

Company	Rating	TP (KRW)
Bioland (052260)	BUY (Initiate)	20,000

Multi-role ingredient hyaluronic acid

Multi uses in cosmetics, pharmaceuticals and nutraceuticals

In Korea, "ingredient marketing" is a popular advertising tool that draws consumers' attention to a unique substance in a product. The notable example is hyaluronic acid (HA) that is widely used in cosmetics and nutraceuticals (health supplement foods). HA, present in skin cells along with well-known proteins like elastin and collagen, is called a "moisture magnet" due to its unique ability to hold more than a litre of water per gram. The ingredient debuted as an excellent humectant for cosmetics and is now enthusiastically used as filler in plastic surgery. Its applications are also widening to arthritis treatment (syringe), adhesion prevention, lubricant eye drops, shampoo and foods.

Companies that can make high value-added HA for pharmaceuticals to benefit

HA used in cosmetics is a low-end material worth W1mn/kg compared to the high value-added pharmaceutical-grade HA priced 40-fold dearer. Most of the pharmaceutical HA market is dominated by makers from developed countries such as the US and Japan. The production of pharmaceutical HA is becoming more like a process industry that requires massive facilities, while cosmetics-use HA can be made without huge capex. In addition, only a few companies with deep pockets and technological prowess command the pharmaceutical HA market due to the need for refining technology. As such, we believe makers who have gained advanced technology and production capacity via early capex efforts will likely benefit the most.

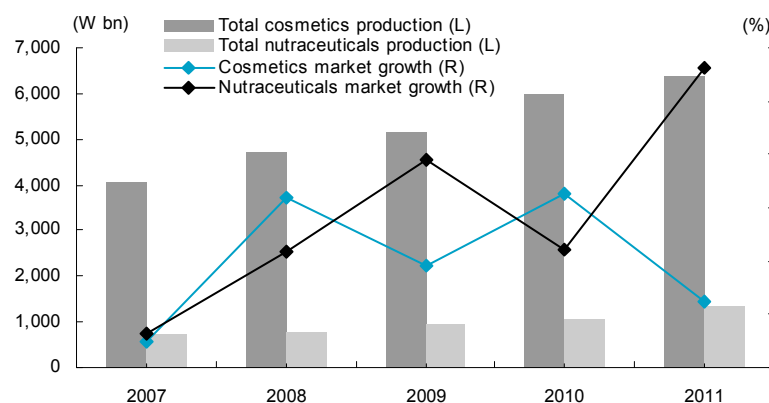
Focus on Bioland, the leading HA player

Bioland that started producing HA in 2011 has widened its applications to cosmetics, nutraceuticals and pharmaceuticals. It has already secured refining technology and facilities and is considering a capacity addition to generate sales of W50bn in line with the market's expansion. We expect it to maintain its early lead in the HA market and post HA sales of W16bn in 2013F and W20bn in 2014F.

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Domestic cosmetics and nutraceuticals market size and growth



Source: Korea Health Industry Development Institute, Ministry of Food & Drug Safety, Korea Investment & Securities

Sector report focus

□ What is the report about?

- Analyze growth potential of the HA market and related firms with ingredients marketing becoming increasingly prevalent
- Related companies are divided between those that make 1) HA or 2) end-products using HA; We favor HA makers
- HA has broad applications in beauty and healthcare industries and is used in cosmetics, health supplement foods and joint supplements, which means demand should spike in tandem with the growth of the aforementioned industries

HA market

(W bn)

	Market value (2005)	Projected value (2015)
Global	2,500	7,500
Korea	55	300

Note: Projections based on data from Frost & Sullivan (2004), Datamonitor (2006), etc.
Source: Korea Biotechnology Industry Organization, Korea Investment & Securities

- In the HA market, demand for pharmaceuticals related to quality of life is rising steadily due to a larger aging population and changing attitudes about cosmetic surgery; Of note, about 90% of the elderly (+60 years) are diagnosed with osteoarthritis and the cosmetic surgery pharmaceuticals market is posting solid growth of more than 200% p. a.

