

# Dispatch from South Korea Autumn 2017

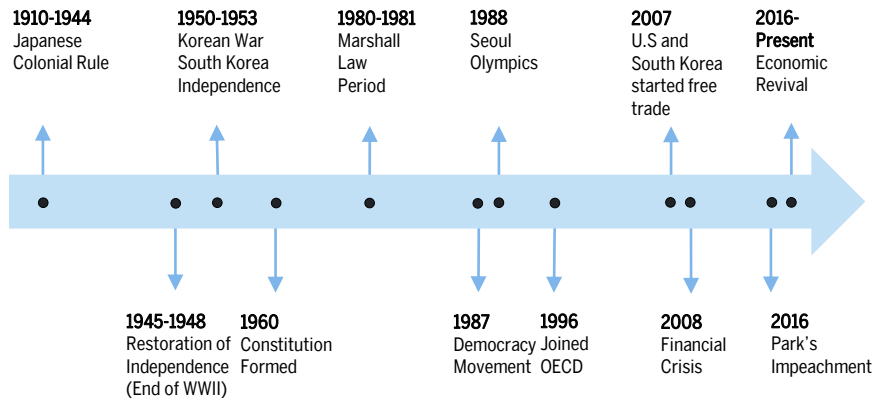


Dear Friends,

Often referred as the Miracle of the Han River, South Korea grew rapidly after the end of the Korean War - from one of the poorest countries to the 11<sup>th</sup> largest economy in the world, ahead of Canada. Despite the rising hostility from the North this year, South Koreans seem to take it all in stride, having become used to the annual provocations since the armistice of the Korean War in 1953.

Since the inauguration of President Park Geun-hye in 2013, South Korea has seen both political and economic divisions among its citizens. Her policies and corruption scandals caused her approval ratings to freefall to 5% by the end of 2016, and resulted in her impeachment and removal. President Moon Jae-in's inauguration after Park's impeachment seemed to herald a resurrection of democracy as well as a positive change over society after decades of decayed social practices.

South Korea's vast majority of economic activity is concentrated around Seoul, the capital, and Gyeonggi-do, producing around 45% of the nation's \$1.4 trillion GDP.



### Economic Activity by Province 2017 and major cities

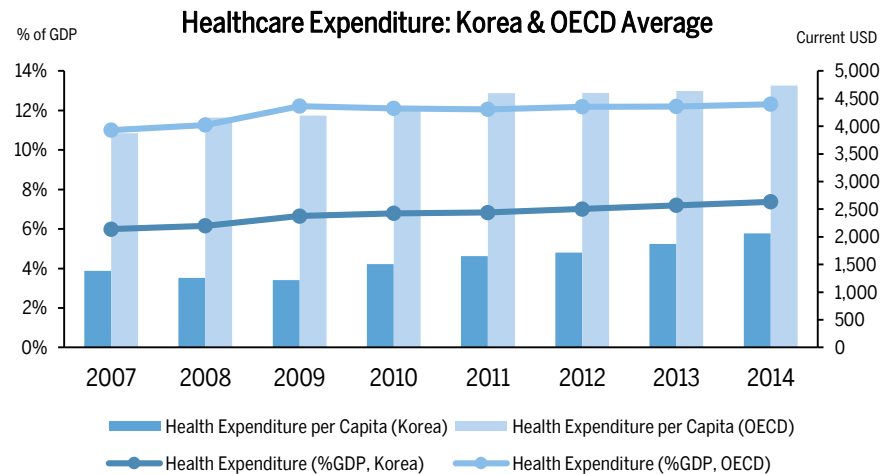
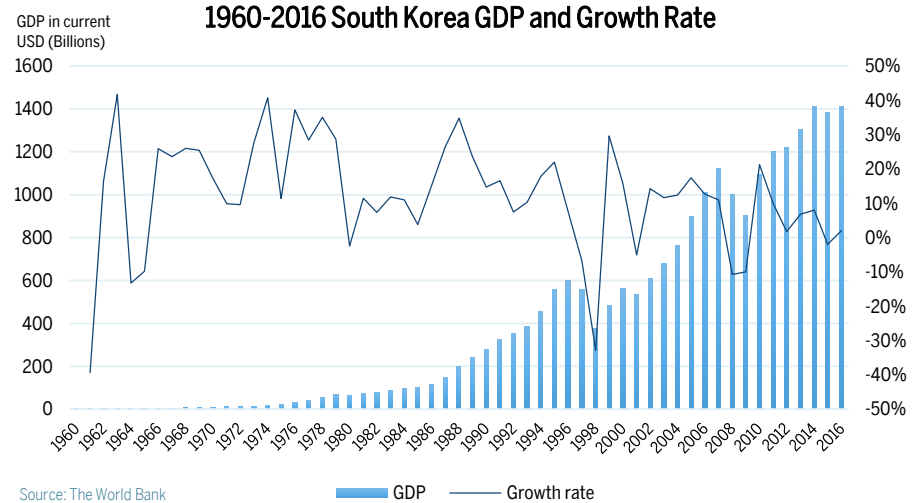


GDP growth declined in the latter part of 2016 in the context of political uncertainty, corporate restructuring and a drop in exports. But the South Korean Finance Ministry projects 2.9% growth in 2018, supported by a pick-up in exports and rising business and consumer confidence, which is the fastest growth since 2014.

The Bank of Korea sees improving global demand for South Korean goods supporting growth in the second half of 2017, along with increased fiscal spending. It sees exports jumping 10.2% this year, while domestic consumer spending is forecast to increase 2.3%, held back by high household debt.

President Moon, whose approval rating was recently at 68.5%, has introduced a new healthcare plan to increase coverage under the National Health Insurance (NHI) for the public and to reduce their out-of-pocket costs, which have been historically high by OECD standards.

The nation's healthcare spending has been on the rise for the past decade. Per capita expenditure on healthcare grew at a compound annual growth rate of 5.1% from 2007 to 2014 while the OECD member average was at 2.6%. Furthermore, it grew 10.2% compared to 2.2% of OECD nations in 2016. While the amount of expenditure is still significantly lower than OECD average (\$2,060 v. \$4,739), such growth is likely to be supported further by the aging population and the low birth rate, as most of the healthcare spending is directed towards the elderly population.

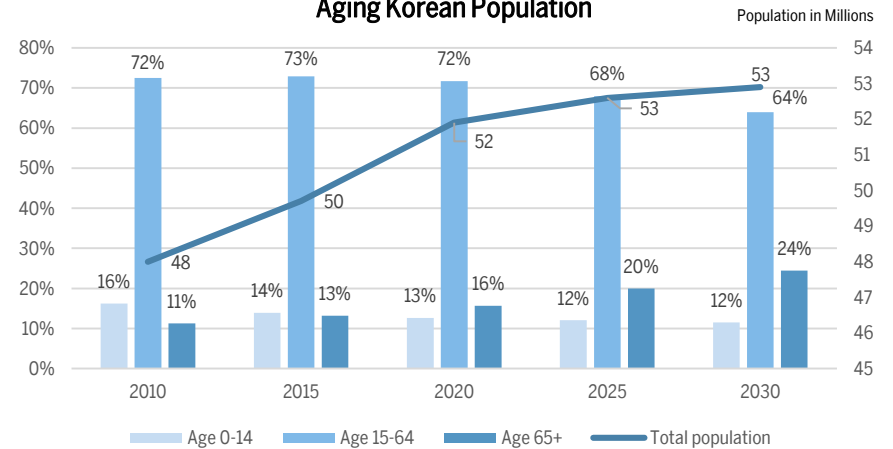


According to *The Lancet*, South Korea is expected to first reach the life expectancy of 90 years by year 2030. And the number of elderly is rising rapidly – while the percentage of the population over the age of 65 was at 11.3% in 2010, it was at 13.2% in 2015 and it is expected to reach 24.5% by 2030. On the other hand, people under age 15 were 16.2% of the population in 2010, which dropped to 13.9% in 2015, and is expected to further drop to 11.5% by 2030. The Korean Statistical Information Service expects the birth rate to stay around the same until 2030 at 1.5% when it was 1.2% in 2005.

The Bank of Korea expressed its confidence in the economy, expecting inflation to hover around 1.9% both in 2017 and 2018, and GDP to grow 2.8% in 2017 and 2.9% in 2018 both of which are higher than its previous forecast. To support the growth, it recently announced it would continue to hold the seven-day repurchase rate (the benchmark, or policy, rate) steady at 1.25%, as it has since June 2016, a historical low.

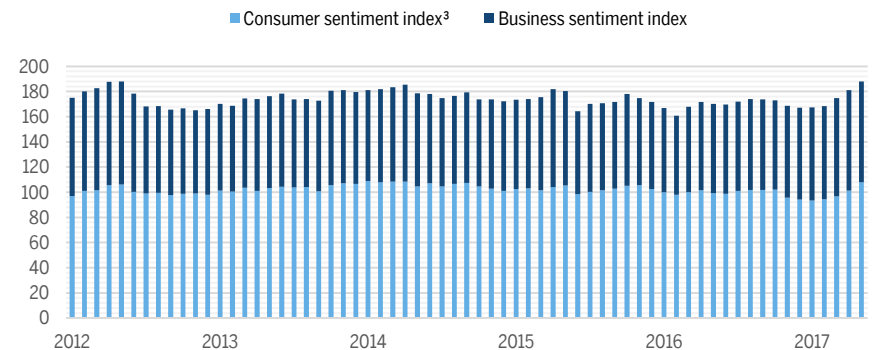
For the past few months after the impeachment and presidential election, the KOSPI, the South Korean stock index, was rising rapidly. The rise was accompanied by a strengthening won, until Kim Jong-un began to launch ICBMs over Japanese territory, which impacted both the won and the index. The market is, however, slowly recovering from the temporary shock, and both have strengthened. KOSPI index has soared to record highs recently and is up 22% since the start of the year, beating the Nasdaq and the Dow over the same period. The surge comes as the heavyweight stock Samsung Electronics, which has shrugged off last year's Galaxy Note 7 debacle and the corruption conviction of its de facto leader to post a gain of more than 45% in 2017. Investor expectation and consumer confidence have also risen sharply.

