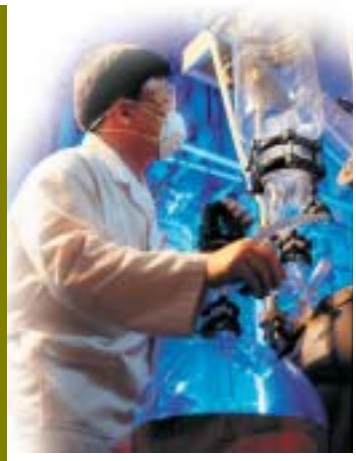
Korean Pharmaceutical Industry Profile 2006



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Korea Drug Research Association
www.kdra.or.kr

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Korean Pharmaceutical Industry Profile

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Overview of Korean Pharmaceutical Industry

During the past several years global pharmaceutical & biotech industries have witnessed Korea coming up to the global pharmaceutical market as one of the countries possessing new drug R&D abilities and U.S. FDA approved new drug in the world.

Modern pharmaceutical industry in Korea has 110 years of history initiating at the end of the 1800s, when a first pharmaceutical company began its operation. With the introduction of product patent system in 1987, Korean pharmaceutical companies initiated full-scale R&D activities as the last breakthrough to cope with the rapidly changing pharmaceutical environment, and spared no efforts to expedite their R&D studies towards the development of new drugs for the last 25 years with a firm conviction for people's health through better medicines and in preparation of early entering into the global pharmaceutical market.

Now the industry has grown up to have approximately over 2,000 companies operating in manufacturing of drugs(553), quasi-drugs(208) and cosmetics(252) with the other early-stage venture companies(600) focusing on basic research in biotechnologies. And further the Korean pharmaceutical industry was ranked 10th in the world with its production volume of $ 14 Billion in total as of 2004 including drugs($9.6 billion), cosmetics($3.4 billion) and sanitary aids/quasi-drugs($0.8 billion).

Focusing on the innovative pharmaceutical & biotech firms doing new drug R&D and related works among 553 drug-manufacturing companies, about 11%(60firms) of those companies in pharmaceutical sector, most of which are listed enterprises, and 20 or so bio-venture companies ranking high in biotech-sector have their own R&D centers and these 80 pharmaceutical & biotech firms among the total 1,153 companies may be considered to have substantial R&D projects in innovation category with over 3,500 research scientists in total. These R&D based pharmaceutical & biotech companies have been spending average 4-6% of R&D expenditure to their turnover for accomplishing over 350 R&D projects annually going on in their labs.

R&D manpower as of 2003

Company	Public Research Orgs.	College & University	Total
3,535	1,324	5,476	10,335

Source : Ministry of Science & Technology

These R&D based pharmaceutical & biotech companies is continuing their efforts to discover new chemical entities and, at the same time, to develop new biopharmaceuticals such as therapeutic antibody, protein drugs with improved delivery system etc. And they have strived to expand their international presence through strategic collaboration with leading

pharmaceutical/biotech companies.

As a result, in 1999 Korea witnessed a new drug, Sunpla®(heptaplatin) of SK Chemicals Inc. for the first time in 100 years of Korean pharmaceutical industry's history. Sunpla®(heptaplatin) is generally known as the third-generation platinum-complex anti-cancer agent, which has been developed to overcome the limits of existing platinum-complex anti-cancer drugs such as Cisplatin and Carboplatin. And thereafter, a total of 13 new drugs derived from small or large active molecules were successfully approved by the Korea Food and Drug Administration(KFDA) until the middle of 2006. On April 4, 2003, one of leading Korean pharmaceutical & biotech companies, LG Life Sciences Ltd., achieved new drug approval(NDA) from U.S. FDA for FACTIVE(Gemifloxacin), a novel quinolone antibacterial agent providing improved activity against gram positive organism, while retaining the gram-negative activity of ciprofloxacin.

Korea has a short history of 25 years associated with new drug R&D projects, compared with multinational firms in western countries boasting a longer period of 40 to 110 years. Despite this, Korea is now moving into the world pharmaceutical market dynamically consolidating and expanding its infrastructure for the development of new drugs. And the Korean market is, although it amount to $ 9.6billion in drug production occupying 1.6% of global market at present, expected to grow up to over 2% of the world pharmaceutical market in 2010 with rapid annual growth rate of 10% in domestic market surpassing the world average 6%.

The Korean Government, keeping pace with the efforts of the industry, has chosen the pharmaceutical & biotech industry as one of the 10 fastest growing industry sectors in parallel with IT sector and has planned mid-and long-term fostering programs. Hitherto, the Korean government had implemented a set of drug-related policies designed to mainly foster the pharmaceutical production for more stabilized supply of drugs in the aspect of people's better health, in parallel with the development phases of domestic pharmaceutical industry. Thereafter, the government has pushed ahead with its plan aiming at consolidating and expanding Korea's infrastructure for the development of new drugs as well as ameliorating the current drug-related systems for safeguarding the safety of drugs.

Market

The market size of Korean pharmaceutical industry has been estimated at approximately $9.6 billion as of 2004 with 35,000 employees and 3,500 research scientists working at approximately 150-200 pharmaceutical & biotech companies. The growth rate of Korean pharmaceutical market shows about 10% per a year and expected to reach almost $15 billion in 2010. Compared with the world's average growth rate(6%), Korean market is reflecting its dynamic property.

Wedged between two of the world's largest economies, China and Japan, Korea is the gateway to the huge markets of Northeast Asia, which currently account for 25% of the world's GDP and have a total population of 2 billion, including 500 million in ASEAN countries. Thanks to the high growth prospects of China and Korea in particular, this share

is expected to reach almost 30% over the next 10 years. Korea, in and of itself, is a fast growing and dynamic market that offers a wealth of opportunities in market and R&D cooperation for foreign investors and future R&D partners.

Production of drugs, cosmetics & quasi-drugs as of 2004

(Unit : establishment, each, US$b)

Drugs			Cosmetics			Quasi-drugs		
Manufacturers	Products	Amount	Manufacturers	Products	Amount	Manufacturers	Products	Amount
553	22,356	9.637	252	37,215	3.451	208	3,040	0.815

Source : Korea Food & Drug Administration

Ratio of pharmaceutical industry to GDP as of 2004(US$ billion, %)

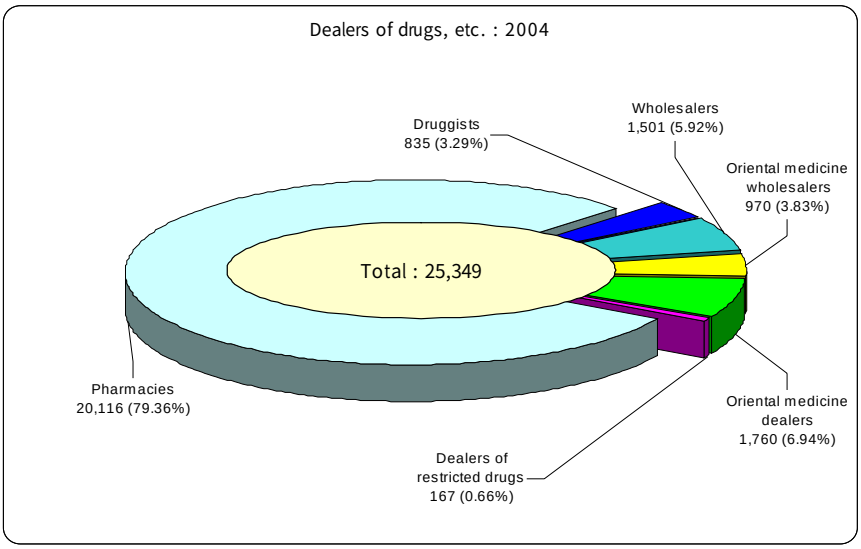
GDP	GDP of Manufacturing	Amount of manufactured pharmaceutical products	Ratio to GDP	Ratio to GDP of manufacturing
778.44	198.86	10.45	1.34	5.26

Source : Korea Food & Drug Administration

Domestic Pharmaceutical Market as of 2003(US$ million)

Class	Production	Exprot(export ratio,%)	Import	Net Korean Market
Finished Product	6,968	297(4.3%)	688	7,359
API/Intermediate	534	442(82.8%)	1,325	1,417
Others	787	52(6.6%)	222	957
Total	8,289	791(9.5%)	2,235	9,733

Dealers of drugs etc as of 2004



R&D

Since the joint establishment of the Korea Drug Research Association (KDRA) in 1986 to cope with the introduction of a new product patent system, the Korean pharmaceutical industry have concentrated its utmost efforts on the timely development of new drugs. Like most of overseas countries, Korean pharmaceutical companies are mostly in charge of commercial stage in R&D from lead compounds to clinical research & commercialization. In addidion to the commercial studies, some of them have also focused on basic researches to search for new targets for novel therapeutic agents and even some companies have extended their R&D area to stem cell, artificial organs, medical devices, functional materials for medical uses etc. But, in general cases, basic researches have been accomplished by government-supported public research institutes, colleges & universities, spin-off startups & bio-venture companies etc. In basic researches, biotechnology is playing import parts in providing various kinds of crucial clues in search of promising therapeutic or functional materials needed in biotech(pharmaceutical, cosmetics, food, agriculture & environmental) industries.

In Korean biotech industry, biotechnology has more priority in medicinal application (Red-biotech) than any other sub-sectors in biotechnology industry and those companies, colleges & universities, research institutions and startups mainly involved in discovery areas are as usually done in advanced countries making effort to provide useful informations and R&D sources from their research activities in genomics, bio/cheminformatics, proteomics, target validation, bioreactor etc. all of which in biotechnology area.

Thanks to the recent successful results in genome projects, scientists in many countries have come to witness many kinds of informations and clues to identify new targets and disease causes to be applied in research and development of novel therapeutic agents, therapeutic methods, order-made medicines etc. Following the latest R&D trends and environmental changes in biotechnology, world pharmaceutical industry have no choice but to meet the needs of times through the joint researches with other biotech companies & research organizations pioneering the unknown research areas and external R&D investment in promising research projects and partners.

Like the overseas pharmaceutical & biotech companies, Korean companies also have already propelled making partnerships and R&D co-works with domestic and overseas biotech companies and research orgs. since the middle of 1990s. Even some companies are resolutly searching for overseas R&D projects and startups both in basic and commercial stages to be invested.

In the recent years, Korea's new drug R&D projects has proven to be successful within a shorter period, in that 13 Korean new drugs were approved by the Korea Food and Drug Administration(KFDA) for market authorization, in parallel with the development of a number of improved new drugs in terms of better efficacy, less side effects and diverse

dosage forms for convenient administration. In particular, 10 domestic pharmaceutical firms have exported(license-out) over 30 patent-related technologies in overseas markets, thus enhancing the local R&D capability. With the tangible sign in the domestic R&D spending, clinical trials are underway for many kinds of new drugs being developed by domestic pharmaceutical firms in foreign countries. As seven new substances developed by four domestic firms have already been approved from the US FDA for their clinical trials, Korea is likely to emerge as a country of launching block-buster new drugs in the world market.

Current Status of New Drug Approval of Leading Korean Firms

Company	Product	Efficacy or indication	Date of approval by KFDA
SK Chemicals/SK Pharma	Sunpla inj. (third-generation platinum complex)	Stomach cancer (additional clinical trials which is underway to extend other indications such as lung cancer)	Jul. 14, 1999
Dong Wha Pharm. Ind. Co., LTD.	Milican inj. (166Ho chitosan complex)	Liver cancer (phase IIb which is underway as antiarthritic agent)	Jul. 6, 2001
ChoongWae Pharma Corporation	Q-roxin tab. (quinolone)	Antibiotic (urinary infection)	Dec. 17, 2001
LG Life Sciences Ltd.	FACTIVE tab. (Gemifloxacin)	Antibiotic (chronic respiratory disease)	Dec. 26, 2002(KFDA) Apr. 4, 2003(US FDA)
Daewoong Pharm. Co.,Ltd.	EGF (epidermal growth factor) topical solution	Diabetic antiulcerant	May 30, 2001
Cellontech Ltd.	Chondron (a method of treating damaged joints by reproducing cartilage cells from the patients own genes)	Repair of symptomatic, cartilaginous defects of condyle	Jan. 30, 2001
SK Chemicals/SK Pharma	Joins tab. (combined herbs)	Antiarthritis	Jul. 5, 2001
Dong-A Pharm. Co.,Ltd.	Stillen cap. (Gastomucosal protective)	Acute/chronic gastritis	Jun. 12, 2002
Chong Kun Dang Pharm. Corp.	Camtobell inj.	Anticancer (Camptothecin analog as topoisomersae I inhibitor)	Oct. 6, 2003
YuYu Inc.	Maxmarvil tab.	Treatment for Osteoporosis	Nov. 16, 2004
YUHAN Corporation	Revanex tab.(revaprazan)	Antiulcer	Sep. 15, 2005
Dong-A Pharm. Co.,Ltd	Zydena tab.(Udenafil)	Erectile Dysfunction	Nov. 29, 2005
Bukwang Pharm. Co., Ltd.	Levovir cap.(Clevudine)	Chronic Hepatitis B	Jul. 28. 2006

Current Status of New Drug R&D Projects of Leading Korean Firms

Classification	Development Status		No. of Product	No. of Company	Total
New Drugs	Market Launched		11(including 3 items under phase Ⅲ)	10	Companies : 36 Products : 121
	Approved		2	2	
	Clinical	Phase Ⅲ	8 (including 3 items launched)	8	
		Phase Ⅱ	11	9	
		Phase Ⅰ	12	7	
		Sub-total	33	20	
	Preclinical		50	25	
	Discovery		28	14	
New Tech Adopted Drugs/Biotech Medicines	New Formulations/ Combinations/DDS		75	33	Companies : 43 Products : 190
	Biotech Medicines		26	16	
	Bulk Pharmaceuticals		69	24	
	Diagnostic Products		10	6	
	Others(Functional Materials/Products)		10	6	
Total			311	47	Companies : 47 Products : 311

Source : Industry survey report 2005, Korea Drug Research Association

Current Status of US FDA IND approvals for New Drug Candidates of Korean Firms

Product Name	Disease Area	Company	Development Status
FACTIVE	Quinolone Antibacterial agent	LG Life Sciences, Ltd.	Market Launched
hGH, IFN-a	Growth Deficiency	LG Life Sciences, Ltd.	Phase III
LB80380	Anti-HBV therapeutics	LG Life Sciences, Ltd.	Phase II
Zydena(DA-8159)	Erectile Dysfunction	Dong-A Pharmaceutical Co., Ltd	Phase II
YKP509	Antiepilepsy	SK Corporation	Phase II
YKP10A	Antidepression	SK Corporation	Phase II
PTH	Facilitates the formation of bone density	Green Cross Corp.	Phase I

Source : Industry survey report 2005, Korea Drug Research Association

Notwithstanding this, the Korean pharmaceutical industry has faced more severe competition at home and abroad and thus, the future growth of domestic pharmaceutical firms may depend on their R&D capabilities and new drug-related technologies, while consolidating and expanding Korea's infrastructure for the efficient development of new drugs. Multinational firms have been actively pushing ahead with venture investments, M&A, licensing-in/licensing-out, and joint research based on global network and outsourcing in a bid to overcome the difficulty of new drugs and expand their presence in the world market.

Domestic pharmaceutical firms are also concentrating utmost efforts to utilize their own R&D capabilities, while bracing for closer outsourcing with domestic academia, private organizations and foreign research institutions in global partnerships.

R&D based pharmaceutical & biotech companies

According to 2004 industry survey report of Korea Drug Research Association(KDRA), representing the R&D based pharmaceutical & biotech industry in Korea, average annual R&D spending of major 50 R&D based pharmaceutical & biotech companies amounted to 5.7% of the total sales compared with the average 6.2% of annual ratio of net profit to net sales. And further compared with the average 64.9% of annual ratio of R&D expenditure to net profit of world top 10 pharmaceutical companies, although the total scale of R&D investment of Korean companies was inferior, the Korean R&D based companies have invested 93% to net profit. This figures shows most of Korean companies leading the industry through the technological innovation are resolutely spending most of net profit on their R&D activities which may decide the fate of them and the industry.

The net sales as of 2002 of these R&D based pharmaceutical companies was over $4.0 billion(about 60% of the net sales of the industry) investing over $250million. Considering this the net sales and R&D expenditure of these companies in 2005 can be estimated to minimum $5billion and $3billion respectively.

Since 1987 Korean R&D based pharmaceutical companies have accomplished over 400 R&D projects with about 2,000 research scientists of their own and domestic or overseas R&D partners. Among these R&D projects, about 112 R&D projects(28%) can be included in innovative new drug R&D category of which the lead compounds or candidates were derived from chemical synthesis(small molecules), bio-molecules or natural products and the others(72%) are focused on R&D category of improved drugs with improved delivery system, dosage form, controlled release etc.

Approximately 26% among these 400 R&D projects accomplished by R&D based pharmaceutical companies are now estimated to be quite successful. As the result of their R&D activities, 13 kinds of new drugs developed by 11 companies were domestically approved by Korea Food & Drug Administration(KFDA) and one of these Korean new drugs, FACTIVE, a quinolone antibacterial agent, was approved in 2003 by US FDA showing

the possibilities to be global new drug.

At the same time 33 new drug candidates developed by 20 companies are in clinical stage, 50 drug candidates of 25 companies are in pre-clinical test and about 30 lead compounds are in basic research. And further 7 drug candidates have already got IND approvals from US FDA for clinical trials.

When it comes to the other new drug R&D categories done by these companies, there are what is called improved drugs with improved delivery system, dosage form, controlled release etc., Nearly 200 R&D projects have been or are now in progress at the labs of 43 companies and estimated also to be successful.

And further since 1986 thirty kinds of new drug candidate or/and related technologies developed by these R&D based pharmaceutical firms were licensed out to the big pharma & partners etc. in overseas countries. Considering these facts, R&D efficiency and productivity of Korean companies could be estimated to be comparatively high in comparison with those of multinational big pharmaceutical companies investing average several billion US dollars per a year with several thousands of R&D manpower and excellent R&D infrastructures.

R&D of new drug by therapeutic categories

By therapeutic category, domestic new drug R&D projects have been briskly undertaken in cancer, infective system and central nervous system. Among the several categories, R&D projects in anti-cancer category ranked first occupying nearly 30% in the whole domestic R&D projects. It means there would be much opportunities in the development of first-in-class anticancer agents through the influence of targeted therapy newly coming up to the global market.

Local studies on central nervous system(11 projects)and antibiotics(10projects) succeeded in anticancer agent. Among the 13 kinds of domestic new drugs approved by the KFDA for market authorization, 5 drugs belonged to the category of cancer and infective system.

R&D projects searching for therapeutic agents in age-related diseases such as osteoporosis(5 projects) and diabetes(5 projects) in the category of metabolic system are also actively under way reflecting and following the global R&D trends coping with the needs for better quality of life from modern society and people.

The other categories, liver disease, antiulcer etc are still considered important research areas in domestic market in contrast with the delayed R&D situation recently occurred in advanced nations.