□ Key assumptions and valuation

- Types of HA include Japan-made high-quality/high-priced, China-made low-quality/low-priced and Korea-made mid-quality/mid-priced that sits between the two
- In the case of the low-priced type, ingredients can have side effects and for the high-priced type, a cost pass-through to end-products is inevitable; As such, we believe Korea-made mid-priced HA in the mid-range segment has the biggest growth potential
- Bioland trades at 14.2x 2013F PE and 11.4x 2014F PE, and is overly discounted to downstream industries (KIS cosmetics 23.5x 2013 and 19.0x 2014 and KIS pharmaceuticals 24.8x 2013 and 19.3x 2014)

□ Risks/opportunities

- Potential development of an alternative substance to HA: Although HA is the most efficient at retaining moisture among all biomaterials in existence, it could be replaced if another substance with better moisture retention properties is developed (low possibility)
- Mandatory labeling of ingredients and dosages for cosmetics and health supplement foods is increasingly being enforced and discerning consumers have started to base their choices on the inclusion of materials such as HA; These are favorable changes and should help grow the market

□ Sector highlights

1) Cosmetics/food ingredients market

- With major cosmetics firms such as AmorePacific increasing OEM production and focusing on brand names and marketing, cosmetics/food ingredients customers are being diversified; Aside from established products, small companies are aggressively penetrating the cosmetics/food market, which is helping the client base expand
- Although there are many cosmetics/food ingredients makers, most are small and focus on a single item, so it is difficult for them to keep up with rapidly changing trends

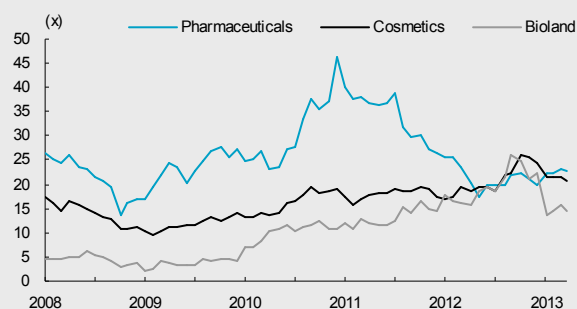
2) HA market

- Range of HA applications: 1) nutraceuticals (health foods), 2) cosmetics, 3) artificial joints and 4) vision care
- Domestic HA market estimated at W50bn (cosmetics 40%, pharmaceuticals 40% and food 20%)
- Priced at W1mn/kg for cosmetics, W1.3mn/kg for food and W40mn/kg for pharmaceuticals
- Pharmacopeia standards for pharmaceutical-use HA are quite strict. As such, the production of pharmaceutical HA is becoming more like a process industry that requires large capex for technologies used for cultivating microorganisms that can be converted into high polymers and refining ingredients into high-purity substances.
- Major HA producers are the US' Genzyme and BTG (pharmaceutical-use) and China's Shandong Freda and Czech's Contipro (cosmetics-grade)

□ Peer comparison

- Bioland has valuation merit, trading at a 40% discount to downstream industries (cosmetics and pharmaceuticals)

12MF PE trend: Pharmaceuticals, cosmetics, Bioland



Note: Pharmaceuticals' average 12MF PE is the simple average of the top six firms; Excluded some companies from the average due to PE distortion caused by operating losses (Dong-A ST, formerly Dong-A Pharm, from Jun 2006 to Jun 2007, and Hanmi Pharm from Jun 2009 to Jan 2012)

Source: Korea Investment & Securities

Contents

I. Multi-role ingredient hyaluronic acid.....	2
1. HA market overview & outlook	
2. From cosmetics/nutraceuticals to pharmaceuticals	
II. Top pick	7
1. Bioland (052260)	

I. Multi-role ingredient hyaluronic acid

Era of ingredients marketing

“Ingredient marketing” is an advertising tool that draws consumers’ attention to a unique substance in a food product or cosmetics. Vitamin-enriched energy drink Vita 500, tablet or liquid-type Edible Collagen or ground ginseng drink KoRoot are examples. The mandatory labeling of all ingredients in Korean, fully implemented for cosmetics as of 2008, has accelerated ingredient marketing and encouraged the use of renowned ingredients in product names. As consumers are getting more conscious about materials and their effects in cosmetics and food products, we believe ingredients marketing will remain popular.

Leading ingredient HA

In the cosmetics and nutraceuticals industries, hyaluronic acid (HA) has emerged as a hot product. HA, present in skin cells along with well-known proteins like elastin and collagen, is called a “moisture magnet” due to its unique ability to hold more than a litre of water per gram. The ingredient debuted as an excellent humectant for cosmetics and is now enthusiastically used as filler in plastic surgery. Its applications are also widening to arthritis treatment (syringe), adhesion prevention, lubricant eye drops, shampoo and foods.

