

## Vita platform propels genomics research

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### Vita Genomics' platform propels pharmacogenomics research



The pharmacogenetics testing is a new and powerful tool in medical application. Scientists combine genomic data, pharmacokinetics molecular/cellular phenotype data, and clinical phenotype data to understand the relationships between different genes and various drug functions.

Based on this particular pharmacogenetics, Vita Genomics, a genomics-based biotechnological and biopharmaceutical company from Taiwan, has developed a platform named CiYoPu for identifying drug metabolizing gene variants of patients. CiYoPu provides knowledge of individual genotype to maximize treatment efficacy, target drugs to responders, and avoid adverse drug reactions.

Vita Genomics was chosen for the BioSpectrum Asia Pacific Bioscience Industry Emerging Company of the Year Award for 2010.

### Genesis

Vita Genomics was established in March, 2001 by Dr Ellson Chen, better known as the Grandfather of Sequencing, with an

investment of \$75 million raised from various Taiwanese investors. Over the period of time, Vita Genomics has developed proficiency in conducting pharmacogenomics research aimed at early disease prevention and personalized medicine, in-vitro diagnosis (IVD) product development, and specialty contract research services.

Vita Genomics has developed six technology platforms such as high throughput screening, short tandem repeat genotyping, SNP genotyping, clinical genomics, functional genomics and bioinformatics. "Using these technology platforms we developed innovative and IP protected products that are moving through clinical trials and field testing. Some of our research is further developed into diagnostic or prognostic kits that are commercially available in the market.

## **Business strategies**

Started with 60 staff that include 15 PhD holders, the company has emerged as a leading biotechnology group in Taiwan. Vita Genomics has adopted an inorganic business model by acquiring and setting up of its own subsidiaries to grow its operations. In 2003, the company has acquired Shanghai GeneCore from ABI & Celera and also established CytoPharm for protein drug development. With the changing business opportunities, Vita Genomics has set up Cyto Biotech for animal healthcare in 2007. ACTS Biosciences is the latest addition to the list of the group. Set up in 2009, ACTS Biosciences has been looking after the global business development, marketing and distribution of services and products offered by Vita Genomics and Shanghai GeneCore Biotechnologies.

Vita Genomics has developed three products namely Beta-Ag, INFor and AmSure in pharmacogenetic testing area. It has developed two products, BRCA Chip and Cancer Gene Detection, for cancer testing. It has also developed tools that can test caffeine, alcohol, parental, personality, skin, Apolipoprotein E and whole genome scan. In disease risk assessment space Vita Genomics has developed as many as 10 tests for OsteoGene, Obesity, AMIType, HypTen Type, APOE Test, Stroke Type, Alzh Type, SmaPhile, MetaPro and FH-Profiler.

Vita Genomics has been developing diagnostic product in the areas of liver diseases, various cancers, and obesity-metabolic syndrome and psychiatric cares. At the same time it is offering cost-effective and efficient CRO services through its ISO certified central labs to various clients. Its subsidiary operation, GeneCore, in Shanghai, China, has achieved second profitable year at an annual growth rate of over 40 percent.

CytoPharm (CP) is developing oral interferon for the treatment of hepatitis C under phase II clinical trials. CP also initiates clinical study for flu this year. On the other side, Cyto Biotech, which is developing oral interferon for animal healthcare, is expanding its market into mainland China this year. The company plans to list on Taiwan OTC market later this year.

ACTS Biosciences has launched global marketing of its comprehensive and high quality genomics/pharmacogenomics services and diagnostic products and services to various clients including pharmaceutical companies, CRO companies and diagnostic companies. ACTS has established its offices in Taiwan, China and the US to explore new business opportunities world-wide with specific emphasis in oncology-related diagnostics and therapies.

In addition to maintaining healthy growth, Vita Genomics is actively participating in modernizing Taiwan healthcare system. The company is establishing the infrastructure needed to add the molecular profile information to the healthcare integrated circuit (IC) card. This is a first step in creating personalized medicine in the future.

## **Breakthroughs**

Year 2009 is a financially significant year for Vita Genomics, as it is the first year the company has achieved break-even point at over \$5 million annual burn rate after nine years of its operations. The cumulated total number of peer-reviewed paper publication too has reached a new high of 53 with 13 patents.

On the R&D front, Vita Genomics has established several additional collaborations with major hospitals and premier academic institutes. Cancer targeted therapy is gaining momentum at local markets in Taiwan and through collaborations the company is increasing the detection services such as EGFR & Kras genes.

Establishment of ACTS Biosciences has increased its business horizons to other countries in the Asia Pacific region and worldwide. ACTS has established collaborations with top international pharmaceutical, CRO and diagnostic companies in 2009, which will generate additional revenues in future. Furthermore, with the establishment of another sister company, Cyto Biotech, the application of preventive care has also extended into animal uses.

Commenting on the future plans of the company, Dr Chen says, "We strongly believe that the role of genomics and pharmacogenomics in the development of personalized medicines of the future is unarguably indispensable. Towards this trend, we at Vita Genomics and Shanghai GeneCore provide pharmacogenomic services and diagnostic tests that cater to the local needs of disease prevention and individualized therapy. Through our dynamic marketing arm, ACTS Biosciences, we hope to expand our services and products to clients not only in the Asia Pacific region but also around the globe."

On receiving the BioSpectrum Asia Pacific Emerging Company of the Year 2010 Award, Dr Ellson says, "I sincerely appreciate BioSpectrum and the reviewers for picking us for this award. It is a great endorsement justifying our nine-year long efforts by many hard-working people and it would certainly enhance team morale and comfort our investors."