R&D of new drugs by therapeutic categories

Rank	Category	R&D Projects	%
1	Anti-cancer	33	29.5
2	CNS	11	9.8
3	Antibiotics	10	8.9
4	Antiviral	7	6.3
5	Cardiovascular	6	5.4
6	Liver Disease	6	5.4
7	Osteoporosis	5	4.4
8	Antidiabetic	5	4.4
9	Antiulcer	5	4.4
10	Antiarthritics	4	3.6
11	Analgesics	4	3.6
12	Antiasthmatic	3	2.7
13	Immunomodulator	2	1.8
14	Others	11	9.8
Total		112	100

Source : Industry survey report 2005, Korea Drug Research Association

R&D of new drug by active ingredients

By active ingredient category, 79.5% of domestic new drug R&D projects have adopted their active ingredients derived from NCEs followed by new biological entities(NBE, 10.7%) and natural products(NPs, 9.8). It may be influenced by careful considerations of R&D possibilities, limitations existing in developing various kinds of drug formulations etc. However, it is expected, following the development pace in drug delivery systems, nano-technologies etc., and through the collaboration with domestic & overseas partners in their innovation processes, various kinds of active ingredients could be choosed by the domestic pharmaceutical companies.

R&D of new drug by active ingredients

Rank	Classification of Active ingredient	No. of Projects (Active ingredients)	%
1	New Chemical Entities	89	79.5
2	New Biological Entities	12	10.7
3	Natural Products	11	9.8
Total		112	100

Source : Industry survey report 2005, Korea Drug Research Association

Korea Drug Research Association (KDRA)

General Introduction

In 1986 Korea Drug Research Association(KDRA) was established as non-profit organization to cope with the introduction of a new product patent system based on the law for fostering industrial technology association and represents R&D based pharmaceutical & biotech companies in Korea.

From its establishment KDRA has been working for the development of Korean Pharmaceutical & Biotech industries promoting the industrial technologies in pharmaceutical & biotech fields. For this KDRA has been participating in and leading biotech R&D policy-making, strategy-formulating and improvement of advanced R&D systems. Additionally KDRA has since 1986 engaged in mid-and long-term nat'l R&D plans, drived and managed various kinds of R&D programs including those sponcered by the government.

KDRA has also been working in business partnering and technology transfer & licensing between the pharmaceutical & biotech industries, academic and public research circles domestically and internationally. For these activities, KDRA has since 2002 been organizing business partnering event, InterBiz Bio-Partnering & Investment Forum, a key conference for technology transfer & collaboration with average 100 domestic & international companies & orgs. KDRA has moreover established distinct subsidiary organization, PTBC(PharmaTech Business Center), for providing services in technology transfer, licensing and R&D collaboration activities between KDRA members and domestic & international partners.

Major Activities

- Representing R&D based pharmaceutical & biotech Industries in Korea
- Providing unified voice fostering an environment which responds to the needs of Korean R&D based pharmaceutical & biotech Industry
- Promotion of pharmaceutical & biotech R&D Activities
- Leading & participating in R&D policy-making in pharmaceutical & biotech fields
- Planning mid-and long-term national R&D programs supported by the government
- Operation of national new drug R&D consortiums and various kinds of committees
- Support & management of R&D funds secured from the government etc.
- Supporting services of R&D collaboration & technology diffusion
  - ※ Establishment & Management of PTBC(PharmaTech Business Center)
  - ※ Technology Evaluation & Valuation (through PTBC Technology Business Committee)
  - ※ Annual organizing & hosting of "InterBiz Bio-Partnering & Investment Forum"
- State-of-the-art information services & publication of various kinds of industrial reports
- R&D education and trainning
- Management of R&D exhibition hall, award(KNDA; Korea New Drug Award) etc.

Member companies

KDRA member companies are all leading and representing the R&D based pharmaceutical & biotech industries of Korea and have been conducting almost all of research and development activities in the field of Korean pharmaceutical & biotech industry. These companies are investing more considerable R&D expenditure than any other companies existing in the industry and occupying over 60% of the domestic market.

Kuhnil Pharmaceutical Co.,Ltd.	Kyongbo Pharmaceutical Co.,Ltd.	Korean Drug Co.,Ltd.	Kwang-dong Pharma.Co.,Ltd.	Kukje Pharma Ind. Co.,Ltd.
Green Cross Corporation	Neurotech Pharma	DAEWOONG Pharmaceutical Co.,Ltd.	Daewonpharm Co., Ltd.	Dong Kook Pharmaceutical Co.,Ltd
Dongbu Hannong Chemical Co., Ltd.	Dong Shin Pharm. Co.,Ltd..	Dong-A Pharmaceutical Co.,Ltd.	Dong Wha Pharm. Ind. Co.,Ltd.	Dream Pharma Corp.
Binex Co.,Ltd.	ViroMed Co.,Ltd.	Boryung Pharm. Co.,Ltd.	Bukwang Pharm. Co.,Ltd.	SamSung Pharm. Ind. Co., Ltd.
Sama Pharm. Co.,Ltd.	SAMYANG Corp.	Samil Pharmaceutical Co.,Ltd	Samjin pharmaceutical Co.,Ltd.	Sam Chun Dang Pharm. Co.,Ltd.
Shin Poong Pharmaceutical Co.,Ltd.	CJ Corp.	Amore Pacific	Ahn-gook Pharm. Co.,Ltd.	ISU ABXIS
SK Corporation	SK Chemicals	M&H Laboratories Co.,Ltd.	LG Life Science Ltd.	Yung Jin Pharm. Co.,Ltd
YuYu Inc.	Yuhan Corporation	Il Dong Pharmaceutical Co.,Ltd.	Il Yang Pharm. Co., Ltd.	Il Hwa Co.,Ltd.
Jeil Pharmaceutical. Co.,Ltd.	Chong Kun Dang& Pharmaceutical Corp.	Choongwae Pharma Corporation	Jin Yang Pharmaceutical Co.,Ltd	Chirogenix Co.,Ltd.
Kolon Industries, Inc.	Taejoon Pharmaceutical Co.,Ltd.	Korea DDS Pharmaceutical Co.,Ltd.	Korea United Pharm. Co.,Ltd.	Handok Pharmaceutical. Co.,Ltd.
Hanlim Pharm. Co., Ltd.	Hanmi Pharmaceutical. Co.,Ltd.	Hanall Pharmaceutical Co., Ltd.	Hanwha Chemical Corporation	Hyundai Pharm. Ind. Co.,Ltd.

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E-mail. hccho@kdra.or.kr
URL. www.kdra.or.kr

Useful Websites

R&D Based pharmaceutical & biotech companies (KDRA Members)

Kuhnil Pharm. Co., Ltd.
www.kuhnil.com
KYONGBO Pharmaceytical Co., Ltd.
www.kbchem.co.kr
Korean Drug Co., Ltd.
www.nicepharm.co.kr
Kwang-dong Pharma. Co., Ltd.
www.ekdp.com
KUKJE Pharma. Ind. Co., Ltd.
www.kukjepharm.co.kr
Green Cross Corp.
www.greencross.com
NEUROTECH Pharma
www.neurotech-pharma.com
Daewoong Pharmaceutical Co., Ltd.
www.daewoong.co.kr
Dong Kook Pharmaceutical Co., Ltd.
www.dkpharm.co.kr
Dongbu Hannong Chemical Co., Ltd.
www.dongbuchem.com
Dong Shin Pharm. Co., Ltd.
www.dong-shin.com
Dong-A Pharmaceutical Co., Ltd.
www.donga.co.kr
Dong Wha Pharm. Ind. Co., Ltd.
www.dong-wha.co.kr
Binex Corp.
www.bi-nex.com
ViroMed Co., Ltd.
www.viromed.co.kr
BORYUNG Pharmaceutical Co., Ltd.
www.boryung.co.kr
Bukwang Pharm. Co., Ltd.
www.bukwang.co.kr
SAMSUNG Pharm. Ind. Co., Ltd.
www.sspharm.co.kr
Sama Pharm. Co., Ltd.
www.samapharm.co.kr
Samyang Corporation
www.samyang.com
Samil Pharmaceutical Co., Ltd.
www.samilpharm.com
Samjin pharmaceutical Co., Ltd.
www.samjinpharm.co.kr
Sam Chun Dang Pharm. Co., Ltd.
www.scd.co.kr
Shin Poong Pharmaceutical Co., Ltd.
www.shinpoong.co.kr
CJ Corp.
www.cj.net
Ahn-gook Pharm Co., Ltd.
www.ahn-gook.com
ISU ABXIS
www.abxis.com
Daewonpharm Co., Ltd.
www.daewonpharm.co.kr
SK Corporation
www.skcorp.com
SK Chemicals
www.skchemicals.com
LG Life Sciences Ltd.
www.lgls.co.kr
Yung Jin Pharm. Co., Ltd.
www.yungjin.co.kr
YuYu Inc.
www.yuyu.co.kr
YUHAN Corporation
www.yuhan.co.kr
ILDONG Pharmaceutical Co., Ltd.
www.ildong.com
ILYANG Pharm. Co., Ltd.
www.ilyang.co.kr
IL HWA Co., Ltd.
www.ilhwa.co.kr
JEIL Pharmaceutical Co., Ltd.
www.jeilpharm.co.kr
Chong Kun Dang Pharmaceutical Corp.
www.ckdpharm.com
ChoongWae Pharma Corporation
www.cwp.co.kr
Jin Yang Pharm. Co., Ltd.
www.jinyangpharm.com
Kolon Industries Inc.
www.ikolon.com
AMORE PACIFIC
www.pacific.co.kr
Korea DDS Pharmaceutical Co., Ltd.
www.ddstech.co.kr
Korea United Pharm. Inc.
www.kup.co.kr
M&H Laboratories Co., Ltd.
www.mnhlabo.com
Handok Pharmaceutical. Co., Ltd.
www.handok.co.kr
Hanlim Pharm. Co., Ltd.
www.hanlim.com
Hanmi Pharm. Co., Ltd.
www.hanmi.co.kr
Hanall Pharmaceutical Co., Ltd.
www.hanall.co.kr
Hanwha Chemical Corporation
hcc.hanwha.co.kr
Hyundai Pharm. Ind. Co., Ltd.
www.hyundaipharm.co.kr
Dream Pharma Corp.
www.dreampharma.co.kr
Chirogenix Co., Ltd.
www.chirogenix.com
Taejoon Pharmaceutical Co., Ltd.
www.taejoon.co.kr
iBiopharm Co., Ltd.
wwwibiopharm.co.kr

Governmental Organizations

Ministry of Foreign Affairs and Trade	http://www.mofat.go.kr
Ministry of Science and Technology	http://www.most.go.kr
Ministry of Commerce, Industry and Energy	http://www.mocie.go.kr
Minsstry of Health and Welfare	http://www.mohw.go.kr
Korea Food and Drug Administration	http://www.kfda.go.kr
Korea National Statistical Office	http://www.nso.go.kr
The Korean Intellectual Property Office	http://www.kipo.go.kr

Public Research Institutes

Korea Research Institute of Chemical Technology	http://www.krict.re.kr
Korea Research Institute of Bioscience & Biotechnology	http://www.kribb.re.kr
Korea Institute of Science & Technology	http://www.kist.re.kr
Korea Institute of Toxicology	http://www.kitox.re.kr
National Institute of Toxicological Research	http://www.nitr.go.kr

Major Foreign Chambers of Commerce

The American Chamber of Commerce in Korea	http://www.amcharmkorea.org
The European Union Chamber of Commerce in Korea	http://www.eucck.org
Korea-German Chamber of Commerce and Industry	http://www.kgcci.com
Seoul Japan Club	http://www.sjchp.co.kr

Associations & Related Orgs.

Korea Drug Research Association	http://www.kdra.or.kr
Korea Biotechnology Research Association	http://www.kbra.or.kr
Korea Pharmaceutical Manufacturers Association	http://www.kpma.or.kr
Korea Pharmaceutical Traders Association	http://www.kpta.or.kr
Bioindustry Association of Korea	http://www.bak.or.kr
Korea International Trade Association	http://www.kita.net
Korea Specialty Chemical Industry Association	http://www.kscia.or.kr
Korea Health Industry Development Institute	http://www.khidi.or.kr
Korea Chamber of Commerce & Industry	http://www.korcham.net
Korea Trade-Investment Promotion Agency	http://www.kotra.or.kr

General Information on Korea

Korean Information Service	http://www.korea.net
Invest Korea	http://www.investkorea.org

Profile of Korea

Profile of Korea

(Source : Ministry of Commerce, Industry and Energy)

General Facts

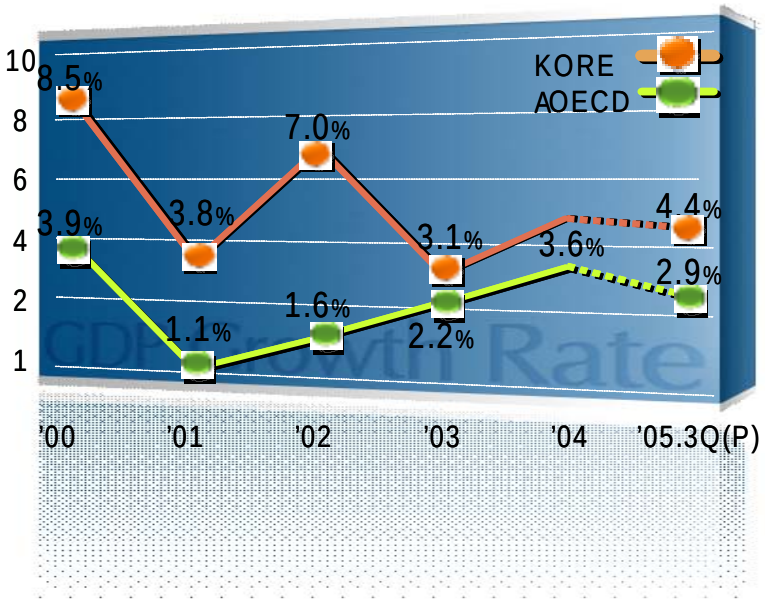
Country Name	Republic of Korea(ROK)
Capital	Seoul
Area	99,434 sq. km
Population(Yr 2002)	48 million
Population Growth Rate	0.85%
Life Expectancy	74.88 years(female : 78.95 years, male : 71.2 years)
Urban Population Ratio	83%(one-fourth of total population live in Seoul)
Major Language	Korean(official), English widely used
Weights & Measures	Metric system
Literacy	98% of the total population age 15 and over can read and write
Climate	Continental with four seasons
Weather in Seoul (altitude 87 meters)	Hottest month : August, 22° ~31° C Coldest month : January, minus 9° ~0° C Driest month : February, 20 mm average rainfall Wettest month : July, 376 mm average rainfall
Major Religions	Christianity(49%) and Buddhism(47%) with a widespread regard for Confucian values
Constitution	February 25, 1948

Political-Economy Facts

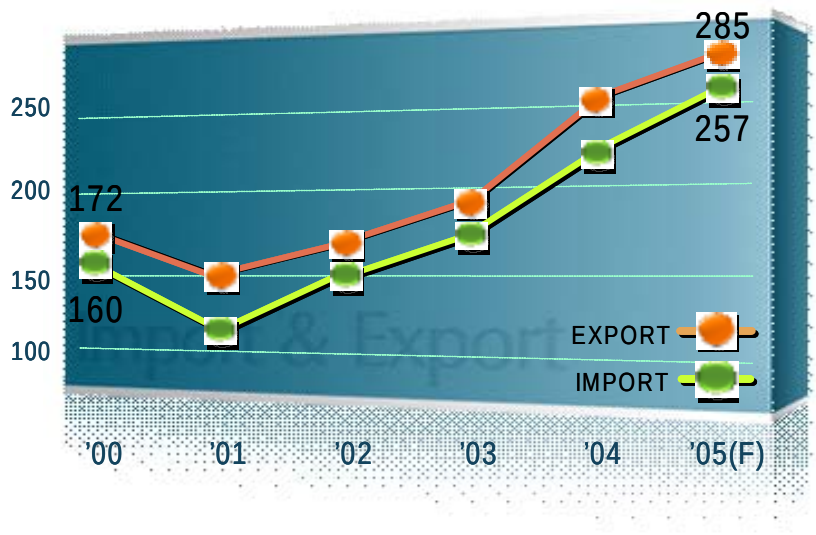
Government	Constitutional Republic led by a president, unicameral legislature
Head of State	President Roh Moo-Hyun(since February 25, 2003)
GDP(Yr 2004)	USD 778.44 billion
Fiscal year	Starts January 1st
Consumer Price Inflation	2.8%
Sources of GDP	Service(52.6%), industry(43.1%), agriculture(4%)
Currency	Won(₩)-also referred to as Korean won(KRW)
Key Products	Electronics, machinery, automobiles, ships, chemicals
Major Trading Partners	EU, USA, China, Japan, Taiwan

Strategic Regional Location

GDP Growth Rate

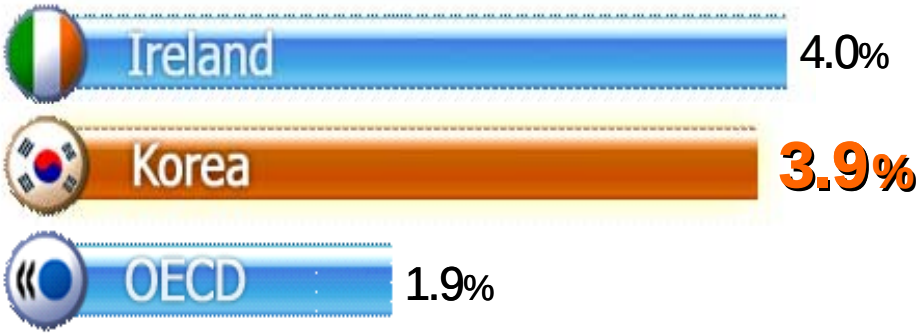


Imports & Exports (US$ billion)



Higher Education Achievement

Productivity Improvement-Avg. annual growth(1994-2005)



R&D Capability

Business Expenditure on R&D

Country	US$ millions	Rank
USA	200,525	1
Korea	**10,152**	**6**
China	9,518	7

Total Expenditure on R&D

Country	% of GDP	Rank
Israel	4.3	1
Korea	**2.6**	**8**
USA	2.5	9

Patent Related Figures

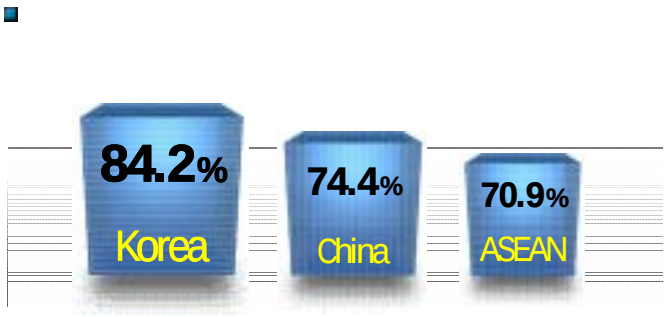
Patents Granted to Residents

Country	Number	Rank
Japan	118,535	1
USA	85,528	2
Korea	**29,363**	**3**

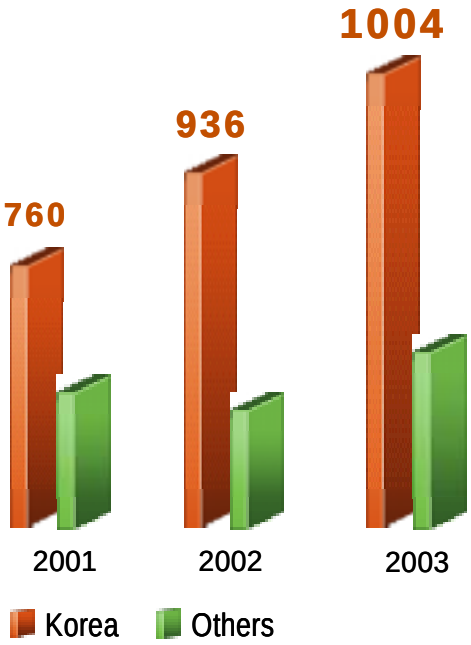
Patent Productivity

Country	Number	Rank
Taiwan	446	1
Japan	195	2
Korea	**187**	**3**

Ratio of Companies Posting Profit



Per-Employee Sales



Intellectual Property Rights

Definition of Intellectual Property Rights

Intellectual property rights refer to the rights granted by law for original works in the areas of literature, art, music, compilations, databases, and computer programs, which are so valuable as to be protected by law. Just like the ownership rights for real estate or movable assets such as machinery which can be used by the owner or leased to others, the same is true for intellectual property.

Types of Intellectual Property Rights

Intellectual property rights can be classified into industrial property rights, copyright, and new intellectual property rights.

Intellectual property rights	Industrial Property Rights	Patent	Source/Core technologies(Major)
		Utility model	Derivative/Improvement technologies(Minor)
		Design	Designs of objects
		Trademark	Identifiable symbols, characters, or figures
	Copyright	Copyright	Literature and artistic creations
		Associated rights	Includes performers, music producers, and broadcasting
	New Intellectual property rights	High-tech copyrights	Semiconductor integrated circuits layout design, biotechnology, new breeds of plants etc.
		Industrial copyrights	Computer programs, artificial intelligence, database etc.
		Information copyrights	Trade secrets, multimedia, new media etc.

Korea's Efforts to Protect Intellectual Property Rights

The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) was concluded during the Uruguay Round with the aim of providing worldwide standards toprotect the intellectual property rights of different nations. The result is that global protection of intellectual property rights has been reinforced because of international conventions such as the TRIPS Agreement and the Convention Establishing the World Intellectual Property Organization (WIPO). In order to comply with the TRIPS Agreement, Korea revised all of its relevant domestic laws in 2001 to meet international standards to improve the protection of intellectual property rights. In addition, to further strengthen this commitment, Korea has joined the following:

- The Convention Establishing the World Intellectual Property Organization (1967)
- The Paris Convention for the Protection of Intellectual Property (1980)
- The Patent Cooperation Treaty (PCT) (1984)
- The Budapest Treaty on the International Recognition of the Deposit Microorganism for the Purpose of Patent Procedure (1988)

- The WTO Agreement on Trade related aspect of Intellectual Property Rights; TRIPs Agreement (1995)
- The Berne Convention for the Protection of Literary and Artistic Works (1996)
- The Strasbourg Agreement Concerning the International Patent Classification (1998)
- The Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of Registration of marks (1998)
- The Trademark Law Treaty (2002)
- Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks (2003)

In Korea, with the Office for Government Policy Coordination taking the leading role, five projects are being promoted to enhance the protection of intellectual property rights: (a) Strict enforcement of regulations against the infringement of intellectual property rights, (b) dvancement of laws and systems for the protection of intellectual property rights, (c) nhancement of public awareness about the protection of intellectual property rights, (d) einforcement of international countermeasures for the protection of intellectual property ights, and (e) The establishment of a cross-departmental implementation system.

Korea's R&D Achievements

According to the 2004 World Competitiveness Yearbook released by IMD, the United States ranked first in R&D investment with over US$200 billion, followed by Japan with US$94.3 billion, and Germany with US$34.4 billion. Korea ranked sixth with US$10.2 billion after France and the U.K. In terms of R&D capability vs. GDP, Korea ranked 10th after Israel, France and Japan, and the United States.

The Batelle Memorial Institute, the largest non-profit private research institute in the United States, agreed in October 2004 to set up an R&D center to study inhalation toxicity in Jeongeup, Chonbuk, the site where the second campus of the Korea Institute of Technology (KIT) affiliated with the Korea Research Institute of Chemical Technology will be built. The institute is seeking ways to cooperate with Korea in areas such as national security, health sciences, energy, environment, transportation, aero spacial science, and new materials. The Institute, founded in 1929, employs more 19,000 researchers with an annual R&D budget of US$3.3 billion. The institute is a leading global research center and has developed a range of pioneering technologies. It invented the first copier, commercialized CD and barcode technologies, and developed optical fiber.

In addition, Siemens, Germany's largest IT company, has agreed to invest 100 million euros (approximately 150 billion won) in Dasan Networks, Korea's leading network equipment maker to establish an R&D center in Korea for its communication network. Siemens is Germany's biggest company producing electrical and electronic appliances, and information communication equipment. The company has expanded into electronic parts, power generation facilities, factory automation and other industrial facilities, automotive parts and medical equipment. It operates globally with some 420,000 employees, more than 2,000 of which work in Korea.

Meanwhile, the world' s largest software maker, Microsoft, plans to set up its first MS mobile innovation lab in Korea, which will be responsible for developing next-generation mobile equipment. For the plan, MS will invest a total of US$30 million over the next three years and the lab will be staffed by more than 30 engineers. In response to the growing awareness of the importance of R&D, the government is increasing investment in R&D and providing lavish support for R&D activities.

Theses & Patents

According to the Science Citation Index (SCI) database of Institute for Scientific Information (ISI), Korea ranked 16th in the number of SCI-grade thesis publications in 2000 and edged up to 14th in 2001. In 2002, a total of 14,916 theses were published by Korean nationals and the figure rose 19.2 percent in 2003 to 17,785, placing Korea 13th in the world. The SCI published annually by ISI of the United States, provides information on thesis citation and references in the field of science and technology. It compiles a database of carefully selected leading scholarly journals, based on statistics on theses on science and technology by country, institute and university. Korea ranked 13th in the world with 18,635 theses published in 2003 according to National Science Indicators (NSI), a measure of national scientific achievement.

Profile & Collaboration Agenda of Leading Pharmaceutical & Biotechnology Companies in Korea

Ahn-Gook Pharamceutical Co., Ltd.

Company Profile

President & CEO	Jin Auh
Establishment	September, 1959
Web-Site Address	www.ahn-gook.com
Mailing Address	# 993-75, Daelim-dong, Yongdeungpo-gu, Seoul, 150-953, Korea
Contact	Esther Keum-Hwa Choi, Ph.D., Deputy General Manager, New Buinsess Development T. 82-2-3289-4258, F. 82-2-849-4123, E-mail. agcntechbd@ahn-gook.com
Main Business Sector	Pharmaceutical, Health Food
Capital	US $ million
No. of Employees	330
Sales(as of 2005)	US $ 60 million
Company Overview	Ahn-Gook is medium-size pharmaceutical company, and has been focusing on prescribing drugs in Respiratory system, GI area, cardiovascular area and etc for a better life of human being. Ahn-Gook is one of the fast growing companies and the most aggressive for marketing and sales. Ahn-Gook is enlarging our territory from domestic to Asian and world wide. Its main strategy is developmental Resources Leverage which contains R&D collaboration and investment, and out-sourcing. Ahn-Gook has been looking for partners which have promising candidates or platform technology for R&D collaboration or investment to ensure mutual benefits.
Major Technologies & Products Portfolio	Prospan (Respiratory area) Anytal(GI area) Anyfen(NSAID chiral product)

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Import(Licensing-In) Joint R&D Works Product Import Marketing Alliance Outbound Investment

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Metabolic disease Genito-urinary system Gastrointestinal area		Preclincal stage or IND or Clinical Phase I

Description of Business Items for In-licensing

- GI area (less Phase I or launched)
- Respiratory area (antitussive and expectorant, less Phase or phase III)
- Antiinflammatory and analgegics (less Phase I or launched)
- Genito-urinary (less Phase I or launched)
- Gout(less Phase I or launched)
- CNS (Nootropics, Neuropathic pain, Alzheimer disease, Phase III or NDA or launched)

AMOREPACIFIC CORPORATION

Company Profile

President & CEO	Kyung Bae Suh
Establishment	September, 1945
Web-Site Address	www.amorepacific.co.kr
Mailing Address	181, Hangangro 2ka, Yongsan ku, Seoul, 140-777, KOREA
Contact	Jay Jangyoung Lee, Ph.D., Head, Corporate Development/Bio&Pharma T. 82-2-709-6354, F. 82-2-709-6319, E-mail. jylee@amorepacific.com
Main Business Sector	Pharmaceutical, Health Food, Cosmetics
Capital	US $ 1,100 million
No. of Employees	3,300
Sales(as of 2005)	US $ 1,360 million
Company Overview	AmorePacific Corporation (AmorePacific) is the biggest player in cosmetics and personal care market in Korea. The annual sales turnover in 2005 was around $1.35bn, which corresponds to about 32% of market share. The company is now a part of Pacific Group with Pacific Corporation (Pacific) as a holding company since the company has been split into AmorePacific and Pacific in 2006. Both AmorePacific and Pacific Corporation are public and listed in Korea Stock Exchange. Combined market valuation is around $3bn. Backed by the successful performance in cosmetics business, AmorePacific is keenly ambitious to expand into pharmaceutical area. AmorePacific R&D Center (PRDC) and Pacific Pharmaceutical Company, Ltd. (Pacific Pharm) *Pacific Pharma is a public company with 52% of voting rights by common stock is owned by Pacific* are key drivers for the pharmaceutical business in Pacific group
Major Technologies & Products Portfolio	For drug discovery, there are four discovery programs on-going at differing developmental stages, which include 1) Next generation cyclooxygenase-2 Inhibitor with improved cardio-renal Safety, 2) Vanilloid receptor antagonist for pain management, 3) TNF-alpha production inhibitor for irritable bowl syndrome (IBS) and 4) ACC2 inhibitor for obesity treatment. The Cyclooxygenase-2 inhibitor program is at the end of Phase 1 human trials in the UK and ready to start Phase 2 trial in collaboration with CyrstalGenomics, Inc. (Seoul, KOREA). PAC10649, a dual inhibitor of carbonic anhydrase and COX-2, shows a very interesting distributionprofile in human that can minimize the potential cardiovascular adverse event of COX-2 inhibitor class of drugs without compromising its anti-inflammatory potency. The vanilloid receptor antagonist has been licensed to Schwarz Pharma AG (Monheim, Germany)in 2004 for co-development in pain and other indication in major markets. The ACC2 inhibitor program is under progress in collaboration with CrystalGenomics. The PRDC-CrystalGenomics team has identified a critical structural motif in ACC enzyme that determines specificity upon ACC2 over ACC. For drug delivery and formuaiton, the company has three delivery platforms: (1) transdermal delivery system; (2) injectable sustained-release delivery system (Depot system); and (3) oral controlled-release system (MSCR). MSCR is one of key formulation technologies at PRDC. Bioequivalent and value added formulations have been co-developed and launched by PRDC and Pacific Pharma for APIsincluding doxazosine mesylates for hypertenstion, oxybutynin for uninary incontinence, tamsulosin for BPH and topiramate for epilepsy.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

- Technology Export(Licensing-Out)
- Technology Import(Licensing-In)
- Joint R&D Works
- Product Export
- Product Import
- Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Preferably in pain, metabolic diseases and dermatology, but subject to expand upon opportunities	Both	discovery to preclinical	

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Depending on the opporunity found	Product preferably	preferably after P2/a

Description of Business Items for Out-licensing

Licensing or codevelopment opportunity is available for Pacific's in-house program for worldwide market or for the territory specific

Description of Business Items for In-licensing

Pacific and Pacific Pharma welcome any licensing or collaboration opportunity with flexibility in business arrangement. Immediate interest lies in in-licensing in the field of cardiovascular, dermatology and metabolic diseases including obesity with late stage development programs or with existing products for Korean market. Early stage programs before clinical proof of concept are also of interest to codevelop for worldwide market with a focus on the field of pain and inflammation, dermatology and metabolic diseases. Other field of indication may also be welcomed for consideration except oncology. L.

Boryung Pharmaceutical Co., Ltd.

Company Profile

President & CEO	Sang-Lin Kim
Establishment	October, 1963
Web-Site Address	www.iboryung.com
Mailing Address	Boryung Bldg, #66-21, Wonnam-dong, Chongro-ku, Seoul, 110 -750, Korea
Contact	Sang-Lin Kim, President & CEO T. 82-2-708-8122, F. 82-2-708-8123, E-mail. slkim@boryung.co.kr
Main Business Sector	Pharmaceutical, Health Food
Capital	US $ 14.7 million
No. of Employees	833
Sales(as of 2005)	US $ 208 million
Company Overview	Boryung Pharm. Co., Ltd. located in Seoul, South Korea, are one of the leading pharmaceutical manufacturers, recording about 200 million US dollars of 2005 annual turnover with about 830 employees. Boryung was founded in 1963 and has been involved in healthcare business over 40 years of history. Boryung specializes in developing and marketing anti-hypertensive, anti-infective, anti-cancer and biotechnology products. Boryung has kept licensing collaborative relationships with more than 30 overseas pharmaceutical companies such as Meiji Seika, Rohto, UCB-Japan, Bristol Myers Squibb, Almirall, Boehringer Ingelheim and so on for the successful business in Korean market.
Major Technologies & Products Portfolio	Major Technologies New drug developmet, DDS, Synthesis of raw materials Product Portfolio Medicines for cardiovascular, anti-infective, gastrointestinal, anti-cancer, hospital solution(including dialysis solutions) and respiratory area

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

- Technology Export(Licensing-Out)
- Technology Import(Licensing-In)
- Joint R&D Works
- Product Export
- Product Import
- Marketing Alliance
- Outbound Investment
- Inbound Investment

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Hypertension	Fimasartan	Phase IIa completed	None
Fungal infection	Fuconal cream	NDA submitted	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field Product & Technology	Development Status Desired
Cardiovascular agents Anti-infective agents Gastrointestinal agents Anti-cancer agents Hospital solutions Respiratory agents Geriatric agents(anti-diabetics, agents for benign prostatic hyperplasia)	Above Phase I

Description of Business Items for Out-licensing

Fimasartan

- Indication : Hypertension
- Mechanism : Angiotensin II receptor antagonist
- Form : Oral formulation
- Development status : Phase IIa completed
- IP : Compound patent (till 2019)

Fuconal cream

- Indication : Fungal infection
- Ingredient : Fluconazole
- Form : Cream
- Development status : NDA submitted
- IP : Composition patent (till 2021)

Description of Business Items for In-licensing

Therapeutic areas

- Cardiovascular, anti-infective, gastrointestinal, anti-cancer, hospital solution, respiratory and geriatric area

Partnership

- Exclusive licensing agreement in Korea

Development Status

- Above Phase 1

Bukwang Pharmaceutical Co., Ltd.

Company Profile

President & CEO	Sung Koo Lee
Establishment	October, 1960
Web-Site Address	www.bukwang.co.kr/e/index.asp
Mailing Address	398-1, Daebang-dong, Dongjak-gu, Seoul, 156-811, Korea
Contact	Chang Hui Koo, Vice President, Central Research Institute T. 82-2-2026-0084, F. 82-2-2026-0083, E-mail. chkoo@bukwang.co.kr
Main Business Sector	Pharmaceutical, Medical Materials, Medical Instrument
Capital	US $ 12.3 million
No. of Employees	500
Sales(as of 2005)	US $ 150 million
Company Overview	Bukwang Pharmaceutical Co., Ltd. was founded on the 17th, October, 1960 and started a business with the high-quality toothpaste first in Korea. Since then we have been pursuing a paradise of healthy living supplying supreme-quality medicines. Since we became listed on the stock market in August, 1988, we have maintained good finalcial management, so many consumers and stockholders have loved and trusted us for a long time. We acquired the approval of Clevudine for the treatment of the hepatitis-B virus in July, 2006, and this is a valuable fruit of continuous effort in R&D. As a result, Eisai and Pharmasset became our new partner for the world-wide marketing of Clevudine. We will continue to make efforts to develop the new medicinal products and already started new various projects in R&D center. We are sure that we will lead biotechnology in the 21th century, and will continue to be loved by our customers.
Major Technologies & Products Portfolio	Bukwang has focused on development of products for hepatology, oncology, diabetes and immunology. Recently we have strengthened the power of R&D for the stem cell technology and newly synthesized peptide treating cancer.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

- Technology Export(Licensing-Out)
- Technology Import(Licensing-In)
- Joint R&D Works
- Product Export
- Product Import
- Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Hepatic & Colon Cancer	Peptide	Preclinical	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Hepatology, Oncology	Drug candidates	Pre-clinical stage or Phase I/II/III

Description of Business Items for Out-licensing

Anti-cancer peptide

This is a newly synthesized peptide which is effective in cancer. It showed an in vitro efficacy to hepatic and colon cancer cell line. We developed the large-scale synthetic method.

Description of Business Items for In-licensing

We want to license-in the drug candidates that are being actively developed and the new drug delivery techniques that can be useful to enhance bioavailability and control the release profiles of drugs.

Chirogenix Co., Ltd.

Company Profile

President & CEO	Kim, Kyoung Soo
Establishment	February, 2002
Web-Site Address	www.chirogenix.com
Mailing Address	801 Kowoon Institute of Technology Innovation, Suwon Univ., Whasung-city, Kyunggi-do, 445-743, Korea
Contact	Kim, Hye Kyung, Assistant manager, Management support dept. T. 82-31-226-5934, F. 82-31-226-5935, E-mail. hkkim@chirogenix.com
Main Business Sector	Pharmaceutical
Capital	US $ 0.8 million
No. of Employees	13
Sales(as of 2005)	US $ 0.5 million
Company Overview	Chirogenix is a bioventure specialized in new drug development. It has been founded in 2002 by chemists who had been researched for new drug development at a governmental research center, a pharmaceutical company and major companies. Chirogenix is located in the university of Suwon, has been cooperating strategically with many partners for the development of innovative new drugs and the commercialization of high value-added pharmaceuticals. As a long term project, by the enzyme based drug designing we have focused on the development of anti-cancer drugs such as MMP inhibitor, Metastasis inhibitor. As a short term project, we have been researching pharmaceutical raw materials and cosmeceutical materials, also have been doing custom synthesis and contract research in the various synthetic area.
Major Technologies & Products Portfolio	On the basis of the essential technologies in the field of drug design, organic synthesis, medicinal chemistry, process development, we have secured various pipelines of new drug development and manufacturing techniques of various pharmaceutical raw materials, have been making profits by technical transfer to other pharmaceutical companies.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

- Technology Export(Licensing-Out)
- Joint R&D Works
- Inbound Investment

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
MMP Inhibitor (Anticancer)	CG 2300 etc.	Biological test	Yes (Korea)
Metastasis Inhibitor (Anticancer)	CG 1000 series	Lead optimization	None
EGFR Kinase Inhibitor	-	Lead generation	None

Description of Business Items for Out-licensing

MMP Inhibitor

We have the prominently effective new drug candidate materials-angiogenesis inhibitors-which are targeting for MMP-2 & MMP-9. Through the binding assay, in vivo metastasis inhibition assay and tumor growth inhibition assay, those candidate materials showed the most excellent results. We are in preparation to conduct the preclinical trial in cooperation with other Korean bioventure company. (1 PCT patent & 5 Korean patents are registered)

Metastasis Inhibitor

The developed compounds of CG-1000 line up to now, shows very prominent efficacy through the tumor growth inhibition assay with mouse's B16 melanoma and LLC(Lewis Lung Cancer) model. Theses kind of anti-cancer drugs never discovered before, if it's operating mechanism is defined and used at clinical, it can be a quite innovative turning point in the cancer treatment.

EGFR Kinase inhibitor

We have been researching to develop new EGFR kinase inhibitors in cooperation with the R&D team of Chonbuk National University College of Medicine. From the three dimensions structure of EGFR kinase, some new structural inhibitors are being desined. Due to this research we might draw effective new drug candidate materials.

Chong Kun Dang Pharmaceutical Corporation

Company Profile

President & CEO	Jung Woo Kim
Establishment	May, 1941
Web-Site Address	www.ckdpharm.com
Mailing Address	368, 3-ga, Chungjeong-ro, Seodaemoon-gu, Seoul, 120-756, Korea
Contact	Soon Kil Ahn, Ph.D., Executive Director, Research Institute T. 82-41-529-3107, F. 82-41-558-3004, E-mail. skahn@ckdpharm.com
Main Business Sector	Pharmaceutical
Capital	US $ 30 million
No. of Employees	1070
Sales(as of 2005)	US $ 235 million
Company Overview	Chong Kun Dang Pharmaceutical Corporation (CKD Pharm), based in Seoul, Korea, is a fully integrated pharmaceutical company manufacturing both active pharmaceutical ingredients and finished products. The company has experienced over half a century in manufacturing products by fermentation and synthetic technologies, and recently strives to develop products by the post-genomic drug discovery and the cutting-edge drug delivery technologies. In November 2001, the company was separated into CKD Pharm and CKD Bio in order to focus on their own business, the production and sales of finished products and raw materials, respectively. CKD generated 2005 sales of about $235 million, spending $12 million on research and development.
Major Technologies & Products Portfolio	CKD Pharm successfully launched Camtobell Inj. (CKD-602, camptothecin derivative) in Korean market for the treatment of ovarian and small cell lung cancer in the early 2004 with KFDA's new drug approval in 2003. CKD-602 is also in clinical trials for oral formulation or combination therapy with cisplatin. In 2000, the partial right to CKD-602 was out-licensed to Alza Corporation, U.S.A. for the development of Stealth liposomal formulation, and it is now in phase I clinical trial at University of Pittsburgh. In addition to CKD-602, antiangiogenic anticancer agent, CKD-732 (fumagillin derivative), insulin sensitizing antidiabetes, CKD-501 (glitazone derivative) and antiseptic agent, CKD-712 (higenamine derivative) are in phase I clinical trials. PDE-5 inhibitor for erectile dysfunction, CKD-533 is in preclinical studies. Besides, several potential drug candidates are currently being studied by about 80 researchers, cooperatively working in different area.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Import

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Anticancer agent	CKD-602 (oral)	Ph I (Korea)	None
Anticancer agent	SCKD-602	Ph I (USA)	ALZA (USA)
Angiogenesis Inhibitor	CKD-732	Ph I (Korea)	None
Antidiabetes	CKD-501	Ph I (Korea)	None
Antiseptic agent	CKD-712	Ph I (Korea)	None
Erectile Dysfunction	CKD-533	Preclinical	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Cardiovascular		over Phase 2b
Metabolism		All stages
Oncology		All stages
CNS		All stages
Rheumatoid arthritis		Preclinical-Phase 1

Description of Business Items for Out-licensing (I)

CKD-602, Anti-Cancer agent

- Mechanism of Action: DNA Topoisomerase-I Inhibition
- Development Stage:
  - Launched for ovarian & small cell lung cancer in Korea (Camtobell Inj.)
  - Phase II study combination therapy with Cisplatin in Korea
  - Phase II study for weekly bolus administration in Korea
  - Phase I study for Oral formulation in Korea
  - Phase I study for Stealth liposomal formulation (AP-30) by ALZA (J&J) in US
- Characteristics:
  - A novel Camptothecin derivative anticancer agent, Enhanced water-solubility
  - Established semi-synthesis from Camptothecin, Broad safety profile margin (R/Emax)
- Patent: USP 6310207, KR 0266743, USP 6265413, EP 0802915, JP 3023990, USP 6177568

CKD-732, Anti-Cancer & Anti-Metastasis agent

- Mechanism of Action: Anti-Angiogenesis
- Development Stage: Phase I Study in Korea
- Characteristics:
  - Fumagillin derivative, Establishment of formulation with good stability
  - Highly selective inhibition of endothelial cell proliferation *in vitro* test
  - Excellent anti-angiogenic, anti-metastatic and anti-cancer activity *in vivo* test
  - Improved safety profiles compared to TNP-470, Good water-solubility
- Patent: USP 6063812, EP 1077964, JP 3370985, KR 0451485, WO 99/059986, WO 05/082349

Lobeglitazone, CKD-501, Anti-Diabetes

- Mechanism of Action: Insulin sensitizer
- Development Stage: Completed of Phase I Study & Ready for Phase II Study in Korea
- Characteristics:
  - 2nd generation Glitazone derivative, Good bioavailability (>90 % in rat)
  - Dual-activity lowering both blood glucose and lipid
  - Long plasma half-life (~10 hr in human)
  - Excellent safety and convenient medication (It is possible to once-a-day administration)
- Patent: USP 6787551, WO 03/080605, KR 0450700,

Description of Business Items for Out-licensing (II)

CKD-712, Anti-Sepsis

- Mechanism of Action: Multifunction having a Anti-inflammation, Anti-thrombosis & Fibrinolysis
- Development Stage: Phase I Study in Korea
- Characteristics:
  - Derivative of natural product Higenamine (small molecule)
  - Excellent anti-inflammatory, anti-coagulatory, fibrinolytic & cardiotonic activity
  - Showed less bleeding than Xigris
  - Improved survival rate up to 92% in the pre-treatment of CKD-712
- Patent: USP 6562837, EP 1124554, WO 00/23078, WO 03/095426, KR 0512184, USP 10/513383

CKD-533, Erectile Dysfunction

- Mechanism of Action: Phosphodiesterase V (PDE5) inhibition
- Development Stage: Preclinical Study
- Characteristics:
  - Novel, highly potent and selective PDE5 inhibitor
  - Fast onset and long-acting PK profile in animal model

Description of Business Items for In-licensing

- Development stage: over Phase IIb (for Biologicals; Phase III)
  - Therapeutic classes: CV, metabolism, oncology, CNS
- Development stage: Discovery - Preclinical
  - Therapeutic classes: oncology, metabolism, rheumatoid arthritis, CNS

ChoongWae Pharma Corporation

Company Profile

President & CEO	Kyung Ha Lee
Establishment	August, 1945
Web-Site Address	www.cwp.co.kr
Mailing Address	698, Shindaebang-Dong, Dongjak-Ku, Seoul, 156-757, Korea
Contact	Jong Hoon Lee, Deputy Senior Manager, Business Development Team T. 82-2-840-6723, F. 82-2-847-0010, E-mail. jhlee@cwp.co.kr
Main Business Sector	Pharmaceutical, Health Food
Capital	US $ 35.6 million
No. of Employees	1,200
Sales(as of 2005)	US $ 324.4 million
Company Overview	For the last 61 years ever since its foundation in 1945, on the basis of its founding sprit of "respect for life" and "pioneering spirit", ChoongWae has been striving to produce and provide innovative new technologies and services heading for healthy lives of human beings. Based on leading competitiveness in the prescription drug market, ChoongWae has built up strong sales network across the country and superior pipelines in I.V-solutions, antibiotic, cardiovascular, gastrointestinal, nephrology/antianaemic, anticancer and neuropsychiatric. Moreover, ChoongWae is making efforts to provide medical equipments, various self-medication products and OTC products satisfying the requirements for prevention and diagnosis of diseases. Also, ChoongWae has diligently opened up itself to the overseas market with competitive APIs and finished products developed on a basis of our creative technologies. Especially, the 1st brand generic of carbapenem antibiotics containing 'Imipenem+Cilastatin' is lively being exported to the developed countries such as Japan, China,Central and South America, and etc.
Major Technologies & Products Portfolio	API i. Antifungal Agents ii. Carbapenems iii. Cephamycins I.V. Solutions i. Full-automation system to manufacture a Linger's solution (Environmentally friendly Non-PVC bag) ii. Various formulation study iii. Plant engineering technology

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Export Product Import Marketing Alliance Outbound Investment Inbound Investment Others Not-mentioned

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Stroke	NEU2000	Preclinical	NEUROTECH in Korea
Antifungal	Itraconazole	Launched	DEM in TURKEY
Cancer	CBP	Preclinical	CHUGAI in JAPAN
Antifungal	Itraconazole	Launched	SAWAI in JAPAN
Antifungal	Itraconazole	Launched	MARUKO in JAPAN
Antibiotics	Imipenem/Cilastatin	Pre-registration	SANDOZ in Austria

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Cancer	HIF	Co-development
Inflammation	NF-kB	Co-development
Antibiotics	M2-Phosphate	Technology Transfer
Antibiotics	Meropenem	Technology Transfer
Antibiotics	Panipenem	Technology Transfer
Antibiotics	Cefotetan	Technology Transfer
Antibiotics	Azidon	Technology Transfer
Hyperlipidemia	BAED/BHMD	Technology Transfer

Description of Business Items for Out-licensing

Anti-colorectal cancer agents

We have developed the anti-cancer agents targeting TCF4 signaling pathway blocking of transcription factors, CBP/beta-catenin binding. We have made joint research with Roche-Chugai corporation since 2005. Colorectal patients occurs over 1,020,000 in the world in 2002 (source: International Agency for Research on Cancer. France), and the market size of colorectal cancer is expected to reach 2,100 million dollars in 2006 (Source: Data-monitor). We expect that the market size of colorectal cancer will increase 3,000 million dollars in 2010. We will proceed with preclinical study of CWP231 compounds. In case of success of the project, the compound is expected to have remarkable competitiveness which can reshape the anti-colorectal cancer agents market.

Imipenem + Cilastatin

We have developed the 1st brand generic of carbapenem antibiotics named Imipenem & Cilastatin which was initially substantiated in August, 2000. We have its technology and know-how related to the synthesis ofImipenem Sterile and Cilastatin Sodium Sterile and the blending and vial filling of Imipenem Sterile and Cilastatin Sodium Sterile. We have exported APIs of Imipenem & Cilastatin and a finished product named 'Prepenem' throughout the world such as Brazil, China, Japan, Russia, etc. and successfully licensed out its technology and know-how to Sandoz, Austria in 2006 for the regulated markets such as Europe and the States.

Non-PVC bag and PlantEngineering

We are taking pride in its technology for environmentally friendly Non-PVC films and bags, and fully automatic system of their production. The one of our affiliates, Choongwae Corporation, succeeded in development of Non-PVC films with its own technology, and now starts to produce IV solution filled in Non-PVC films. It has dominant leadership position in basic IV solutions markets and superior technologies in container designs and manufacturing.Since, we successfully constructed new factory meeting cGMP standard requirements in 2006 we have competitive plant engineering technology to license out.

Description of Business Items for In-licensing	ChoongWae Central Research Institute is looking for the partnership with any research organization & institutes under collaborative research agreement, service agreement and licensing agreement in the field as described below - Target Identification/Validation technologies - Drug Delivery System (DDS) technologies - Library Constructions

CJ Corp.

Company Profile

President & CEO	Jay Hyun Lee
Establishment	August, 1953
Web-Site Address	http://english.cj.net/
Mailing Address	CJ Bldg, 500, Nandaemunro 5-ga, Jung-gu, Seoul, 100-749, Korea
Contact	Moon-Sue, Lee, Project Specialist T. 82-2-726-8456, F. 82-2-726-8649, E-mail. webmaster@cj.net
Main Business Sector	Pharmaceutical, Other
Capital	US $ million
No. of Employees	
Sales(as of 2005)	US $ million

Company Overview

Since its establishment in 1953, CJ has been spearheading the Korean food market, specializing in sugar, flour, cooking oil, and processed food. Backed by its innovative bio fermentation technology, CJ is now a world leader in the production of food and animal feed additives. CJ consists of 59 affiliates and 28 overseas networks. Aside from its traditional food and food service and bio pharma businesses, its business areas include the entertainment media, home shopping, and logistics.

CJ started the pharmaceutical business in 1984, and it established a strong footing in the field as the company with strong research capabilities and potentials with the successful release of hepaccine, the vaccine for hepatitis-B. And now, it is growing into the world's leader in the pharmaceutical industry contributing to the healthy life of the patients in and out of the country with the continuous development of a variety of vaccines, cytokine, medicines for geriatric diseases, and antibiotics based on advanced bioengineering technology including the latest recombinant DNA technology.The recent acquisition of Hanil Pharm reflected CJ's strong will to strengthen its capabilities in the pharmaceutical business with and gave CJ an opportunity to bring out the synergy in the sales and profit/loss areas and strengthen the overseas license network as Hanil Pharm has many original licenses for excellent foreign medicines such as Mevalotin, Bana, Herben, and Selbex.

Major Technologies & Products Portfolio

Vaccine	Hepaccine-B®, Act-Hib®, Pneumo-23®, Varicine®, Infleccine®, Imovax®
IV Solution	Dextrose S, Dextrose-Electrolytes S, Electrolytes S, Plasma-Electrolytes, Diuretic S, Plasma Constitution S, Irrigation S, Amino acids S, Fulcaliq®, Hextend®
Oncology	Campto®, Genexol®, Leuplin®, Leukokine®, Alphaferon®*Aloxi®,*Leuplin DPS®
Tonics	Condition®, Genovita®, Hongsamwon®
Antibiotics / inflammatory	Citopcin®, Vancorin®, Brosporin®, Mobactam®, Soleton®, *Tesalin®
Anti-Diabetes/ anti-Renal	Basen®, Neurocheck®, Glyone®, Kremezin®, Epokine®
CV	Almarl®, Madipine®, Simvastar®, Amlostar®, Rampistar®,
Others	*Tostrex®,

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

Technology Export(Licensing-Out)
Others Not-mentioned

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Liver cirrhosis	CJ-11555 (oltipraz)	Phase II	
Hematinic	rh EPO(serum free, albumin free)	Research	None
Pseudomonas Infection	SyudobaccineTM	Phase III	

Daewoong Pharm. Co., Ltd.

Company Profile

President & CEO	Jong Wook Lee, Ph.D.
Establishment	August, 1945
Web-Site Address	www.daewoong.com
Mailing Address	501-2, Samgye-Ri, Pogok-Eup, Yongin, Kyunggi-Do, 449-814, Korea
Contact	Yeo Wook Koh, Ph.D. General manager, Biopharmaceutical team, R&D center T. 82-31-334-3200(Ext. 600), F. +82-31-322-7190, E-mail. ywkoh@daewoong.co.kr
Main Business Sector	Pharmaceutical, Health Food, Cosmetics, Medical Instrument, API
Capital	US $ 25 million
No. of Employees	1,200
Sales(as of 2005)	US $ 337 million
Company Overview	Since our founding in 1945, Daewoong Pharmaceutical Co., has grown to become a leading Korean pharmaceutical company. It's remarkable growth is attributed to its aggressive marketing and strong R&D investment. Daewoong's 550 highly qualified medical representatives are involved in delivering high quality products to every facet of the Korean medical industry. Daewoong markets a number of pharmaceuticals, health supplements, household goods and consumer products through this vast and efficient sales force. Daewoong have an extensive successful history of collaboration with foreign companies such as Eli Lilly, Merck, Allergan, Ipsen, and Rotta. Currently, we are strongly looking for new business opportunities through in-or out-license or R&D collaboration for the biopharmaceuticals and new chemical entities.
Major Technologies & Products Portfolio	Major Technologies Development of Biophamceuticals (growth factors, antibody area), Synthetic chemicals, and DDS. Products Portfolio Cardiovascular, Gastrointestinal, Respiratory, Anti-cancer, CNS, Immune and Liver disease.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Export Product Import Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Diabetic foot ulcer	EGF	Launched in Korea	None in EU
Head and neck cancer	Oncolytic adenovirus	Pre-clinical	None
Multiple Sclerosis	Interferon beta	Pre-clinical	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Anti-cancer Liver disease anti-inflammatory CNS or dermal disease QOL	Human Antibody 2nd Generation Proteins DDS	Above Preclinical

Description of Business Items for Out-licensing

Easyef

- Recombinant human EGF
- Indication : diabetic foot Ulcer(DBU), Spray for oral mucositis, and GI mucositis
- development status : Launched in Korea to the DBU
- looking for the developing partner for EU and USA market

YDC02

- Oncolytic adenovirus
- Indication : head and neck cancer
- development status : Clinical Phase in Korea

DWP419, Interferon Beta

- Recombinant human interferon beta1a
- Indication : Multiple sclerosis
- development status : Preclinical
- looking for the developing partner for EU market as a biosimilar product

Description of Business Items for In-licensing

Therapeutic areas

- anti-cancer, CNS, cardiovascular, anti-inflammatory, liver disease (pegylation products, human antibody, therapeutic protein products and chemicals)

Partnership

- licensing agreement in Korea or including south east Asia

Development Status

- Above Clinical Phase 2 for chemicals
- Above Preclinical for bio-pharmaceuticals

Digital Bio Technology Co., LTD.

Company Profile

President & CEO	Jun Keun Chang Ph. D.
Establishment	June, 2000
Web-Site Address	www.digital-bio.com
Mailing Address	Rm.1304, Institute of Advanced Machinery Design, Seoul National Univ., Shinlim, Kwanak, Seoul, 151-742, KOREA
Contact	Neon c. Jung, Ph.D., Chief Business Officer, Marketing Dept. T. 82-2-889-7139, F. 82-2-885-2267, E-mail. neon@digital-bio.com
Main Business Sector	Medical Instrument, Other
Capital	US $ 1.996 million
No. of Employees	26
Sales(as of 2005)	US $ 0.6 million
Company Overview	The dream of Digital Bio Technology (DBT) is to open up a bright future that guarantees healthy and wholesome life by developing diagnostic and analytical instruments for medical purposes as well as providing related services and solutions. That is the reason why DBT focuses on MEMS (Micro Electro Mechanical System), bioengineering, and Lab-on-a-Chip techniques which are represented as effective tools for diagnosis and drug discovery in BIT integrated industry, a promising new industrial field in 21st century.
Major Technologies & Products Portfolio	C-Chip It is a disposable plastic hemocytometer used for manual cell counting under the microscope. C-Reader system The micro-chip based automatic cell counter & viability tester using purified disposable plastic microchips and it also can count Yeast, Lactic Acids and Milk Somatic cell, etc. Microporator system Microporator system is a novel and proprietary electroporation technology developed by DBT. Microporator system is a unique electroporation technology utilizing pipet TIP as a electroporation chamber.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Export Marketing Alliance Inbound Investment

Agenda For Out-licensing & R&D Co-Works

Drug or Product	Development Status	Partners
product (microporator)	Market-Launched	Yes

Description of Business Items for Out-licensing

Microporator

Microporator system is a novel and proprietary electroporation technology developed by DBT. Microporator system is a unique electroporation technology utilizing pipet TIP as a electroporation chamber.

C-Chip

It is a disposable plastic hemocytometer used for manual cell counting under the microscope

C-Reader system

The micro-chip based automatic cell counter & viability tester using purified disposable plastic microchips and it also can count Yeast, Lactic Acids and Milk Somatic cell, etc.

Dong-A Pharmaceutical. Co., Ltd.

Company Profile

President & CEO	Kang, Shin Ho
Establishment	December, 1932
Web-Site Address	www.donga-pharm.com
Mailing Address	252, Yongdu-Dong, Dongdaemun-Ku, Seoul, 130-708, Korea
Contact	Chan-Won Oh, Manager, Product Development & licensing Div. T. 82-2-920-8224, F. 82-2-925-4026, E-mail. sol@donga.co.kr
Main Business Sector	Pharmaceutical, Health Food, Cosmetics, Medical Materials, Medical Instrument
Capital	US $ 45.6 million
No. of Employees	2001
Sales(as of 2005)	US $ 533.6 million
Company Overview	Dong-A has stood for leadership in Korean pharmaceutical industry and ranked at the top position over more than 30 years. The annual pharmaceutical sales of Dong-A in 2005 reached up to 541.2 Billion Won (US$533.6M) and Dong-A has been covering most of the Korean hospital and pharmacies with the strongest sales and marketing force. Dong-A Pharmaceutical is up to multiple and futuristic management from not only pharmaceutics area but also bio-technology to health food and environmental business field, and we are giving every effort in developing new products and expanding markets. Dong-A Pharmaceutical will continue to do its endeavors to make better living as the "company for the life" emphasizing the mankind as the "subject of life" and the nature as the "origin of life" We wish to be with you in every effort we put in to make the better life.
Major Technologies & Products Portfolio	Dong-A Pharmaceutical research laboratories, a leading research laboratory in Korea, was founded on July 1st, 1977. In 1988, the laboratory began to perform broad range of independent research project at the pre-clinical trial level. Approximately 150 scientists and other employees are working in the laboratory to develop new drugs, biopharmaceuticals, bulk pharmaceticals, and new formulation research.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Export Product Import Marketing Alliance Outbound Investment

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Erectile Dysfunction	Zydena	Phase Ⅱ in USA Launched in Korea	
IBD (Inflammatory Bowel Disease)	DA-6034	Phase Ⅱ	None
Antibiotics	DA-7218	Preclinical study is almost done	None
Infertility for women	DA-3801(rhFSH)	Launched	None
Multiple sclerosis	Interferon-β	Preclinical	None
Hepatitis B	PEG-IFN-α	Preclinical	None
Chronic hapatitis B	HB-110	Phase Ⅰ	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Development Status Desired
Diabetes, Obesity, CNS disorders, Urologic disease like BPH, Urinary Incontinence	Late stage(at least Phase IIb)

Description of Business Items for Out-licensing

DA-6034

DA-6034 is a gastroprotective flavonoid derivative compound with therapeutic effect on inflammatory bowel disease and has a potential in the treatment of gastritis. DA-6034 shows very safe profile compared with other IBD drugs such as 5-ASA derivatives and corticosteroids.

DA-7218

DA-7218 is an antibiotic of Oxazolidinone class that inhibits bacterial protein synthesis. It is an oral/i.v. therapeutic agent under development for the treatment of gram-positive bacterial infection. The expected antibacterial spectrum of DA-7218 is superior to Zyvox, a sole oxazolidinone class antibiotics available on the market.

DA-3801

DA-3801 is recombinant human follicle stimulating hormone. It has been already approved in Korean FDA and we are preparing to launch coming early September, 2006 and on a separate issue, a serum free process development has been completely finished as well.

Description of Business Items for In-licensing

We are seeking innovative partners with R&D pipeline under late stage of devleopment(at least phase IIb). Moreover, our focusing therapeutic areas for in-licensing are as below.

- Metabolic diseases : Diabetes, Obesity, Dyslipidemia
- CNS diseases : Parkinson's disease, Schizophrenia, Dementia
- Urologic diseases : Benign prostatic hyperplasia(BPH), Urinary Incontinence
- Others : Cancer and Cancer-related diseases like mucositis

Dong Kook Pharm. Co., Ltd.

Company Profile

President & CEO	Ki-Beom Kwon
Establishment	October, 1968
Web-Site Address	www.dkpharm.co.kr
Mailing Address	150-3, Hoejuk-ri, Kwanghaewon-myun, Jincheon-gun, Chungbuk, 365-834, Korea
Contact	Kyung-Hoe Cha, Ph.D., Director, Central Research Institute T. 82-43-530-0211, F. 82-43-535-2840, E-mail. dkpa01@chol.com
Main Business Sector	Pharmaceutical
Capital	US $ 38.7 million
No. of Employees	295
Sales(as of 2005)	US $ 70 million
Company Overview	Since its establishment in 1968, DongKook Pharmaceutical Co., Ltd. has been producing various pharmaceutical products of the highest quality. In 1992, the aseptic pre-filled syringe system factory was constructed for the first time in Asia. In 1994, the Third Factory was completed and began to produce different types of products, such as injections, tablets, capsules, ointments, creams, suspensions, gels, strips, etc. in compliance with GMP. DongKook invests more than 5% of the annual sale for research and development expenses while operating its central research institute.
Major Technologies & Products Portfolio	DongKook has developed Minocline Strip for perio-dontitis that utilized local drug delivery system techniques and also has succeeded to produce Pofol, a superior intravenous general anesthetics. These innovative products were approved as the excellent Korean Technology in 1995 and in 1996, respectively. Also, recently, the company has developed Pamiray (x-ray contrast medium), Streptokinase (fibrinolytic agent) and Lorelin depot (anti-cancer agent).

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Import(Licensing-In) Joint R&D Works Product Import Marketing Alliance

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Diagnostic or anti-cancer	Antibody-based therapeutics Peptide compounds	Pre-clinical or phase I

Description of Business Items for In-licensing	Candidates or product : peptides, antibodies Application : anti-cancer Desired partner : Biotechnology company, University Development stage : Pre-clinical or phase I stage

Dong Wha Pharm. Ind. Co., Ltd.

Company Profile

President & CEO	Kil-Joon Yoon
Establishment	September, 1897
Web-Site Address	www.dong-wha.co,kr
Mailing Address	189, Anyang Dong, Anyang city, Kyunggi-Do, 430-017, Korea
Contact	Jin Soo Lee, Ph.D., Principal Researcher, R&D center T. 82-31-445-2485, F. 82-31-446-9556, E-mail. jslee@iris.dwcrc.co.kr
Main Business Sector	Pharmaceutical, Health Food, Medical Materials
Capital	US $ 154 million
No. of Employees	820
Sales(as of 2005)	US $ 160 million
Company Overview	It was back in 1897, when Korea was undergoing tremendous upheavals in the name of modernization, that Dong Wha started as the nation's first medicine company. Over the years, Dong Wha has grown and expanded, taking pride in the fact that it is responsible for safeguarding the public health. Many pharmaceutical products such as Gas Whalmyungsu, Fucidin ointment, Lacteol and Pancol A etc., have been developed after Dong-Wha Pharmaceutical Research Laboratories was founded in 1973. Since present laboratory building was built in 1985, our laboratory began to start the research systems for new drugs and advanced drugs. And now, approximately 100 scientists including other related employees are working together to develop new drugs, advanced drugs and new pharmaceutical products.
Major Technologies & Products Portfolio	Our R & D projects are concentrated on the 3 kinds of therapeutic area for the new drug development ; Anticancer, Antiosteoporosis and Antiinfective. And on new drug delivery system ; Microparticle with sustained release and Liquid suppository. From the result of our R & D efforts, we have developed the new drug "Milican Injection" which is the world-first radiopharmaceutical drug for liver cancer. Now, Milican Inj. is Marketed in Korea for treatment of hepatocellular carcinoma. And now, Milican Film which is being developed as a radiopharmaceutical for treatment of skin cancer is in the stage of clinical Phase II studies now. In addition, we have developed the DW-1350 which is the new drug candidate for treatment of osteoporosis and DW-224a which is the new drug candidate as a anti-bacterial agent. Phase I clinical trials for these drug candidates have been completed recently and a phase II clinical study is planned.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Export Product Import Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Anti-cancer	Milican inj.	Marketed	None
anti-osteoporosis	DW-1350	Phase I	None
Anti-bacterial	DW-224a	Phase I	None

Description of Business Items for Out-licensing

Milican inj.

Milican inj. is radiopharmaceuticals for treatment of hepatocellular carcinoma. One set of Milican inj.(DW-166HC) consists of 2 vials; one is clear and transparent sterile 166Ho solution(Kit A) and the other is lyophilized sterile chitosan powder(Kit B). The Kit A is added to Kit B to make 166Ho-chitosan complex as a clear solution in situ. It is thought that the hepatocellular carcinoma(HCC) might be cured by single percutaneous intratumoral injection. Now, Milican Inj. is Marketed in Korea for treatment of hepatocellular carcinoma.

DW-1350

DW-1350 is low molecular weight chemical for the treatment of osteoporosis. DW-1350 stimulates bone formation as well as inhibits bone resorption. DW-1350 shows good efficacy for prevention and treatment of osteoporosis in vivo animal model. In addition, it has good bone anabolic effect. Phase I clinical trial has been completed in UK recently and a phase II clinical study is planned. It shows good safety in phase I study. Patent approved in Korea and filed in a developed country including USA, Japan and EU.

DW-224a

New fluoroquinolone antimicrobial agent, DW224 has broad antibacterial activities. Especially, DW-224a has excellent activities against RTI pathogen. Phase I clinical trial has been completed in UK recently. It shows good safety in phase I study, Patent approved in Korea, USA, Japan and UK.

Liquid suppository

The new intelligent liquid suppository, composed of poloxamers and bioadhesive polymers, is a liquid form at room temperature and becomes a gel at body temperature after rectal administration. The gel sticks to the mucos menbrane of the rectum and retains at the administration site for a long time (more than 6 hr). It can avoid first pass metabolism of drugs by the liver, improved patient compliance, easy manufacturing and decreased rectal mucosal irritation. Patent is approved in Korea and filed in USA, Japan and EU.

Green Cross Corp.

Company Profile

President & CEO	IL-SUP HUH, Ph.D
Establishment	October, 1967
Web-Site Address	www.greencross.com
Mailing Address	303 Bojeong-dong, Giheung-gu, Yongin, 446-770, Korea
Contact	Sung Ick Park, Senior Manager, Business Development T. 82-31-260-9358, F. 82-31-260-9408, E-mail. parksi@greencross.com
Main Business Sector	Pharmaceutical
Capital	US $ 44.5 million
No. of Employees	976
Sales(as of 2005)	US $ 332 million
Company Overview	Green Cross Corporation (GCC) is one of the largest pharmaceutical companies in Korea and well known for Hepavax B, world's biggest selling hepatitis B vaccine. Since its establishment in 1967, GCC has devoted to its expertise in the field of biopharmaceuticals, such as plasma-derivatives, recombinant proteins and vaccines. With continuous investment in R&D and introduction of the advanced technologies, its product portfolio and pipeline are now expanded into various areas including therapeutic antibodies, innovative vaccines, gene/cell therapeutics, small chemical drugs, vitamins and etc.
Major Technologies & Products Portfolio	GCC possesses strong expertise and platform technologies related to mass production of various biological products using fermentation, cell culture and plasma fractionation. GCC also has its own proprietary technologies in the field of antibody engineering, pegylation, microbial fermentation, mammalian culture, *in vitro* diagnostics and etc. Our product portfolio is largely divided into 4 areas : Plasma derivatives, Vaccines, Biologials and Others. Several important products are as follows. - Plasma derivatives : Albumin, Immunoglobulin, and Hepatitis B IG - Vaccines : Haemorrhagic fever (Hanta virus), JEV and DTaP - Biologicals : rhINF-alpha and rhG-CSF - Others : Urokinase, Heparin, and Placenta

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

Technology Export(Licensing-Out)
Technology Import(Licensing-In)
Joint R&D Works
Product Export
Product Import
Marketing Alliance
Outbound Investment

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Hemophilia type A	Rec. Factor VIII (Greengene)	Phase III	None
Anti-cancer	Anti-angiogenic protein (Greenstatin)	Non-clinical	None
Prophylaxis of HBV/HCV	HBV/HCV fusion vaccine	Primate study	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
- Hypertension - Hyperlipidemia - Diabetes - Anti-cancer - Infectious diseases	- DDS and formulation for protein and gene products - Technologies to enhance the potency of therapeutic antibodies - Novel therapeutic targets and candidates	- Marketed or late clinical stage products - Research collaboration - Marketing partners for the EU and US markets

Description of Business Items for Out-licensing

GCC is actively seeking experienced partners to accelerate and advance the development and commercialization of our own product candidates. Several important candidates in our pipeline are described below.

Recombinant blood coagulating factor VIII (Greengene)

GCC has attempted to develop and commercialize recombinant human coagulation Factor VIII (Greengene) using the proprietary mammalian cell culture system. Greengene, generated as a B-domain deleted(BDD) one, has been proven to be advantageous over full-length and/or other BDD FVIII, particularly in homogeneity and productivity. Phase III clinical trials are in progress and is expected to be completed within this year.

Anti-angiogenic protein (Greenstatin)

A recombinant form of human apolipoprotein(a) kringle V(termed rhLK8) named Greenstatin is a polypeptide containing 86 amino acids. Studies showed Greenstatin to be a potent inhibitor of angiogenesis and tumor growth. Greenstatin is now in the non-clinical stage in the US and is scheduled to enter Phase I clinical trials in early 2007.

Multivalent prophylactic vaccine for HBV and HCV

GCC made a fusion construct including envelope protein sequences which are important targets for HBV and HCV vaccine development. Neutralization assay using HCV pseudotype viruses indicates that the fusion particle-induced antibodies can effectively neutralize viruses. Efficacy tests using chimpanzees are in progress.

Hanall Pharmaceutical Co., Ltd.

Company Profile

President & CEO	Kim Sung Wook
Establishment	November, 1973
Web-Site Address	www.hanall.co.kr
Mailing Address	3F Bioventure Town, 461-58 Jeonmin-dong, Yuseong-gu, Daejeon Metropolitan, 305-811, Korea
Contact	Young Gwan Jo, Ph.D., Head, R&D Center T. 82-42-867-2041, F. 82-42-867-2044, E-mail. yjo@hanall.co.kr
Main Business Sector	Pharmaceutical
Capital	US $ 45 million
No. of Employees	445
Sales(as of 2005)	US $ 75 million
Company Overview	HANALL Pharmaceutical is a pharmaceuticals manufacturing company developing new medicine. As an industry that seeks for health care which improves customers' quality of life, HANALL Pharmaceutical's goal is to pursue healthy life and better life of customer. Established in November, 1973, HANALL Pharmaceutical has been pursuing only the pharmaceutical industry with a sense of duty make good medicines and gives health to customers. HANALL Pharmaceuticals, as ethical product company amino acid infusion solution and antibiotic medicine, was main business in general hospital market. Currently, there has been a change in the business environment. According to such a change, HANALL has been continuously reinforcing cardiovascular medicines, antidiabetes medicines. With the basis of such a change, HANALL Pharmaceutical has been reinforcing competitiveness through R&D of new chemical entities of antidiabetes medicine and formulation new drug of cardiovascular medicines area. Moreover HANALL will do it' s best to take lead in biotechnology areas also.
Major Technologies & Products Portfolio (I)	Pharmaceutical formulation area ① World class Novel Drug Delivery System(DDS) development ② New dosage formulation study ③ Differntiated generic formulation development ④ In vitro drug release study analysis ⑤ Solid dosage form DDS ; Oral disintegrating tablet, Triple layered tablet, Bilayered tablet, Controlled release tablet, Dispersable tablet,Pellet type sustained release Medicinal chemistry Area ① DMF based raw material synthesis ② Discovery Anti-atopic dermatitis ③ Liposome(Microencapsulation) of Coenzyme ④ Discovery Antidiabetica and anti-obesity ⑤ Biguanide derivatives ⑥ DDP-IV inhibitors ⑦ AMPK activators - Drug design and mode of action study - Synthetic process study - Identification of new drug candidate - Examine the efficacy and pharmacokinetic and pharmacodynamic study - Characterization physicochemical property

Major Technologies & Products Portfolio (Ⅱ)

Bio-Technology

① Modificaiton of bio-generics
② Discovery New protein entity of specific cytokines
③ Discovery new Pegylated Peptides

Major Product

① Antibiotics : Bactroban, Refosporen, Cefalysis, Uroxacin, Ceftezole, Urfamycin, Floxin, Moxilin, Cloran, Micronomycin, Sencef, Tomiporan, Cerotzine
② Anti-Inflammatoris/Analgesics : Prolase, Esberon, Tramadol, Afloxan, Sendipen, Clinpen, Limethasone, Itadorin
③ Infusions : Topasol Inj. Gerovisol Inj. Proamin Inj. Livabisol Inj. Amini Inj. Morihepamin Inj. PN-TWIN Inj. Neoamiyu Inj.
④ Antispasmodics : Methocarbamol, Petrone, Mesilan, Myoben, BTXA
⑤ Biological Agents : Humiron-αm
⑥ Miscellaneous : Naloxon, Bupivacaine, Venoron, Amtox, Neophin, Multimin, Quickvue one- step H. pyloritest, PhosLo, Elcatonin, Konsyl Easy Mix Formular,
⑦ Agents For Gastrointestinal Tract : Hanolase, Famotidine, Ranitidine, Hantiron, Recridene, Raxitin, Prazole, Biotop, Tiromin, Levode
⑧ Corticosteroid Hormones : Cortisolu, Tamceton, Betamethasone, Solu-dacortin, Medisoru
⑨ Cardiovascular Drugs : Nafril, Tefra, Hesotanol
⑩ Agents For Hepatic Disorders : Neomarin

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

Technology Export(Licensing-Out)
Technology Import(Licensing-In)
Joint R&D Works
Product Export
Product Import
Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Antidiabetics	Metformin	Final review(BE study)	Yes
Anti-atopic agent	Vitamin	Phase I	Yes

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Anticancer	Interferon	Preclinical

Description of Business Items for Out-licensing

Metformin HCl optimized release

Metformin HCl tablet for 24hr extended release tablet. Final review by KFDA
Patent

Anti-atopic agent

Topical anti-atopic agent technology. Preclinical, Patent application

New combination of cardiovascular APIs

Patent, clinical trial

Anti-obesity agent

Antiobesity products, DDS technique, Patent, Clinical trial

Hanmi Pharmaceutical Co., Ltd.