1. HA market overview & outlook

HA is known for its excellent moisture retention properties

HA is a substance in skin cells along with elastin and collagen. HA can hold 1,000ml of water per gram and is known for its excellent moisture retention properties. The gel-like substance is naturally found in joints, cartilage and tissues and it binds large quantities of water in the skin. Recently, one of the major changes in the skincare market has been women’s growing preference for “healthy and glowing moist skin” over “spotless white skin”. The key to glowing moist skin lies in hydration and it is HA that plays the most important role to keep it moisturized. HA not only supplies nutrients and moisture to the cells in the dermis but keeps moisture from evaporating. In addition, HA acts as a type of lubricant that facilitates the movement of collagen and elastin between cells. Given its main features to retain moisture, prevent wrinkles and provide elasticity, HA is highly touted in the cosmetics and medical industries. Moreover, its application has been spreading to contact lenses to prevent dry eyes.

Table 1. Notable cases of ingredients marketing

Ingredients	Effects	Products
Olive	Detox, skin cell regeneration	- Innisfree Olive Real Skin
Plant stem cell	Boost skin metabolism	- Iope Plant Stem Cell Skin
Peptide	Wrinkle repair, skin elasticity, hydration	- Isa Knox HD-Active - Somang Cosmetics Essor
Recovery complex	Skin aging prevention	- Lacvert Time Repair Skin Returning
Omega-3	Improve skin elasticity	- Coreana Sheniz
Cordyceps sinensis	Vitalize skin	- Missha Choboyang Eye Cream
Caviar	Boost skin regeneration	- Sheniz Absolute Revitalizing
Glucosamine	Moisturize skin	- Zeniswell Ultra Moisture Serum
Royal jelly	Hydration, antibiotic	- SKINFOOD Honey & Royal Jelly
Eleutherococcus senticosus	Skin cell regeneration	- Coreana Oriental Boyoon Massage Cream
Retinyl retinoate	Strengthen skin barrier, ultra-hydration	- Enprani Retino X8
RGIT	Deep wrinkle treatment	- Somang Cosmetics Danahan RGIT
Camellia oil	Antioxidant, anti-inflammatory	- Redflo Camellia Hair Basic Body line
Fermented deer antler	Boost skin metabolism	- Somang Cosmetics Danahan Hyoyong Skin Toner
Tissue-cultured mountain ginseng extract	Vitalize skin, improve hydration	- Hankook Cosmetics Sansim
Rape blossoms, mandarin orange	Active oxygen prevention, skin nutrition	- Hanbul Cosmetics Reorom
Rubus coreanus	Skin nutrition, antioxidant	- SKINFOOD Rubus Coreanus line
Black sugar	Skin aging prevention, hydration	- SKINFOOD Black Sugar Mask Pack

Source: Korea Investment & Securities

Domestic HA market is expected to grow from W50bn at present to W150bn in the next five years

The domestic HA market is expected to grow from the current W50bn up to W150bn in the next five years. The current market size would be much larger than W50bn given that it only takes external sales into account while some pharmaceutical companies produce HA internally as a raw material for finished products. HA is used mainly in cosmetics, pharmaceuticals and health supplements. Domestically, the HA market breaks down to 40% cosmetics, 40% pharmaceuticals and 20% health supplements.

Production of high-end HA for pharmaceuticals increases

HA used for cosmetics is a low-end material worth W1mn/kg. In contrast, pharmaceutical-grade HA is high value-added material that sells for ~W40mn/kg. Pharmacopeia standards for pharmaceutical-use HA are quite strict and developed countries such as the US and Japan are dominating the market. Making HA for cosmetics is possible without huge capex. But refining technology is essential for pharmaceutical-use HA, which allows only top-tiers with investment and technological capacity to dominate the market. In the pharmaceutical segment, HA production is moving toward the process industry, suggesting that companies with limited capacity will fall behind. Domestically, the cosmetics HA market is saturated with oversupply. Instead, the center of the HA market is shifting toward high-end HA for pharmaceuticals.

2. From cosmetics/nutraceuticals to pharmaceuticals

HA helps keep moisture in the skin and prevent aging

The dermis under the skin’s surface contains collagen, elastic fibers and HA that give tone and texture to the skin. As aging depletes the substances in the dermis, it causes skin to age as well. Many people feel pressured to look younger with the so-called “baby face fever” becoming a cultural trend, and this pushes them to buy products that will reverse the signs of aging. In response to the ever-growing demand, cosmetics companies are releasing many HA-based products ranging from oral to topical formulas.

HA is widely used as a base material for cosmetics

HA is widely used as a cosmetics material for its ability to retain moisture. And nearly all skincare products contain a small amount of HA. Many Japanese cosmetics firms use HA as a marketing keyword (e.g., HA-based cosmetics). In a survey of cosmetics and nutraceuticals OEMs in 2010 conducted by a Japanese newspaper, HA ranked the second most popular substance after collagen in the cosmetics segment. Korea is no exception in terms of HA’s popularity, as shown in the recent release of topical HA enhancers. Orally taken HA is also marketed in the growing “inner beauty” market that has embraced the concept of oral cosmetics.

Figure 1. HA cosmetics in topical formula



Source: Korea Investment & Securities

Figure 2. Oral HA cosmetics



Source: Korea Investment & Securities

Popular amid the “petit plastic surgery” wave

HA is widely used along with the wave of the so-called “petit plastic surgery” or non-surgical facial treatments in Korea. Next to the popular botox is the filler injection to artificially restore lost volume beneath the skin. HA is among the commonly used facial fillers. HA is also a component of the recently introduced “hydrated glow” injection administered to add luster to facial skin. It is a popular facial filler choice as only a short time is needed for administration and recovery. As it is a natural substance already present in skin, it triggers less adverse effects than foreign substances, which gives it a strength compared to plastic surgery.

Most popular as a filler

Along with higher income levels, women who wish to enhance their looks turn to filler injection and HA is at the center of the craze. Korea’s dermal filler market has grown 20% from W60bn in 2009 to W70bn in 2011 and is pegged to exceed W100bn in 2013F. Fillers can be categorized as HA-based and non-HA based, and collagen, calcium, etc. are examples of the latter. HA-based fillers account for 80% of the total market and even 90% in the US, the world’s largest. As such, their safety and efficacy are well recognized.

A treatment for joints in Japan and Korea

HA is better known in Japan than in Korea. In Japan, HA is used not only for oral beauty supplements and cosmetics but also as a treatment for joints. As the nation became an aged society in the 2000s, the joint/bone-related market ballooned. Bioland, a leading HA maker in Korea, generates 30% of its sales by supplying HA for knee joints to 27 domestic pharmaceutical firms.

Most widely used HA-based pharmaceutical is eye drops

As for sodium hyaluronate, there has been debate about whether it should be re-classified as an over-the-counter (OTC) drug or remain as prescription-only. The Ministry of Food & Drug Safety’s (MFDS) latest verdict is that most HA-based eye drops can be used as both OTC and prescription-only by classifying them as “both categories”. As artificial tears previously available as prescription-only can now be purchased over the counter at pharmacies, the lubricant eye drop market should grow. Interojo developed a new sodium hyaluronate-based contact lens material called Ultra Soo which boasts high water content and oxygen permeability.

Table 2. Examples of HA-based drugs

	HA-based products	Latest development update
Ildong Pharmaceutical	Hyalq: Eye drop (for ophthalmic-use); Knee joint injection	Began HA mass-production at the EU-GMP-grade facility in Cheongju (targeting both Korean and overseas markets)
Dongkook Pharmaceutical	Bellast: Filler to erase wrinkles	Released Bellast, an in-house product, in Korea Obtained CE1293, a springboard to advance overseas Signed export contracts with 30 overseas partners
LG Life Sciences	Declage, Eutropin and Eutropin Plus: Human growth hormones Yvoire: Dermal filler Hyruan Plus: Viscosupplement	Applied for US Food & Drug Administration approval for Eutropin Plus
Huons	Elravie Deep Line: Filler	Released by subsidiary Humedix

Source: DART, Korea Investment & Securities

Figure 3. Interjo's HA application technology: Ultra Soo **Figure 4. LG Life Sciences' filler: Yvoire**



Source: Korea Investment & Securities



Source: Korea Investment & Securities

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Top pick

Bioland (052260) 8



Bioland (052260)

BUY (Initiate), TP: W20,000

Stock price (Apr 19, KRW)	15,100
Market cap (USD mn)	203
Shares outstanding (mn)	15
52W High/Low (KRW)	19,950/10,300
6M avg. daily turnover (USD mn)	3.6
Free float (%)	62.4
Foreign ownership (%)	3.1

Yr to	Sales	OP	EBT	NP	EPS	% chg	EBITDA	P/E	EV/EBITDA	P/B	ROE
Dec	(W bn)	(W bn)	(W bn)	(W bn)	(KRW)	(YoY)	(W bn)	(x)	(x)	(x)	(%)
2011A	68	16	15	14	915	9.2	19	14.3	10.8	2.1	16.6
2012A	73	16	15	10	676	(26.1)	23	22.9	10.7	2.3	10.4
2013F	85	20	19	16	1,065	57.6	27	14.2	8.7	2.0	15.0
2014F	100	24	23	20	1,330	24.9	31	11.4	7.3	1.8	16.6
2015F	120	30	30	25	1,665	25.2	37	9.1	5.9	1.5	18.1

