

# Role of PGx Test in Personalized Medicine Without Adverse Drug Reactions

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## Abstract

A legal drug prescribed by a doctor and taken as directed kills one patient every 4 minutes or 350 per day in the United States alone. Adverse Drug Reactions (ADR) put millions of people in hospitals. ADR is 4th leading cause of death<sup>1</sup> (5th if you include deaths due to COVID-19).

It is because doctors continue to prescribe medications by Trial & Error. One drug does not fit all<sup>2</sup>. Patient Population for Which a Drug Is Ineffective 2 Anti-Depressants (SSRIs) 38%, Asthma Drugs 40%, Diabetes Drugs 43%, Arthritis Drugs 50%, Alzheimer's Drugs 70%, Cancer Drugs 75%. We are all different, including siblings due to inherited genetic variations (mutations). Hepatic gene variation controls how we respond to a drug. With a simple test called a pharmacogenetics (PGx), a doctor can observe this genetic activity of the individual patient and determine the suitability of a drug before it is prescribed. And the drug can be personalized, avoiding traditional way by trial and error.

## Biography

Brahma D. Sharma, PhD is a retired chemist from R&D and manufacturing in pharmaceutical and medical device industry. He is an author, inventor, scientist, coach, and keynote speaker. His mission is to reduce Adverse Drug Reactions (ADR). It's the fourth leading cause of death in the US after heart attacks, strokes, and cancer. One person

dies every 4 minutes. He is educating everyone, patients, doctors, healthcare providers how to avoid ADR by incorporating Pharmacogenetics (PGx) testing in the practice and personalizing drugs that match patient's hepatic gene variations. ADR is estimated to cost over \$136 Billion in the US not counting priceless suffering of patients and their loved ones.