Special Issue

Natural Killer Cells (NK Cells) and Vaccine Efficacy

Message from the Guest Editor

Using experimental models, NK cell immune responses have various type of immune responses in every type of vaccination protocols. In contrast myeloid response, blood NK cell dynamics were driven mainly by decreases in absolute numbers and a high interindividual variability. It was shown a transient decrease of NK cell numbers in the blood of immunized macagues. On the other hand some NK subphenotypes increased in numbers after the first and second immunization. A huge lack of knowledge was described of different phenotypes in many NK cells such as Ly49H and KLRG1 or NKG2C and 57 in humans. Memory-like NK cells could persist after 2 month after immunization. A deeper analysis of memory-like NK cells and their cytokines milieu and if they are activated by cytokines or antigens is needed to be tested with functional assays and transcriptional profiles displayed during the various phases of immunization. In this issue we focus our attention on the mechanisms necessary to expand in vivo the memory-like NK cells that represent a bridge from innate and adaptive immunity needed to good vaccination protocols that represent a challenge for the scientific community.

Guest Editor

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Vaccines (ISSN 2076-393X) has had a 6-year history of publishing peer-reviewed state of the art research that advances the knowledge of immunology in human disease protection. Immunotherapeutics, prophylactic vaccines, immunomodulators, adjuvants and the global differences in regulatory affairs are some of the highlights of the research published that have shaped global health. Our open access policy allows all researchers and interested parties to immediately scrutinize the rigorous evidence our publications have to offer. We are proud to present the work and perspectives of many to contribute to future decisions concerning human health.

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