



Pacific Center for
Emerging Infectious Diseases
Research



UNIVERSITY
of HAWAII
MĀNOA

Department of Tropical Medicine, Medical Microbiology
& Pharmacology

JOHN A BURNS SCHOOL OF MEDICINE, UNIVERSITY OF HAWAII AT MANOA

Development of Precision Medicine through Integrative DNA- and RNA-seq Data Analysis

Veliparib is a potential anti-cancer drug acting as a PARP inhibitor. It kills cancer cells by blocking a protein called PARP, thereby preventing the repair of DNA or genetic damage in cancer cells. Based on clinical trials data of over 300 breast cancer patients with mutations in the breast cancer-related genes BRCA1 and BRCA2, we found there were almost no significant outcome (such as survival) difference between veliparib and control drugs. Through integrative exome DNA-seq and RNA-seq data analysis, we have found a certain subgroup of patients with some gene somatic mutations or gene expression changes have better response to veliparib than the control drugs. Meanwhile, a novel method to detect somatic DNA mutations with super sensitivity was developed.

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Wednesday, October 19, 2016 at 12:00 noon
John A. Burns School of Medicine, Kaka'ako Campus
Medical Education Building Auditorium (Room 315)
For further information, contact (808) 692-1654

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