

# Tailored Treatment with

**PGx**

**Comprehensive**

Using NGS





## Prescribe with precision

Pharmacogenomics (PGx) is the science that harnesses the power of genomics to precisely determine how effective a drug will be for an individual based on their DNA.

- Helps improve patient care
- Provides specific drug dosing recommendations, based on guidelines
  - CPIC (Clinical Pharmacogenetics Implementation Consortium)
  - Pharmacogenomics Knowledge Base (PharmGKB)
- Reduces trial and error, enabling personalized medicine
- Provides genetic variant details and metabolizer status

## Advantages of PGx - Comprehensive

### REDUCES TRIAL & ERROR

in appropriate drug and dosage selection



Prevents Adverse  
Drug Reactions  
(ADRs)



Higher compliance  
and medication  
adherence



Cost effective  
and personalized

## Who should get tested?

### Essential for:

# ALL

### Especially for:

- Patients under treatment for cardiology, oncology, neurology, pain management, gastroenterology, etc.
- Patients with a history of medication-related adverse events
- Patients with history of poor response to certain medications
- Patients with a complex medication regimen
- Patients undergoing surgery (anaesthetic agents)








## Highlights of PGx - Comprehensive

- Indicates clearly
  - Drugs to be 'avoided'
  - Drugs to be 'used with caution'
  - Drugs to be 'used as directed'
- Indicates clearly the dosing recommendations based on guidelines
- Indicates clearly the genetic variants that impact the drugs

**identifi PGx - Comprehensive harnesses the power of Next Generation Sequencing (NGS) to identify genetic variants and provides actionables across:**

- 90+ medications
- 15 drug classes
- 18 Clinical Pharmacogenetics Implementation Consortium (CPIC) drug responses
- 400+ unique alleles



## PGx - Comprehensive includes

Drug Class	Genes
 <b>Cardiovascular</b> Anticoagulants, Antiplatelets, Statins	ABCG2, CACNA1S, CYP2B6, CYP2C19, CYP2C9, CYP2D6, CYP3A5, CYP4F2, G6PD, RYR1, SLCO1B1, VKORC1
 <b>Neurology</b> Anesthetics, Analgesics, Antidepressants, Anticonvulsants, Antipsychotics, Selective Serotonin Reuptake Inhibitors (SSRIs), Tricyclic Antidepressants (TCAs)	
 <b>Pain Management</b> Nonsteroidal Anti-inflammatory Drugs (NSAIDs), Opioids	
 <b>Infectious Disease</b> Antibiotics, Antifungals, Anti-HIV Agents	
 <b>Gastroenterology</b> Proton-Pump Inhibitors (PPIs)	
 <b>Immunology</b> Immunostimulants, Immunosuppressants	
 <b>Others</b> Antinauseants, Urology medications	

## A one-time test for a lifetime of benefits



### References

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 **HaystackLabs**

H-22, 23 Akshar Business Park, Sector 25,  
Turbhe, Navi Mumbai 400703

 +91 88288 31393

 [identifi@haystackanalytics.in](mailto:identifi@haystackanalytics.in)