### Aging Korean Population



Sources: World Bank, Korean Statistical Information Service

### Rising Consumer and Business Sentiments



Source: OECD Economic Outlook 2017

As briefly mentioned earlier, while North Korea poses a huge threat to the overall health of South Korea, North Korea is not the only threat to the South Korean economy. The swift economic growth over President Park Chung Hee's military regime in 1960s and 1970s as well as other two military successors came at the cost of sacrificing democracy. Government-aided companies have now become chaebols. The labor market for regular employees is comprised of permanent jobs with legal protection and generous policies that restrict layoffs, offer benefits, and provide for severance pay. But temporary employment is a different matter – with much less security.

This rigidity of the labor market inhibits income distribution across the society and has led to high unemployment among entry-level job seekers (9.8%), despite the low overall unemployment rate (3.7%).

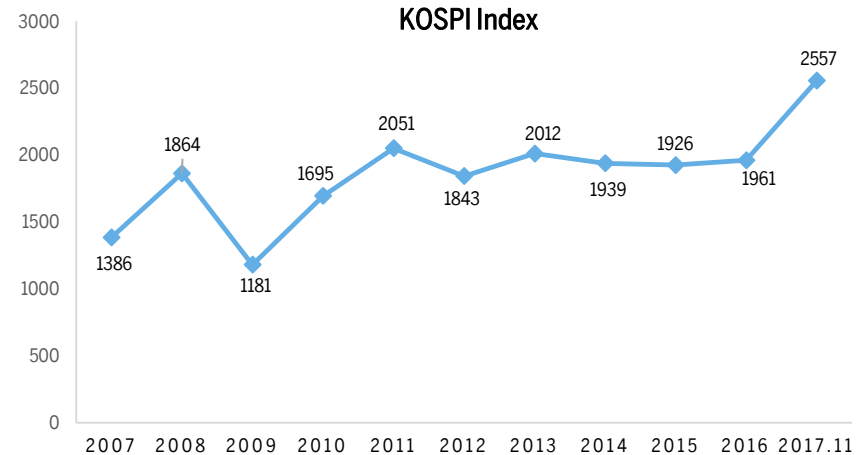
Although the internal political instability that had affected the country in recent years was removed from the scene after President Park's impeachment, political issues remain. The implementation of the THAAD missile system has caused a spat with China, which impacted tourism, the ongoing conflict with North Korea, and a number of economic reforms, are still challenges. Tensions with China have already begun to warm, and with his high approval ratings, President Moon is well positioned.

Brocair has spent a considerable amount of time understanding the intricacies of the healthcare market in South Korea, and has strong relationships in the region.

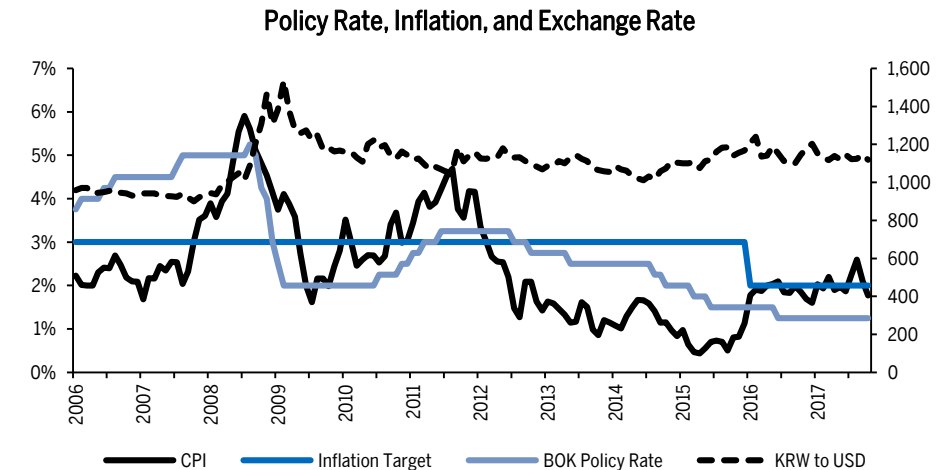
Below are some metrics on the South Korean healthcare market, including public company trading multiples and recent transactions. If there is anything we can do to help with your M&A efforts in South Korea, please give me a call.

