Please share with us the background and history of your company.
Daewoong Pharmaceuticals is a pharmaceutical firm with the top sales in description medicines in Korea. Since 2000, it realizes two-digit growth every year. As of 2006, the company had amassed a total of 400.4 billion won in sales since its foundation in 1945. With the vision to become a “global healthcare group leading improvements in quality of life”, Daewoong aims to become one of the top 50 international pharmaceutical companies by 2010.

Daewoong Pharmaceuticals’ business activities are largely based on sales of Ursa, which improves the liver function of patients with chronic hepatic disease and has been sold since 1961. In 2001, the company developed Easyef (a diabetic foot ulcer cure), the first bioengineered medicine made after establishing an annex-laboratory in 1974; and subsequently received a mark for new technology recognition and patent technology contribution. It has also received a Minister’s Award from the Korean Ministry of Health and Welfare and the Jang Young Shil Award for synthesizing coenzyme Q10 for the first time in Korea and only the second time in the world, recording growth for prominent research performances.

What were your greatest challenges when starting the company, and now in maintaining it?
During the 1997–1998 economic crisis, many corporations in Korea had cash flow problems. The price of imported raw materials rocketed and business partners went bankrupt, so for a certain period of time sales bond were not retrieved. It was also during this period that the loans reached their maturity, thus compounding the problem. We endured this period through tireless efforts made by all employees and executives to retrieve the bonds and raise funds. This power is the essential engine behind today’s Daewoong Pharmaceuticals.
[ Special Feature ]
What are the company’s areas of focus/core business?
Medicines based mainly on the digestive system, circulatory system, internal secretion system, and central nervous system. We also produce some other functional health products other than medicine.

What is your staff strength?
Our employees currently number about 1400. Their most prominent strength is that they possess the largest business-marketing capacity in Korea. Our staff has vast experience in achieving sales growth by successfully launching and developing many products in Korea; and such a track record is exploited when launching new products by leveraging Daewoong’s R&D technologies and diverse networks. We also continuously upgrade the functions of existing products to boost marketing opportunities.

Please share with us the technologies your company has patented or those that your research team is working on.
Our company has patents and technologies in the field of drug interaction improvement, such as composition of high-level medicines made of raw materials and their industrialization, active pharmaceutical ingredient (API) synthesis, drug delivery systems, protein cures, antibodies, and multi-layer tablets with special coating.

What are your latest products or those in the pipeline?
These include CoQ₂₀ VQ (coenzyme Q₁₀), a functional health product, and NVU (sibutramine), a cure for obesity.
[ Special Feature ]

Are any of your products in clinical trials now?
We have eight items in clinical trials. These include an epidermal growth factor (EGF) for diabetic foot ulcer, EGF for stomatitis, EGF wound ointment, adenovirus cancer cure, improved new medicine, and neuropathic painkiller based on the vanilloid receptor antagonist mechanism.

Has your company marketed any products to the market yet?
An EGF spray for treatment of diabetic foot ulcer.

Ultimately, who are your target audience or clients?
Our target customers are doctors, pharmacists, and consumers.

Where does your company get its funds from? Who are your investors?
Most of the major pharmaceutical companies in Korea have a traditionally large ownership stake by major shareholders. Our company’s shares are 40% owned by Daewoong Co. Ltd (the parent company), 51% by special participants such as related firms or major shareholders, 12% by foreign investors, and 20% (on estimation) by domestic investors and institutions. In addition, our cash flow can be satisfied through our business activities, excluding a certain amount of private loans for new sources of investment.

