# **MEETING ABSTRACT**



**Open Access** 

# Circulating apo 2L levels decreased in hepatitis C with the pegilated interferon-2 alpha treatment

Ata Nevzat Yalcin<sup>1\*</sup>, Arzu Didem Yalcin<sup>2</sup>, Betul Celik<sup>3</sup>, Sukran Kose<sup>4</sup>, Ayhan Cekin<sup>5</sup>, Derya Seyman<sup>6</sup>, Saadet Gumuslu<sup>7</sup>

*From* 3rd WAO International Scientific Conference (WISC) 2014 Rio de Janeiro, Brazil. 6-9 December 2014

## Background

Chronic hepatitis C (HCV) infects approximately 170 million people and causes more than 350 000 deaths every year. Information regarding pathogenetic mechanism of acute hepatitis C infection is limited. Following innate immune activation, cellular immunity, including natural killer (NK) cell activation and antigen-specific CD8 cell proliferation occurs. CD8+ T lymphocytes directly kill infected cells via direct cell-cell contact, and release antiviral cytokines (e.g. IFN, TNF)

#### Methods

Eleven HCV-treatment naive HCV infected patients were treated with weight-based ribavirin daily in addition to either weekly pegIFN alfa-2b at 1.5 ug/kg, weekly pegIFN alfa-2a, or albinterferon alfa-2b at 900mcg every 2 weeks. All patients gave written informed consent approved by the Institutional Review Board prior to enrollment in the studies. Intensive serum monitoring was completed at study visits day 0 (pretreatment), weeks 4, 6 and 12.

### Results

In this present study, we aimed to investigate the relationship between IFN treatment response, HCV viral load and sApo 2L levels. Eleven HCV-treatment naive HCV infected patients were treated with pegIFN alfa-2a. Intensive serum circulating Apo 2L levels were monitered at study visits day 0 (pretreatment), weeks 4, 6 and 12.HCV-RNA and sApo 2L levels decreased gradually with PegIF- $\alpha$  2 treatment and the differences were significant between day 0 and 4<sup>th</sup> week (p=0.001, p<0.005 and p=0.01, p<0.005 respectively); between day

<sup>1</sup>Department of Infectious Diseases and Clinical Microbiology, Akdeniz University, 07070, Antalya, Turkey

Full list of author information is available at the end of the article



© 2015 Yalcin et al; licensee BioMed Central Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The Creative Commons Public Domain Dedication waiver (http:// creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated.

0 and 12th week (p=0.001, p<0.005 and p=0.001, p<0.000 respectively); between 6th week and 12th week (p=0.01, p<0.05 and p=0.01, p<0.05 respectively).

#### Conclusions

We suggest that, decreased level of circulating Apo 2L may reflect its increased binding to its ligand expressed on hepatocyte or lymphocyte under the influence of PegIFN treatment.

#### Authors' details

<sup>1</sup>Department of Infectious Diseases and Clinical Microbiology, Akdeniz University, 07070, Antalya, Turkey. <sup>2</sup>Internal Medicine, Allergy and Clinical Immunology, Genomics Research Center, Academia Sinica,11529, Taipei, Taiwan. <sup>3</sup>Department of Laboratory Medicine and Pathology, Mayo Clinic in Jacksonville, USA. <sup>4</sup>Department of Infectious Diseases and Clinical Microbiology, Allergy and Clinical Immunology Unit, Tepecik Education and Research Hospital. Izmir, Turkey. <sup>5</sup>Department of Gastroenterology, Antalya Training Hospital, Antalya, Turkey. <sup>6</sup>Department of Infectious Diseases and Clinical Microbiology, Antalya Education and Research Hospital, Turkey. <sup>7</sup>Department of Medical Biochemistry, Faculty of Medicine, Akdeniz University, 07070, Antalya, Turkey.

#### Published: 8 April 2015

doi:10.1186/1939-4551-8-S1-A8 **Cite this article as:** Yalcin *et al.*: **Circulating apo 2L levels decreased in hepatitis C with the pegilated interferon-2 alpha treatment.** *World Alleray Oraanization Journal* 2015 **8**(Suppl 1):A8.