

## **The Ethical Framing of Personalized Medicine**

Heung-Woo Park

Department of Internal Medicine

Seoul National University College of Medicine

### **Learning objectives**

1. An overview of ethical issues in the pharmacogenomics research
2. Important ethical issues related with the clinical application of pharmacogenomics from three main perspectives; researcher, pharmaceutical company, and government.

### **Presentation summary**

Advances in -omics technology make it possible to individualize prescription practices by narrowing the target populations exclusively to those for which the medication is safe and effective. Pharmacogenomics reflects this merging of pharmacology and genetics. Knowledge improvement inevitably accompanies greater levels of complexity and an increasing number of problems. Likewise, many ethical issues arise in the research and clinical application of pharmacogenomics. Buchanan et al. pointed out six ethical issues: (1) regulatory oversight, (2) confidentiality and privacy, (3) informed consent, (4) availability of drugs, (5) access, and (6) clinicians' changing responsibilities. In this presentation, I will briefly overview ethical issues in the pharmacogenomics research and consider the ethics of pharmacogenomics from three main perspectives: (1) researcher (2) pharmaceutical company and (3) government.

## **References**

1. Buchanan A, Califano A, Kahn J, McPherson E, Robertson J, Brody B. Pharmacogenetics: ethical issues and policy options. *Kennedy Institute of Ethics J* 2002;12:1-15.
2. Mordini E. Ethical considerations on pharmacogenomics. *Pharmacol Res* 2004;49:375-9.
3. Issa AM. Ethical considerations in clinical pharmacogenomics research. *Trends Pharmacol Sci* 2000;21:247-9.
4. Wertz DC. Ethical, social and legal issues in pharmacogenomics. *Pharmacogenomics J* 2003;3:194-6.