**Editorial on the Research Topic (452/2400)**

“Roles of Fc Receptors in Disease and Therapy"

The humoral immune response is one of the central tenets of mammalian immunity. Delivered through the production of antibodies of multiple classes (IgG, IgM, IgA, IgD and IgE) and sub-classes (e.g. IgG1, IgG2, IgG3 and IgG4 in humans) their activities are achieved through their inherent ability to bind with exquisite specificity to a given target antigen and then engage various immune effector functions to elicit the appropriate response. Chief amongst these are cellular immune effectors such as macrophages, NK cells and neutrophils which are engaged through their expression of Fc receptors, binding the Fc portion of the immunoglobulins. Accordingly different classes and isotypes of antibody engage a selection of different Fc receptors. For example in the murine system there are receptors that are specific for IgG, IgM, IgE as well as receptors that are dually-specific for IgM and IgA with paralogues in human cells. A bewildering array of immune and non-immune cells express these various receptors in different combinations, leading to a highly complex system for regulating and evoking antibody responses. Various receptors evoke cellular activation (e.g. FcγRIIIA) whereas others are inhibitory (FcγRIIB) with still others capable or evoking their intracellular transport and recycling (FcRn) to establish long serum half-lives. Clearly careful regulation of expression, signalling and modulation is required for a healthy and well-functioning immune system. In this Research Topic, a series of articles are provided to reveal comprehensive insights on the role of these various Fc receptors in health and disease, taking into account the wide spectrum of receptors and cells expressing them.

In original research articles, XXX

This Research Topic also features a number of Review Articles on XX

In terms of therapeutics,

Disease pathologies

Collectively, this Research Topic highlights xxxx

The knowledge acquired from the articles contained within this special issue may lead to

This area of research is absolutely essential and is urgently required in xxxx

We wish to convey our appreciation to all the authors who have participated in this Research Topic and the reviewers for their insightful comments.

Author Contributions

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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