Company Profile

President & CEO	Kyung Yoon Min
Establishment	June, 1973
Web-Site Address	www.hanmipharm.com
Mailing Address	#45 Bangi-dong, Songpa-gu, Seoul, 138-724, Korea
Contact	Chang-Ju Choi, PL, Research Assistant Team T. 82-31-371-5027, F. 82-31-371-5006, E-mail. cjchoi@hanmi.co.kr
Main Business Sector	Pharmaceutical, Health Food, Medical Materials
Capital	US $ 381 million
No. of Employees	1,414
Sales(as of 2005)	US $ 377 million
Company Overview	Only 30 years after its establishment in 1973, Hanmi Pharmaceutical Co., Ltd. has become a leading pharmaceutical company in Korea. The mission of Hanmi is to provide society with superior products and services by developing pharmaceuticals that improve the quality of life and satisfy customer needs. Hanmi is one of the leading research-driven pharmaceutical companies in Korea.
Major Technologies & Products Portfolio	Recently, Hanmi develops unique long-acting protein platform technology which can extend the half-life of peptide/protein drugs to several weeks. Hanmi is also focusing on discovering anti-cancer drugs. An oral formulation of Paclitaxel using our novel PGP inhibitor is in Phase I. In addition, the efforts of generating novel candidates for blocking signal transduction pathways are in progress. We are currently seeking collaboration/licensing partners.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

- Technology Export(Licensing-Out)
- Technology Import(Licensing-In)
- Joint R&D Works
- Product Export
- Product Import
- Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Long-acting proteins conjugates	HM10760A (Long-acting EPO) HM10660A (Long-acting INF) HM10560A (Long-acting hGH) HM10460A (Long-acting GSCF)	Preclinical	None
Oral formulation of Paclitaxcel / MDR cancers	Oraxol	Phase I	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Cancer, CNS, Cardiovascular, Ophthalmology, QOL(Quality Of Life)	Drugs related CNS, Cardiovascular, Ophthalmology, QOL including Anticancer drug	Phase II, Phase III, Registered or Marketed

Description of Business Items for Out-licensing

Long-acting proteins conjugation technology

- Hanmi has developed a recombinant biocarrier which can extend the half-life of peptide/protein drugs to several weeks.
- It uses a non-peptidyl polymeric link to form a site-specific conjugate with active peptide/protein drugs.
- The proof-of-concept has been confirmed with several commercial proteins
- This technology can be applied to many kinds of therapeutic peptide/protein drugs to improve therapeutic potentials by increasing serum half-life and in vivo efficacy.
- Current Pipelines (August, 2006) :
  - HM10760A, Long-acting EPO, Preclinical
  - HM10660A, Long-acting INF, Preclinical
  - HM10560A, Long-acting hGH, Preclinical
  - HM10460A, Long-acting GSCF, Preclinical
- Related Patents:
  - Method for the Mass Production of Immunoglobulin Constant Region / WO2005047335 / Hanmi Pharm. / 04-Nov-13 / PCT Publication
  - Protein Complex Using an Immunoglobulin Fragment and Method for the Preparation Thereof / WO2005047336 / Hanmi Pharm. / 04-Nov-13 / PCT Publication
  - A Pharmaceutical Composition Comprising an Immunoglobulin Fc Region as a Carrier / WO2005047337 / Hanmi Pharm. / 04-Nov-13 / PCT Publication
  - IgG Fc Fragment for a Drug Carrier and Method for the Preparation Thereof / WO2005047334 / Hanmi Pharm. / 04-Nov-13 / PCT Publication

P-glycoprotein (PGP) Inhibitor

- HM30181A is a potent and third generation p-glycoprotein inhibitor.
- It enhances oral bioavailability and cytotoxicity of various anticancer drugs.
- Current Pipelines (August, 2006) :
  - Oraxol™, Oral Paclitaxel (HM30181A+Paclitaxel), Phase I
  - Oral Irinotecan (HM30181A+Irinotecan), Preclinical
  - Oral Docetaxel (HM30181A+Docetaxel), Research
- Related Patents :
  - P-Gycoprotein Inhibitor, Method for Preparing the Same and Pharmaceutical Composition Comprising the Same / WO2005033097 / Hanmi Pharm. / 04-Oct-06 / PCT Publication / KR Registered

Description of Business Items for In-licensing

Hanmi has been keeping business relationship with over 10 licensing partners in North America, Europe and Japan. Hanmi has keen interest in products of Anticancer, CNS, Cardiovascular, QOL(Quality of life) and Ophthalmology. We would like to have a chance to discuss licensing opportunity with the companies that have developed in these areas.

ILDONG PHARMACEUTICAL CO.,LTD.

Company Profile

President & CEO	Kumki Lee
Establishment	March, 1941
Web-Site Address	www.ildong.com
Mailing Address	260-5, Unnam, Kihoong, Yongin, Kyungki, 449-910, Korea
Contact	Jh Cho, Manager, Research Assist Team T. 82-31-287-1700, F. 82-31-287-1800, E-mail. chojh@ildong.com
Main Business Sector	Pharmaceutical
Capital	US $ 235 million
No. of Employees	1,000
Sales(as of 2005)	US $ 240 million
Company Overview	Established in 1941, ILDONG PHARMACEUTICAL CO., LTD. is based on the Corporate philosophy of Respect for the individual, Quality Management, Creation of value. 1959 Active lactic bacteria preparation "BIOVITA" produced and process patent obtained. 1963 Multi-active long-lasting vitamins "ARONAMIN", 1986 the peptic ulcer remedy, "RANITIDINE", the first breakthrough of its kind in Korea developed. Succeeding in developing "KENOFEN GEL" an anti-inflammatory analgesic for topical application, another first in Korea in 1992. Having achieved in-house production of "LEVOFLOXACIN" preparation in 1995, ILDONG helps active research and development in quinolones in Korea. ILDONG PHARMACEUTICAL CO., LTD will exert best efforts for contributing to healthier and happier lives.
Major Technologies & Products Portfolio	New drug development • IDC7181, injectable Cephalosporin antibiotics • A new anti-cancer drug, Hyrubicin (ID 6105). • New agents for arthritis treatment and neoplastic metastasis inhibition based on MMP 3 dimensional structures • IDQ-8006 Quinolone antibiotics • Growth inhibitor against resistant bacteria Pharmaceutical raw material development • New Lactobacillus strains • Benzoxazine anti-bacterial agents by a special process of unsymmetric reduction technology • Yeasts for normalization of intestinal function • Anti-histaminics • Vitamin derivatives New Dosage form development • Sustained released form of anti-hypertensive agents. • Analgetic drugs of fast onset of its pain- relief effects.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

Technology Export(Licensing-Out)
Technology Import(Licensing-In)
Joint R&D Works
Product Export
Product Import
Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Anticancer	Hyrubicin	Preclinical	None
Antibiotics	IDC 7181	Preclinical	None
Alzheimer	Peptide	Research	None
Antiobesty	Natural Product	Preclinical	None

Description of Business Items for Out-licensing

Hyrubicin

Hyrubicin is a new anthracycline developed by hybrid antibiotic technique. It is a promising candidate for cancer chemotherapeutic agent with low cardiotoxicity and high effectiveness, waiting for clinical trials.

Cephalosporin antibiotics IDC 7181

IDC 7181 is as active or more active than Cefotaxime and Cefpirome. It shows far more excellent therapeutic profiles in animal studies compared to Cefpirome especially against pathogenic pseudomonas. In single-dose and 4-week repeated dose toxicity studies of IDC 7181 in rats and dogs, toxicity and remarkable clinical changes were not detected.
- Industrial Property : KR 174117, US 6,063,778, ZL 96199311.1
- Development Status : Preclinical

Peptide deformylase inhibitor

We are developing a series of peptide deformylase inhibitors, with potential utility in the treatment of bacterial infections. Pharmacokinetics and *in vivo* studies of a lead compounds, IDP 204040 and 204042, which shows improved activity against *Enterococcuc faecium* and *Streptococcus pneumoniae* compared with other peptide deformylase inhibitors under development, are underway in our laboratories.
- Industrial Property : 10-2005-0034057(Korea), 10-2006-0047171(Korea), PCT/KR2006/001500
- Development Status : Discovery

ILHWA CO., LTD.

Company Profile

President & CEO	Sung-Kyun Lee
Establishment	December, 1971
Web-Site Address	www.ilhwa.co.kr
Mailing Address	#437 Suteak-dong Guri-si Gyeonggi-do, 471-711, Korea
Contact	Jong-Hwan Sung, Head, Natural product research Lab. T. 82-31-550-0480, F. 82-31-550-0488, E-mail. jhsung@ilhwa.co.kr
Main Business Sector	Pharmaceutical, Health Food, Medical Materials, Ginseng, Beverage
Capital	US $ 26 million
No. of Employees	447
Sales(as of 2005)	US $ 83 million
Company Overview	Ilhwa since its foundation in 1971, has been on the run of caring for the clients' health and happiness based on its manufacturing and distribution of ginseng beverages, pharmaceuticals with the united mind of all employees, and its foundation ideology of "Keeping the world health". Based on continued research and development, Ilhwa is currently acquiring the capabilities of development of new medicines that represent the best ginseng processing technology of the world, IH-901, and is racing with the mind of creation and challenge so that our reputation of being "the representing runner of Korea ginseng exporter" and "main character of the myth of McCOL" is not demoted. Entering 21st century, Ilhwa holds precious the value of corporations and clients to strengthen existing business areas extend the corporation's main capacity to new business areas, and will do the best to complete "the world's first class corporation of general life and culture".
Major Technologies & Products Portfolio	The future of the company and the future of mankind-It is up to the development of new technologies. Ilhwa has already prepared for the global competitive era with aggressive investment in basic researches. As a result, ilhwa has accomplished the achievement of obtaining many international patents domestically, and in the United states, Canada and Germany, using the anti-cancer medicine, IH-901, which used ginseng saponin that was demonstrated to be superior through clinical experiments. Also IH-201, which is noted for its superior effects compared to conventional antibiotics.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Joint R&D Works Product Export Marketing Alliance Inbound Investment & Other not mentioned

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Anticancer	IH-901	Preclinical	None

ISU ABXIS CO., Ltd.

Company Profile

President & CEO	Chang Hoon Choi, Ph.D.
Establishment	March, 2001
Web-Site Address	www.abxis.com
Mailing Address	Seodaemun post office, P.O.Box 143, (Yonsei Unviersity Medical Center), Seoul, 120-600, South Korea
Contact	June-Young Park, Ph.D., Senior manager, Technology Planning T. 82-2-2227-8810, F. 82-2-2227-8887, E-mail. jpark@isu.co.kr
Main Business Sector	Pharmaceutical
Capital	US $ 2.54 million
No. of Employees	78
Sales(as of 2005)	US $ 1.2 million
Company Overview	ISU ABXIS specializes in the development and manufacturing of therapeutic proteins and monoclonal antibodies. Our strategy to position ISU ABXIS in the fast-growing area of therapeutic proteins with a focus on monoclonal antibodies originated from our analysis of unmet needs of currently marketed therapeutics and our goal to provide effective therapeutics to satisfy these unmet needs, ultimately making an important contribution to the improvement of quality of life. ISU ABXIS operates two business divisions : Therapeutics and Diagnostics. The Therapeutics business unit focuses on the development of therapeutic proteins based on a CHO cell production system. It has established in-house technologies and know-how related to novel target identification, the generation and engineering of lead antibodies, and large scale production. ISU's first product, CLOTINAB (anti-GPIIb/IIIa mAb) will be launched in 2006, followed by the development of 4 other therapeutic proteins currently in the pipeline.
Major Technologies & Products Portfolio	Therapeutic proteins based on CHO cell production system

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

- Technology Export(Licensing-Out)
- Technology Import(Licensing-In)
- Joint R&D Works
- Product Export
- Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Inflammatory diseases (asthma)	recombinant protein	preclinical	None (Co-development)
Gaucher disease	recombinant protein (generic)	preclinical	None (clinical & marketing partner)

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Therapeutic protein	Protein engineering	Proof-of-concept
Cancer	Discovery of Novel targets for the development of therapeutic antibody	Proof-of-concept
Cancer	Biologic leads	(Pre)Clinical

Description of Business Items for Out-licensing

ISU302: generic biologics for Gaucher disease

- looking for multinational clinical trials and marketing partners
- the 1st generic therapeutic for Gaucher's disease
- Currently undergoing preclinical studies as ISU302
- Target Market: worldwide excluding US and E.U.

ISU201: therapeutic proteins for asthma

- looking for co-development partners
- novel target: secure worldwide intellectual properties rights (PCT, US patents application)
- candidate leads proven in animal models
- worldwide market for inflammatory diseases

Veterinary diagnostic products

- veterinary diagnostic kits for infectious diseases
- raw material antigen proteins for human diagnostic kits (e.g., HIV).

Description of Business Items for In-licensing

- Antibody-related technologies including protein engineering and production technologies
- Nano-delivery of macromolecules
- Novel targets for cancer and immune therapeutics
- Lead biologics for clinical trials

Jeil Pharmaceutical Co., Ltd

Company Profile

President & CEO	Suk-Je Sung
Establishment	March, 1959
Web-Site Address	www.jeilpharm.co.kr
Mailing Address	745-5, Banpo-dong, Seocho-ku, Seoul, 137-040, Korea
Contact	Chang-Kyu Choi, Managing Director, Lisensing & Business Development Headquarter T. 82-2-549-7469, F. 82-2-549-4045, E-mail. kimsru@jeilpharm.co.kr
Main Business Sector	Pharmaceutical
Capital	US $ 7.7 million
No. of Employees	787
Sales(as of 2005)	US $ 257.9 million
Company Overview	Since its foundation in 1959, JEIL Pharmaceutical Co., ltd established its own central research laboratory for the formulation and synthesis of drugs, followed by its successive construction of KGMP factory in 1986. Hitherto, JEIL Pharmaceutical Co., ltd has closely collaborated with the advanced foreign firms including Pfizer of U.S.A., and Japanese firms(Daiichi, Otsuka and Kirin). It has 11 sales branches throughout the country. The company is a leader in an ethical market with able sales and detailing representives and it has also competitiveness in an OTC market through the launch of JEIL Pap, KefenTech-L and Murupe etc.
Major Technologies & Products Portfolio	One of our major research areas is the development of topical preparations. KefenTech was launched in 1996 as a topical NSAIDs (non-steroidal anti-inflammatory drugs) preparation for the treatment of rheumatoid arthritis. The research was, also, focused on the development of topical preparations for the treatment of alzheimer, asthma, and angina pectoris. Other major research areas are the research & development of new drugs, especially focused on cancer, rheumatoid arthritis, hepatic cirrhosis, osteoporosis and dementia. Out of aforesaid projects, JES9501 for the treatment of dementia is under Phase I clinical trial, anticancer project in ready to enter into preclinical study. As another project, development of cell therapy using human stem cell is progress. Technologies of organic synthesis for chiral and/or structurally complicated compounds are the company's specialties comparing with the competitors in this field.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Import(Licensing-In) Product Import Marketing Alliance

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Diabetes	① PPAR agonist ② Insulin sensitizer	Above Phase Ⅱ
Depression	① 5HT reuptake inhibitor ② Noradrenaline reuptake inhibitor	Above Phase Ⅱ
Schizophrenia	① 5HT antagonist ② dopamine antagonist	Above Phase Ⅱ
Hepatitis	① Nucleoside ② Immunostimulant	Above Phase Ⅱ
Cancer	① Signal transduction inhibitor ② Protein kinase inhibitor ③ Tyrosine kinase inhibitor	Above Phase Ⅱ

Description of Business Items for In-licensing

JEIL Pharmaceutical Co., ltd has been focusing on developing medicines for cardiovascular, central nervous system, digestive organs and rheumatoid arthritis treatment. JEIL shall continue to expand our clinical pipeline by in-licensing product candicates planned to market in G7 countries (France, U.S.A, U.K., Germany, Japan, Italy, Canada) and acquring business with complementary product candidates or technologies. JEIL Pharmaceutical Co., ltd is interested in PPAR agonist and sensitizer of diabetics ; 5HT reuptake inhibitor and Noradrenaline reuptake inhibitor of antidepressants ; 5HT antagonist and dopamine antagonist of antipsychotics ; Nucleoside and Immunostimulant of antihepatitic agents ; Signal transduction inhibitor, Protein kinase inhibitor and Tyrosine kinase inhibitor of antitumor agents.

JIN YANG PHARM. CO., LTD

Company Profile

President & CEO	Yoon Hwan Choi
Establishment	July, 1971
Web-Site Address	www.jinyangpharm.com
Mailing Address	1532-9 Seocho-3Dong, Seocho-Gu, Seoul, 137-073, KOREA
Contact	Chan-Dong Yeo, Manager, Overseas & Bio Team T. 82-2-3470-0370, F. 82-2-3470-0392, E-mail. yeocd@jyp.co.kr
Main Business Sector	Pharmaceutical, Health Food, Medical Instrument
Capital	US $ 46 million
No. of Employees	265
Sales(as of 2005)	US $ 34 million
Company Overview	JIN YANG the pharmaceutical company specialized in the area of generic pharmaceutical. JIN YANG's KGMP facility was approved in 1991. JIN YANG registered in the KOSDAQ (Korean Securities Dealer' s Automated Quotations) in 2000. Main Products are GYNO-Plus, Sobnal, Neocef and Livera.
Major Technologies & Products Portfolio	Depletion Method of Blood Plasma Ascorbate(US Patent Application No. 6,989,143 B1)

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

- Technology Import(Licensing-In)
- Joint R&D Works
- Product Export
- Product Import
- Marketing Alliance
- Outbound Investment

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
ALL	ALL	ALL

Description of Business Items for Out-licensing

US Patent Application No. 6,989,143 B1 ; Depletion Method of Blood Plasma Ascorbate, The method for the defense of L-ascorbic acid in hematologic malignancy

Description of Business Items for In-licensing

We do not limit the area of products on licensing in. If the compounds have high potential and can be launched with high probability, we can invest.

Kolon Life Science, Inc.

Company Profile

President & CEO	Kim, Tae Hwan
Establishment	January, 2006
Web-Site Address	www.kolonls.co.kr
Mailing Address	9th Floor, Kolon Tower 1-23, Byulyang-dong, Kwacheon-city, Kyunggi-do, 427-709, Korea
Contact	JungJong Cho, Manager, Business Development T. 82-2-3677-4153, F. 82-2-3677-4159, E-mail. jjcho@kolon.com
Main Business Sector	Pharmaceutical, Health Food, Medical Materials, Medical Instrument
Capital	US $ million
No. of Employees	78
Sales(as of 2005)	US $ 50 million
Company Overview	Kolon Life Science is established in January, 2006, merging the active pharmaceutical ingredients and specialty chemicals of Kolon Industries Co., Ltd and Kolon Chemicals Co., Ltd into TissueGene Asia, the bio-venture company. Our business categories are 1)API, 2)Specialty Chemicals, 3)Bio-technology and 4)Biological new drugs . In July 2006, US FDA approved Investigational New Drug for TissueGene-C (Cell-mediated gene therapeutics for degenerative arthritis).
Major Technologies & Products Portfolio	APIs ① Drugs for the circulatory system ② Anti-inflammatory Drugs ③ Drugs for the Digestive&Urinary system ④ Intermediate in the systhesis of API Specialty chemicals ① Pyrithione biocides(CleanBio™) ② Water treatment chemicals(Besfloc®) ③ Phosphorus Flame retardant(HIRETAR-205) ④ Phosphate antioxidants(KP-604) Bio-technology : Sodium hyaluronate(Macronan™) Biological New Drugs ① Cell-mediated gene therapy technology for degenerative arthritis(TissueGene-C) TissueGene-C is a mixture of allogeneic human chondrocytes transduced with a retroviral vector encoding TGF-1 and uninfected allogeneic human chondrocyte. ② Cell-mediated gene therapy technology for neurodegenerative disease, Bone fracture.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Export Product Import Marketing Alliance Outbound Investment Inbound Investment

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Degenerative Arthritis	TissueGene-C	Clinical Phase I	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
open	open	

Description of Business Items for Out-licensing

TissueGene-C

TissueGene-C is cell-mediated gene therapy technology for degenerative arthritis. It is a mixture of allogeneic human chondrocytes transduced with a retroviral vector encoding TGF-β1 and uninfected allogeneic human chondrocyte.