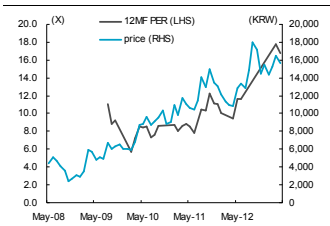
Note: NP and EPS based on adj. NP (equity-method gains/losses reflected)

Korea's no. 1 natural ingredients maker and leading HA player with record earnings outlook for 2013

Performance

	1M	6M	12M
Absolute (%)	(11.2)	(5.9)	43.8
Rel. to Kospi (%p)	(7.5)	(4.0)	48.5

12MF PER trend



BUY with TP W20,000: We initiate coverage of Bioland with BUY and a TP of W20,000 that equals 19.0x 2013 PE. The stock currently trades at 14.2x 2013 PE and 11.4x 2014 PE, and is overly discounted to downstream industries (KIS cosmetics 23.5x 2013 and 19.0x 2014 and KIS pharmaceuticals 24.8x 2013 and 19.3x 2014). Ingredients are gaining importance in the cosmetics, nutraceuticals (functional foods) and pharmaceuticals industries and related sales represent a rising portion. As such, Bioland, the leading supplier of natural ingredients with big growth potential and stable margins (OPM 21-25% over the past five years), should enjoy a substantial share rally.

Stable business portfolio: Bioland is the domestic no. 1 natural ingredients firm. It makes ingredients for cosmetics and nutraceuticals, and active pharmaceutical ingredients (API). The company also runs a biopharmaceuticals business that provides diagnostic reagents, tissue engineering products, etc. Bioland serves diverse downstream industries and has a wide pool of customers. The company has been able to deliver stable growth as its downstream industries are relatively immune from changing economic conditions.

Growth potential backed by natural/functional ingredients: As consumers are getting more health-conscious, natural/functional ingredients are gaining importance not only for pharmaceuticals but for cosmetics and foods. It has become common in cosmetics, from low to high-end, that synthetic materials are fortified with function-promoting additives such as natural extracts or fermented ingredients. Also for nutraceuticals, there are aggressive releases of new or upgraded products added with natural ingredients. Oriental raisin extracts and hyaluronic acid (HA), whose merits were not widely known before, are gaining enormous popularity. Such trends should continue and Bioland will likely benefit a lot as the natural ingredients market leader. The company's sales of ingredients used in cosmetics and nutraceuticals jumped 30% and 73%, respectively, over the past three years. Following hit products such as red ginseng extract powder and oriental raisin extracts, ingredients such as emerging star HA are settling in as steady sellers and should build up new growth momentum.

Leading HA player: Hyaluronan, extensively used in cosmetics, nutraceuticals and API, is a valuable sales driver for Bioland. Adding HA to cosmetics and nutraceuticals keeps skin moisturized, improves skin tone, prevents harmful oxidization, etc. In API, HA is used as a filler for plastic surgery, arthritis treatment, artificial tears (lubricant eye drops) and so forth. Bioland began the domestic production of HA in 2011 that was earlier entirely imported from Japan. The company's HA is gradually replacing Japanese products. The domestic HA market

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is currently estimated at W50bn but experts say it will grow to be worth W150bn backed by the ingredient's greater use in foods and pharmaceuticals. Bioland's current HA production capacity can generate sales of W20bn. It is considering adding capacity to bump up to W50bn given the pace of market expansion. We expect it to build a presence earlier than rivals and maintain the lead position as other domestic HA makers such as LG Household & Health Care, Ildong Pharmaceutical and Humedix are using it for internal use rather than putting it on the market. We peg Bioland's HA sales to reach W16bn in 2013F (cosmetics 60%, pharmaceuticals 30%, food 10%) and W20bn in 2014F.

Foray into China offers further growth momentum: A more visible entry to the Chinese market looks also positive. With a W5bn investment, Bioland has been building local facilities to generate annual sales of W30bn. The plants should come on stream in 2014. At an initial phase of operation, Chinese facilities are likely to handle the second processing and sale of products from Korean facilities. But the final goal should be the direct processing of raw materials procured from local sources. Target customers in China include Korean and multinational firms operating there and local companies. Given the quality and reliability gap with local rivals, we expect Bioland to get a firm presence in China, starting with cosmetics ingredients.

