j.imlet.2018.09.008>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Immune-modulation via IgD B-cell receptor suppresses allergic skin inflammation in experimental contact hypersensitivity models despite of a Th2-favoured humoral response

Tue G. Nguyen, PhD^{1,2,*}

1. Autoimmunity and Immunotherapy Research, Kolling Institute
2. Perinatal Research, Kolling Institute at Royal North Shore Hospital, St Leonards NSW 2065 Australia.
3. ImmunoTherapeutic Mab Group, Macquarie Park Sydney NSW 2113 Australia.

Short title: Anti-IgD ameliorates allergic skin inflammation in vivo

*Corresponding author: Dr Tue Gia Nguyen, current address: ImmunoTherapeutic Mab Group, Macquarie Park Sydney NSW 2113 Australia.

Phone: +61 2 9926 4832 Fax: +61 2 9926 8484

Email: tgnguyen@med.usyd.edu.au or tommiewilliam@gmail.com

Highlights

- The novel therapeutic effect of anti-IgD treatment is more efficacious than anti-CD20 treatment in suppressing allergic skin inflammations in murine models of chronic contact hypersensitivities (CHS).
- Anti-IgD effectively suppresses allergic skin inflammation despite an enhanced Th2-skewed antibody response in vivo.
- Anti-IgD selectively depletes ‘initiator’ mature CD19⁺IgD^{hi} B cells while promotes regulatory B cells and T cells in vivo.
- Collectively, these findings highlight the therapeutic potentials of targeting IgD B cell receptor with a monoclonal antibody as a novel treatment of chronic atopic dermatitis.

Download English Version:

<https://daneshyari.com/en/article/10218499>

Download Persian Version:

<https://daneshyari.com/article/10218499>

[Daneshyari.com](https://daneshyari.com)