

# 6<sup>th</sup> Euro Virology Congress and Expo

March 10-12, 2016 Madrid, Spain

## Development of Animal Model for Dengue Virus Antiviral Trial using Infected Cells

**Beti Ernawati Dewi, Dwi Hilda Putri, Fitriyah and Tjahjani Mirawati,**

Department of Microbiology, Faculty of Medicine Universitas Indonesia Jalan Pegangsaan Timur no 16 Jakarta 10320 Indonesia

Dengue virus (DENV) infection is still a serious health problem in Indonesia with no specific antiviral to treat the patients. Due to the lack of a good animal model, the development of antiviral has not been completely elucidated. In this study we develop a mice model of DENV infection for antiviral experiment. DDY mice were injected with  $5.5 \times 10^6$  DENV-2 New Guinea C infected Huh-7 and Vero cell via intra peritoneal. The presence of DENV in plasma sera were evaluated by focus assay at 6, 24 and 48 hours post infection. In mice with DENV-2 infected Vero cells, the titer of DENV-2 was  $1.7 \times 10^2$  FFU/ml at 6 hours post infection. At 24 and 48 post infection no DENV were found in plasma mice with DENV-2 infected Vero cells. The higher titer was found in mice with DENV-2 infected Huh-7 cells with  $5.8 \times 10^3$  FFU/ml and  $3.6 \times 10^3$  FFU/ml at 6 hours and 24 hours, respectively. The DENV viremia results demonstrate that DDY mice injected with DENV infected Huh-7 are a promising simple animal model for DENV antiviral trials in future.

### Biography

Beti Ernawati Dewi has completed her PhD at the age of 37 years from University of Tsukuba, Japan and postdoctoral studies from Institute of Tropical Medicine, University of Nagasaki, Japan. She is a teaching staff and senior researcher at Department of Microbiology, Faculty of Medicine, Universitas Indonesia. She has published more than 10 papers in reputed journals.

[betied@yahoo.com](mailto:betied@yahoo.com)

Notes: