October 11, 2005
AnGes MG, Inc.

Osaka University, AOKI and AnGes MG Joint Development Project Launched
- Development of Fully Bioabsorbable Next-generation Magnesium Stent -

AnGes MG, Inc. has officially announced the commencement of a joint development with Osaka University and AOKI Co., Ltd., for a fully bioabsorbable next-generation stent made of magnesium.

Balloon catheter technology is mainly used for vasodilation procedures in order to dilate the narrowed coronary arteries caused by arteriosclerosis. However, this method always comes with the disadvantage of occurrence of restenosis, the reocclusion of blood vessels.
Thus, recently the technique was introduced of implanting a stent in the blood vessel after balloon catheter therapy, with the objective of preventing restenosis, but the rate of restenosis occurrence remains 20-40%, which is a major medical issue.
More recently, a drug-eluting stent designed to release immunosuppressive agents or anticancer drugs into the vascular wall to inhibit acute inflammation is being applied in clinical settings. Although the drug-eluting stent significantly reduces the restenosis rate as compared to conventional metallic stents without any drug function, chronic inflammation due to foreign body reaction towards permanently implanted stents composed of materials such as stainless steel cannot be avoided. Furthermore, a high amount of clot formation caused by the delayed stent surface endothelialization due to the drug function is also a notable issue.

Against this background, the market launch of stents made of bioabsorbable material with an added drug-eluting function is awaited in order to solve the material-related issues of stents.
Thus, Osaka University, AOKI and AnGes MG have in collaboration embarked on the development of a next-generation stent made of magnesium alloy.

By leveraging each university’s or company's strengths, the roles of each party in this research and development project are as follows.
Osaka University: preparation and analysis of animal experiments as the method for magnesium stent evaluation.

AOKI: R&D of magnesium (the stent material) processing methods and prototype stent manufacturing.
AnGes MG : stent design and R&D of NFκB oligodeoxynucleotide coating conditions.

This research and development project is a theme adopted by the FY 2005 Consortium R&D project for regional revitalization sponsored by the Ministry of Economy, Trade and Industry.
Osaka University, AOKI, and AnGes MG conduct joint research, and Bio-Sight Capital, Inc. manages the project. Under this scheme, the project is scheduled, in principle, to receive a subsidy for two years.

Company Profile

AOKI Co., Ltd.
Head office : 5-7-3 Takaida-naka, Higashi-Osaka, Osaka
President : Toyohiko Aoki
Founded : November 1979
Capital : 10 million yen (as of September 2005)
Number of employees : 23 (as of September 2005)
Sales : 230 million yen (term ended September 2004)
Scope of business : Production of aircraft parts, precision machinery components, and metal molds

Bio-Sight Capital, Inc.
Head office : 7-7-15 Saito-Asagi, Ibaraki, Osaka
President : Masayuki Tani
Founded : December 2002
Capital : 32 million yen (as of December 2004)
Number of employees : 4 (as of December 2004)
Scope of business : Management and operation of business investment associations, incubation business, and research facilities rental business