2013 earnings outlook: We peg 2013 sales at W85bn (+17% YoY) and OP at W20bn (+28% YoY). The restructuring of production bases for efficient operation (cosmetics in Cheonan, nutraceuticals in Ansan, medical equipment & API in Ochang and supply to AmorePacific in Osong) should bolster margins.

Figure 5. Annual sales

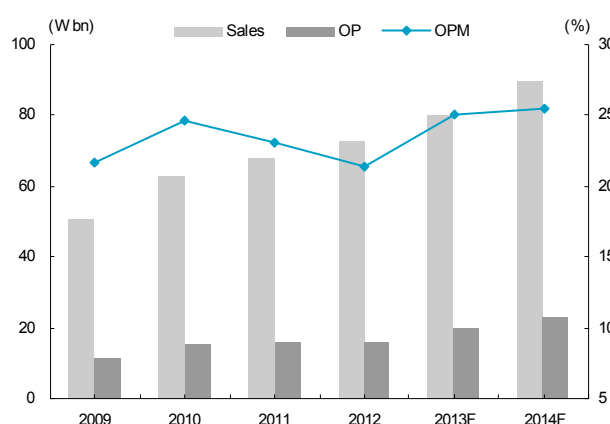


Table 3. Sales breakdown

	(W bn, %)					
	2009	2010	2011	2012	2013F	CAGR
Cosmetics ingredients	31.6	39.2	38.8	41.1	45.0	6.8
Nutraceuticals ingredients	11.4	17.1	20.6	19.6	25.0	14.5
API	3.8	3.3	4.0	5.1	6.5	7.6
Medical equipment	4.2	2.8	4.6	7.0	8.5	13.6
Total	51.0	62.5	68.0	72.8	85.0	9.3

Source: Korea Investment & Securities

Source: Korea Investment & Securities

Table 4. Ingredients and major customers by division

	Ingredients	Usage	Major customers
Cosmetics ingredients	Natural: ~350 incl. purslane Synthetic: ~10 incl. albutin Fermented: ~30 incl. HA	Ingredients for high-end cosmetics (non-toxic and non-reactive) with the addition of herb extracts, fermentation of microbe and organic synthesis	Korea: ~270 incl. AmorePacific, LG Household & Health Care, TheFaceShop, Coreana Overseas: ~30 incl. L'Oreal, P&G, Unilever, J&J, Guerlain, Shiseido and Christian Dior
Nutraceuticals ingredients	Registered: 18 incl. red ginseng extract powder Individually approved: HA, isoflavones, oriental raisin extracts	Ingredients for health supplement foods or functional foods made based on fermentation/bioconversion/natural extract development technologies accumulated over decades	~100 incl. Korea Yakult, Kwang Dong Pharmaceutical, Namyang Dairy Products, AmorePacific, Korea Ginseng Corp., Pacific Pharma and Maiim
API	Mugwort extracts Ingredients for Baekcho Syrup: 8 incl. licorice Ingredients for pain relief patch: 3 incl. amur cork tree bark	Ingredients for pharmaceuticals made through the extraction, separation, refining and enrichment of efficacious elements from herbal medicines	Dong Wha Pharm, Green Cross

Source: Company data, Korea Investment & Securities

Figure 6. Cosmetics applications

Figure 7. Nutraceuticals applications

Figure 8. API applications



Source: Company data

Source: Company data

Source: Company data

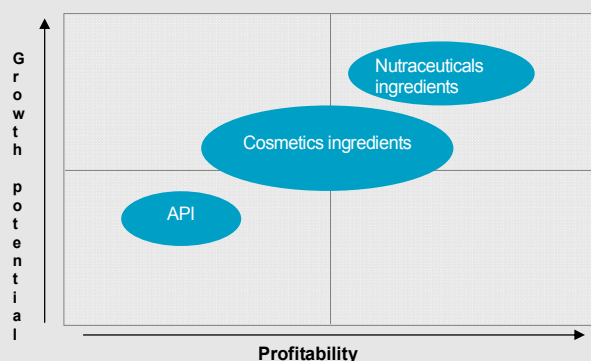
Company overview

- ❑ **Main business:**
Korea's no. 1 natural ingredients maker (cosmetics, nutraceuticals and pharmaceuticals)
- ❑ **Major shareholders:**
Chairman Lee Taek-seon and eight others (31.6%), Interlees (5.6%)

EQ

- Growth potential: ★★★★★
- Earnings stability: ★★★★★
- Company reliability: ★★★★★

