

Revolutionizing medical diagnosis through genetic screening

08 March 2015 | Features

Revolutionizing medical diagnosis through genetic screening



Mumbai-based Navigene was incorporated in April 2012 and began operations in Nov 2012. The company operates in the domain of genetic science undertaking screening, diagnosis and research in Metabolomics with focus on non-invasive Preventive Testing (New Born Genetic Screening (NBS), Metabolic fingerprinting, Prenatal screening etc). It is said to be the first institution to have developed a robust Preventive Genetic Screening solution which is implementable at a large scale.

Dr Rishi Dixit, MD and CEO and Dr Vrushali Joshi, CTO, co-founded Navigene along with Incucapital. "Our aim is to strive for early and accurate prediction of diagnosis of disorders and ailments, through Preventive Genetic Screening solution across age groups and give an individual a head start in managing his/her health. The challenge is to make such preventive health screening mass marketable and at affordable price," said Dr Dixit.

The company currently offers Newborn Screening and Diagnostics, Metabolic testing for Adults, Prenatal Screening and Diagnostics, Cytogenetics, Molecular diagnostics and Genetic counseling.

It's flagship product Navigene Baby Screen, is innovative and unique technology, that screens the New born babies for 110 genetic and metabolic disorders as early as 3rd day of life through just a urine sample collected on a special filter paper. Traditionally, NBS across world is done through blood samples. It is one of the most comprehensive screening tests in the world, according to the company. It offers one step confirmatory (for 80 percent of disorders screened) making a follow up test unnecessary.

"The newborn screening portfolio at Navigene starts from 3 basic disorders moves up to max 110 disorders. We have screening packages to suit every budget from High end corporate hospitals in metros to the nursing homes in tier 2 and 3 cities," informed Dr Dixit.

The company was funded through seed capital raised with the help of Institutional co-promoters Incucapital. "We are planning

to raise series a funding in next 6-8 month," notified Dr Dixit.

It has currently partnered with Cordlife India, a Stem cell bank for new born screening and Metabolic fingerprinting services, whereby they would be offering its services to their clients.

Talking about the challenges that they faced while establishing Navigene he said, "Acceptability to new technologies is a hurdle we faced when we started but we were successfully able to prove ourselves with the kind of results we have given to our clients." He added, "Awareness amongst the prospective clients is the biggest challenge. Patient education is virtually non-existent in India. Reaching the clients another challenge as the cost of reaching the client in this industry is huge. We are adopting innovative ways such as online registrations for the test to overcome the challenges and have tasted some success with our methods."

Most of the system/machines/hardware/reagents etc we currently use are imported, the kind of duties levied on these seems to be very steep and at times affects the viability of the entire project. The manufactures along with the demand from the smaller companies have come up with some innovative ways such as reagent rental models etc, but I feel the Govt can do good to relook at these duties and extend some sector specific sops that should benefit start up. Unless this happens the Make in India would be a distant dream. I feel it's one of the best times to be an entrepreneur across various countries globally.

The company is further looking to break through preventive screening product around metabolomics in area of oral and breast cancer as well as adult metabolic dysfunctions and is also looking to further improve the current product mix on the Newborn screening to include Sickle cell, Thalassaemia and other important genetic disorders screening.

Dr Dixit elaborated, "One such test is called metabolic fingerprinting. This is a service for Adults which is about to be launched is also a non-invasive simple to do test which requires a urine sample absorbed on the special filter paper provided. This is known as Metabolic fingerprinting or Metabolic profiling, and is an advanced diagnostic procedure that reveals the root causes of health conditions or diseased states and recommend steps to manage the same."

The test analyses the presence/absence or levels of certain metabolites/biochemical markers which are by products of metabolism in your body and can forewarn you about certain impending diseases. These markers when studied by the Metabolic Profiling test can tell you about the required changes in the way you live and what you eat to ensure an improvement in the health conditions and reduction in disease risk. Using test results, practitioners can design comprehensive, customized therapies to restore optimal metabolic health.

In terms of marketing and sales, the company plans to expand its presence to 25 more cities in next one year in India and reach out to the client in Middle East, South East Asia and Europe through partnerships. "We look forward to work with the Government Hospitals and NICU across India as these are the hospitals where a lot of such cases at first instance get referred to and we can still help them," he signed off.