

Adopting newer diagnostics

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Local diagnostic companies too are launching newer diagnostic products.

The Indian diagnostics market is growing at 15-20 percent annually. And newer products are being introduced not only by global players but also by Indian companies.

Bangalore-based XCyton Diagnostics has developed the DNA chip for simultaneous identification of 15 different pathogens causing eye infections. Xcytoscreen Keratoconjunctivitis, Uveitis, Retinitis and Endophthalmitis, the specific and sensitive diagnostic kits for the detection of 15 microorganisms responsible for infection to both eyes and brain have been developed for the first time in the country and is based on Nucleic Acid Amplification technology and Macro-chip. "About 2,00,000 people suffer from eye infections in India every year and a million globally. The Xcyto-Screen kit has the advantage of being able to detect a series of the eye infecting microorganisms," said Dr Ravikumar, managing director, XCyton Diagnostics, at the product launch event.

Navi Mumbai-based Yashraj Biotechnology Ltd (YBL) is one of the few Indian biotech companies focused on molecular diagnostics. YBL uses the proteins purified from human biomedical waste as reagents for the development of indigenous kits. Efforts are on to forge public-private partnership in development of diagnostics on the principles of immunology, DNA detection system, and instrumentation. The focus to develop diagnostics for cancers, acute lower respiratory infection, HIV, diarrhoea, malaria, tuberculosis, and sexually transmitted infections is on the rise. These diseases result in a significant loss of human life.

The National Biotechnology Development Strategy of the Department of Biotechnology, Government of India, has talked about the diagnostics for emerging medical paradigm in the sectoral road map and also suggested some strategic actions for the sector. The strategic actions include establishing a cell for diagnostic biotechnology to encourage and support studies in the clinical application of pharmacogenomics. This cell should be well positioned to overcome barriers in its work to bring pharmacogenomics to the clinical setting; encourage research involving investigators with both clinical practice and pharmacology/ pharmacokinetics expertise while at the same time keeping the overall goal of clinical application/utility in focus; provide incentives for this group of clinician-researchers to bring these scientific advances to the patient bedside; support education programs to providers of the importance of this field and its utility; encourage biopharmaceutical companies to include pharmacogenomic data in their drug submissions.

Asia outlook

With the presence of rich pool of innovation and intellectual property, manufacturing capacity, emerging industry players and maturing market-Asia is beginning to experience the surge in IVD market. At present, Asia Pacific accounts for only two percent of the IVD global sale. Over the past few years, the Asian IVD market has been the only region experiencing close to a double-digit growth rate. While an ageing population and widening health insurance penetration are advancing growth opportunities in this high potential market, divergent country-specific social, economic, political and healthcare issues threaten to impede overall market development. The Kalorama Information report predicts that emerging markets, such as South America and Southeast Asia, where rising standards of living have sparked the growing demands for quality medical care, will experience 10-20 percent annual growth. While Japan, EU, and the US markets, comprising 85 percent of the IVD market, will begin to lose market share, with their portion of the market decreasing to 80 percent by 2010. Asia's ageing population is expected to double by 2025, increasing the number of people likely to require medical treatment. Rising average life expectancies coupled with more affluence are expected to boost expenditure on healthcare treatments, including IVD. For instance, Japan-with the world's third largest aged population-accounts for 90 percent of IVD market revenues in Asia. In other countries, governments are being confronted with the dilemma of reducing healthcare outlays even while expanding healthcare coverage to all. However, the growing realization of their tremendous financial and therapeutic benefits is furthering the popularity of IVD tests. From being under-utilized and undervalued, IVD tests are now increasingly being regarded as key to improving overall cost efficiency and patient outcomes.