Growth potential and profitability by division



Key variables for EV and share price

- Launch of cosmetics end-products
- Export of cosmetics ingredients to China and building a local production base
- Expansion of nutraceuticals market

Risks

- Fiercer competition in the cosmetics ingredients market due to newcomers
- Lingering cost burden from facility expansion

Product	Sales (% of total)	OPM	3C			Others
			Company	Customers	Competitors	
Cosmetics ingredients	₩41.1bn (56%)	25-30%	<ul style="list-style-type: none"> • ~400 ingredients incl. natural extracts, fermented or synthetic materials 	<ul style="list-style-type: none"> • Cosmetics firms or ODM/OEM in Korea and abroad incl. AmorePacific, Korea Kolmar, L'Oreal and Shiseido 	<ul style="list-style-type: none"> • Mostly small companies dedicated to a few products 	<ul style="list-style-type: none"> • Product quality has been confirmed via sale to Korean and large overseas firms • Growing demand from China • Korea's functional ingredients market estimated at ₩150bn
Nutraceuticals ingredients	₩19.6bn (27%)	25-30%	<ul style="list-style-type: none"> • Functional food ingredients such as oriental raisin/red ginseng/soybean extracts 	<ul style="list-style-type: none"> • ~90 food companies and pharmaceutical firms incl. Kwang Dong Pharmaceutical 	<ul style="list-style-type: none"> • Mostly small companies with low product quality 	<ul style="list-style-type: none"> • Product quality has been confirmed via sale to large firms
API/medical equipment	₩12.1bn (17%)	0-5%	<ul style="list-style-type: none"> • API for Baekcho Syrup (Green Cross) and Stillen (Dong-A Pharm), HA and diagnostic kits 	<ul style="list-style-type: none"> • Pharmaceuticals incl. Green Cross 	<ul style="list-style-type: none"> • Many in Korea and abroad 	<ul style="list-style-type: none"> • Designated as a leading developer of new natural extract drugs by the Ministry of Knowledge Economy

Balance sheet

FY-ending Dec. (W bn)	2011A	2012A	2013F	2014F	2015F
Current assets	40	53	60	69	83
Cash & cash equivalents	9	12	14	15	17
Accounts & other receivables	13	13	15	19	22
Inventory	18	19	22	25	31
Non-current assets	89	95	98	102	109
Investment assets	10	15	17	20	25
Tangible assets	75	75	75	75	75
Intangible assets	2	2	2	2	3
Total assets	129	147	158	171	192
Current liabilities	15	10	10	8	9
Accounts & other payables	11	5	6	7	9
ST debt & bonds	2	2	1	0	0
Current portion of LT debt	1	0	0	0	0
Non-current liabilities	20	36	34	31	29
Debentures	0	0	0	0	0
LT debt & financial liabilities	14	31	28	24	20
Total liabilities	35	46	44	40	38
Paid-in capital	8	8	8	8	8
Capital surplus	20	20	20	20	20
Capital adjustments	0	0	0	0	0
Retained earnings	66	74	87	104	126
Shareholders' equity	93	101	114	131	154
Adj. shareholders' equity	93	101	113	128	148

Cash flow

FY-ending Dec. (W bn)	2011A	2012A	2013F	2014F	2015F
C/F from operations	15	12	19	21	24
Net profit	14	10	16	20	25
Depreciation	3	7	7	7	7
Amortization	0	0	0	0	0
Net incr. in W/C	(1)	(9)	(5)	(7)	(9)
Others	(1)	4	1	1	1
C/F from investing	(24)	(21)	(11)	(12)	(15)
Capex	(29)	(8)	(7)	(8)	(8)
Decr. in fixed assets	0	0	0	0	0
Incr. in investment	5	(13)	(2)	(3)	(5)
Net incr. in intangible assets	0	(0)	(0)	0	(0)
Others	0	0	(2)	(1)	(2)
C/F from financing	9	12	(7)	(8)	(7)
Incr. in equity	0	0	0	0	0
Incr. in debt	12	16	(4)	(5)	(4)
Dividends	(3)	(3)	(3)	(3)	(3)
Others	0	(1)	0	0	0
C/F from others	0	(0)	0	0	0
Increase in cash	(0)	3	2	1	2

Note: 1. K-IFRS (non-consolidated)
2. EPS and BPS are calculated using adjusted net profit and shareholders' equity that includes equity-method gains/losses

