Genetic diagnostics witnessing rise in spending on research

OPPORTUNITIES

1. Disease treatment:

• Over a million children are born each year with genetic abnormalities in India. Carrier screening for elimination of community specific disorders- Some diseases common within specific communities can be eradicated with couples having prior information about their carrier status and the chances of passing on any disease condition to their offspring.

• Detecting early and personalized treatments will increase life expectancy for diseases like Cancer

• Red-flagging treatments likely to cause adverse reactions will ensure the right direction of treatment for rare disorders.

2. Drug Discovery & Development

• Majority termination of drug trials happen in Phase II & III resulting in huge losses with respect to resources of time and money to the pharma industry. Genetic Diagnostics will help in the discovery of efficient tumor biomarkers through sequencing and will be the next step in treatment of different Cancer types.

• Understanding the value of the Indian population through Genetic Diagnostics will provide vital information for creating databases of largely prevalent diseases such as Diabetes.

• The subdivision of the population into responders and non-responders to a particular drug will provide an invaluable starting point for the association of genetic variation with particular phenotypes.

3. Other areas such as ancestry information

Ancestry information drawn from a user's genetic markers will offer them and the clinicians medically relevant information to investigate the genetic roots of diseases.

TRENDS

The Genetic diagnostics industry is seeing increased spend on research with the aim of minimizing the inherited disease burden of the country. The industry is witnessing a healthy growth rate at 15% CAGR till 2020.

Some of the other key trends are: Pharmacogenomics, Gene Editing, Direct to Consumer Genetics, Growth of Newborn Genetic Screening Programs.

- Sam Santhosh,
Chairman
and CEO, MedGenome