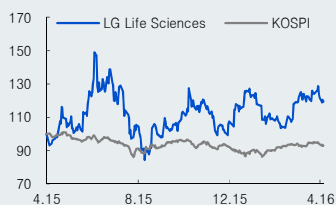


## Healthcare

Event Summary  
May 9, 2016

|                           |               |
|---------------------------|---------------|
| (Maintain)                | <b>Buy</b>    |
| Target Price (12M, W)     | <b>92,000</b> |
| Share Price (05/04/16, W) | <b>67,300</b> |
| Expected Return           | <b>37%</b>    |

|                            |           |           |            |
|----------------------------|-----------|-----------|------------|
| OP (16F, Wbn)              | 37        |           |            |
| Consensus OP (16F, Wbn)    | 39        |           |            |
| EPS Growth (16F, %)        | 95.4      |           |            |
| Market EPS Growth (16F, %) | 16.2      |           |            |
| P/E (16F, x)               | 50.2      |           |            |
| Market P/E (16F, x)        | 10.8      |           |            |
| KOSPI                      | 1,976.71  |           |            |
| Market Cap (Wbn)           | 1,116     |           |            |
| Shares Outstanding (mn)    | 17        |           |            |
| Free Float (%)             | 69.0      |           |            |
| Foreign Ownership (%)      | 7.0       |           |            |
| Beta (12M)                 | 1.96      |           |            |
| 52-Week Low                | 47,600    |           |            |
| 52-Week High               | 84,000    |           |            |
| <b>(%)</b>                 | <b>1M</b> | <b>6M</b> | <b>12M</b> |
| Absolute                   | -4.5      | 3.7       | 28.2       |
| Relative                   | -4.4      | 7.7       | 38.3       |



### Daewoo Securities Co., Ltd.

[Healthcare]

Hyun-tae Kim  
+822-768-3251  
hyuntae.kim@dwsec.com

Seung-min Kim  
+822-768-4157  
sm.kim@dwsec.com

# LG Life Sciences

(068870 KS)

## Core products to accelerate top-line growth

### Domestic NDR feedback

We recently accompanied LG Life Sciences (LGLS) on a domestic non-deal roadshow (NDR) from May 2<sup>nd</sup> to 4<sup>th</sup>, meeting with a total of 11 investors.

Key areas of interest were: 1) 1Q16 earnings results, 2) sales of Yvoire in China and Korea, 3) sales of in-house developed diabetes drug Zemiglo in Korea and overseas, 4) combination vaccine Eupenta (diphtheria, tetanus, whooping cough, hepatitis B, and meningitis), and 5) pipeline developments.

Management highlighted 1) strong sales of Yvoire in China and Korea, 2) the positive effects of the Zemiglo co-promotion deal with Daewoong Pharmaceutical, 3) expectations of Eupenta orders, and 4) progress in its pipeline. By unit, Yvoire is currently the second best-selling filler in China. As for Zemiglo, domestic sales have been thriving, boosted by the co-promotion deal with Daewoong, while exports of the diabetes treatment are anticipated to begin in 2016. Regarding Eupenta, the company expects to win a UNICEF contract this year. On the pipeline front, the company expects to deliver progress in its biosimilars and myocardial infarction treatment.

The recent NDR confirmed our view that the company's earnings power is strengthening. In particular, we see strong visibility for Yvoire and Zemiglo sales and expect Eupenta sales to begin full swing in 2016. In the medium and long term, we believe robust sales of Yvoire, Zemiglo, and Eupenta will drive top-line and margin expansion.

### Watch for Eupenta orders in 2Q16

LGLS has supplied hepatitis B vaccines to UNICEF for the past two decades. Given its solid track record, we see a strong chance the company will be awarded with part of the organization's pentavalent vaccine contract. The results of the first tender round are expected to come out in 2Q16. The first round will cover 80% of the supply needs for 2017-18, respectively. Full-year awards are estimated at approximately 150mn doses, and average price has been around US\$2 per dose.

We project annual sales of Eupenta to reach W20bn in 2016 and W50bn in 2017 (with the 2016 revenue coming from spot orders), providing a lift to revenue and margins.

