Clinically actionable genetic variations in rheumatoid arthritis

A team of investigators and staffs in the Department of Rheumatology, Shanghai Guanghua Hospital of Integrated Traditional and Western Medicine, led by Dr. Dongyi He, Dr. Shicheng Guo and Dr. xxx are conducting a pilot study that applies genetic testing results to improve and personalize care for 2,000 Guanghua Hospital patients. It is estimated that up to 3% of patients will carry a genetic variant that is clinically actionable. Clinically actionable variants are those that increase disease risk for conditions where early detection may improve outcomes such as cancer and heart disease. In addition to disease risk variants, it is expected that 95% of patients will carry one or more pharmacogenetic variants. Pharmacogenetic variants are those that influence how people respond to specific medications. This genetic data are being integrated into Guanghua Hospital’s EHR and decision support tools are being developed so our patients can receive the right drug, at the right time, and at the right dose. This project is supported by generous patient donations, financial support from Security Health Plan, and grant awards from National Institute of Health.