

C-Gene^{PGx}

Let's take a look!



Right drug. Right dose. Right now!

The PGx Test

easy

comprehensive

dynamic

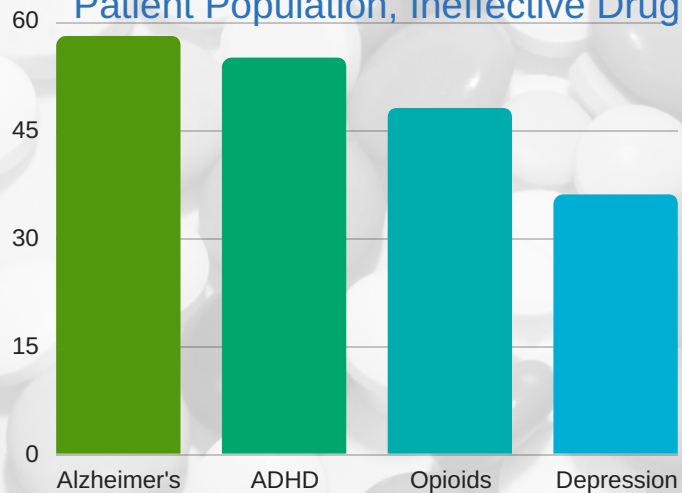


Capstone
GENETICS

Personalized Medicine

Personalized medicine is present in today's medicine. It provides individualized health care by using knowledge of patients' health history, behaviors, environments, and, most importantly, genetic variation when making clinical decisions. Genetic testing provides advances to more accurately predict the risk of developing certain diseases, personalize screening and surveillance protocols and, in some cases, prevent the onset of disease. Genetic screening is used to diagnose diseases and tailor therapies and disease management strategies. Personalized medicine relies on knowledge of a patient's genotype (genetic makeup) influences his or her phenotype (observable traits or characteristics). Health care providers are equipped to move beyond the "one-size fits-all" approach.

Patient Population, Ineffective Drug



*Oncology drugs are 73% ineffective

Pharmacogenetics

Pharmacogenomics is the study of genetic variations that influence individual response to drugs. *Pharmacogenetics* is the impact that a gene has on how a drug metabolizes. These terms are often used interchangeably. Enzymes responsible for drug metabolism and proteins that determine the cellular response to drugs (receptors) are encoded by genes. Knowing a patient carries any of these variations helps a health care professional individualize drug therapy, decrease the number of adverse drug reactions and increase the effectiveness of drugs.

Pharmacogenetics is getting the right dose of the right drug to the right patient at the right time.

Metabolizer phenotype

Metabolizer phenotype describes the patient's ability to metabolize drugs and based on the number and type of functional alleles of certain genes that a patient carries. A drug metabolizes in one of four ways:

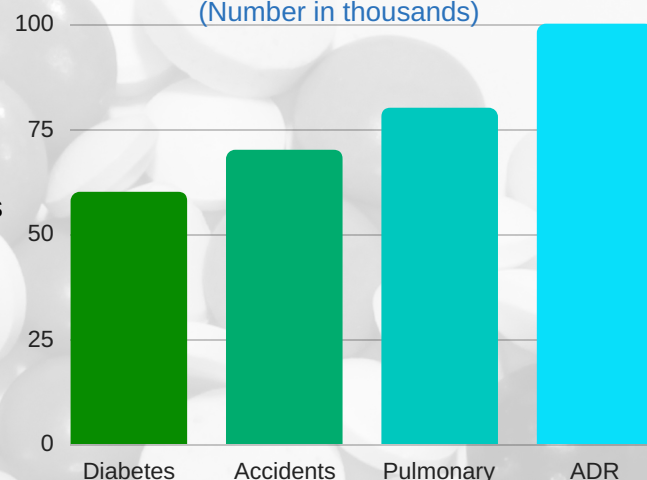
***Ultra rapid metabolizer (UM)**-The drug works too fast in the body. It is characterized by a rapid onset and quickly leaves the body. The patient feels "great" then quickly feels worse.