Managing Partner  
Brocair Partners, LLC  
212-500-5020

*Gregg Blake*



Source: Bloomberg



Sources: Bank of Korea, OECD

## Publicly Traded South Korean Healthcare Companies

Company	Ticker	City	Price	52-Week		EV*	Net Debt	Market Cap	EV/Sales			EV/EBITDA			FYE
				High	Low				FY2015	FY2016	LTM	FY2015	FY2016	LTM	
Samsung Biologics Co., Ltd.	KOSE:A207940	Incheon	KRW 395,000	KRW 414,000	KRW 139,000	\$ 24,015.2	\$ 137.2	\$ 23,878.0	NM	NA	NA	NM	NM	NM	31-Dec
Celltrion, Inc.	KOSDAQ:A068270	Incheon	KRW 216,700	KRW 222,100	KRW 87,400	\$ 24,555.8	\$ 228.8	\$ 24,199.9	19.7x	21.6x	32.8x	34.8x	49.0x	56.9x	31-Dec
Celltrion Healthcare Co., Ltd.	KOSDAQ:A091990	Incheon	KRW 80,700	KRW 83,800	KRW 43,650	\$ 10,161.7	\$ 35.7	\$ 10,126.0	NM	NM	12.1x	NM	NM	47.3x	31-Dec
Hanmi Science Co., Ltd.	KOSE:A008930	Seoul	KRW 116,500	KRW 124,500	KRW 51,869	\$ 6,458.8	\$ (33.0)	\$ 6,489.5	11.0x	4.4x	10.9x	NM	14.6x	NM	31-Dec
Hanmi Pharm. Co., Ltd.	KOSE:A128940	Seoul	KRW 574,000	KRW 596,000	KRW 263,081	\$ 6,073.6	\$ 166.1	\$ 5,838.5	8.4x	2.5x	7.9x	NM	12.1x	NA	31-Dec
Medy-Tox Inc.	KOSDAQ:A086900	Cheongju	KRW 464,200	KRW 647,500	KRW 311,800	\$ 2,327.0	\$ 82.7	\$ 2,244.3	NA	16.5x	15.9x	NM	27.3x	27.7x	31-Dec
Green Cross Holdings Corporation	KOSE:A005250	Yongin	KRW 40,300	KRW 42,000	KRW 19,550	\$ 2,500.5	\$ 307.5	\$ 1,654.5	2.3x	1.5x	1.9x	17.3x	17.0x	17.6x	31-Dec
Hugel, Inc.	KOSDAQ:A145020	Chuncheon	KRW 480,000	KRW 622,900	KRW 258,100	\$ 1,792.7	\$ (119.1)	\$ 1,889.1	10.7x	9.0x	12.2x	9.4x	17.3x	20.4x	31-Dec
Green Cross Corporation	KOSE:A006280	Yongin	KRW 236,000	KRW 237,000	KRW 136,000	\$ 2,666.5	\$ 113.4	\$ 2,493.2	2.1x	1.6x	2.3x	16.8x	18.5x	23.4x	31-Dec
Komipharm International Co., Ltd.	KOSDAQ:A041960	Siheung	KRW 39,400	KRW 43,700	KRW 29,250	\$ 1,992.4	\$ 18.2	\$ 1,968.7	NM	NM	NM	NM	NM	NM	31-Dec
Yuhan Corporation	KOSE:A000100	Seoul	KRW 224,500	KRW 276,190	KRW 173,810	\$ 1,858.9	\$ (299.4)	\$ 2,152.6	2.2x	1.4x	1.4x	12.1x	8.9x	9.6x	31-Dec
Yungjin Pharm. Co., Ltd.	KOSE:A003520	Seoul	KRW 10,050	KRW 13,700	KRW 6,790	\$ 1,686.6	\$ 7.3	\$ 1,679.3	2.4x	8.5x	9.4x	36.6x	NM	NM	31-Dec
SillaJen, Inc.	KOSDAQ:A215600	Busan	KRW 127,400	KRW 127,400	KRW 8,900	\$ 7,620.6	\$ (119.9)	\$ 7,740.5	NM	NM	NM	NM	NM	NM	31-Dec
JW Holdings Corporation	KOSE:A096760	Seoul	KRW 9,190	KRW 12,600	KRW 7,300	\$ 1,294.3	\$ 589.9	\$ 518.1	2.1x	2.0x	2.1x	24.2x	19.0x	18.3x	31-Dec
Daewoong Pharmaceutical Co., Ltd.	KOSE:A069620	Seoul	KRW 142,000	KRW 144,000	KRW 62,600	\$ 1,665.4	\$ 230.9	\$ 1,339.0	1.1x	1.2x	1.9x	13.9x	21.9x	24.2x	31-Dec
Daewoong Co., Ltd.	KOSE:A003090	Seongnam	KRW 18,050	KRW 18,400	KRW 8,220	\$ 1,146.7	\$ 114.8	\$ 694.7	0.9x	0.8x	1.2x	7.8x	9.3x	10.7x	31-Dec
Chong Kun Dang Pharmaceutical Corp.	KOSE:A185750	Seoul	KRW 141,000	KRW 143,500	KRW 91,500	\$ 1,267.7	\$ 55.6	\$ 1,212.1	1.7x	1.5x	1.6x	15.9x	14.9x	14.1x	31-Dec
JW Pharmaceutical Corporation	KOSE:A001060	Seoul	KRW 48,850	KRW 56,373	KRW 38,700	\$ 1,041.1	\$ 188.4	\$ 852.6	2.2x	2.7x	2.4x	24.6x	29.7x	27.4x	31-Dec
Osstem Implant Co., Ltd.	KOSDAQ:A048260	Seoul	KRW 62,500	KRW 75,000	KRW 50,100	\$ 863.3	\$ 58.3	\$ 796.1	4.2x	2.7x	2.4x	27.7x	18.9x	25.9x	31-Dec
Dong-A Socio Holdings Co., Ltd.	KOSE:A000640	Seoul	KRW 131,500	KRW 166,500	KRW 104,500	\$ 932.4	\$ 195.0	\$ 737.5	1.7x	1.6x	1.6x	8.4x	5.9x	11.3x	31-Dec
Kolon Life Science Inc.	KOSDAQ:A102940	Gwacheon	KRW 140,300	KRW 191,400	KRW 104,200	\$ 931.4	\$ (43.8)	\$ 975.2	NA	6.5x	7.0x	NM	40.0x	47.5x	31-Dec
Bukwang Pharmaceutical Co., Ltd.	KOSE:A003000	Seoul	KRW 26,350	KRW 27,050	KRW 19,167	\$ 994.0	\$ (24.0)	\$ 1,018.0	6.0x	7.5x	7.5x	28.1x	48.4x	NM	31-Dec
Ilyang Pharmaceutical Co.,Ltd	KOSE:A007570	Yongin	KRW 38,300	KRW 44,800	KRW 31,650	\$ 773.7	\$ 123.8	\$ 635.6	4.3x	3.9x	3.3x	39.8x	29.7x	24.4x	31-Dec
Celltrion Pharm Inc.	KOSDAQ:A068760	Cheongju	KRW 65,600	KRW 69,200	KRW 18,150	\$ 2,117.2	\$ 119.4	\$ 1,997.8	8.0x	11.2x	18.0x	NM	NA	NA	31-Dec
Seegene, Inc.	KOSDAQ:A096530	Seoul	KRW 32,000	KRW 40,950	KRW 26,300	\$ 733.9	\$ (27.3)	\$ 760.9	14.9x	12.4x	9.9x	NM	55.1x	42.0x	31-Dec
Suheung Co., Ltd.	KOSE:A008490	Seoul	KRW 33,550	KRW 41,000	KRW 31,950	\$ 594.1	\$ 202.2	\$ 365.3	2.5x	2.1x	1.9x	14.7x	10.9x	10.5x	31-Dec
MEDIPOST Co., Ltd.	KOSDAQ:A078160	Seongnam	KRW 97,100	KRW 109,400	KRW 49,650	\$ 676.0	\$ (10.6)	\$ 686.6	16.3x	14.1x	21.0x	NM	NM	NM	31-Dec
Dong-A ST Co., Ltd.	KOSE:A170900	Seoul	KRW 103,000	KRW 116,500	KRW 71,000	\$ 779.6	\$ (15.0)	\$ 794.6	2.2x	1.5x	1.6x	15.9x	16.6x	33.9x	31-Dec
CHA Biotech Co., Ltd.	KOSDAQ:A085660	Seongnam	KRW 15,800	KRW 16,500	KRW 11,200	\$ 714.5	\$ (147.2)	\$ 714.5	1.5x	1.3x	1.9x	11.3x	11.5x	38.4x	31-Dec
Naturalendo Tech Co., Ltd.	KOSDAQ:A168330	Seongnam	KRW 26,350	KRW 35,000	KRW 11,650	\$ 481.1	\$ 0.7	\$ 480.4	5.4x	NM	NA	NM	NM	NM	31-Dec
HanAll Biopharma Co., Ltd.	KOSE:A009420	Seoul	KRW 14,900	KRW 15,350	KRW 10,700	\$ 638.4	\$ (51.1)	\$ 689.5	7.6x	7.3x	8.5x	NM	NM	NM	31-Dec
DIO Corporation	KOSDAQ:A039840	Busan	KRW 35,750	KRW 43,550	KRW 27,500	\$ 508.9	\$ 9.0	\$ 495.5	7.2x	6.6x	6.2x	26.9x	17.9x	20.6x	31-Dec
Caregen Co., Ltd.	KOSDAQ:A214370	Anyang	KRW 85,900	KRW 96,200	KRW 60,200	\$ 705.9	\$ (140.9)	\$ 843.1	NM	16.4x	15.1x	NM	27.4x	27.0x	31-Dec
ST Pharm Co. Ltd.	KOSDAQ:A237690	Seoul	KRW 36,050	KRW 50,900	KRW 31,050	\$ 496.9	\$ (117.6)	\$ 614.5	NM	3.6x	2.6x	NM	8.4x	6.2x	31-Dec
Chong Kun Dang Holdings Corp.	KOSE:A001630	Seoul	KRW 78,800	KRW 83,900	KRW 56,400	\$ 527.5	\$ (19.9)	\$ 360.7	2.5x	1.6x	1.4x	14.9x	12.8x	10.7x	31-Dec
Value Added Technology Co., Ltd.	KOSDAQ:A043150	Hwaseong	KRW 34,000	KRW 38,500	KRW 24,950	\$ 481.0	\$ 23.6	\$ 455.2	3.0x	2.6x	2.0x	13.6x	10.5x	8.7x	31-Dec

## Publicly Traded South Korean Healthcare Companies Cont'd

Company	Ticker	City	Price	52-Week		EV*	Net Debt	Market Cap	EV/Sales			EV/EBITDA			FYE
				High	Low				FY2015	FY2016	LTM	FY2015	FY2016	LTM	
Dentium Co.,Ltd.	KOSE:A145720	Suwon	KRW 68,600	KRW 76,300	KRW 32,550	\$ 544.7	\$ 6.6	\$ 537.6	NM	NM	4.4x	NM	NM	15.7x	31-Dec
Huons Global Co Ltd.	KOSDAQ:A084110	Seongnam	KRW 54,000	KRW 58,000	KRW 23,000	\$ 585.8	\$ (26.1)	\$ 485.8	4.6x	1.5x	2.1x	19.8x	6.5x	9.3x	31-Dec
Handok Inc.	KOSE:A002390	Seoul	KRW 30,950	KRW 32,500	KRW 21,550	\$ 507.0	\$ 144.4	\$ 356.1	1.3x	1.1x	1.4x	28.5x	22.8x	NM	31-Dec
Vieworks Co. Ltd.	KOSDAQ:A100120	Anyang	KRW 38,500	KRW 74,000	KRW 36,150	\$ 314.1	\$ (37.2)	\$ 351.4	5.2x	5.2x	2.6x	23.9x	19.9x	9.1x	31-Dec
iNTRON Biotechnology, Inc.	KOSDAQ:A048530	Seongnam	KRW 41,050	KRW 42,100	KRW 20,250	\$ 541.8	\$ (19.8)	\$ 561.5	NM	NM	NA	NM	NM	NM	31-Dec
DongKook Pharmaceutical Co., Ltd.	KOSDAQ:A086450	Seoul	KRW 66,600	KRW 72,900	KRW 46,700	\$ 456.7	\$ (79.0)	\$ 534.8	1.9x	1.4x	1.5x	14.0x	8.4x	9.4x	31-Dec
DAE HWA Pharmaceutical Co., Ltd.	KOSDAQ:A067080	Seoul	KRW 26,400	KRW 32,300	KRW 18,600	\$ 457.4	\$ 28.5	\$ 422.8	4.9x	3.2x	3.8x	NA	NA	NA	31-Dec
Samjin Pharmaceuticals Co., Ltd.	KOSE:A005500	Seoul	KRW 37,200	KRW 37,800	KRW 31,100	\$ 409.2	\$ (14.0)	\$ 423.2	1.5x	1.8x	1.8x	7.6x	9.2x	8.4x	31-Dec
JW Life Science Co. Ltd.	KOSE:A234080	Dangjin	KRW 41,350	KRW 41,750	KRW 22,600	\$ 348.5	\$ 49.4	\$ 299.1	NM	2.2x	2.9x	NM	7.8x	11.1x	31-Dec
Interjo Inc.	KOSDAQ:A119610	Pyeongtaek	KRW 40,050	KRW 41,600	KRW 31,800	\$ 378.2	\$ (13.7)	\$ 391.9	11.2x	5.7x	5.4x	NM	15.4x	14.3x	31-Dec
Kwang Dong Pharmaceutical Co., Ltd.	KOSE:A009290	Seoul	KRW 8,970	KRW 9,570	KRW 7,870	\$ 355.9	\$ 6.6	\$ 327.6	0.6x	0.3x	0.3x	7.9x	5.8x	7.8x	31-Dec
InBody Co., Ltd.	KOSDAQ:A041830	Seoul	KRW 38,400	KRW 39,950	KRW 20,600	\$ 435.4	\$ (42.2)	\$ 477.6	NA	4.1x	5.5x	NA	13.0x	20.4x	31-Dec
Shin Poong Pharm.Co.,Ltd.	KOSE:A019170	Seoul	KRW 7,630	KRW 8,220	KRW 4,885	\$ 403.9	\$ 69.1	\$ 334.5	1.6x	1.9x	2.3x	18.7x	19.7x	18.6x	31-Dec
JW Shinyak Corporation	KOSDAQ:A067290	Seoul	KRW 9,220	KRW 10,100	KRW 6,460	\$ 389.9	\$ 58.1	\$ 331.9	5.2x	4.5x	5.5x	NA	NA	NA	31-Dec
AbClon Inc.	KOSDAQ:A174900	Seoul	KRW 61,400	KRW 61,900	KRW 57,000	\$ 376.1	\$ 1.7	\$ 374.4	NM	NM	NM	NM	NM	NM	31-Dec
CrystalGenomics, Inc.	KOSDAQ:A083790	Seongnam	KRW 24,650	KRW 25,550	KRW 12,150	\$ 564.0	\$ (19.3)	\$ 583.3	NA	NA	NA	NM	NM	NM	31-Dec
Boditech Med Inc.	KOSDAQ:A206640	Chuncheon	KRW 19,650	KRW 20,950	KRW 12,700	\$ 406.3	\$ (9.7)	\$ 413.6	6.5x	8.5x	8.0x	23.6x	26.6x	34.5x	31-Dec
i-SENS, Inc.	KOSDAQ:A099190	Seoul	KRW 24,900	KRW 32,700	KRW 20,200	\$ 339.2	\$ 23.5	\$ 312.4	4.7x	3.3x	2.5x	17.8x	13.5x	13.3x	31-Dec
CMG Pharmaceutical Co., Ltd.	KOSDAQ:A058820	Seoul	KRW 6,430	KRW 7,010	KRW 2,300	\$ 588.9	\$ (50.7)	\$ 639.5	7.0x	10.7x	17.5x	NM	NM	NM	31-Dec
Amicogen, Inc.	KOSDAQ:A092040	Jinju	KRW 54,900	KRW 56,800	KRW 29,000	\$ 514.6	\$ 11.0	\$ 481.3	NA	6.8x	8.4x	NM	65.4x	67.2x	31-Dec
Kyongbo Pharmaceutical Co., Ltd.	KOSE:A214390	Asan	KRW 14,100	KRW 14,850	KRW 10,800	\$ 345.2	\$ 37.3	\$ 308.0	2.0x	2.0x	2.0x	11.3x	13.3x	13.2x	31-Dec
LegoChem Biosciences, Inc.	KOSDAQ:A141080	Daejeon	KRW 36,900	KRW 39,850	KRW 23,050	\$ 322.9	\$ (12.7)	\$ 335.6	NM	NA	18.7x	NM	NM	NM	31-Dec
BINEX Co., Ltd.	KOSDAQ:A053030	Incheon	KRW 12,050	KRW 19,950	KRW 6,650	\$ 354.8	\$ 13.7	\$ 340.2	8.9x	7.1x	4.7x	NM	NM	NM	31-Dec
Daewon Pharmaceutical Co., Ltd.	KOSE:A003220	Seoul	KRW 19,800	KRW 23,700	KRW 17,136	\$ 314.3	\$ (9.9)	\$ 323.8	1.3x	1.4x	1.4x	11.1x	9.5x	9.1x	31-Dec
REYON Pharmaceutical Co., Ltd.	KOSE:A102460	Seoul	KRW 35,200	KRW 41,600	KRW 24,800	\$ 369.5	\$ (35.8)	\$ 405.3	4.0x	2.6x	3.2x	25.4x	16.7x	20.7x	31-Dec
Aprogen pharmaceuticals, Inc.	KOSE:A003060	Seongnam	KRW 5,300	KRW 5,370	KRW 2,990	\$ 419.8	\$ 16.8	\$ 403.0	6.5x	6.4x	10.0x	NM	NA	NM	31-Dec
Pepron, Inc.	KOSDAQ:A087010	Daejeon	KRW 53,000	KRW 55,000	KRW 31,800	\$ 324.8	\$ (30.9)	\$ 355.6	NM	NM	NA	NM	NM	NM	31-Dec
Pharma Research Products Co., Ltd	KOSDAQ:A214450	Gangneung	KRW 53,200	KRW 54,800	KRW 31,750	\$ 357.4	\$ (103.3)	\$ 460.1	NM	5.9x	8.2x	NM	15.0x	23.3x	31-Dec
Sam Chun Dang Pharm. Co., Ltd	KOSDAQ:A000250	Seoul	KRW 14,000	KRW 16,450	KRW 8,450	\$ 269.0	\$ (50.1)	\$ 273.8	1.4x	1.7x	1.8x	7.9x	8.5x	8.6x	31-Dec
TegoScience Inc.	KOSDAQ:A191420	Seoul	KRW 78,800	KRW 96,900	KRW 44,000	\$ 261.1	\$ (11.2)	\$ 272.3	NM	NM	33.3x	NM	NM	NM	31-Dec
ORIENT BIO Inc.	KOSE:A002630	Seongnam-si	KRW 1,335	KRW 1,875	KRW 1,085	\$ 245.8	\$ 21.8	\$ 198.9	1.5x	2.9x	2.4x	28.9x	37.5x	NM	31-Mar
Humedix Co., Ltd.	KOSDAQ:A200670	Anyang	KRW 40,000	KRW 41,800	KRW 27,000	\$ 295.1	\$ (26.0)	\$ 316.4	NM	NM	6.2x	NM	NM	21.9x	31-Dec
Cell Biotech Co., Ltd.	KOSDAQ:A049960	Gimpo	KRW 42,950	KRW 50,400	KRW 32,700	\$ 259.4	\$ (43.5)	\$ 302.9	8.2x	5.9x	4.8x	21.9x	13.9x	12.2x	31-Dec
Rayence Co., Ltd.	KOSDAQ:A228850	Hwaseong	KRW 20,150	KRW 20,900	KRW 15,000	\$ 230.5	\$ (65.1)	\$ 295.2	NM	NM	2.4x	NM	NM	10.9x	31-Dec
Daihan Pharmaceutical Co.,Ltd.	KOSDAQ:A023910	Seoul	KRW 43,900	KRW 44,500	KRW 26,700	\$ 243.7	\$ 3.0	\$ 240.7	1.2x	1.3x	1.8x	7.1x	6.3x	7.1x	31-Dec
Macrogen Inc.	KOSDAQ:A038290	Seoul	KRW 31,800	KRW 34,000	KRW 22,150	\$ 259.5	\$ (12.9)	\$ 271.4	3.9x	3.2x	3.0x	22.3x	14.3x	18.8x	31-Dec
Green Cross Lab Cell Corporation	KOSDAQ:A144510	Yongin	KRW 32,350	KRW 34,400	KRW 20,600	\$ 277.3	\$ (34.7)	\$ 311.9	NM	5.6x	6.6x	NM	NA	NM	31-Dec

## Publicly Traded South Korean Healthcare Companies Cont'd

Company	Ticker	City	Price	52-Week		EV*	Net Debt	Market Cap	EV/Sales			EV/EBITDA			FYE
				High	Low				FY2015	FY2016	LTM	FY2015	FY2016	LTM	
Myungmoon Pharm. Co., LTD.	KOSE:A017180	Seoul	KRW 6,770	KRW 8,150	KRW 4,418	\$ 203.5	\$ 52.1	\$ 147.8	1.1x	1.4x	1.6x	31.4x	27.3x	21.6x	31-Dec
BCWorld Pharm Co., Ltd.	KOSDAQ:A200780	Seoul	KRW 25,400	KRW 28,000	KRW 20,050	\$ 183.7	\$ 14.1	\$ 169.6	5.5x	4.4x	4.2x	28.7x	24.3x	19.8x	31-Dec
Daehan New Pharm Co., Ltd.	KOSDAQ:A054670	Hwaseong	KRW 15,200	KRW 21,400	KRW 9,560	\$ 216.9	\$ 22.0	\$ 194.9	2.9x	2.9x	2.0x	22.3x	23.1x	NM	31-Dec
Theragen Etex Co.,Ltd.	KOSDAQ:A066700	Seoul	KRW 7,250	KRW 7,360	KRW 4,900	\$ 220.3	\$ 24.8	\$ 189.6	1.7x	2.0x	2.3x	NA	NA	NM	31-Dec
Huvitz Co., Ltd.	KOSDAQ:A065510	Gunpo	KRW 13,450	KRW 14,700	KRW 11,350	\$ 182.5	\$ 35.1	\$ 142.5	2.8x	2.8x	2.9x	15.9x	11.8x	13.9x	31-Dec
Lutronic Corporation	KOSDAQ:A085370	Goyang	KRW 12,200	KRW 18,100	KRW 10,000	\$ 212.3	\$ (33.4)	\$ 247.0	6.9x	5.1x	2.8x	48.0x	32.4x	38.2x	31-Dec
Oscotec Inc.	KOSDAQ:A039200	Seongnam	KRW 12,100	KRW 12,300	KRW 5,630	\$ 299.1	\$ (2.1)	\$ 299.3	9.9x	27.2x	NM	NM	NM	NM	31-Dec
CTCBIO Inc.	KOSDAQ:A060590	Hongcheon	KRW 10,250	KRW 12,400	KRW 6,340	\$ 224.3	\$ 62.2	\$ 162.0	2.7x	2.0x	2.0x	NM	NA	NM	31-Dec
Dongwha Pharm.Co.,Ltd	KOSE:A000020	Seoul	KRW 11,500	KRW 11,550	KRW 7,390	\$ 231.1	\$ (58.9)	\$ 290.1	0.8x	0.7x	1.0x	9.8x	6.4x	10.6x	31-Dec
SAMSUNG PHARM. Co., LTD.	KOSE:A001360	Hwaseong	KRW 4,620	KRW 4,925	KRW 3,305	\$ 205.4	\$ 37.9	\$ 167.5	7.8x	3.5x	4.5x	NM	NM	NM	31-Dec
Ildong Holdings Co., Ltd.	KOSE:A000230	Seoul	KRW 16,250	KRW 31,000	KRW 13,400	\$ 121.6	\$ (35.6)	\$ 155.7	1.6x	0.4x	3.3x	17.5x	4.1x	23.3x	31-Dec
Kyung Dong Pharmaceutical Co., Ltd.	KOSDAQ:A011040	Seoul	KRW 23,500	KRW 23,850	KRW 16,950	\$ 203.8	\$ (48.3)	\$ 253.5	1.2x	1.2x	1.3x	6.3x	5.9x	6.2x	31-Dec
Hans Biomed Corporation	KOSDAQ:A042520	Seoul	KRW 21,050	KRW 21,700	KRW 14,350	\$ 184.5	\$ 11.4	\$ 172.1	7.3x	6.0x	5.4x	32.8x	24.7x	22.3x	30-Sep
Qurient Co., Ltd.	KOSDAQ:A115180	Seongnam	KRW 31,300	KRW 39,600	KRW 20,800	\$ 197.6	\$ (18.8)	\$ 216.4	NM	NM	NM	NM	NM	NM	31-Dec
Sewoon Medical Co., Ltd	KOSDAQ:A100700	Cheonan	KRW 3,695	KRW 4,670	KRW 3,235	\$ 142.1	\$ (5.0)	\$ 146.1	4.1x	3.2x	2.7x	20.9x	12.5x	10.8x	31-Dec
ISU ABXIS Co., Ltd.	KOSDAQ:A086890	Seongnam	KRW 7,460	KRW 9,000	KRW 5,780	\$ 137.2	\$ 2.6	\$ 134.7	NA	8.3x	7.8x	NM	NM	NM	31-Dec
Mezzion Pharma Co.,Ltd.	KOSDAQ:A140410	Seoul	KRW 37,650	KRW 42,500	KRW 17,450	\$ 207.0	\$ (47.1)	\$ 254.0	21.3x	17.2x	28.8x	NM	NM	NM	31-Dec
ALTEOGEN Inc.	KOSDAQ:A196170	Daejeon	KRW 39,500	KRW 42,650	KRW 26,250	\$ 197.2	\$ (30.3)	\$ 227.5	NA	NA	18.5x	NM	NM	NM	31-Dec
Anterogen Co.,Ltd.	KOSDAQ:A065660	Seoul	KRW 33,800	KRW 37,550	KRW 18,000	\$ 223.4	\$ (22.3)	\$ 245.6	NM	NA	NA	NM	NM	NM	31-Dec
ChoA Pharmaceutical Co., Ltd.	KOSDAQ:A034940	Seoul	KRW 5,090	KRW 5,480	KRW 3,995	\$ 136.8	\$ 5.9	\$ 131.7	2.7x	2.5x	2.6x	NM	NM	NM	31-Dec
Cellumed Co., Ltd.	KOSDAQ:A049180	Seoul	KRW 11,950	KRW 21,050	KRW 5,310	\$ 210.1	\$ 11.4	\$ 200.5	9.8x	NA	15.7x	NM	NM	NM	31-Dec
Corentec Co., Ltd.	KOSDAQ:A104540	Seoul	KRW 13,000	KRW 15,600	KRW 11,500	\$ 120.9	\$ 2.9	\$ 118.0	4.8x	4.0x	3.5x	29.4x	25.4x	21.1x	31-Dec
Ilung Pharmaceuticals Co., Ltd.	KOSE:A003120	Seoul	KRW 138,000	KRW 152,500	KRW 112,500	\$ 129.7	\$ (39.8)	\$ 169.4	1.3x	1.8x	2.0x	12.8x	26.3x	23.5x	31-Dec
PanGen Biotech Inc.	KOSDAQ:A222110	Suwon	KRW 17,300	KRW 19,100	KRW 12,500	\$ 137.8	\$ (14.2)	\$ 152.0	NM	NM	70.4x	NM	NM	NM	31-Dec
INFINITT Healthcare Co., Ltd.	KOSDAQ:A071200	Seoul	KRW 6,560	KRW 7,800	KRW 5,450	\$ 118.6	\$ (27.4)	\$ 146.1	3.2x	2.0x	1.8x	15.4x	13.1x	14.2x	31-Dec
Wonik Corporation	KOSDAQ:A032940	Seongnam	KRW 6,390	KRW 7,950	KRW 5,180	\$ 106.5	\$ 31.3	\$ 73.8	2.6x	1.7x	1.9x	NM	NM	28.7x	31-Dec
Kyung Nam Pharm Co., Ltd.	KOSDAQ:A053950	Uiyeong	KRW 11,350	KRW 11,900	KRW 4,555	\$ 125.2	\$ 8.5	\$ 116.6	2.6x	2.1x	3.4x	14.4x	14.3x	22.4x	31-Dec
Shinhung Co., Ltd	KOSE:A004080	Seoul	KRW 11,400	KRW 12,000	KRW 9,620	\$ 114.5	\$ 15.3	\$ 99.1	1.0x	1.0x	1.0x	12.7x	16.1x	17.8x	31-Dec
Solborn, Inc.	KOSDAQ:A035610	Seoul	KRW 5,510	KRW 7,170	KRW 4,400	\$ 119.1	\$ (39.0)	\$ 123.8	1.8x	1.6x	1.7x	8.6x	24.8x	38.2x	31-Dec
NanoEnTek Inc.	KOSDAQ:A039860	Seoul	KRW 6,120	KRW 6,550	KRW 4,100	\$ 140.1	\$ 3.4	\$ 136.6	7.3x	5.1x	6.8x	NM	NM	NM	31-Dec
Choong Ang Vaccine Laboratory Co., Ltd.	KOSDAQ:A072020	Daejeon	KRW 20,400	KRW 29,600	KRW 16,750	\$ 128.0	\$ (8.4)	\$ 136.4	3.3x	4.4x	4.1x	18.7x	16.5x	14.9x	31-Dec
Prostemics Co., Ltd.	KOSDAQ:A203690	Seoul	KRW 6,150	KRW 6,600	KRW 3,030	\$ 230.0	\$ (23.8)	\$ 253.8	NA	NA	NA	NM	NA	NM	31-Dec
Kang Stem Biotech Co., Ltd.	KOSDAQ:A217730	Seoul	KRW 13,400	KRW 13,800	KRW 9,260	\$ 163.1	\$ (15.2)	\$ 178.3	NM	NM	NM	NM	NM	NM	31-Dec
UBCare Co., Ltd.	KOSDAQ:A032620	Seoul	KRW 3,695	KRW 4,155	KRW 2,970	\$ 106.5	\$ (25.5)	\$ 131.6	1.7x	1.7x	1.6x	19.9x	18.7x	16.9x	31-Dec
Biototech Co., Ltd.	KOSDAQ:A086040	Cheongwon	KRW 7,670	KRW 9,450	KRW 5,010	\$ 104.0	\$ 1.8	\$ 101.4	5.5x	4.2x	4.7x	NM	NM	NA	31-Dec
Meta Biomed Co., Ltd.	KOSDAQ:A059210	Cheongju	KRW 3,910	KRW 5,460	KRW 3,070	\$ 116.2	\$ 38.2	\$ 77.0	2.0x	2.3x	2.0x	19.3x	13.6x	17.3x	31-Dec
Bioneer Corporation	KOSDAQ:A064550	Daejeon	KRW 10,500	KRW 10,800	KRW 4,355	\$ 201.3	\$ 3.4	\$ 197.9	8.3x	6.7x	9.6x	NM	NM	NM	31-Dec



## Publicly Traded South Korean Healthcare Companies Cont'd

Company	Ticker	City	Price	52-Week		EV*	Net Debt	Market Cap	EV/Sales			EV/EBITDA			FYE
				High	Low				FY2015	FY2016	LTM	FY2015	FY2016	LTM	
Seoul Pharma Co., Ltd	KOSDAQ:A018680	Seoul	KRW 13,000	KRW 19,250	KRW 7,640	\$ 115.1	\$ 15.9	\$ 99.3	3.1x	2.1x	2.9x	NA	14.2x	17.9x	31-Dec
EuBiologics Co., Ltd.	KOSDAQ:A206650	Seoul	KRW 5,930	KRW 6,370	KRW 3,650	\$ 120.4	\$ (12.0)	\$ 132.5	NM	NM	13.7x	NM	NM	NM	31-Dec
GreenCross Medical Science Corp.	KOSDAQ:A142280	Yongin	KRW 13,000	KRW 13,200	KRW 9,870	\$ 120.4	\$ 3.8	\$ 113.5	1.8x	1.3x	1.5x	NA	NM	NA	31-Dec
EyeGene Inc.	KOSDAQ:A185490	Seoul	KRW 21,200	KRW 22,600	KRW 8,070	\$ 187.2	\$ (8.7)	\$ 195.9	NM	NM	NM	NM	NM	NM	31-Dec
EstechPharma Co., Ltd.	KOSDAQ:A041910	Hwaseong	KRW 13,500	KRW 13,700	KRW 8,490	\$ 131.4	\$ (11.6)	\$ 143.0	6.0x	2.6x	3.6x	47.9x	23.5x	16.1x	31-Dec
Mediana Co., Ltd.	KOSDAQ:A041920	Wonju	KRW 11,350	KRW 16,650	KRW 10,650	\$ 80.1	\$ (8.7)	\$ 88.8	2.9x	2.5x	1.5x	16.2x	12.2x	8.2x	31-Dec
Ahn-Gook Pharmaceutical Co. Ltd.	KOSDAQ:A001540	Seoul	KRW 12,950	KRW 13,850	KRW 9,990	\$ 117.0	\$ (22.0)	\$ 138.6	1.1x	0.6x	0.7x	13.3x	20.2x	11.9x	31-Dec
Corestem, Inc.	KOSDAQ:A166480	Seongnam	KRW 9,780	KRW 12,250	KRW 6,810	\$ 111.0	\$ (43.1)	\$ 140.4	NA	7.7x	6.0x	NM	NM	NM	31-Dec
Jeil Pharma Holdings Inc	KOSE:A002620	Seoul	KRW 45,000	KRW 91,800	KRW 29,600	\$ 80.1	\$ (14.9)	\$ 91.8	1.1x	2.4x	0.1x	NA	NM	4.9x	31-Dec
WooGene B&G Co., Ltd.	KOSDAQ:A018620	Seoul	KRW 6,210	KRW 8,520	KRW 5,450	\$ 90.2	\$ 26.3	\$ 63.8	2.5x	3.7x	3.8x	NA	NM	NM	31-Dec
Ckd Bio Corporation	KOSE:A063160	Seoul	KRW 23,400	KRW 24,350	KRW 19,650	\$ 103.7	\$ (5.9)	\$ 109.7	1.3x	1.0x	1.0x	9.1x	5.1x	6.7x	31-Dec
DHP Korea Co., Ltd.	KOSDAQ:A131030	Seoul	KRW 8,670	KRW 10,500	KRW 7,000	\$ 87.8	\$ (43.4)	\$ 131.2	4.2x	2.7x	1.9x	12.5x	8.5x	5.5x	31-Dec
Kukje Pharma Co., Ltd.	KOSE:A002720	Seongnam	KRW 5,350	KRW 5,840	KRW 3,300	\$ 105.5	\$ 26.1	\$ 79.4	0.8x	0.8x	1.0x	27.5x	19.7x	19.7x	31-Dec
Hwail Pharmaceutical Co.,Ltd.	KOSDAQ:A061250	Seongnam	KRW 7,040	KRW 8,340	KRW 5,830	\$ 90.6	\$ 3.6	\$ 87.0	1.0x	1.0x	0.9x	17.8x	23.2x	29.7x	31-Dec
Solco Biomedical Co., Ltd.	KOSDAQ:A043100	Pyeongtaek	KRW 723	KRW 1,285	KRW 560	\$ 80.3	\$ 1.0	\$ 79.1	4.7x	4.0x	3.8x	NM	NM	NM	31-Dec
SELVAS Healthcare, Inc.	KOSDAQ:A208370	Daejeon	KRW 6,910	KRW 8,500	KRW 4,755	\$ 94.4	\$ 11.4	\$ 83.0	NM	3.8x	4.3x	NM	NM	NM	31-Dec
High Tech Pharm Co., Ltd.	KOSDAQ:A106190	Daeso-Myeon	KRW 12,850	KRW 16,250	KRW 10,400	\$ 79.8	\$ (3.4)	\$ 83.2	1.4x	1.8x	1.5x	9.1x	19.0x	17.1x	31-Dec
L&K Biomed Ltd.	KOSDAQ:A156100	Seoul	KRW 12,550	KRW 15,750	KRW 6,490	\$ 113.4	\$ 12.4	\$ 98.2	NM	NM	4.2x	NM	NM	NM	31-Dec
U&I Corporation	KOSDAQ:A056090	Uijeongbu	KRW 11,350	KRW 18,000	KRW 9,850	\$ 62.7	\$ (17.0)	\$ 79.7	NM	6.3x	5.3x	NM	NM	NM	31-Dec
BIT Computer Co., Ltd	KOSDAQ:A032850	Seoul	KRW 5,590	KRW 6,590	KRW 4,450	\$ 76.0	\$ (8.0)	\$ 84.0	3.2x	2.3x	2.6x	26.8x	11.9x	20.9x	31-Dec
Sinil Pharmaceutical Co., Ltd.	KOSDAQ:A012790	Seoul	KRW 13,550	KRW 15,750	KRW 11,400	\$ 82.2	\$ (10.7)	\$ 92.9	2.0x	1.8x	1.8x	6.9x	6.3x	6.7x	31-Dec
C-TRI Co., Ltd.	KOSDAQ:A047920	Namyangju	KRW 7,460	KRW 8,080	KRW 4,650	\$ 91.0	\$ 7.6	\$ 83.4	4.3x	3.4x	4.7x	NM	NM	NA	31-Dec
Eagle Veterinary Technology Co.,Ltd	KOSDAQ:A044960	Yesan	KRW 6,300	KRW 7,590	KRW 4,435	\$ 77.3	\$ 10.1	\$ 67.2	3.5x	3.0x	2.5x	29.9x	27.4x	22.5x	31-Dec
Seoulin Bioscience Co.,Ltd.	KOSDAQ:A038070	Seongnam	KRW 13,300	KRW 16,615	KRW 10,850	\$ 75.7	\$ (3.7)	\$ 78.4	1.9x	1.9x	1.9x	24.9x	NA	21.5x	31-Dec
Korean Drug Co., Ltd.	KOSDAQ:A014570	Seoul	KRW 7,590	KRW 9,310	KRW 4,920	\$ 73.1	\$ (3.2)	\$ 76.3	1.1x	1.4x	1.5x	13.2x	15.6x	11.8x	31-Dec
Hironic Co., Ltd.	KOSDAQ:A149980	Yongin	KRW 5,500	KRW 9,100	KRW 4,035	\$ 54.3	\$ (14.9)	\$ 69.1	7.1x	5.2x	3.8x	29.4x	NM	39.1x	31-Dec
LabGenomics Co., Ltd.	KOSDAQ:A084650	Seongnam	KRW 11,250	KRW 13,350	KRW 7,110	\$ 91.2	\$ 3.5	\$ 87.7	5.4x	3.6x	4.3x	36.5x	29.0x	NM	31-Dec
CU Medical Systems, Inc.	KOSDAQ:A115480	Wonju	KRW 3,115	KRW 4,445	KRW 3,005	\$ 48.9	\$ 4.6	\$ 44.3	2.3x	1.3x	0.9x	28.0x	36.2x	22.5x	31-Dec
Samil Pharmaceutical Co.,Ltd	KOSE:A000520	Seoul	KRW 9,380	KRW 10,800	KRW 7,020	\$ 94.4	\$ 50.7	\$ 43.7	0.7x	0.7x	1.2x	NM	11.5x	19.8x	31-Dec
Wooridul Pharmaceutical Limited	KOSE:A004720	Seoul	KRW 9,040	KRW 28,600	KRW 5,910	\$ 74.3	\$ (18.6)	\$ 92.9	1.1x	2.3x	1.1x	18.1x	NA	13.7x	31-Dec
Jin Yang Pharmaceutical Co., Ltd.	KOSDAQ:A007370	Seoul	KRW 4,665	KRW 5,680	KRW 3,705	\$ 62.1	\$ 14.4	\$ 47.6	1.1x	1.9x	1.7x	9.6x	NM	NM	31-Dec
Sam-A Pharm. Co., Ltd	KOSDAQ:A009300	Seoul	KRW 18,300	KRW 23,400	KRW 14,300	\$ 64.3	\$ (37.8)	\$ 102.0	0.8x	1.4x	1.1x	6.4x	7.3x	6.4x	31-Dec
ASTA Corporation	KOSDAQ:A246720	Suwon	KRW 9,650	KRW 13,800	KRW 7,040	\$ 71.3	\$ (11.6)	\$ 82.9	NM	NM	NA	NM	NM	NM	31-Dec
Young in Frontier Co., Ltd.	KOSDAQ:A036180	Seoul	KRW 5,290	KRW 6,100	KRW 3,740	\$ 68.5	\$ (14.3)	\$ 82.8	4.3x	3.0x	2.2x	NM	NM	47.7x	31-Dec
ANYGEN Co.,Ltd	KOSDAQ:A196300	Gwangju	KRW 33,300	KRW 37,550	KRW 11,000	\$ 134.5	\$ (9.5)	\$ 144.1	NM	NA	NA	NM	NM	NM	31-Dec
Yuyu Pharma, Inc.	KOSE:A000220	Seoul	KRW 13,400	KRW 14,900	KRW 8,260	\$ 58.6	\$ (2.6)	\$ 60.1	0.7x	1.1x	0.9x	18.8x	NA	8.3x	31-Mar
MG MED, Inc.	KOSDAQ:A180400	Seoul	KRW 39,150	KRW 42,850	KRW 11,550	\$ 202.0	\$ (14.3)	\$ 216.2	NA	NA	NA	NM	NM	NM	31-Dec

## Publicly Traded South Korean Healthcare Companies Cont'd

Company	Ticker	City	Price	52-Week		EV*	Net Debt	Market Cap	EV/Sales			EV/EBITDA			FYE
				High	Low				FY2015	FY2016	LTM	FY2015	FY2016	LTM	
BioLeaders Corporation	KOSDAQ:A142760	Daejeon	KRW 9,900	KRW 10,700	KRW 4,690	\$ 112.4	\$ (30.7)	\$ 143.1	NM	NA	NA	NM	NM	NM	31-Dec
NIBEC Co., Ltd.	KOSDAQ:A138610	Jincheon	KRW 11,400	KRW 11,750	KRW 7,130	\$ 66.8	\$ 4.8	\$ 62.1	NA	10.2x	12.5x	NM	NM	NM	31-Dec
MEK-ICS CO., LTD.	KOSDAQ:A058110	Paju	KRW 5,160	KRW 9,500	KRW 4,600	\$ 32.8	\$ 7.6	\$ 25.2	NM	5.6x	3.8x	NM	NM	NM	31-Dec
Median Diagnostics Inc.	XKON:A233250	Chuncheon	KRW 31,000	KRW 31,000	KRW 11,000	\$ 49.9	\$ 0.6	\$ 49.4	NM	NM	NM	NM	NM	NM	31-Dec
DNA Link, Inc.	KOSDAQ:A127120	Seoul	KRW 6,200	KRW 7,990	KRW 3,430	\$ 51.2	\$ 8.1	\$ 43.1	9.1x	5.5x	4.0x	NM	NM	NM	31-Dec
Cheilbio Co., Ltd.	KOSDAQ:A052670	Yongin	KRW 4,835	KRW 5,780	KRW 3,690	\$ 50.4	\$ (15.7)	\$ 66.1	1.8x	1.4x	1.7x	NA	NA	NA	31-Dec
KM Corporation	KOSDAQ:A083550	Anseong	KRW 5,880	KRW 7,327	KRW 5,150	\$ 41.3	\$ (9.4)	\$ 48.5	0.4x	0.5x	0.4x	6.8x	6.1x	4.9x	31-Dec
KPX Life Science Co., Ltd.	KOSDAQ:A114450	Yeosu	KRW 4,775	KRW 5,240	KRW 3,980	\$ 42.9	\$ (22.4)	\$ 65.3	1.3x	1.1x	1.1x	11.3x	5.0x	6.0x	31-Dec
Wooridul Huebrain Ltd.	KOSE:A118000	Seoul	KRW 2,200	KRW 14,000	KRW 1,685	\$ 43.6	\$ 3.2	\$ 40.3	3.5x	NA	3.5x	NM	NM	NM	31-Dec
IntroMedic Co., Ltd.	KOSDAQ:A150840	Seoul	KRW 6,800	KRW 8,980	KRW 5,220	\$ 43.3	\$ (1.4)	\$ 44.7	7.5x	6.0x	5.6x	NM	NM	NM	31-Dec
Daesung Microbiological Labs. Co., Ltd.	KOSDAQ:A036480	Uiwang	KRW 110,300	KRW 173,300	KRW 99,700	\$ 32.2	\$ (6.1)	\$ 38.2	1.0x	1.3x	1.3x	5.3x	6.0x	9.8x	31-Dec
PCL, Inc.	KOSDAQ:A241820	Seoul	KRW 6,520	KRW 10,750	KRW 4,630	\$ 40.4	\$ (12.7)	\$ 53.0	NM	NM	NA	NM	NM	NM	31-Dec
GeneMatrix Inc.	KOSDAQ:A109820	Seongnam	KRW 4,465	KRW 5,590	KRW 2,735	\$ 38.9	\$ (3.6)	\$ 41.6	5.0x	9.6x	8.5x	NM	NM	NM	31-Dec
Logos Biosystems, Inc.	KOSDAQ:A238120	Anyang-si	KRW 14,500	KRW 19,800	KRW 11,500	\$ 29.4	\$ (18.1)	\$ 47.5	NM	NA	6.2x	NM	NM	NM	31-Dec

	EV/Sales			EV/EBITDA		
	FY2015	FY2016	LTM	FY2015	FY2016	LTM
Max	21.3x	27.2x	70.4x	48.0x	65.4x	67.2x
Mean	4.2x	4.1x	5.5x	19.0x	18.1x	19.2x
Median	2.7x	2.6x	2.8x	17.4x	15.2x	17.5x
Min	0.4x	0.3x	0.1x	5.3x	4.1x	4.9x

\*EV = Market Capitalization + Net Debt + Minority Interest

Market Cap and Enterprise Value as of 11/20/2017

Source: Capital IQ

## Representative Korean Transactions (last 36 months)

Date Closed	Target	Acquirer	Transaction Value (\$M)	Target Financial Information			Multiples	
				Enterprise Value (\$M)*	Sales (\$M)	EBITDA (\$M)	EV/Sales	EV/EBITDA
10/31/2017	Samsung Medicos Co., Ltd	Korea Stem Cell Bank Co., Ltd.	14.6	-	1.0	-2.5	-	-
10/23/2017	Sedae Asset Co.,Ltd	Haiduk Corp.	-	-	-	-	-	-
10/19/2017	Boehringer Ingelheim GmbH, Previcox	Green Cross Veterinary Products Co., Ltd.	-	-	-	-	-	-
9/25/2017	Biogenicskorea Co., Ltd.	PATI Games Corporation (KOSDAQ:A194510)	8.4	-	-	-	-	-
9/7/2017	Kai Health Care Co., Ltd.	FutureChem Co.,Ltd (KOSDAQ:A220100)	4.4	-	3.1	-	-	-
8/31/2017	Abion Inc. (XKON:A203400)	KPM TECH Co., Ltd. (KOSDAQ:A042040)	12.0	-	-	-	-	-
7/31/2017	DiscoverX Corporation	Eurofins Scientific SE (ENXTPA:ERF)	-	-	17.1	-	-	-
7/28/2017	Damipharm Co., Ltd.	Wooridul Huebrain Ltd. (KOSE:A118000)	1.8	1.8	5.4	-	0.3x	-
7/7/2017	Sancheong Co., Ltd.	Hancom Inc. (KOSDAQ:A030520)	244.7	234.8	97.8	34.4	2.4x	6.8x
6/21/2017	K-MAC BIO CENTER Corp.	Sugentech Incorporate (XKON:A253840)	14.8	15.3	-	-	-	-
6/19/2017	Telcon Life Science Co., Ltd.	Vivozon, Inc.	-	-	-	-	-	-
6/16/2017	Bristol-Myers Squibb Company	SK Holdings Co., Ltd. (KOSE:A034730 )	-	-	-	-	-	-
6/14/2017	Myungmoon Pharm. Co., LTD., Distribution Business Division	KPL Pharmacy Co., Ltd.	1.6	1.6	-	-	-	-
6/1/2017	Bionics Co., Ltd.	Remed Co. Ltd.	-	-	-	-	-	-
5/31/2017	Greenbell Systems, Inc. (94.2% Stake)	Wooridul Huebrain Ltd. (KOSE:A118000)	4.3	4.7	40.3	-	0.1x	-
4/28/2017	Croen Inc. (60% Stake)	Kang Stem Biotech Co., Ltd. (KOSDAQ:A217730)	2.4	4.1	3.5	-	1.2x	-
4/19/2017	Hanwha MGI Special Purpose Acquisition Co., Ltd.	Woojung BSC, Inc. (KOSDAQ:A215380)	-	-	-	-	-	-
4/17/2017	Dongyang HC Co., Ltd.	Bain Capital Private Equity, LP	416.5	431.9	-	-	-	-
4/10/2017	Dentium BMS (96% Stake)	Dentium Co.,Ltd. (KOSE:A145720)	1.2	1.3	-	-	-	-
3/31/2017	LifeLiver Co, Ltd	HLB Life Science Co.,Ltd. (KOSDAQ:A067630)	46.2	64.1	-	-	-	-
3/31/2017	Green Cross Corporation, CT (cell therapy) Business	Green Cross Cell corporation (KOSDAQ:A031390)	7.0	7.2	-	-	-	-
3/28/2017	Ebest Special Purpose Acquisition 2 Co., Ltd.	Corestem, Inc. (KOSDAQ:A166480)	-	-	-	-	-	-
3/22/2017	BiocurePharm, Inc.	Gravis Energy Corp.	-	-	-	-	-	-
3/13/2017	Hyundai Heavy Industries Co., Ltd., Medical Robotics Business	Curexo Inc. (KOSDAQ:A060280)	10.3	27.9	-	-	-	-
3/10/2017	Sungwun Bio Co., Ltd. (65.4% Stake)	GenoFocus, Inc. (KOSDAQ:A187420)	4.3	6.6	6.1	-	1.1x	-
2/13/2017	Wonjin BCD Co., Ltd. (60% Stake)	BIOCND Inc. (XKON:A217950)	-	-	-	-	-	-
2/3/2017	Vatech America, Inc. (51% Stake)	Value Added Technology Co., Ltd.	10.1	19.8	-	-	-	-
1/20/2017	LuyeElium Healthcare Co., Ltd	AsiaMedic Limited (Catalist:505)	27.0	27.6	-	-	-	-
1/13/2017	KT&G Life Sciences Corp.	KT&G Corporaton (KOSE:A033780 )	56.6	38.7	-	-	-	-
1/1/2017	LG Life Sciences, Ltd.	LG Chem, Ltd. (KOSE:A051910)	1,297.0	1,516.2	442.2	77.1	3.4x	19.7x
1/1/2017	JW Bioscience Co., Ltd. (60% Stake)	KB Securities Co., Ltd., Investment Arm	-	-	-	-	-	-