APIs

Kolon Life Science is supplying fine APIs manufactured in compliance with the Korean bGMP requirements. Voglibose, Simvastatin, Loxoprofen Sodium, Zaltoprofen, Sofalcone, ATTBA, Levofloxacin, ZML...

CleanBio™-Series

Kolon pyrithion biocides, CleanBio™-Series have broad spectrum antimicrobial activities against bacteria, fungi, molds and yeast. It is widely used in industrial fields(to control the growth of micro-organi는 in antifouling marine paints, plastics, coatings, metal-working fluid..) as well as personal care applications(an effective anti-dandruff agent in shampoo)

Bestfloc® -Polyacrylamide flocculants

Bestfloc® is an organic, water-soluble, high molecular weight polymer based on acrylamide an its copolymer. It's efficiently designed for solid-liquid separation and dewatering process in the municipal sewage, industrial wastewater and mining field.

Macronan™

Macronan™ is the trade name of sodium hyaluronate produced by Kolon Life Science, Inc. Macronan™is produced by bacterial fermentation of *Streptococcus zooepidemicus*, non-hemolytic bacterial strain. It shows high moisturizing effect on skin test.

Description of Business Items for In-licensing

Kolon Life Science is concentrating on development of new bio-related materials and therapeutics based on our own R&D and local & overseas outsourcing. We're seeking partners with therapeutics especially for treatment of cancer, autoimmune disease, neuro-disease, respiratory disease, obesity and etc. (Development status desired : product/technology achieved proof of principle/evaluation)

Kuhnil Pharm. Co., Ltd.

Company Profile

President & CEO	Y.O. Kim
Establishment	May, 1951
Web-Site Address	www.kuhnil.com
Mailing Address	237-12, Gongdeok-dong, Mapo-gu, Seoul, 121-803, Korea
Contact	SK Choi, Licensing Manager, Business Development T. 82-2-714-0091(Ext. 176), F. 82-2-714-0314, E-mail. skchoi@kuhnil.com
Main Business Sector	Pharmaceutical
Capital	US $ million
No. of Employees	372
Sales(as of 2005)	US $ 70 million
Company Overview	Kuhnil, founded in 1951, is one of the best growing pharmaceutical company in South Korea. Major sales area of Kuhnil is concentrated on ethical drugs (specially Kuhnil made dramatic activities in antibiotics, NSAIDs and probiotics for recent years). Kuhnil showed very steep growth rate from 2001, and its sales reached 70 million USD in the year of 2005. Now, we are enlarging our business area into CV, oncology. Kuhnil has built up various foreign relationships with companies such as Schering-Plough, Wyeth, MSD, Cubist, Guilford, YM Biosciences, Bicodex, Sandoz, Vita, Pronova, Regulon and many others, and is looking for more collaboration opportunities.
Major Technologies & Products Portfolio	Kuhnil is highly focusing on licensing new medicine from late stages to on-market products. Our therapeutic or medical areas include oncology, cardiovescular, pain, aging disease, endocrinology, GI and respiratory.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

- Technology Export(Licensing-Out)
- Technology Import(Licensing-In)
- Product Import

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Anesthetics	Newpol	Approved in Korea	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
oncology, cardiovescular, pain, aging disease, endocrinology, GI and respiratory	New chemical entities, Biological Products	Phase II, III or marketed

Description of Business Items for Out-licensing	Newpol - Microemulsified propofol - Approval in Korea
Description of Business Items for In-licensing	We look for: Kuhnil is highly focusing on licensing new medicine from late stages to on-market products. - Therapeutic or medical area: oncology, cardiovescular, pain, aging disease, endocrinology, GI and respiratory - Territory: South Korea or Asia We are not interested in: - Early Stagy development projects (preclinical, phase I) - New formulation technology, generic products and active pharmaceutical ingredients which do not have clinical study data.

Kukje Pharma. Ind. Co., Ltd.

Company Profile

President & CEO	Jong Hoon, Ra
Establishment	July, 1959
Web-Site Address	www.kukjepharm.co.kr
Mailing Address	648 Choji-Dong Danwon-Gu Ansan-city Kyunggi-Do, 425-866, Korea
Contact	Young Ro Choi, Director, R&D Center T. 82-31-491-9411, F. 82-31-492-5177, E-mail. yrchoi@kukjepharm.co.kr
Main Business Sector	Pharmaceutical
Capital	US $ 52 million
No. of Employees	410
Sales(as of 2005)	US $ 95 million
Company Overview	There 's no illness but its therapeutic medicine. Under the company motto of "Love is the best medicine ", KUKJE Pharma Ind. Co., Ltd. have devoted our constant attention to synthesis of novel organic compound, process development, manufacturing of phamaceuticals and API under the KGMP and KBGMP. Recentlyl we has been granted several Certificates of Suitability(COS) in Europe and IDL in China, especially Cefuroxime axetil, Ceftriaxine, Cefminox, Cefotetan, etc. Our goal is to become the most elite pharmaceutical company in the world based on the consumer-oriented management.
Major Technologies & Products Portfolio	• Synthesis of active pharmaceutical ingredients and intermediates of API - cephalosporin APIs and other antibiotic APIs - other APIs • Process optimization and scale-up • Drug formulation technology • Technology - Freeze drying(Lyophilization) • Discovery and Developement of new carbapenem antibiotics

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Export Product Import
Description of Business Items for In-licensing	• New drug formulation • Patent drugs • Innovative Generic drugs • Biotechnology drugs • Synthesis of APIs

LG Life Sciences

Company Profile

President & CEO	In Chull Kim, Ph.D.
Establishment	Aug, 2002
Web-Site Address	www.lgls.co.kr
Mailing Address	LG Twin Tower 20 Yoido-dong youngdungpo-gu Seoul, 150-721, Korea
Contact	Mu-Young Kim, Head, Strategic Planning Team T. 82-42-866-4926, F. 82-42-862-0332, E-mail. mykim@lgls.co.kr
Main Business Sector	Pharmaceutical
Capital	US $ million
No. of Employees	1000
Sales(as of 2005)	US $ million
Company Overview	LG began research in genetic engineering in 1981 and has invested steadily in the life sciences ever since. This effort has already resulted in world-class technology and product capabilities. The company has focused R&D resources and know-how on three areas-pharmaceuticals, animal health and specialty chemicals. LG Life Sciences has developed and commercialized an array of pharmaceuticals over the years. These include interferon in 1989(Intermax-gamma) and 1992(Intermax-alpha), hepatitis B vaccine in 1992(EUVAX B™), human growth hormone in 1993(EUTROPIN™) and degenerative arthritis treatment in 2005(HYRUAN Plus™), A company milestone was reached in 2003, when its next-generation quinolone antibiotic(FACTIVE™) was approved by the FDA in the United States. We aim to make LG Life Sciences a world-class biotech and healthcare company, and we are pursuing to accomplish this through challenge and innovation.
Major Technologies & Products Portfolio	The LGLS research system and technology are world class. The research and development of new drugs begins with the drug discovery stage, which consists of chemical compound synthesis and design, basic efficacy assessment, and preclinical candidate selection. A high throughput screening system is used to shorten the time required from the drug discovery stage. We possess highly competitive and distinctive drug delivery system(DDS) platform technology which helps us to develop novel sustained release biopharmaceutical products.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

- Technology Export(Licensing-Out)
- Technology Import(Licensing-In)
- Joint R&D Works
- Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Drug or Product	Development Status	Partners
HBV inhibitor	Phase 2 clinical study	Yes
Caspase inhibitor	Phase 2 clinical study	None
DPP-IV inhibitor	Phase 1 clinical study	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
medicine		Above Phase II

Description of Business Items for Out-licensing

HBV inhibitor

- HBV Polymerase inhibitor as Nucleotide analogue ester pro-drug.
- It was designed to overcome problem of existing therapeutics.(resistence to Lamivudine of GSK, renal toxicity by Adefovir of Gilead)
- Under phase 2 clinical study

Caspase inhibitor

- Caspase inhibitor
- hepatic therapeutic preventing liver damage and fibrosis caused by hepatitis B&C and NASH(Non-alcoholic steatohepatitis)
- excellent efficacy, compared to IDN-6556(Pfizer)
- Successful completion of phase 1 study.

DPP-IV inhibitor

- DPP IV inhibitor(Type 2 diabetes mellitus)
- Superior in vitro potency compared to LAF-237(Phase 3, Novartis), Superior efficacy in animal model
- Phase 1 study is scheduled for October 2006

Description of Business Items for In-licensing

- Development stage : Above Phase II
- Target disease for In-licensing
  - Cardiovascular
  - Endocrinology
  - Muscle-skeletal
  - Central Nervous
  - Mesotherapy related drugs/medical devices

Neurotech pharmaceuticals Co.,Ltd.

Company Profile

President & CEO	Byoung Joo Gwag
Establishment	April, 1998
Web-Site Address	www.neurotech-pharma.com
Mailing Address	Neurotech bldg, 29-35, Woncheon-dong, Yeongtong-gu, Suwon, Gyeonggi-do, 443-380, Korea
Contact	Haekwen, Lee, Team Head, Planning & Admin. Dept. T. 82-31-217-3828, F. 82-31-217-3829, E-mail. hklee@neurotech-pharma.com
Main Business Sector	Pharmaceutical
Capital	US $ 2.7 million
No. of Employees	29
Company Overview	Neurotech is a biopharmaceutical company focused on the discovery and development of innovative new drugs to treat inflammatory diseases and brain diseases including stroke and Alzheimer's disease. Neurotech's strategy is to construct and strengthen platform technologies in close collaboration with scientists, research institute, and biocompanies. Neurotech built Amkor Pharma in Seatle, for planning and execution of world clinical trial and licensing for drug candidates passing preclinical stage. Neurotech employs 29 people with expertise in pharmacology, neurobiology, cellular and molecular biology, and animal models. The company has contracted with experts in structure, medicinal chemistry, formulation, molecular modeling, drug delivery, and safety pharmacology. Neurotech has raised $28M in private financing and research grant. The company completed a backdoor listing with Eolith listed in the KOSDAQ in May, 2006.
Major Technologies & Products Portfolio	Neu2000 Neu2000 is a drug candidate for stroke and traumatic brain/spinal cord injury. It is an aspirin-deived neuroprotectant with multi-neuroprotective actions that acts as a weak NMDA antagonist and potent anti-oxidant. Preclinical study of Neu2000 has been successfully completed. Neu2000 will enter into Phase I study for stroke in the USA. AAD-2004 AAD-2004 has been developed to prevent neuronal death and amyloid plaque in Alzheimer's disease. Its efficacy was verified in animal models of Alzheimer's disease and neurodegeneration. AAD-2004 entered into preclinical stage in June, 2006. NG-2006 NG-2006 is a drug candidate for treating arthritis and inflammatory diseases. NG-2006 is an NSAID with cytoprotective action. NG-2006 will enter into preclinical stage at the beginning of 2007. NP-2007 NP-2007 is being developed as an analgesic drug. It is derived from Cyperi Rhizoma and acts as sigma 1 receptor antagonist. Derivatives of NP-2007 have been developed to maximize its pharmacological action and safety.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

Technology Export(Licensing-Out)

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Stroke	Neu2000	IND	None
ALS	Neu2000	Pre-clinical	None
Spinal cord injury	Neu2000	Pre-clinical	None
Glaucoma	Neu2000	Pre-clinical	None
Alzheimer's Disease	AAD-2004	Pre-clinical	None

Description of Business Items for Out-licensing

Neu2000

- Pharmacological mechanism : Antioxidant, NMDA Antagonist, Antithrombotic action
- Indications : Stroke, ALS, Spinal cord injury, Glaucoma
- Stage : (IND ready) Stroke; (Pre-clinical) ALS, Spinal cord injury, Glaucoma
- Patent : US 6927303

AAD-2004

- Pharmacological mechanism : Antioxidant, Antiinflammatory, Prevents beta-amyloid formation
- Indications : Alzheimer's disease, Parkinson's disease
- Stage : Pre-clinical
- Patent : US 6573402, EP 1274675

Sama Pharm. Co., Ltd.

Company Profile

President & CEO	Jun Hur
Establishment	October, 1945
Web-Site Address	www.samapharm.co.kr
Mailing Address	80-18, Chungdam-dong, Kangnam-ku, Seoul, 135-954, Korea
Contact	Jae Uk Seo, Development & License Department T. 82-2-2056-7275, F. 82-2-2056-7210, E-mail. seojaeuk@samapharm.co.kr
Main Business Sector	Pharmaceutical
Capital	US $ 74 million
No. of Employees	260
Sales(as of 2005)	US $ 46 million
Company Overview	Since the establishment in 1945, Sama has achieved perfect public health through developong the state-of-the-art pharmaceuticals under the good name of 'Good Life & Healthy Future'. For strengthening the international competition in the 21st century, Sama has focused on the development of new dosage forms and innovative new drugs. To achieve our ends, we are pursuing studies through collaboration with other institutions.
Major Technologies & Products Portfolio	• Manufacturing technology of soft chewable tablet • Formulation technology of dispersible tablet for children

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

Technology Export(Licensing-Out)
Technology Import(Licensing-In)

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Antibiotics	Camodix® dispersible tablet	Launched	None
Multivitamin agent	Noma®-F chewable tablet	Launched	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Pharmaceutical technology	Taste-masking technology	

Description of Business Items for Out-licensing

Noma-F soft chewable tablet

- Launched
- Patent : Soft chewable multivitamin tablet comprising separated active ingredients (USP 6,444,288)

Camodix dispersible tablet

- Launched at 2005
- Amoxicillin · Potassium Clavulanate(4:1)
- Dispersed within 30 sec
- PCT Application

Samjin Pharmaceutica Co., LTD.

Company Profile

President & CEO	Lee, Sung Woo
Establishment	April, 1968
Web-Site Address	www.samjinpharm.co.kr
Mailing Address	338-8, Seokyo-dong, Mapo-ku, Seoul, 121-739, Korea
Contact	Lee, Dug Hyung, Vice chief, Central Research Institute T. 82-31-353-1712, F. 82-31-353-8701, E-mail. drt355y@chol.com
Main Business Sector	Pharmaceutical
Capital	US $ 11 million
No. of Employees	501
Sales(as of 2005)	US $ 106 million
Company Overview	Samjin Pharmaceutical Co., a publicly held company listed on the Korea Stock Exchange, is one of the leading pharmaceutical companies in Korea with projected sales for 2005 estimated at USD 120 Milion. Established in 1968, Samjin Pharmaceutical Co. is dedicated to the manufacture, distribution and marketing of novel pharmaceuticals. To achieve their mission-protection of the dignity of a human life and elimination of the causes of human disease-Samjin Pharmaceutical Co. strives for the continuous development of excellent medical products by securing superior intelligence, acquiring the latest tools and materials, and utilizing advanced scientific information and technology. These efforts have lead to numerous international patents and lead antiviral, anticancer and metabolic candidate compounds. The company has recently expanded their scope to include stem cell research. "The corporate which develops healthy human lives and challenges for fruitful future with the spirit of creativity-that is Samjin Pharmaceuticals."
Major Technologies & Products Portfolio	• Novel first in class Anti-Cancer Piperazine derivatives patented • Unique properties Anti-HIV Pyrimidinedione derivatives patented

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Joint R&D Works Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Anti-HIV	SJ-3366 etc.	Late stage of Pre-Clinical	Yes
Anti-Cancer	SJ-3638 etc.	Late stage of Pre-Clinical	Yes

Samyang Corp.

Company Profile

President & CEO	Yoon Kim
Establishment	October, 1924
Web-Site Address	www.samyang.com, www.samyangpharm.com
Mailing Address	263 Yeonji-dong, Jongro-gu, Seoul, 110-725, Korea
Contact	Min-Young Lee, Vice President, Pharmaceutical BU T. 82-2-740-7023, F. 82-2-743-6626, E-mail. mylee@samyang.com
Main Business Sector	Pharmaceutical, Medical Materials, Other
Capital	US $ 50 million
No. of Employees	2,500
Sales(as of 2005)	US $ 3,000 million
Company Overview	Established in 1924, Samyang is one of the Korea's oldest companies. The Samyang group is engaged in diversified manufacturing and global makerting activities through its manufacturing base in Korea, overseas branches and alliances all over the world. Samyang is focusing its efforts on healthcare as its core strategic business in the future. Samyang Pharmaceutical products and technologies are based on drug delivery system as well as next generation bio-polymer technologies aiming to be a world-class bio-pharmaceutical company. Key platform DDS technologies are parenteral, CSDS, slow release poligogel and FDT. Recently Samyang obtained a premarket approval from KFDA with polymeric micelle paclitaxel formula on breast cancer and NSCLC. Also Samyang is conducting phase II study in the US with pancreatic cancer expecting to complete by December 2006.
Major Technologies & Products Portfolio	• Drug Delivery System(polymeric micelles, transdermal delivery system, fast dissolving tablet, colon specific delivery system, Poligogel) • Medical Devices (absorbable suture products, dental product such as GTR barrier)

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Export Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Cancers (breast, NSLC, and pancreatic)	Genexol(Paclitaxel)-PM	• US : clinical phase II - pancreatic cancer • Korea: approval obtained with breast cancer, and NSCLC	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Cancer	NCE / NME / DDS technologies	Preclinical, Discovery

Description of Business Items for Out-licensing

Genexol-PM

Genexol-PM is undergoing phase II clinical investigation in US in selected cancers. This product is based on the technology of solubilization of paclitaxel (poorly water soluble drug)(www.samyangpharm.com/rnd/genexol_pm.asp)

Fast Dissolving Tablet, FDT

FDT is a dosage form that rapidly dissolves in an oral cavity ususally less than 40 seconds and can be taken without water.(www.samyangpharm.com/rnd/technology.asp)

Colon Specfic Delivey System, CSDS

CSDS based on polysacharides is designed to be degraded by the bacteria in the colon, whilst remaining refractory to the environment of the upper GI tract.

PoligoGel

PoligoGel allows once a week delivery of protein drugs like interferon, G-CSF and other peptide. Contrary to the pegylation technology used for weekly delivery of G-CSF etc. This technology does not require development as a "new drug".

Description of Business Items for In-licensing

Anti-cancer drug, NCE, NME and DDS technologies

Shinpoong Pharmaceutical. Co., Ltd.

