

Accepted Manuscript

Title: Type I and type II cytokine production of CD4+ T-cells in immune response biased dairy cattle around calving

Authors: M.A. Paibomesai, S. Sharif, N. Karrow, B.A Mallard

PII: S0165-2427(17)30119-8
DOI: <https://doi.org/10.1016/j.vetimm.2018.03.001>
Reference: VETIMM 9723

To appear in: *VETIMM*

Received date: 29-3-2017
Revised date: 14-2-2018
Accepted date: 1-3-2018



Please cite this article as: Paibomesai, M.A., Sharif, S., Karrow, N., Mallard, B.A, Type I and type II cytokine production of CD4+ T-cells in immune response biased dairy cattle around calving. *Veterinary Immunology and Immunopathology* <https://doi.org/10.1016/j.vetimm.2018.03.001>

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.

Type I and Type II Cytokine Production of CD4+ T-Cells in Immune Response Biased Dairy Cattle around Calving

M.A. Paibomesai^{1,3}, S. Sharif¹, N. Karrow², and B.A Mallard^{1,2}

¹Dept. of Pathobiology, OVC, ² Centre Genetic Improvement of Livestock, Dept. of Animal Bioscience, University of Guelph, Guelph, Ontario, Canada, N1G 2W1, ³ Ontario Ministry of Agriculture, Food and Rural Affairs, 1 Stone Road West, Guelph, Ontario, Canada

Highlights

- Dairy cattle can be classified as high, average, and low immune responders
- Late pregnancy and parturition may affect CD4+ T-cell cytokine production
- Immune response phenotype can affect CD4+ T-cell cytokine production through the peripartum period

Abstract

The peripartum period is a period of high stress, transition and management changes for dairy cows. It is associated with higher incidence of both metabolic and pathogenic disease. Both antibody- (AMIR) and cell- (CMIR) mediated immune responses play a key role in the maintenance of health in mammals protecting against extracellular and intracellular pathogens, respectively. Generally, interferon gamma (IFN- γ) has been associated with CMIR, whereas interleukin 4 (IL-4) has been associated with AMIR bias, and interleukin 17 (IL-17A) is

Download English Version:

<https://daneshyari.com/en/article/8504714>

Download Persian Version:

<https://daneshyari.com/article/8504714>

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