



# **BIBMC 2014**



# ABSTRACT BOOK

THE 3<sup>rd</sup> Bandung International
Biomolecular Medicine Conference (BIBMC)
57th Anniversary, Faculty of Medicine, Universitas Padjadjaran (1957-2014)

18-19 SEPTEMBER, 2014 BANDUNG, INDONESIA



In Collaboration with:























This Certificate is awarded to

# Edhyana Sahiratmadja, dr. PhD.

Ö

Oral e Poster Presenter

# 3rd Bandung International Biomolecular Medicine Conference

in conjunction with

57th Anniversary, Faculty of Medicine, Universitas Padjadjaran (1957-2014) 18-19 September 2014 Bandung, Indonesia

Chairman





Prof. Tri Hanggono Achmad, MD, Dr. med

IDI Accreditation No. 011/IDI. Wil Jab/SKP/IX/2014

### **FULL PAPER**

# PRESENTED ON

# BANDUNG INTERNATIONAL BIOMOLECULAR MEDICINE CONFERENCE 18-19 SEPTEMBER 2014

NEXT TO HPV-16, HPV-18 AND HPV-52, HPV-45 ARE PREVALENT AMONG CERVICAL CANCER PATIENTS IN HASANSADIKIN HOSPITAL BANDUNG, INDONESIA.

# BY

EDHYANA SAHIRATMADJA, <sup>1</sup> SUNARYATI SUDIGDOADI, <sup>2</sup> GITA WIDYA PRADANA, <sup>2</sup> MARINGAN TOBING, <sup>3</sup> SUPRIADI GANDAMIHARDJA, <sup>3</sup> AND HERMAN SUSANTO <sup>3</sup>

<sup>1</sup> Dept. of Biochemistry, Faculty of Medicine, Universitas Padjadjaran, Bandung <sup>2</sup> Dept. of Microbiology, Faculty of Medicine, Universitas Padjadjaran, Bandung

<sup>3</sup> Dept. of Obstetrics and Gynaecology, Hasan Sadikin Hospital/Faculty of Medicine, Universitas Padjadjaran, Bandung

## **ABSTRACT**

# Background.

Cervical cancer, caused by persistent human papillomavirus infection mostly by HPV-16 and HPV-18, can be prevented by HPV vaccination. HPV vaccine available covers both high-risk genotypes. Study in 3 areas in Indonesia has proposed that HPV-52 need to be included in the vaccination. However, HPV types have been shown to differ according to geographical distribution. Our study aimed to determine the distribution of HPV genotypes that infect cervical cancer patients from Bandung, Indonesia.

## Methods.

Viral DNA, extracted from randomly chosen cervical cancer and histopathologically classified as squamous cell carcinoma, were genotyped using linear array tests that can detect both high- and low-risk genotypes.

### Results and conclussion.

The result revealed that of 87cervical cancer tissue samples genotyped, HPV-16 and HPV-18 infected most of the samples (69% and 57%, respectively), followed by HPV-45 and HPV-52 (24% and 21%, respectively). These high-risk genotypes infected the cervical cancer as a single or multiple infections. We concluded that HPV-16 remains the major HPV infection in squamous cell carcinoma in Bandung, Western Java, Indonesia. The high number of genotypes HPV 45 may be interesting to be further explored and as other group has proposed for HPV-52 in Indonesia, here we also suggest to include HPV-45 in the next generation of HPV vaccine.

Keywords: Cervical cancer, HPV infection, HPV-45, Indonesia