### Our second-most preferred stock in pharmaceuticals

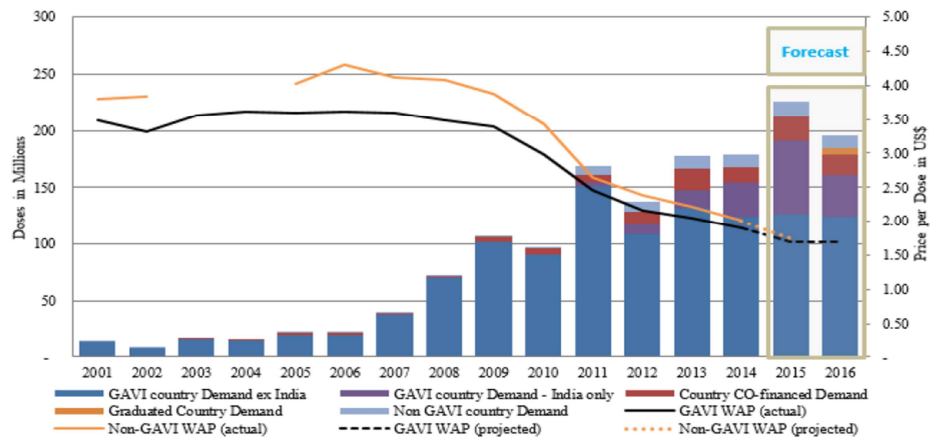
We maintain our Buy call and target price of W92,000 on LGLS, which is our second-most preferred stock in pharmaceuticals. We continue to believe profits will expand on the back of increasing sales of core pharmaceutical products, and that fundamentals will strengthen in the medium and long term, supported by the overseas expansion of in-house developed products.

| FY(Dec.)      | 12/13 | 12/14 | 12/15 | 12/16F | 12/17F | 12/18F |
|---------------|-------|-------|-------|--------|--------|--------|
| Revenue (Wbn) | 417   | 426   | 451   | 514    | 570    | 648    |
| OP (Wbn)      | 14    | 16    | 25    | 37     | 46     | 59     |
| OP margin (%) | 3.4   | 3.8   | 5.5   | 7.2    | 8.1    | 9.1    |
| NP (Wbn)      | 3     | -2    | 12    | 23     | 27     | 34     |
| EPS (W)       | 194   | -125  | 686   | 1,339  | 1,612  | 1,993  |
| ROE (%)       | 1.3   | -0.8  | 4.6   | 8.4    | 9.2    | 10.3   |
| P/E (x)       | 209.3 | -     | 88.4  | 50.2   | 41.7   | 33.8   |
| P/B (x)       | 2.7   | 2.4   | 4.0   | 4.0    | 3.7    | 3.3    |

Notes: All figures are based on consolidated K-IFRS; NP refers to net profit attributable to controlling interests  
Source: Company data, Daewoo Securities Research estimates

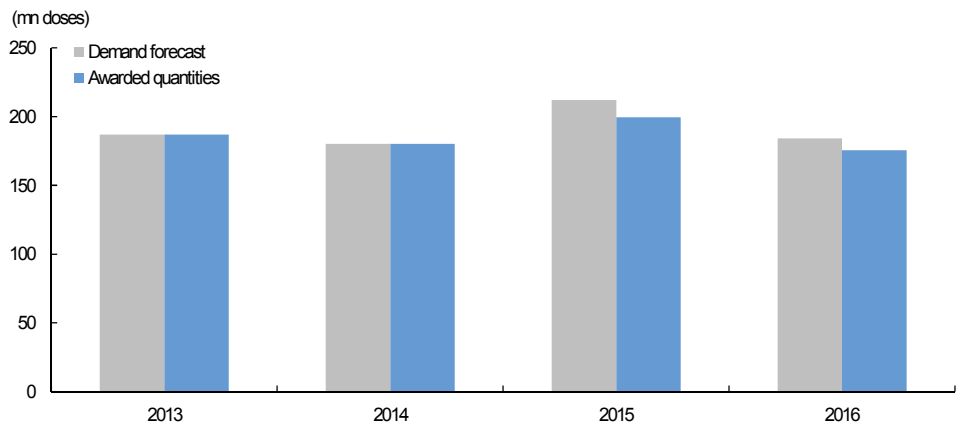
Analysts who prepared this report are registered as research analysts in Korea but not in any other jurisdiction, including the U.S.  
PLEASE SEE ANALYST CERTIFICATIONS AND IMPORTANT DISCLOSURES & DISCLAIMERS IN APPENDIX 1 AT THE END OF REPORT.

