# PCNE WC2019 - WS1: Using pharmacogenetics to select patients for pharmaceutical care (Extended Abstract)

## Abstract

## Introduction

Pharmacogenetics (PGx) ) is the field in which an individual's genetic makeup is used to guide pharmacotherapy, thereby personalizing medicine In recent years, many clinical guidelines have been developed guiding clinicians to select drug and dose based upon an individual's genotype. However, implementation of these recommendations into clinical practice remains a challenge. This may be due to as well practical as intentional barriers. In this workshop the concept of PGx is introduced. Participants get acquainted with actual guidelines for relevant pharmacogenes in drug treatment and discuss their potential impact on patients and healthcare. Participants will exchange their own opinions and discuss views from literature on the clinical utility and feasibility of PGx implementation into their daily practice.

In this workshop you will discuss the meaning of PGx for pharmaceutical care from existing evidence and guidelines, related to the assessment of their clinical utility and feasibility. We will develop recommendations for the implementation of pharmacogenetics to clinical practice. This workshop invites community as well as hospital pharmacists, researchers, policy makers, and pharmaceutical care services.

## Workshop aims and learning objectives

- Get acquainted with the principles of PGx and existing guidelines for drug choice and dosage
- Discuss the potential impact on patients and healthcare for some examples of genotype related dose recommendations for specific drugs
- 'Make your own guideline' for a specific drug/gene interaction
- Discuss critical views on implementation and develop an own point of view
- 'Develop your own trial' to gain evidence for an effective implementation of PGx
- Discuss the design of the ongoing PREPARE study
- Develop a generic guideline for PGx implementation in daily practice with a view on the necessity, urgency and feasibility with critical success factors and pitfalls, and recommendations.

### Methods

Different work forms will be applied to learn about the topic: presentations, reading and discussing evidence from literature, exchanges in small groups and the plenary. After an introduction to the principles of PGx and PGx guidelines, the workshop participants will identify the main topics for the following workshop sessions. To this they can focus on existing evidence for specific drug- gene interactions from literature, discuss critical success factors of PGx to their practice, evaluate views of pharmacists and stakeholders to be involved and barriers to overcome. Finally all insights are summarized , and participants will formulate recommendations for PGx implementation.