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**2009 ASHP Midyear Clinical Meeting  
Las Vegas, Nevada  
Educational Session Abstracts**

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**252-All**

**From Research to Clinical Practice: Evidence-Based Pharmacogenomic Recommendations**

Kuo, G.M.

University of California, San Diego (UCSD), Skaggs School of Pharmacy & Pharmaceutical Sciences, 9500 Gilman Dr, MC 0714, La Jolla, CA 92093, USA. Email: [gmkuo@ucsd.edu](mailto:gmkuo@ucsd.edu)

Ma, J.D.

Pharmacogenomics aims to increase the response rate of drug therapy and decrease the events of adverse drug reactions. There appears to be a gap between healthcare providers' knowledge and the expectations of patients regarding pharmacogenomic testing. In addition, pharmacogenomics education materials are not readily available to healthcare professionals. "Pharmacogenomics Education Program: Bridging the Gap between Science and Practice" (PharmGenEd™) is an evidence-based education program funded by the Centers for Disease Control and Prevention, for pharmacists, physicians, students, and other healthcare professionals. The program team at UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences collaborates with pharmacy and medical associations to promote pharmacogenomics education to more than 100,000 healthcare professionals through continuing education programs. The program team also collaborates with faculty experts to develop a shared curriculum for pharmacogenomics with lectures and teaching materials in various therapeutic areas to be used in pharmacy schools.

**Learning Objectives:**

1. Review a CDC-funded pharmacogenomics education program "PharmGenEd™."
2. Identify key therapeutic areas in which pharmacogenomic testing can be applied.
3. Define common pharmacogenomics terminologies.
4. Using a patient case, identify available pharmacogenomic testing, formulate a therapeutic plan from evidence-based recommendations.

**Self-Assessment Questions:**

1. An example of a SNP is the VKORC1 1173 C > T. Based on the pharmacogenomic nomenclature of this SNP, what is the gene of interest?
  - a. 1173
  - b. VKORC1
  - c. Thymine (T)
  - d. Cytosine (C)
2. Patients with HLA-B\*5701 variation are at increased risk for which one of the following events?

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- a. Bleeding
  - b. SSRI toxicity
  - c. Hypersensitivity Reaction
  - d. Tumor recurrence
3. Which polymorphism best describes when the original or reference amino acid is no longer coded and results in termination of protein synthesis?
- a. Non-synonymous SNP
  - b. Synonymous SNP
  - c. Premature stop codon SNP
  - d. Gene Deletion

**Answers:** 1. b; 2. c; 3. c