***Extensive Metabolizer (EM)**-Enzymes function as expected and patients should metabolize medications with desired therapeutic treatment.

***Poor Metabolizer (PM)**-The drug does not work and has no enzyme functionality. Can create possible toxicity to the patient.

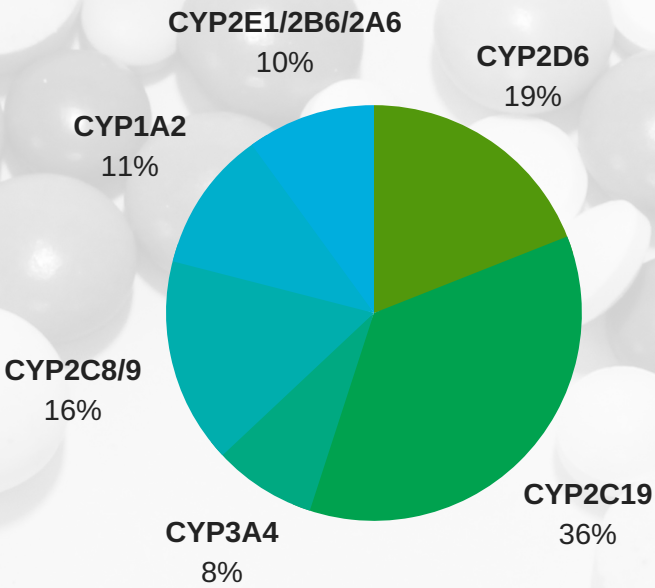
***Impaired Metabolizer (IM)**- Reduced enzyme functionality. Patient displays side effects and there is an increased risk of adverse drug effects and/or reactions.

Leading Cause of Death
(Number in thousands)



*Heart Disease, Cancer and Stroke are top 3

easy



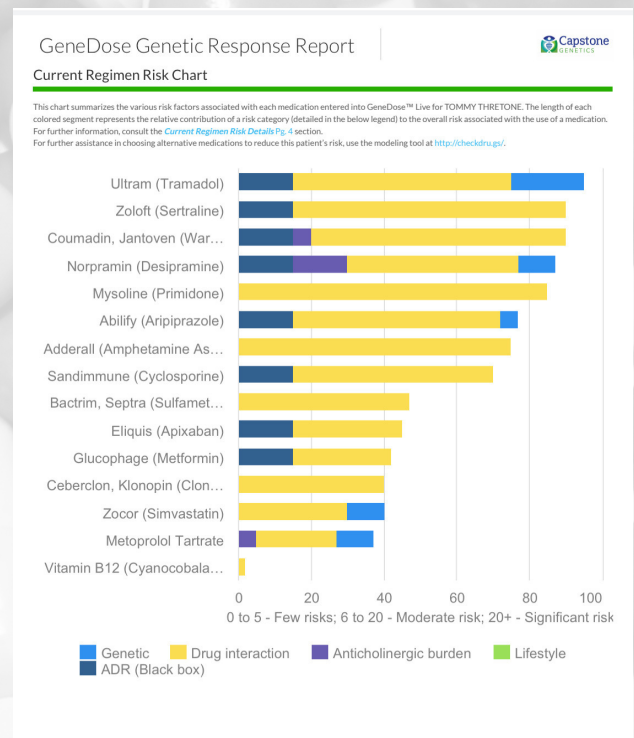
- an easy 30 second buccal swab
- outstanding customer service plus a care provider option
- one page, easy to follow, requisition form

comprehensive

- a comprehensive gene panel that covers the majority of all drugs
- CYP2D6-studies show this involved in the metabolism of 19-25% of all drugs
- CYP2C9 involved in the metabolism of many common drugs such as glipizide and warfarin

dynamic

- customized reports in short and long format; online support also
- shows how each medication interacts, if there are any issues with those medications, and suggested modifications
- good for the life of the patient; drugs change but genes do not.