Does Daewoong have any collaboration with local institutes or foreign ones? Please share with us the main important collaborations.
Daewoong Pharmaceuticals is involved in collaborated research with Korea’s main research institutions (Korea Research Institute of Chemical Technology, Korea Research Institute of Bioscience and Biotechnology, Korea Bioindustry Center); major universities (Seoul National University, Yonsei University, Korea Advanced Institute of Science and Technology); and venture firms (Peptron, GenExel, Imagine). Also, we are working with major pharmaceutical companies in Europe (Merck, Almirall, Ipsen, Rotta, AstraZeneca, Italfarmaco, Novartis, Tillotts), United States (Eli Lilly, Allergan, Mentholatum), and Japan (Yakult, Sankyo, Dainippon, Eisai, Mitsubishi, Kyowa Hakko) to introduce products via collaborated marketing.

What is the company’s five-year plan/goals/aims and strategies?
In order to achieve the company’s vision as a global healthcare group, Daewoong Pharmaceuticals is plans to become one of the world’s top 50 pharmaceutical companies by 2010. To this end, we intend to reinforce our product portfolio; maximize our business-marketing capacity; register and promote products that suit the demand characteristics of a particular country; and establish international branches and subsidiaries — all of these under an umbrella strategy of elevating our R&D performance to the global level.
[ Special Feature ]
How does your company ensure excellence in output and production of quality products? What are some awards that your company has won?

Daewoong Pharmaceuticals aims to improve the quality of life of the human race by producing high-quality medicine through its excellent R&D, manufacturing facilities, and global network.

**R&D**

Daewoong developed the first biomedicine (Easyef, a cure for diabetic foot ulcer) in Korea, and has achieved a mark for new technology recognition and received awards for patent technology contributions. It also synthesized CoQ<sub>10</sub> for the first time in Korea and the second time in the world. Consequently, it received a Minister’s Award from the Korean Ministry of Health and Welfare and the Jang Young Shil Award.

In line with its vision of building a “global laboratory leading the world’s life improvement by 2010”, Daewoong is nurturing global human resources to conduct research, develop international products, and build a 24-hour research system through the creation of a “global laboratory” that will make use of people’s talent, medical items, and technologies from all over the world.

To achieve such a vision, Daewoong is developing new products and medicines through strategic coalitions with domestic and international research institutions which possess original technologies based on Daewoong’s core capacity, i.e. biotechnology for antibody technology and protein production. These collaborations have led to discoveries such as Easyef (property name: EGF), a life-engineered new medicine; high-level API synthesis technology (e.g. for UDCA and CoQ<sub>10</sub>) recognized worldwide; technology for double-layer tablets, multi-layer tablets, fast-dissolving tablets, peptides, and extended-release drug delivery systems; and differentiated technology such as Korea’s finest adenovirus manufacturing facilities and research facilities.
Furthermore, Daewoong plans to build a global R&D capacity in the fields of natural medicine, generic medicine, biomedicine, and new medicine through consistent connection and development (C&D). We are building a network to source competitive resources from all over the world and to set up global laboratories, rather than narrowly thinking of the international market only as a potential marketplace for goods.

Manufacturing
Daewoong is proud of the fact that it has the largest manufacturing capacity for medicines in Korea with only a single factory, which has been internationally and domestically recognized as Korea’s best factory. This is evidenced through accolades such as the Gold Medal in the National Quality Management Competition in 1989, the Presidential Award for National Quality Management and Facilities Management in 1996, the Award for Korea’s Excellent Manufacturing Factory by the Korea Management Association in 2000, and — as the highest level of evaluation — its rating as an outstanding company in evaluations made by the Korea Food and Drug Administration in 2006 as well as international authentications such as ISO 14001 (environmental management system) and OHSAS 18001 (occupational health and safety management system).

