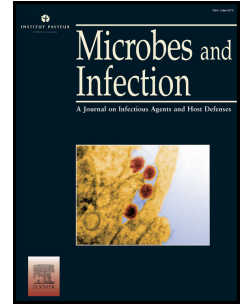


Accepted Manuscript

On the Role of Retinoic Acid in virus induced Inflammatory Response in Cornea

Ujjaldeep Jaggi, Siva Karthik Varanasi, Siddheshvar Bhela, Barry T. Rouse



PII: S1286-4579(18)30106-0

DOI: [10.1016/j.micinf.2018.04.007](https://doi.org/10.1016/j.micinf.2018.04.007)

Reference: MICINF 4584

To appear in: *Microbes and Infection*

Received Date: 20 February 2018

Revised Date: 22 April 2018

Accepted Date: 30 April 2018

Please cite this article as: U. Jaggi, S.K. Varanasi, S. Bhela, B.T Rouse, On the Role of Retinoic Acid in virus induced Inflammatory Response in Cornea, *Microbes and Infection* (2018), doi: 10.1016/j.micinf.2018.04.007.

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.

1 **On the Role of Retinoic Acid in virus induced Inflammatory Response in Cornea**

2 **Ujjaldeep Jaggi^a, Siva Karthik Varanasi^b, Siddheshvar Bhela^a, Barry T Rouse^{a*}**

3 ^a Department of Biomedical and Diagnostic Sciences, College of Veterinary medicine,
4 University of Tennessee, Knoxville, TN 37996, USA;

5 ^b Department of Genome Science and Technology, University of Tennessee, Knoxville,
6 TN 37996, USA

7 Corresponding author

8 Dr. Barry T. Rouse

9 Room No.B408, Walters Life Sciences Bldg.

10 1414 W. Cumberland Ave, Knoxville TN 37996-0845

11 Phone: 865-974-4026

12 Fax: 865-974-7817

13 Email: btr@utk.edu

14 This work was supported by grant EY005093 from National Eye Institute

15
16 **Abstract:** Ocular infection with herpes simplex virus (HSV) can result in a chronic
17 immune inflammatory lesion that is a significant cause of human blindness. A key to
18 controlling stromal keratitis (SK) lesion severity is to identify cellular and molecular
19 events responsible for tissue damage and to counteract them. One potentially useful
20 approach to achieve such therapy is Retinoic Acid (RA). Here we show that RA therapy
21 reduces the severity of SK by having inhibitory effects on the T effector subtypes
22 responsible for orchestrating SK. RA also served to stabilize the function of regulatory T
23 cell (Treg) which counteract inflammatory cell activity. The Treg stabilizing effect was

Download English Version:

<https://daneshyari.com/en/article/8749049>

Download Persian Version:

<https://daneshyari.com/article/8749049>

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