

Alex Wong - CEO, Xcelom



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Alex Wong, CEO of Xcelom sat down with PharmaBoardroom to discuss the company's

non-invasive prenatal testing (NIPT) technology and increasing capacity in the field of screening for chromosomal disorders. Wong sheds light on the Asian diagnostics market and unveils his strategy to expand Xcelom's offering across Asia.

Tell us about Xcelom and how it differentiates itself from the competition.

Generally speaking, all NIPT technology uses the same background theory and follows a similar formula; that is using foetal DNA found in maternal blood to detect a corresponding foetal genetic anomaly. The major differences between the various NIPT service providers lie in how they conduct their quality control and their basic format of testing. Some use in-house platforms such as DNA chips or PCR based methods, which, aside from having a lower sensitivity, can only offer a very limited scope of data.

Our NIPT was invented by a research team from the Chinese University of Hong Kong (CUHK) and we are currently the exclusive licensee of this NIPT patented service from CUHK. Our technology is based on DNA sequencing, which in comparison, is more sensitive and reliable. Also, Xcelom's NIPT follows much more stringent protocols, this together with the use of our unique combined algorithm (one that looks at an extra set of parameters instead of just the standard ones) makes our test extra accurate and reliable.

Above all, Xcelom pushed the envelope with the introduction of performing NIPT at as early as 10 weeks of gestation. At such an early gestation, there is only around 0.8 to one percent foetal genetic material. Previously this low percentage could sometimes lead to uncertainty in the reading, however, Xcelom was able to successfully overcome this difficulty by increasing both the detectability and sensitivity of its NIPT.

Lastly and most distinctively, our reports are endorsed and supported by one of Hong Kong's most recognised academic/medical teams. I think it would be safe for me to claim that our reports are better and more comprehensive than others. Our pursuit and pioneering of cutting edge improvements, along with our partnerships with various medical expert KOLs in Hong Kong, are what made us the NIPT market leader we are today.

What is the strategy to ensure greater uptake of NIPT amongst doctors?

Prior to the availability of NIPT, OSCAR (One-Stop Clinic for Assessment of Risks) was the most popular option for prenatal Down Syndrome screening and is still offered free of charge at public hospitals. This created great difficulty for the introduction of NIPT into the market.

Since OSCAR is far less accurate in comparison, with a high false positive rate, many medics still welcomed this additional option. Many a time, these doctors had to bear the liability of risk of miscarriage associated with amniocentesis, an expensive procedure that was used to confirm the results of OSCAR. The development of NIPT meant that Drs had the option of offering a more reliable yet safe prenatal screening to their clients, thereby also minimizing their own liability.

However, as NIPT is on average pricier than the conventional method, its initial uptake in the market was still limited. In order to increase its acceptance by both doctors and mothers, the NIPT technology had to be able to do more, much much more. The ability to detect foetal DNA anomaly and determining the gender accurately for curious parents at as early as 10 weeks of gestation, as well as the detection of over 130 conditions all in a single test contributed to the successful uptake of NIPT in the market eventually. Although in the public sector, this test has still not been able to replace OSCAR due to its cost, however, NIPT is now officially the second-tier screening for OSCAR high-risk cases in the public sector and is the most preferred choice for doctors and mothers in the private sector.

Given the large number of companies operating in the Asian diagnostics industry, how would you assess the challenge of operating in a crowded market?

For this question, I would be excluding the Chinese market in my discussion as the Chinese market is handled solely by our mother company, whilst we are responsible for the Hong Kong, Macau and all overseas markets.

In my opinion though, although the market appears crowded at first glance, that is not actually the case. The market is currently flooded with academic research companies that are trying to turn their ideologies into commercial products rather than actually having a marketable one already. Regrettably, in the end, only very few of these tests survive to be commercially viable. Reality is that, in the commercial world, we look at business rather than just an academic research theory.

Take cancer research for example. It is the latest hot topic, and lots of start-ups and investments are going into it, particularly on early cancer detection. But so far, from what I can see, very few of these companies go on to be finally commercially successful.

Another reason why that market looks more congested than it actually is, is because of the big gap between supply and medical needs. Many new tests are developed for genes that are of great research value but might not be in high demand by medical practitioners nor do they actually meet the true need of these medical professionals and their clients.

Hence, in my opinion, I don't find it too challenging. One, because in terms of product type, I do not see any other genetic test on the market that are comparable to NIPT in terms of its demand and reliability in its prediction for a disease outcome.

Two, as previously mentioned, Xcelom has strengths that no other NIPT service providers on the market can compete with.

How do these relatively high costs affect your ability to successfully internationalise?

From my business point of view, although a relatively high cost plays quite an important role in determining how we internationalise, it is not the most important factor to consider. Rather, it is the market size followed by income per capita.

For example, our first overseas market was Taiwan and it was just as successful as Hong Kong. Even though their income per capita is much lower, we were able to dilute out the cost of each test by a much larger market volume and this attributed to their successfulness. Other markets with

sizeable populations that we are targeting next would be Thailand and Vietnam. These markets are very similar to Taiwan in nature and hence we believe that they are of great potential and profit.

Once a new market has been well established and has proven to be feasible, our plan is to find local partners to whom we can technology transfer our test to. This way our test can be conducted locally. Local production and the use of a local workforce will not only reduce the cost of the test but in contrary also increase the market size; a win-win situation for both the investor and the public.

What are your immediate ambitions for Xcelom?

We have strong ambitions for growth and development. Our company vision is to become a leading genomic service provider in the world. Just very recently in 2019, we relocated to a much bigger office, expanding from 5,000 to 20000 square feet. This is sufficient for our current operations, but with our plans for further expansion, we expect to acquire another floor of office space as well as another 6,000 square feet for a new laboratory.

Although we are currently financially self-sustainable, running on our own finances without any debts or loans, however, given our future plans, new revenue streams will be necessary. Thus, we are looking forward to generating more funds by being a listed company in the near future. Honestly speaking, there is some uncertainty as to whether we will be able to meet our initial time frame with everything that's been happening in Hong Kong, but nonetheless, an IPO (Initial Public Offering) remains well within our aspirations.

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