Moreover, we have secured purchasing competitiveness as well as competitiveness in quality and manufacturing by building a supplier relationship management (SRM) system. We also have in place a program to nurture high-achieving staff members. Running four working days a week, the program will equip people with modified learning and working systems, focusing on employee development and the improvement of employee satisfaction by balancing work and life.
Global network
Daewoong Pharmaceuticals aims to be the top pharma company in East Asia. To do so, we have adopted a strategy of “glocalization”, i.e. a combination of globalization and localization, that will maximize the synergistic effect of globalization and localization in terms of corporate management. In other words, East Asia is perceived as a single market, and Daewoong as a global pharmaceutical company operated by local people (not just Koreans) by localizing human resources, products, and manufacturing so as to earn the respect of local citizens. Currently, Daewoong has branches in China, Vietnam, Indonesia, Thailand, and the Philippines; and a branch in India is in preparatory stages for the simultaneous execution of technology resource and research activities. In the future, Daewoong will pursue rapid yet orderly globalization by acquiring local pharmaceutical companies and establishing more laboratories.

In addition, Daewoong Pharmaceuticals has a history of receiving awards for excellent labor-and-management corporate culture (in 2007) and for corporate awareness of economic justice (in 2002).

Which specific areas does your company think is worth investing in the future?
We are planning to invest in facility construction that meets cGMP standards as well as in R&D for cure groups with prospective future growth or with unmet needs such as EGF wound healing, neuropathic painkillers, treatment for dementia, and natural drugs.
Can you tell us about your background and work experience?
Lee, Jong Wook

Academic career
• 1967–1971 (BA) College of Pharmacy, Seoul National University
• 1975–1977 (MA) College of Pharmacy, Graduate School of Seoul National University
• 1979–1983 (Dr) College of Pharmacy, Graduate School of Seoul National University
• 1984–1985 Guest-member researcher, Center for Anti-inflammatory Research, School of Pharmacy, Florida A&M University, USA

Career
• 1971–1974 Officer of Air Force at Euijong
• 1974–1991 Department of Quality Management/Department of Research/Central Laboratory at Yuhan Corporation
• 1991–2003 Head manager of the Central Laboratory at Yuhan Corporation
• 2003–2006 President/chairman of Yuhan Chemicals
• 2006–present President/chairman of Daewoong Pharmaceuticals

What is your view of the biotechnology and pharmacy industry in Korea?
Despite the government’s efforts to reduce the expenses for diverse medicines, the medical needs for adult and chronic diseases are rapidly increasing due to the world’s quickly aging population; thus, an average annual growth of 15% is expected for some time in the pharmaceutical market. Also, I expect that the burden for pharmaceutical companies operating in middle- and low-class regions with an insufficient source of investment will increase, given the need for facility investment such as cGMP introduction; such a burden should serve as a strong motive to reorganize the industry. Other than that, I believe that the distinction between rich and poor will only accelerate within the pharmaceutical industry, as the top companies with the capacity to develop new medicines and launch new products will capture a larger market share.

Is the industry growing as fast as it should be and is it comparable to the US and Europe?
The Korean pharmaceutical industry is expecting 15% annual growth on average as a result of improved living standards. This growth rate is higher compared to that of the US or Europe, where the annual growth rate is thought to be 4%–7%.

How about the clinical trial industry in Korea? Can you share with us its current status?
Korea possesses a high level of medical services for high-quality clinical trials at a comparably lower cost than in the US or Europe, so cases where many nations participate in clinical trials has increased in Korea in recent years. By participating in multinational clinical trials, the quality of such trials is also largely improved. The government is currently evaluating a
bridging study to clarify ethnic differences, so once it is approved, I expect that the number of multinational clinical trials in Korea will rise to quickly obtain the results. Therefore, I look forward to see the clinical trial industry growing at a rapid speed.

**What is your view of the standard of research in biomedical sciences in Korea?**

I believe that Korea — through its many bioventure companies — has reached a worldclass level in the fields of cell cure, genetic cure, organ transplant, and research in organs of different species which provide potentially new avenues for treatment. Bioventure companies in Korea enjoy a considerable competitive edge in these fields that could, in the future, lead to performances beyond expectations by cooperating with major pharmaceutical companies. Also, R&D could be further enhanced if solid guidelines or ground rules are in place, such as the law of bioethics.