**Figure 1. UNICEF pentavalent vaccine procurement and forecast**



Source: UNICEF, Daewoo Securities Research

**Figure 2. UNICEF's pentavalent vaccine demand forecast and awarded quantities**



Source: UNICEF, Daewoo Securities Research

**Table 1. UNICEF pentavalent vaccine long-term arrangement prices per dose**

(US\$)

| Vaccine                 | Manufacturer                            | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-------------------------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 dose<br>/liquid       | Biological E (India)                    |      |      |      |      |      |      |      |      |      |      |      |      | 2.35 | 2.35 | 2.30 | 2.25 |
|                         | Berna Biotech<br>(Republic of Korea)    |      |      |      |      |      | 3.63 | 3.75 | 3.60 | 3.60 | 2.80 | 2.80 | 2.80 | 1.95 | 2.40 | 2.35 | 2.35 |
|                         | Panacea Biotec (India)                  |      |      |      |      |      |      |      | 3.60 | 3.60 | 2.97 | 2.97 |      |      |      |      |      |
|                         | Shantha Biotechnics<br>(India)          |      |      |      |      |      |      |      | 2.90 | 2.70 | 2.70 |      |      |      |      |      |      |
|                         | Serum Institute of India                |      |      |      |      |      |      |      |      |      |      | 2.25 | 2.50 | 2.50 | 2.60 | 2.70 | 2.25 |
| 2 dose<br>/lyophilised  | GlaxoSmithKline<br>(Belgium)            | 3.50 | 3.25 | 3.10 | 3.65 | 3.60 | 3.60 | 3.50 | 3.50 | 3.50 | 2.95 | 2.95 | 2.95 | 2.95 | 2.95 |      |      |
|                         | LG Life Sciences<br>(Republic of Korea) |      |      |      |      |      |      |      |      |      |      |      |      | 1.97 | 1.96 | 1.95 | 1.94 |
|                         | Serum Institute of India                |      |      |      |      |      |      |      |      | 2.25 | 2.25 |      |      |      |      |      |      |
| 10 dose<br>/liquid      | Biological E (India)                    |      |      |      |      |      |      |      |      |      |      |      | 1.60 | 1.19 | 1.19 | 1.19 | 1.15 |
|                         | Biological E (India)                    |      |      |      |      |      |      |      |      |      |      |      |      |      | 1.80 | 1.94 | 1.94 |
|                         | Serum Institute of India                |      |      |      |      |      |      |      |      |      |      | 1.75 | 1.75 | 1.85 | 1.95 | 1.55 | 1.50 |
|                         |   |      |      |      |      |      |      |      |      |      |      | 2.10 | 2.10 | 2.10 | 2.10 | 1.71 | 1.66 |
| 10 dose<br>/lyophilised | Biological E (India)                    |      |      |      |      |      |      |      |      |      |      |      | 1.80 |      |      |      |      |

Source: UNICEF, Daewoo Securities Research

**Table 2. Quarterly and annual earnings**

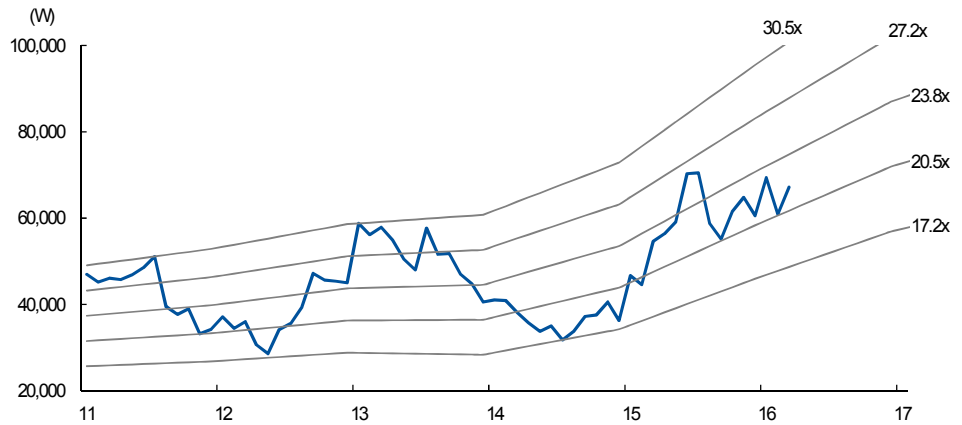
(Wbn, %, W)

