Data for life

Most of the talk around data is about driving efficiency in areas like commerce, finance and public services - all fine as far as they go, but data-enabled diagnostics aims to change the face of medicine and, with it, wellbeing.

Diaceutics' aim is a straightforward, yet globally transformative one: to revolutionise patient testing via big data to help pharmaceutical companies, laboratories and patients. Not only a lofty goal, but also a major challenge.

It is not a pipe dream; the field of diagnostics is being revolutionised.

The end goal is truly personalised medicine, said Dr Merbol Ibrahim, managing director of Diaceutics, a pioneer in personalised medicine.

"Big data allows 'real world' insights: data that is generated from actual patients' tests rather than from clinical trial data," he said.

Integration of data into the medical mix has a number of key strategic benefits. Firstly, it lowers risks for pharma companies engaged in testing, but it also makes sure that labs can incorporate real data and, ultimately, makes sure that the right patient is given the right therapy.

"Data allows pharma and physicians to actively monitor actual patient rates. This real world information about real patients represents a step change in diagnosis and therapy."

"Prior to a new therapy launch, data allows Diaceutics to provide pharma clients first-hand insights into issues that they may face in launching a new diagnostic test, thus reducing risk and accelerating market penetration," said Ibrahim.

"Risk occurs not because the test is incorrect, but you have to make sure that those providing the test (a) are aware of new potential therapies and associated diagnostic test, (b) are educated as to the reason behind the new test, and (c) have the technology needed to run the test," he said.

Traditional methods have not been as responsive. Clinical trial data, for instance, is not always representative of real world patients, and does not necessarily include all methods and technologies that may be used in a laboratory. Diaceutics actively collates and analyses 'real world' data to provide insights to clients that allows quicker test adoption.

"Data also allows physicians, pathologists and labs to benchmark their own tests against other labs, providing them with confidence in their diagnostic testing," said Ibrahim.

"This is done because precision medicine requires precision patient testing, and proactive data collection allows for better monitoring of patient testing.

"We are now in the 'Internet age' where patients are very knowledgeable on what therapies and tests are available. Our data can make sure that they are getting the best diagnostic test and associated therapy," Ibrahim said.

"Diaceutics also maximises return on investment while reducing risk by providing real, evidence-based data and highlighting potential false results.

"Accelerated market penetration is achieved by means including partnership with the Institute of Biomedical Science (IBMS), which provides Diaceutics with access to its network of more than 20,000 biomedical scientists worldwide.

The partnership means that labs working with Diaceutics can be supported with test availability, have their methodologies and requirements better understood, and be provided with face-to-face education and workshops.

As many of the Diaceutics team members are themselves scientists, they understand first-hand the issues that clients face.

"We must work ever closer with organisations such as the IBMS, because the scientists and labs are also our partners. Having the association with the IBMS further indicates Diaceutics' commitment in engaging, supporting and working with laboratories in the field of precision medicine," said Ibrahim.