## Representative Korean Transactions (last 36 months) Cont'd

Date Closed	Target	Acquirer	Transaction Value (\$M)	Target Financial Information			Multiples	
				Enterprise Value (\$M)*	Sales (\$M)	EBITDA (\$M)	EV/Sales	EV/EBITDA
12/30/2016	Korea Electro-Optics Co., Ltd.	SS New Tech. Co., Ltd.	3.8	3.8	11.7	-	0.3x	-
12/13/2016	Pharos Vaccine Inc. (50.2% Stake)	KODI CO., LTD (KOSDAQ:A080530)	15.6	31.2	1.8	-	17.7x	-
11/21/2016	Hanwha Ace Special Purpose Acquisition 1st Co., Ltd.	DRTECH Corporation (KOSDAQ:A214680)	-	-	-	-	-	-
10/25/2016	Bionics Co., Ltd.	BBI Life Sciences Corporation (SEHK:1035)	2.4	2.4	-	-	-	-
9/30/2016	Hanil Komed Co., Ltd.	Synergy Innovation Co., Ltd. (KOSDAQ:A048870)	5.0	5.0	-	-	-	-
9/22/2016	OSKO Inc.	Rayence Co., Ltd. (KOSDAQ:A228850)	2.1	2.1	-	-	-	-
9/19/2016	IBKS No.2 Special Purpose Acquisition Company	GL Pharm Tech Corp. (KOSDAQ:A204840)	-	-	-	-	-	-
8/31/2016	Samil Pharmach & Trading Co., Ltd	YD Global Life Science Co., Ltd.	9.9	10.6	24.3	-	0.4x	-
8/31/2016	Hana Must Second Special Purpose Acquisition Company Ltd.	Selvas AI Inc. (KOSDAQ:A108860)	-	-	-	-	-	-
8/23/2016	MEDICA KOREA Co., Ltd. (52% Stake)	DSK Co., Ltd. (KOSDAQ:A109740)	32.6	67.8	28.0	-	2.4x	-
8/12/2016	M.I.Tech Co., Ltd.	Synergy Innovation Co., Ltd. (KOSDAQ:A048870)	27.0	27.7	-	-	-	-
8/5/2016	SPL Lifesciences Co.,Ltd.	Jayjun Cosmetic Co., Ltd. (KOSE:A025620)	8.9	8.8	-	-	-	-
8/5/2016	Shinwha Advance Co. Ltd.	HLB Life Science Co.,Ltd. (KOSDAQ:A067630)	6.3	6.3	68.4	-	0.1x	-
7/4/2016	Huons Co., Ltd. (KOSDAQ:A243070, 51% Stake)	Huons Global Co Ltd. (KOSDAQ:A084110)	260.4	554.8	231.6	34.6	2.4x	16.1x
6/13/2016	Dr. J SkinClinic, Inc. (75% Stake)	Pharma Research Products Co., Ltd (KOSDAQ:A214450)	3.9	5.5	-	-	-	-
6/2/2016	Mbiotech, Inc.	Integrated DNA Technologies, Inc.	-	-	-	-	-	-
5/20/2016	Telcon Pharm Co., Ltd. (70% Stake)	Telcon Co., Ltd. (KOSDAQ:A200230)	6.2	8.4	-	-	-	-
3/2/2016	Immunostics, Inc.	Boditech Med Inc. (KOSDAQ:A206640)	13.7	13.7	-	-	-	-
2/29/2016	SK Biotek Co.,Ltd.	SK Holdings Co., Ltd. (KOSE:A034730)	99.8	100.0	-	-	-	-
12/29/2015	IJ Co., Ltd.	ILJIN Holdings Co., Ltd. (KOSE:A015860)	-	-	-	-	-	-
12/21/2015	Khanmed Co., Ltd.	LegoChem Biosciences, Inc. (KOSDAQ:A141080)	26.4	26.7	-	-	-	-
12/21/2015	BTO Bio Pharmaceuticals Co., Ltd.	Hwail Pharmaceutical Co.,Ltd. (KOSDAQ:A061250)	7.6	8.2	-	-	-	-
11/4/2015	Daemyung Optical Co., Ltd.	Insight Equity A. P. X, L.P.	-	-	-	-	-	-
10/29/2015	Dong-A ST Co., Ltd., Banwol Factory	Dong-A Socio Holdings Co., Ltd. (KOSE:A000640)	44.6	46.6	-	-	-	-
10/29/2015	Longevity Korea Co. Ltd. (83% Stake)	Amicogen, Inc. (KOSDAQ:A092040)	3.1	4.1	-	-	-	-
10/21/2015	Seoul Clinical Laboratories	Biocore Co., Ltd. (XKON:A216400)	2.4	2.5	-	-	-	-
9/29/2015	Hanbul Pharm Co. Ltd.	LegoChem Biosciences, Inc. (KOSDAQ:A141080)	3.3	3.2	-	-	-	-
9/22/2015	DreamCIS, Inc. (98.1% Stake)	Hangzhou Tigerm Consulting Co., Ltd. (SZSE:300347)	28.6	27.7	15.5	-	1.8x	-
9/11/2015	Bio Focus Co., Ltd. (92.9% Stake)	NanoEnTek Inc. (KOSDAQ:A039860)	7.1	5.0	-	-	-	-
8/27/2015	Bodyfriend Co., Ltd. (58.6% Stake)	Vogo Fund Asset Management Co., Ltd.; Neoplux Co., Ltd.	263.3	263.2	-	-	-	-
8/17/2015	SELVAS Healthcare, Inc. (KOSDAQ:A208370)	Selvas AI Inc. (KOSDAQ:A108860)	19.1	19.1	8.2	-	2.3x	-
7/27/2015	Jang San (60% Stake)	Wonik Corporation (KOSDAQ:A032940)	1.7	2.7	-	-	-	-
6/30/2015	CHA-BioMed Co. Ltd	CHA Biotech Co., Ltd. (KOSDAQ:A085660)	-	-	-	-	-	-

## Representative Korean Transactions (last 36 months) Cont'd

Date Closed	Target	Acquirer	Transaction Value (\$M)	Target Financial Information			Multiples	
				Enterprise Value (\$M)*	Sales (\$M)	EBITDA (\$M)	EV/Sales	EV/EBITDA
6/1/2015	<b>Alvogen Korea Co., Ltd.</b>	<b>Kunwha Pharmaceutical Co., Ltd</b>	174.3	172.0	-	-	-	-
4/21/2015	<b>Optimax Co., Ltd</b>	<b>Essilor Korea Co., Ltd.</b> (Joint Venture between Essilor Int'l and Samyung Trading)	-	-	-	-	-	-
4/15/2015	<b>Dongbu Electronic Materials Co., Ltd.</b>	<b>Chemtros Co., Ltd.; Wondae Industry Co., Ltd.</b>	5.5	5.5	27.6	-	0.2x	-
3/17/2015	<b>Korea ePlatform Ltd. (56% Stake)</b>	<b>Kwang Dong Pharmaceutical Co., Ltd. (KOSE:A009290)</b>	37.0	64.6	-	-	-	-
2/13/2015	<b>Samsung Medicos Co., Ltd.</b>	<b>Samsung Pharma Co., Ltd. (KOSE:A001360)</b>	3.4	3.4	2.6	-	1.3x	-
1/20/2015	<b>Human Medics Co, Ltd.</b>	Teleflex Incorporated (NYSE:TFX)	8.9	8.9	-	-	-	-
12/19/2014	<b>Dream Pharma Corp.</b>	<b>Kunwha Pharmaceutical Co., Ltd</b>	184.0	174.7	87.3	-	2.0x	-
11/28/2014	Contera Pharma ApS	<b>Bukwang Pharmaceutical Co., Ltd. (KOSE:A003000)</b>	-	-	-	-	-	-

\*Enterprise Value (EV) = Market Capitalization + Net Debt + Noncontrolling Interest

Representative transactions only include closed deals with publicly available transaction data

Bolded companies headquartered in South Korea

Source: Capital IQ, public filings, press releases and other public media sources

Max	17.7x	19.7x
Mean	2.3x	14.2x
Median	1.3x	16.1x
Min	0.1x	6.8x

Brocair Partners LLC, based in New York, was formed in 2004 to provide mergers & acquisitions advisory services, equity and debt placement services, and strategic advice to healthcare companies. Brocair Partners has advised a range of public and private companies across healthcare segments that include pharmaceuticals, medical devices, patient care, consumer health and nutrition, healthcare business services and information technology, and pharmaceutical ingredients and intermediates, both in the United States and worldwide. Outside North America, Brocair Partners collaborates on cross-border healthcare transactions with a constellation of key affiliates worldwide.

1001 Avenue of the Americas, 11th Floor, New York, NY 10018  
Phone: +1.212.500.5015 Fax: +1.917.591.3200  
[www.brocair.com](http://www.brocair.com)



Location: Gwangnan Bridge, Busan