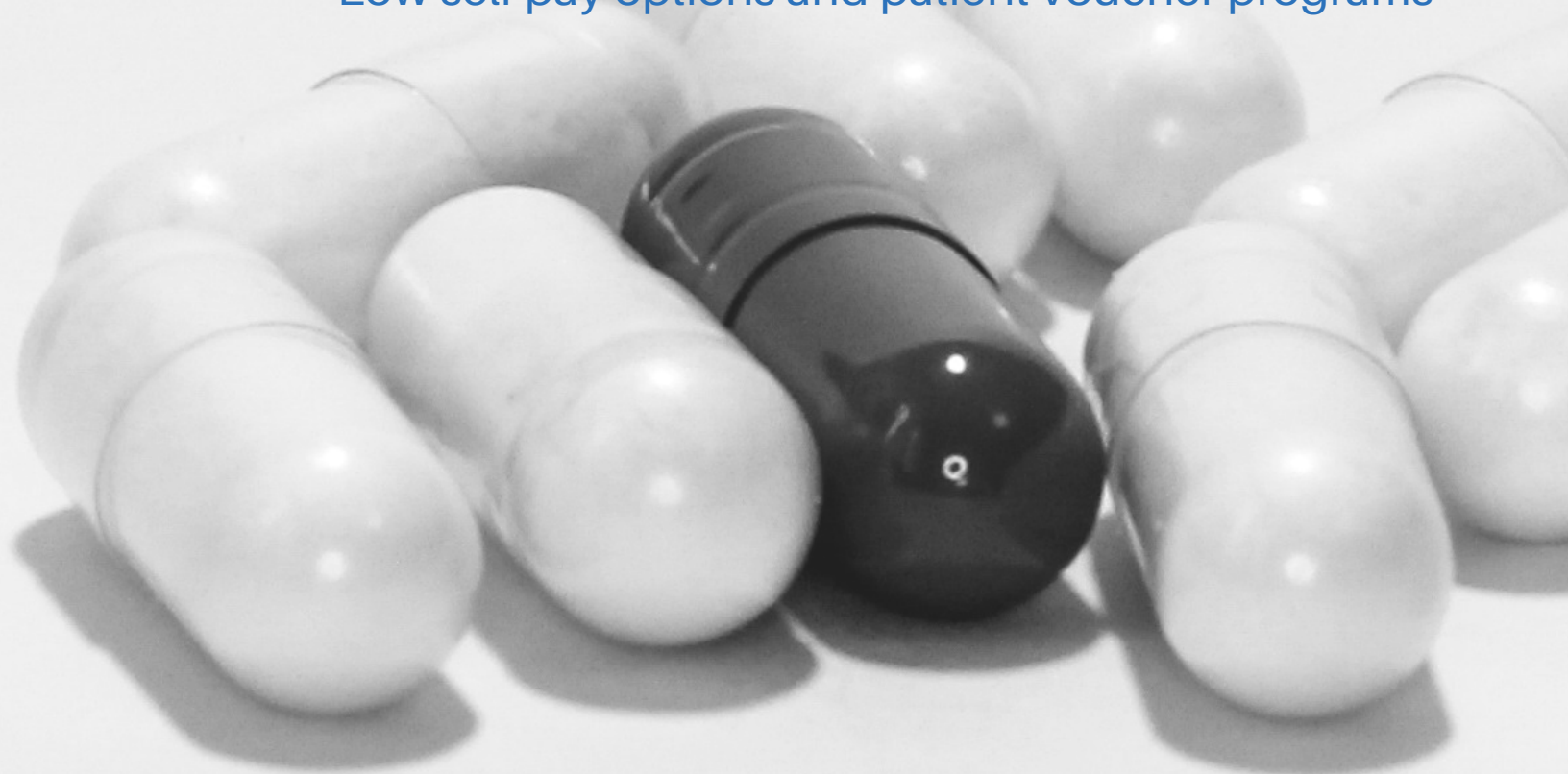


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Let's take a look!

we got you covered

- Outstanding insurance coverage
- Pre Screening and Pre Authorization direct support
- Low self pay options and patient voucher programs



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