

ArBlast Co., Ltd.

Playing a vanguard role in industrializing the corneal regeneration technologies

www.arblast.jp

ArBlas Co., Ltd.
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|------------------------|---------|
| Founded in | 2005 |
| No. of employees | 33 |
| State of Ownership | private |
| Primary stock exchange | N/A |

October 2009: ArBlast is an expert in regenerative medicine biomaterials for ocular surface reconstruction. Its head office and cell processing center are located in the Kobe Medical Industry Development Intellectual Cluster, around 30km west of Osaka, Japan. The cluster is a well-known cell therapy and regenerative medicine research hub. Venture Valuation (VV) interviewed Dr. Akira Kitagawa, President and CEO.



アルブラスト株式会社
ArBlast Co., Ltd.

VV: **Would you please describe your business?**

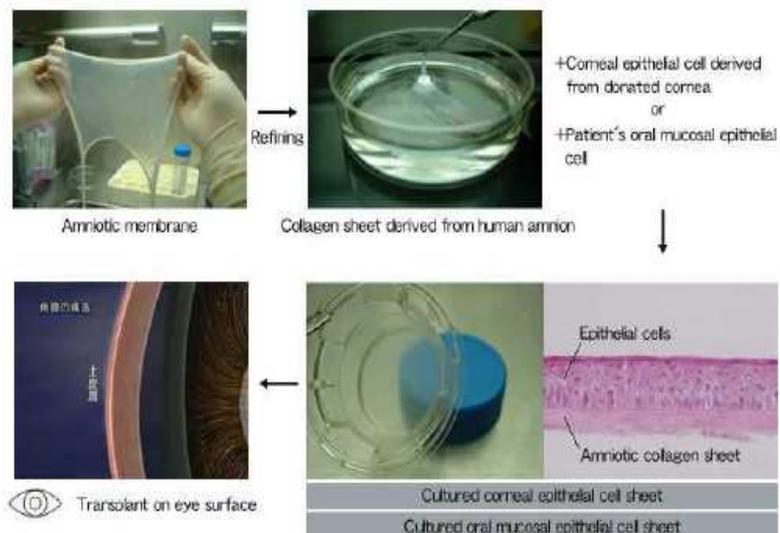
Kitagawa:

ArBlast was established in December 2005 as the result of a merger of two biotech ventures specialized in regenerative medicine: Amniotec and Osteogenesis. We are developing, manufacturing and marketing biomaterials for regenerative medicine specifically in the field of ocular surface disorders.

In the field of ocular surface disorders, we are applying the cell culture technology developed by Prof. Shigeru Kinoshita at the Kyoto Prefectural University of Medicine.

Prof. Kinoshita used human amniotic membrane as a scaffold for cultivated human corneal endothelial

cells (See Figure). Amniotic membrane is mainly made of collagen and known for having strong anti-inflammatory effects.



For the purpose of curing various ocular surface disorders, we are conducting several projects. One of them, the "Allograft Cultured Corneal Epithelial Cell Sheet" was designated in 2008 as an Orphan Medical Device by the Ministry of Health, Labour and Welfare (MHLW). In June this year its



confirmation application has been approved as compliant with the Guidelines for New Biologics.

Other projects are the "Autologous Oral Mucosal Epithelial Sheet" and a clinical study project applying the cell culture technology invented by scientists at Keio University.

VV:

What are your strengths?

Kitagawa:

One of our strengths is our company location in the Kobe Medical Industry Development Intellectual Cluster, an internationally known regenerative medicine research hub. Regenerative medicine is a new field that is posing new challenges. The hub enables close collaboration between universities, research institutions, hospitals, biotech and pharmaceutical companies, and local and national governments. In the cluster we are exposed to and have access a multidisciplinary environment with scientists, engineers, physicians, clinical specialists, and many others. ArBlast is an active participant in the cluster's knowledge sharing.

Second, we have a GMP certified cell processing center that ensures safe and effective operations. Only a few companies provide such a process in Japan. We offer our expertise in cell processing quality control system to research laboratories at university and research institutions.

We have established a close partnership with the MHLW to facilitate transparency in the regulatory process for the new products. Regenerative medicine products require new classifications. Experts from industry, academia, and regulatory authorities have to work hand in hand in order to set a new standard and update Japan's Pharmaceuticals Act in a timely manner.

VV:

What are your objectives in the future?

Kitagawa:

ArBlast is planning to expand business activities abroad by licensing or merger/acquisition. We are also intending to go public next year if the market environment is favorable.

In order to accelerate the approval of our products, we will continue to keep the MHLW informed about the development of technologies. We think it is a joint effort of all stakeholders in regenerative medicine to accommodate the advancement of medicine.

VV:

What opportunities are you exploring?

Kitagawa:

In addition to the product portfolio in ocular surface disorders, we will develop periodontal disease therapy by applying mesenchymal stem cells which have traditionally been obtained from bone marrow. The use of human embryonic stem cell is controversial all over the world. We believe that the technology with mesenchymal stem cells is more likely to provide patients with appropriate cure in the field we are in.



VV: **How do you differentiate from your competitors and position your company?**

Kitagawa: Our direct competitors are CellSeed and J-TEC. However, our marketing strategy for product development, target market segments and positioning is different from theirs.

VV Comments after the Interview:

Once ArBlast has successfully standardized tissue production, the next step would be to challenge more complex tissues and organs which require vascular tissue support.

"The worldwide market for regenerative medicine is conservatively estimated to be 500 billion USD", describes the report "2020: A New Vision – A Future for Regenerative Medicine"¹. The report says that regenerative medicine is expected to transform health care "from treating conditions to curing them". By providing tissues and organs to patients, regenerative medicine is a hope for improving their life as well as trimming down health care costs by reducing chronic disease.

Increasing health care costs and the aging population are key drivers for the development of regenerative medicine. Global competition is getting fierce. Last month the Japanese government announced 30 research projects selected for the Funding Program for World-Leading Innovative R&D on Science and Technology. This national initiative is budgeted to 270 billion JPY (approx. 2.7 billion USD). Including the human induced pluripotent stem (iPS) cell research for regenerative medicine, half the projects are in the life sciences sector. The fact that the iPS cell was invented by a Japanese scientist in 2007 may be a trigger point to accelerate regenerative medicine research in Japan.

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Venture Valuation specializes in independent assessment and valuation of technology-driven companies in growth industries, such as the Life Sciences (Biotech, Pharma, Medtech), ICT, high-tech, Nanotech, Cleantech and Renewable energy. In addition to valuation products, Venture Valuation offers high-quality, focused information services like the Global Life Sciences Database, Biotechgate.com and this "Let's Interview Series" with leading Life Sciences companies. We select and interview thriving companies and organizations all over the world.

¹ Published by the U.S. Department of Health and Human Services (last revised on March 28, 2006)