



Overview of Bio-Health industry in South Korea

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Introduction

South Korea is one of the top countries among OECD members for its long life expectancy and rapid growth of aging population. In addition to the increase in the health-conscious market, the bio-health industry became popular in Korea. Major conglomerates such as Samsung and LG are also actively investing in the life-science sector, and the Ministry of Health and Welfare (MOHW) is seeking to secure an 82.8 trillion KRW (approximately 62.9 billion EURO) budget for 2020 to help improve the lives of ordinary citizens. Despite the growth of the bio-health industry, there were some struggles in the pharmaceutical sector; Kolon Life Science’s osteoarthritis gene therapy drug Invossa license got canceled from the Health authorities in May 2019. Apart from the down turn of the pharmaceutical sector, there are still business opportunities for the Dutch business and researchers in Korea.

Potential in Korean bio-health industry

South Korea accounts for two third of the global biosimilar market. In 2018, the new drug technology export recorded 5.3 trillion KRW (approximately 4 billion EURO). Korea ranks number one in the global ultrasound diagnosis market. Furthermore, advanced infrastructure such as ICT, skilled personnel in medical and pharma sector and world class hospitals and data enables South Korea to be the world 12th market size in the global bio-health industry (pharma, medical device, cosmetics and health industry).

(Million USD)

Rank	Country	Pharma	Medical Device	Cosmetic	Health Industry
1	U.S.A	361,564	164,086	76,110	601,760
2	China	142,683	24,480	51,154	218,317
3	Japan	108,049	27,533	33,224	168,806
4	Germany	71,690	28,834	16,039	116,563
5	U.K	47,476	11,466	14,556	73,498
6	France	43,778	15,642	12,619	72,039
7	Brazil	23,101	5,196	29,271	57,568
8	Italian	36,020	10,721	9,405	56,146
9	Spain	31,887	6,603	7,289	45,779
10	Canada	22,848	7,250	6,888	36,986
11	India	20,492	4,519	11,743	36,754
12	Korea	17,451	6,339	11,648	35,438
13	Russia	20,191	4,641	9,305	34,137
14	Mexico	10,369	5,386	8,559	24,314
15	Australia	10,285	5,181	6,242	21,708
16	Poland	13,376	2,537	4,180	20,093
17	Netherland	7,588	4,458	3,115	15,161
18	Switzerland	8,221	3,986	2,148	14,355
19	Saudi Arabia	7,897	1,563	4,567	14,027
20	Turkey	8,015	1,889	3,136	13,040

BIO KOREA 2020



The Korean government has announced 8 leading industry for innovative growth in 2019. Among the 8 different sectors, bio-health ranks number 4th which is on top of smart city and Smart farming sector.

Pharmaceutical

The Korean pharmaceutical industry is rapidly becoming a manufacturing hub due to its advancement in biosimilar manufacturing skills. It has become the 3rd largest pharma region in Asia with a forecasted growth up to 24.4 trillion KRW (approximately 18.6 billion EURO) in 2020. The mass contribution to its growth is due to the conglomerates such as Samsung biologics and LG Chem which are actively investing in life-science sector. There are top 10 companies in the pharmaceutical market that also contributes to the export business such as Chong Kun Dang Pharmacuetical, SK Chemicals, Hanmi Pharm, Daewoong Pharma, Ildong Pharmaceutical, GC Pharma and Celltrion. Celltrion, for instance, has its European head office in Amsterdam and is active in European market. However, there was a recent crisis in this market due to Kolon Life Science's osteoarthritis gene therapy drug Invossa license cancellation by the Health authorities in May 2019. This has caused Kolon to be delisted. Furthermore, Helixmith also postponed its result announcement of phase 3 trials on DNA plasmid gene therapy in painful diabetic peripheral neuropathy (DPN), and other major pharma companies announced its failure in their clinical test which lost credits from the public.

On the other hand, the Netherlands will be hosting the European Medicine Agency (EMA) and is expected to become the core of the Netherlands Biopharma industry. The Netherlands has 420 biopharmaceutical companies such as Astrazeneca, Janssen, MSD, Amgen and Teva which are active in R&D and distribution. Furthermore, the country is a home of various startups and scaleups such as Galapagos, Genmab, Pharming and UniQure. The crisis of the Korean pharmaceutical industry could be an opportunity for the Dutch companies to explore opportunities to collaborate with Korea by finding manufacturing sites and/or technology transfer.

Medical Device

60% of the high-end medical devices are imported from US, Germany and Japan. Apart from the ultrasound diagnosis market, South Korea produces relatively lower-end medical devices. The demand on high-end medical devices are continuously increasing due to the aging population and majority of doctors being educated from the US and Europe. However there is a huddle for the foreign companies to enter Korean market due to the government pricing and reimbursement policies as the country grapples with cost containment under its national healthcare system. E-healthcare service is also big issue in Korea due to the doctors' oppositions. Apart from this huddle, Korea has an excellent hospital network and is open to develop a robust clinical trial environment for medical devices.

Health Industry



One of the core technologies in the healthcare industry is the telemedicine service. However due to the opposition of the hospitals, clinics and civic organization, the telemedicine market is unable to grow in Korea. Regulation on cloud services is also another factor that prohibits the growth of the healthcare industry. Patient information and data cannot be sent abroad even though the information can be kept by the medial institutions in Korea. Another factor is the long process of approval from the government to get an approval of an innovative device. All this factors are prohibiting Korea to become the world leader in the healthcare industry even though there is an excellent 5G infrastructure that was installed this year for the first time in the world.

Still, there is an opportunity for the Dutch companies to test their healthcare services in the newly developed smart city called Sejong 5-1 district. Sejong is one of the two national test beds for the smart city development. Because of the regulatory sandbox, this area will enable citizens to test all kinds of newly developed innovative technologies. Telemedicine, e-health is one of the top priorities in Sejong to be implemented. The reason is that most of the advanced medical devices and major hospitals are located in metropolitan area, so Sejong will need a remote healthcare system to look after the patients and elderlies and be preparing for the emergency situation. The success of the implementation will enable the government to spread the technologies to the other remote rural areas and furthermore will give an opportunity to export the service to other countries.

Cosmetic

More and more people in Korea are interested in polishing themselves; not only female consumers but also male consumers are gradually consuming more cosmetic products. The growth in domestic market is also influenced by the rise in the K-pop, K-drama and K-beauty trends around the world. Due to this reason, South Korea is the 8th largest cosmetic market in the world. Although the market is saturated and highly competitive, and less competitive companies are closing down, the market barrier is relatively low and consumers are eager to find new products which have distinctive features including but not limited to organic ingredients, and functional cosmetics. Korean companies are eager to find new ingredients from the nature for functional beauty products.

Future events

Bio Korea (www.biokorea.org) is one the biggest international health industry convention in Asia driven by the Korean government since 2006. This is a global event fostering communication among researchers and practitioners working in a wide variety of within bio-health industry. It will be held in Seoul Coex on 20~22th of May, 2020. It consists of 5 core programs such as conferences, business forum, exhibition, investor fair and job fair. There were more than 26,000 visitors from 45 different countries visited in this year. There is also a buyer invitation program subsidizing buyers with free airfare,



accommodations and business meetings. Please contact Ms. Gyu Hyung Lee (ghlee@nost-korea.com) for more details.

Source

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