Income statement

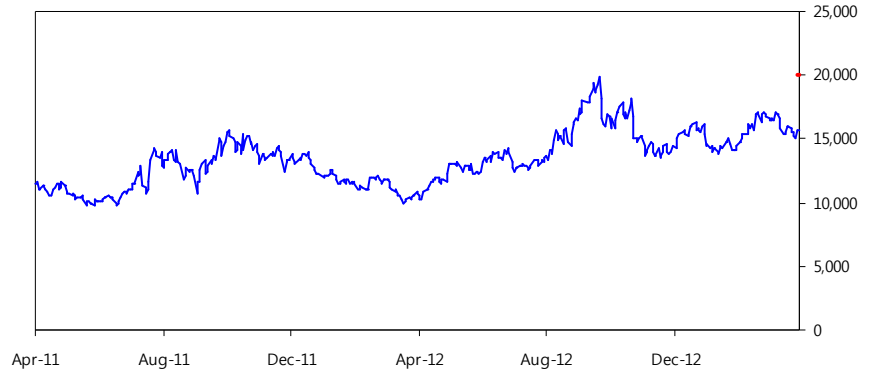
FY-ending Dec. (W bn)	2011A	2012A	2013F	2014F	2015F
Sales	68	73	85	100	120
Cost of Sales	38	43	49	57	68
Gross Profit	30	30	36	43	53
SG&A Expense	14	14	16	19	22
Operating profit	16	16	20	24	30
Financial income	1	0	0	1	1
Interest income	0	0	0	0	0
Financial expenses	0	1	2	1	1
Interest expenses	0	1	1	1	1
Other non-operating profit	(1)	0	0	0	1
Gains (Losses) in associates, subsidiaries and JV	0	0	0	0	0
Earnings before tax	15	15	19	23	30
Income taxes	2	4	3	4	5
Net profit	14	10	16	20	25
Other comprehensive profit	(0)	0	0	0	0
Total comprehensive profit	13	11	16	20	25
EBITDA	19	23	27	31	37
Adj. net profit	14	10	16	20	25

Key financial data

FY-ending Dec.	2011A	2012A	2013F	2014F	2015F
Per-share data (KRW)					
EPS	915	676	1,065	1,330	1,665
BPS	6,219	6,710	7,510	8,530	9,845
DPS	200	200	200	200	200
Growth (%)					
Sales growth	8.8	7.2	16.7	17.6	20.0
OP growth	2.1	(0.6)	28.3	19.9	25.2
NP growth	9.2	(26.1)	57.6	24.9	25.2
EPS growth	9.2	(26.1)	57.6	24.9	25.2
EBITDA growth	5.3	19.0	20.3	15.2	19.3
Profitability (%)					
OP margin	23.1	21.4	23.5	24.0	25.0
NP margin	20.2	13.9	18.8	20.0	20.8
EBITDA margin	27.9	31.0	31.9	31.3	31.1
ROA	11.8	7.5	10.5	12.1	13.8
ROE	16.6	10.4	15.0	16.6	18.1
Dividend yield	1.5	1.3	1.3	1.3	1.3
Stability					
Net debt (W bn)	8	13	7	(1)	(9)
Debt/equity ratio (%)	18.5	32.7	25.4	18.3	13.0
Valuation (x)					
PE	14.3	22.9	14.2	11.4	9.1
PB	2.1	2.3	2.0	1.8	1.5
PS	2.9	3.2	2.7	2.3	1.9
EV/EBITDA	10.8	10.7	8.7	7.3	5.9

Changes to recommendation and price target

Company (Code)	Date	Recommendation	Price target
Bioland (052260)	11-18-11	NA	-
	04-22-13	BUY	₩20,000



■ **Guide to Korea Investment & Securities Co., Ltd. stock ratings based on absolute 12-month forward share price performance**

- BUY: Expected to give a return of +15% or more
- Hold: Expected to give a return between -15% and +15%
- Underweight: Expected to give a return of -15% or less
- Korea Investment & Securities does not offer target prices for stocks with Hold or Underweight ratings.

■ **Guide to Korea Investment & Securities Co., Ltd. sector ratings for the next 12 months**

- Overweight: Recommend increasing the sector's weighting in the portfolio compared to its respective weighting in the Kospi (Kosdaq) based on market capitalization.
- Neutral: Recommend maintaining the sector's weighting in the portfolio in line with its respective weighting in the Kospi (Kosdaq) based on market capitalization.
- Underweight: Recommend reducing the sector's weighting in the portfolio compared to its respective weighting in the Kospi (Kosdaq) based on market capitalization.

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