|   | 1Q15 | 2Q15  | 3Q15  | 4Q15  | 1Q16P | 2Q16F | 3Q16F | 4Q16F | 2015  | 2016F   | 2017F   |
|---|------|-------|-------|-------|-------|-------|-------|-------|-------|---------|---------|
| Revenue   | 83.7 | 103.6 | 127.1 | 136.2 | 119.8 | 115.9 | 134.9 | 143.3 | 450.5 | 513.9   | 570.4   |
| YoY   | -6.0 | 4.9   | 18.9  | 4.0   | 43.2  | 11.9  | 6.1   | 5.2   | 5.9   | 14.1    | 11.0    |
| Pharmaceuticals                                     | 75.2 | 89.0  | 106.4 | 117.9 | 107.4 | 102.7 | 112.3 | 126.6 | 388.4 | 449.0   | 507.0   |
| Fine chemicals                                      | 8.5  | 14.6  | 20.7  | 18.3  | 12.4  | 13.3  | 22.6  | 16.6  | 62.1  | 64.9    | 63.4    |
| Operating profit                                    | -4.1 | 3.4   | 18.9  | 7.0   | 17.1  | 4.6   | 7.2   | 8.0   | 25.2  | 37.0    | 46.3    |
| OP margin   | -4.9 | 3.3   | 14.9  | 5.1   | 14.3  | 4.0   | 5.4   | 5.6   | 5.6   | 7.2     | 8.1     |
| YoY   | RR   | TTB   | 239.2 | -54.9 | TTB   | 35.2  | -61.7 | 14.3  | 55.6  | 46.7    | 25.1    |
| Pretax profit                                       | -6.4 | 1.2   | 16.0  | 3.1   | 14.9  | 2.3   | 4.9   | 5.5   | 13.9  | 27.5    | 33.1    |
| YoY   | RR   | TTB   | 622.2 | -66.2 | TTB   | 92.7  | -69.5 | 73.5  | 547.4 | 98.0    | 20.4    |
| Net profit attributable<br>to controlling interests | -5.0 | 0.9   | 13.2  | 2.4   | 12.2  | 1.9   | 4.0   | 4.5   | 11.5  | 22.5    | 27.1    |
| YoY   | RR   | TTB   | 549.2 | -41.7 | TTB   | 115.7 | -69.8 | 83.7  | TTB   | 95.4    | 20.4    |
| EPS   |      |       |       |       |       |       |       |       | 685.6 | 1,339.4 | 1,612.4 |
| YoY   |      |       |       |       |       |       |       |       | TTB   | 95.4    | 20.4    |

Notes: TTB and RR refer to "turning to black" and "remaining in red," respectively

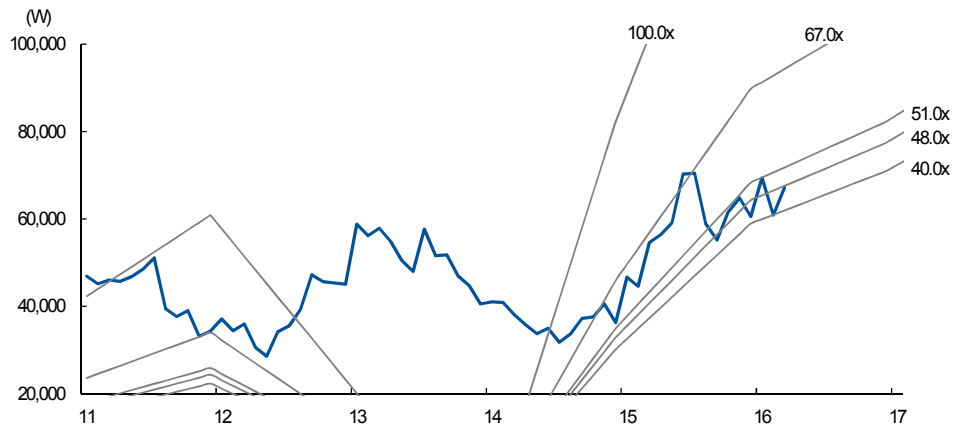
Source: Company data, Daewoo Securities Research estimates