Company Profile

President & CEO	Jang Hyun Taek
Establishment	June, 1962
Web-Site Address	www.shinpoong.co.kr
Mailing Address	748-31, Yoksam-Dong, Kangnam-Gu Seoul, 135-925, Korea
Contact	Kim Byung Yong, Director, Business Development T. 82-2-2189-3492, F. 82-2-553-2578, E-mail. Bykim@shinpoong.co.kr
Main Business Sector	Pharmaceutical, Health Food, API
Capital	US $ 16.5 million
No. of Employees	965
Sales(as of 2005)	US $ 150 million
Company Overview	Shin Poong pharmaceutical co.,Ltd has been enjoying good reputation by supplying the high quality pharmaceuticals all around the world and will do our best constantly to give our customers the full satisfaction in supplying the top quality medicines in the 21st century. The Shin Poong Central Research Institute, which was established in 1988 to embody the company motto, "TECHNICAL DEVELOPMENT FOR THE HEALTH OF THE PEOPLE", consists of 5 research departments : synthesis, materials, bio engineering, pharmacological and analysis. 50 researchers working in these departments concentrate on developing more efficacious pharmaceutical products. Thanks to their devoted efforts, we now see the remarkable results. The Shin Poong Central Research Institute which had emphasized on for the creation of finished pharmaceutical products and raw materials, has contributed to the technical development and growth of Korean pharmaceutical industry. In order to maximize the limited resources in technical development, and at the same time, strengthening industrial-educational-research and technical cooperation, we have had constant exchange of ideas and technology with foreign firms.
Major Technologies & Products Portfolio	anti-cancer, anti-Biotic, gastrointestinal

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

- Technology Export(Licensing-Out)
- Technology Import(Licensing-In)
- Joint R&D Works
- Product Import
- Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
anti-ulcerant		Pre-registered	None

SK Chemicals

Company Profile

President & CEO	Chang Geun Kim
Establishment	June, 1966
Web-Site Address	www.skchemicals.com
Mailing Address	600 Jungja-dong, Changan-Gu, Suwon-Si, Gyeonggi-Do, 440-745, Korea
Contact	Hyung-Ook Kim, Senior Research Scientist, LS R&D Center T. 82-31-240-8474, F. 82-31-247-4194, E-mail. hyungook@skchemicals.com
Main Business Sector	Pharmaceutical
Capital	US $ 10 million
No. of Employees	305
Sales(as of 2005)	US $ 112 million
Company Overview	SK Chemicals is the Korea's leading chemicals company and has been developing environment-friendly chemical products that make our lives healthier and safer with an aim to create harmony between men and nature since 1966. SK Chemicals is reporting continued sales growth in the area of life science with the brands like Sunpla-Korea's first anticancer drug, Trast-the number one selling arthritis patch, and Joins-Korea's first natural medicine. SK Chemicals will continue to make the best products through the synergy of R&D-production-sales network consisted of Life Science Research Center and subsidiary companies.
Major Technologies & Products Portfolio	Sunpla, SK Chemicals' innovative antineoplastic agent, is the first third-generation platinum complex anti-cancer drug in the world. In Korea, Sunpla was successfully launched in 1999, and patents were granted in more than twenty countries. Joins, SK Chemicals' brand-new and innovative anti-arthritis drug was extracted from Clematis mandshurica, Trichosanthes kirilowii and Prunella vulgaris. Not only does Joins show anti-inflammatory and analgesic activities comparable to current products with much less side effects, it also shows cartilage protection effect. GINEXIN, the blood circulation enhancing herbal drug, holds the number one market share and contributes to the creation of corporate value. Currently, SK Chemicals is focusing its continuous R&D efforts in developing new treatments for chronic and intractable diseases as asthma, Alzheimer's disease, cancer and others. OMED is an antiulcer agent utilizing the most advanced formulation technology and it has been exported to various overseas markets including Europe.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Export Product Import Marketing Alliance Outbound Investment Inbound Investment

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
ED	SK-3530	Completion of Phase III in Korea	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Inflammation, Autoimmune diseases, Cancer, Cell Therapy, etc.	NCE, Natural Product, Protein Peptide, mAb, Diagnosis Kit, Cell therapy technology, Formulation, Value-added, etc.	Clinical and Preclinical

Description of Business Items for Out-licensing

SK-3530 Erectile Dysfunction Medicine

SK-3530 is a highly selective PDE 5 inhibitor with the potent in vivo efficacy and good adverse event profile. The Ph III clinical study has recently been completed and will be launched in the first half of 2007 in Korea.

Description of Business Items for In-licensing

SK Chemicals is looking for new products including NCE, natural product, protein, peptide, mAb, etc. at various stages of development in almost all kinds of disease areas. SK Chemicals also seeks value-added products, formulation technology, cell therapy technology, Diagnosis Kit, etc.

ViroMed Co., Ltd.

Company Profile

President & CEO	Sunyoung Kim
Establishment	November, 1996
Web-Site Address	www.viromed.co.kr
Mailing Address	1510-8 Bongcheon-dong, Kwanak-gu, Seoul, 151-818, Korea
Contact	Jaehyuk Imm, Manager, Business Development T. 82-2-2102-7214, F. 82-2-2102-7280, E-mail. jhimm@viromed.co.kr
Main Business Sector	Pharmaceutical
Capital	US $ 4.8 million
No. of Employees	47
Sales(as of 2005)	US $ 961 thousand
Company Overview	Established in 1996, ViroMed ("ViroMed" or the "Company") is a clinical stage Korean biotechnology company, based on research, drug discovery, and commercialization. The company has developed therapeutic gene and/or cell-based medicine to treat life-threatening of major diseases such as genetic disorders, cancer and cardiovascular disease. The company listed on Korean KOSDAQ market on Dec. 2005
Major Technologies & Products Portfolio	• Gene Therapy - Cardiovascular Disease(VM202) - Cancer DNA Vaccine(VM206) • Cell-based gene Medicine - Genetic disorder(Chronic Granulomatous Disease) • Recombinant protein medicine - Thrombocytopenia(VM501)

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

Technology Export(Licensing-Out)
Technology Import(Licensing-In)
Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Cardiovascular Disease	VM202	Phase I(in late 2006)	
Recombinant protein medicine	VM501	Phase II	

Description of Business Items for Out-licensing (I)

Cardiovascular Disease(VM202)

The company is developing VM202, a gene therapy utilizing ViroMed's proprietary pCK vector to express the gene encoding a form of hepatocyte growth factor (HGF-X7), as a potential treatment for ischemic limb disease and ischemic heart disease. Phase I trials of VM 202 in patients with coronary artery disease are scheduled to start in South Korea in late 2006. Phase I trials of VM 202 in patients with peripheral artery disease are scheduled to start in China and the US in late 2006. Partners are sought worldwide excluding South Korea and China to further the development of VM 202.

Description of Business Items for Out-licensing (Ⅱ)

Recombinant protein medicine (VM501)

The company is developing a recombinant protein medicine, VM501, for chemotherapy-induced thrombocytopenia. Phase II is on-going in China from June 2004 which is conducted under control of Beijing Northland (China) For there is no effective drug for thrombocytopenia, platelet transfusion is used. But transfusion suffered from various limitations such as unresponsiveness, immune response and infection. So there is an increasing need for new effective drug for thrombocytopenia which can replace platelet transfusion. Considering the market for EPO and G-CSF, the market for thrombocytopenia could be expanded significantly. For example, GSK estimated the market size of thrombocytopenia more than ₤ 1 billion.

Yuhan Corporation

Company Profile

President & CEO	J. K. Cha
Establishment	December, 1926
Web-Site Address	www.yuhan.co.kr
Mailing Address	49-6, Daebang-dong, Dongjak-gu, Seoul, 156-754, Korea
Contact	Tai Au Lee, Ph.D., Executive Director, Business Development and Licensing T. 82-2-828-0091, F. 82-2-828-0470, E-mail. talee@yuhan.co.kr
Main Business Sector	Pharmaceutical, Health Food, Cosmetics, API
Capital	US $ 41.9 million
No. of Employees	1,247
Sales(as of 2005)	US $ 392 million
Company Overview	We, Yuhan Corporation, are one of the Korean leading pharmaceutical companies with longstanding experience in the research and development, production, and marketing since its foundation in 1926. We have an extensive history of successful collaboration with foreign companies such as Wyeth, Shering Plough, Janssen, Sumitomo, Clorox and so forth, and our local market knowledge and expertise have led mutually successful sales results and business relationships. Currently, we are actively looking for new business opportunities through in-license and R&D collaboration so that we can make new products which meet the growing market needs.
Major Technologies & Products Portfolio	• Major Technologies : new drug development(small molecule library, humanized antibody), DDS(formulation) • Products Portfolio : anti-infectives, cardiovascular, gastrointestinal, respiratory

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

Technology Export(Licensing-Out)
Technology Import(Licensing-In)
Joint R&D Works
Product Import
Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
anti-ulcerant	revaprazan	Pre-registered	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Development Status Desired
anti-cancer agents, cardiovascular agents, respiratory, anti-inflammatory, anti-diabetes, QOL	Phase II, Phase III, Pre-registered, Registered, Marketed

Description of Business Items for Out-licensing	revaprazan • new noble mechanism : acid pump antagonist (reversible proton pump antagonist) • indication : GU, DU, gastritis, NSAIDs induced gastropathy • development status : pre-registered for the treatment of DU and gastritis in Korea • IP : substance patent (till 2014)
Description of Business Items for In-licensing	• Therapeutic areas : cardiovascular, respiratory, anti-inflammatory, anti-cancer, anti-diabetes, and QOL • Partnership : exclusive licensing agreement in Korea • Development Status : above Phase 2

YUNGJIN PHARM,CO.,LTD.

Company Profile

President & CEO	Kim Chang Sub
Establishment	October, 1962
Web-Site Address	www.yungjin.co.kr
Mailing Address	451-20, Cheonho-3dong, Gangdong-Gu, Seoul, 134-864, Korea
Contact	Kim Sung Gyu, Ph.D., General manager, New drug research Dpt. T. 82-31-374-2581, F. 82-31-373-2259, E-mail. sukim@yungjin.co.kr
Main Business Sector	Pharmaceutical
Capital	US $ 46.6 million
No. of Employees	607
Sales(as of 2005)	US $ 101.8 million
Company Overview	YUNGJIN PHARM.CO.,LTD, established in 1962, is one of the leading pharmaceutical companies in KOREA, which has been contributing to relieve mankind from disease and suffering and participate in improving the welfare of human. With the ideal of "Medicines for Your Life", Yungjin has been awarded for four award which are Yugong industry medal, the national order of Moran, the national order of industry, and industry award. Also having received the president award for 25 times, etc. which shows how much the company has gained faith from the medical industry and from all the people. Pharmaceutical companies from all over the world are already competing with new medicines of latest technology. KT&G, our major shareholder is planning to make a huge-network of bio-related companies with YUNGJIN as the core company. To be a top worldwide bio-pharmaceutical company in 10years, YUNGJIN increases investment in developing new medicine and reinforces R&D capability.
Major Technologies & Products Portfolio	• Chemical NME : Caspase 3 Inhibitor drug, DPP-IV Antidiabetics, Modified NME • Formulation technology and Natural substance drug research • Synthesis of API and process development • Development and production of new fermentative materials

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Product Export Product Import Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
CNS	CASPASE INHIBITOR	Discovery	None
Antidiabetic	DPP-IV INHIBITOR	Discovery	None
Preformulation Discovery technology	Technology Plattform		None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
• Antibiotics • Cardiovascular products • Anti-diabetes • CNS • Antianalgesic / Antirheumatoidal agents • Antiplatelets • Products for QoL(Quality of Life) improvements • Biological products	<u>Technology</u> • Sustained release technology • Genetic recombinant • Gene therapy (but not limited to)	Phase I~III

Description of Business Items for Out-licensing

YJP's Tech-platfrom

- the most thermodynamically stable salts with the most appropriate physicochemical properties.(eg: crystalline form, thermal properties, hygroscopicity, pH, aqueous solubility, polymorphic structure and stability)
- Increase the intestinal permeability by adjusting pKa values of drug salts
- Change the dissolution rate by adjusting solubility of drug salts
- Increase the transport across the intestinal barrier by adjusting the degree of ionization
- Enable Large scale production and batch-to-batch uniformity
- Upgrade Biopharmaceutics Classification System (BCS)

Description of Business Items for In-licensing

We've always interested to in-license highly promising molecules or products for marketing in Korea. And we welcome all the potential partners except whom are in the general OTC / health food fields. The collaboration can be any style and open, especially we offer registration, clinical development, sales & marketing in Korea. We also have plenty of experience to do co-Promotion / co-Marketing with other companies, which don't have enough human resources or experiences for sales in the Korea market. We are ready to have open-minded discussions with you.

Yuyu Inc.

Company Profile

President & CEO	Yu, Seungpil
Establishment	February, 1941
Web-Site Address	www.yuyu.co.kr
Mailing Address	Yuyu Bldg. 358-9 Shindong, Jung-gu, Seoul, 100-828, Korea
Contact	Lee, Yongoh, General manager, Licensing & Business Development T. 82-2-2253-6600, F. 82-2-2252-6266, E-mail. yolee@yuyu.co.kr
Main Business Sector	Pharmaceutical, Health Food
Capital	US $ 7.5 million
No. of Employees	350
Sales(as of 2005)	US $ 64 million
Company Overview	Yuyu was established in 1941 to develop internationally competitive new medicines and have concentrated on improving efficacy of medicines and researching the new chemical entities. Since 1994, Yuyu has been actively carrying out various national projects and succeeded in launching injection forms of Calcitriol and *Ginkgo biloba* Ex.preparation. In 1996, Yuyu took part in projects for the development of modified new drugs including YY280, a new fixed combination therapy of Ticlopidine and *Ginkgo biloba* Ex. for the treatment of ischemic stroke under phase III clinical trials. Maxmarvil, a new fixed combination therapy of Calcitriol and Alendronate for the treatment of osteoporosis, is currently launched. In addition to it, since 2001. Yuyu has been engaged in the new drug development projects for YYCG new compound for diabetes, for Ischemic blood vessel diseases, and so on.
Major Technologies & Products Portfolio (I)	YYCG • Efficacy or Targeted Use : Diabetes • Development Status : Screening CBM-02-A-1 • Efficacy or Targeted Use : Ischemic blood vessel diseases • Development Status : Screening YY-280 • Efficacy or Targeted Use : Prevention and/or treatment of ischemic stroke • Development Status : Phase III Clinical Trial • Background of Development : As an antiplatelet preparation, Ticlopidine gives rise to the side effects, agranulocytosis and neuropenia, which are related to the oxiditive free radicals in human body. As flavonoids contained in *Ginkgo biloba* Ex. are known to be free radical scavengers, the combination of Ticlopidine and *Ginkgo biloba* Ex. may also reduce the side effects as well as the therapeutically effective dose of Ticlopidine. Maxmarvil • Efficacy or Targeted Use : Treatment of osteoporosis (Inhibits the expression of hypercalcemia). • Development Status : Launched

Major Technologies & Products Portfolio (II)

- Background of Development : According to the clinical studies up to date, the monotherapy of osteoclastic inhibitor (bisphosphate) could not be a proper treatment to increase the bone density of patients undergoing advanced osteoporosis. Although it is observed that vitamin D3 derivatives can lead a proper balance of bone mass, they also produce significant side effects such as hypercalcemia. Therefore, developing this new fixed combination product of vitamin D3 and bisphosphate is expected to bring a new light to the osteoporosis treatment.

YY-125

- Efficacy or Targeted Use : Treatment of Ischemic dementia
- Development Status : Pre-clinical
- Background of Development : There has not been a perfect medicine for the cure of dementia up to date. Selegiline is effective in Alzheimer's disease by increasing the secretion of dopamine as a MAOB inhibitor. *Ginkgo biloba* Ex.is specifically effective in ischemic dementia by its action of PAF antagonism. As the both substances inhibit the damage of brain cells by its anti-oxidation effect, the combination of Selegiline and *Ginkgo biloba* Ex. is expected to bring a synergic effect and extended therapeutic efficacy.

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area

Technology Export(Licensing-Out)
Technology Import(Licensing-In)
Product Export
Product Import
Marketing Alliance

Agenda For Out-licensing & R&D Co-Works

Indication	Drug or Product	Development Status	Partners
Osteoporosis	Maxmarvil	Launched	None

Agenda For In-licensing & R&D Co-Works

Indication or Technology Field	Product & Technology	Development Status Desired
Stroke Dementia Osteoporosis Diabetes	New drug	Phase III or Launched

Description of Business Items for Out-licensing

Maxmarvil is a superior combination drug containing the two well-proven and well-documented substances alendronate and calcitriol combined in a single tablet. This product is designed for a fixed combination therapy of osteoclasts inhibitor alendronate and osteoblast activator calcitriol (activated Vitamin D3).

			(Date of Publication)	(Publication Number)
KOREA		Oct. 20, 1999	Dec. 5, 2001	10-0317935
PCT		Oct. 20, 2000	(Apr. 26, 2001)	(WO 01/28564 A1)
USA		Oct. 20, 2000	Dec. 28, 2004	US 6,835,722 B1
CHINA		Oct. 20, 2000	(May 28, 2003)	(CN 1420777A)
JAPAN		Oct. 20, 2000	(Apr. 22, 2003)	(514,766/2003)
EUROPE	FRANCE	Oct. 20, 2000	(Aug. 14, 2002)	(EP 1229917 A1)
	UK	Oct. 20, 2000	(Aug. 14, 2002)	(EP 1229917 A1)
	GERMANY	Oct. 20, 2000	(Aug. 14, 2002)	(EP 1229917 A1)

Description of Business Items for In-licensing

Yuyu is currently seeking to identify suitable potential third party companies interested in out-licensing to Korea. Such products may include following items.

- New drug or new formulation/drug delivery system for age-related diseases such as dementia, osteoporosis, etc.
- New Chemical Entities (NCE) for treatment of diabetes and stroke
- Separation and purification of active compounds from crude plant medicines.

NAM & NAM Consulting Co., Ltd.

Company Profile

President & CEO	Jason Lee
Establishment	March, 1998
Web-Site Address	www.namandnam.com
Mailing Address	100-813 Address : Kwanghwamoon P.O. Box 2117 Seou, Korea
Contact	Freddy Lee, Sr. Licensing Consultant & Manager T. 82-2-779-5477, F. 82-2-753-5279, E-mail. freddy@namandnam.com
Main Business Sector	Intellectual Property Management Consulting
Capital	US $ 0.15 million
No. of Employees	6
Sales(as of 2005)	US $ 0.41 million
Company Overview	NAM & NAM Consulting Co., Ltd. is a subsidiary of Nam & Nam, a preeminent IP boutique firm. We are specializing in Intellectual Asset Management (IAM) Consulting Service. Our professionals provide clients with highly differentiated services to maximize the present and future value of clients' IP assets. The followings are the fields that we are putting emphasis on. * Technology Transfer * Technology/Brand Licensing * Collaboration * Technology Valuation * IP Due Diligence * Patent Map * Total IP Asset Management * Technology-related Transactions

Business Agenda for Collaboration with Potential Partners

Interested Cooperation Area	Technology Export(Licensing-Out) Technology Import(Licensing-In) Joint R&D Works Marketing Alliance Outbound Investment Inbound Investment