**Figure 3. 12-month forward EV/EBITDA band**



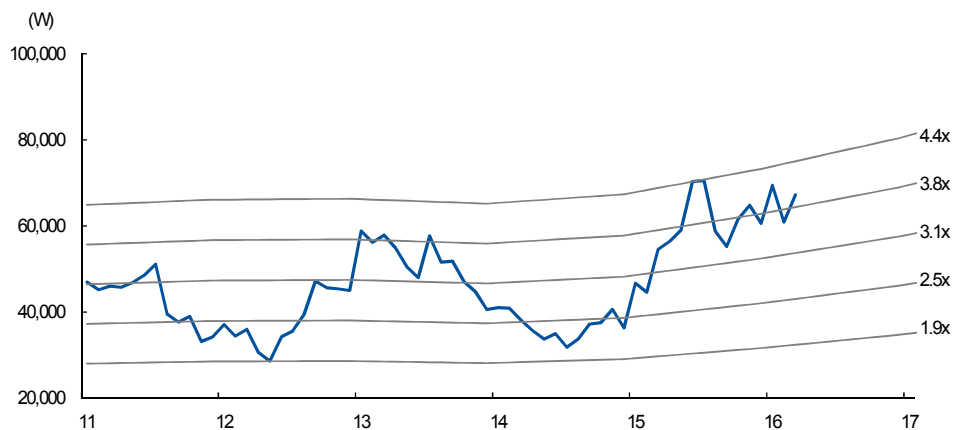
Source: Daewoo Securities Research

**Figure 4. 12-month forward P/E band**



Source: Daewoo Securities Research

**Figure 5. 12-month forward P/B band.**



Source: Daewoo Securities Research

**Table 3. Pipeline overview**

|                | Products              | Indication                     | Drug search | Preclinical | Phase 1 | Phase 2 | Phase 3 | NDA |
|----------------|-----------------------|--------------------------------|-------------|-------------|---------|---------|---------|-----|
| Biologics      | Follitrope (Global)   | Infertility                    |             |             |         |         | →       |     |
|                | Espogen (Global)      | Anemia (chronic renal failure) |             |             |         |         |         | →   |
| Vaccine        | LBVC                  | Poliomyelitis prevention       | →           |             |         |         |         |     |
|                | LBVD                  | D/T/P/HBV/M/IPV prevention     |             | →           |         |         |         |     |
|                | LBVE                  | Pneumonia prevention           |             | →           |         |         |         |     |
| NME            | LC280126              | Myocardial infarction          |             |             |         | →       |         |     |
| IMD            | ZemiStatin            | Diabetes/hyperlipidemia        |             |             |         |         | →       |     |
| Biosimilar     | LBEC0101              | Rheumatoid arthritis           |             |             |         |         | →       |     |
|                | LBAL                  | Rheumatoid arthritis           |             |             |         |         | →       |     |
| Medical Device | Yvoire Soft Plus      | Aesthetic filler               |             |             |         |         |         | →   |
|                | Yvoire Intensive Plus | Aesthetic filler               |             | →           |         |         |         |     |

Source: Company data, Daewoo Securities Research

## LG Life Sciences (068870 KS/Buy/TP: W92,000)

**Comprehensive Income Statement (Summarized)**

| (Wbn)                               | 12/15      | 12/16F     | 12/17F     | 12/18F     |
|-------------------------------------|------------|------------|------------|------------|
| <b>Revenue</b>                      | <b>451</b> | <b>514</b> | <b>570</b> | <b>648</b> |
| <b>Cost of Sales</b>                | <b>232</b> | <b>257</b> | <b>283</b> | <b>315</b> |
| <b>Gross Profit</b>                 | <b>219</b> | <b>257</b> | <b>287</b> | <b>333</b> |
| <b>SG&amp;A Expenses</b>            | <b>194</b> | <b>219</b> | <b>241</b> | <b>274</b> |
| <b>Operating Profit (Adj)</b>       | <b>25</b>  | <b>37</b>  | <b>46</b>  | <b>59</b>  |
| <b>Operating Profit</b>             | <b>25</b>  | <b>37</b>  | <b>46</b>  | <b>59</b>  |
| <b>Non-Operating Profit</b>         | <b>-11</b> | <b>-9</b>  | <b>-13</b> | <b>-18</b> |
| Net Financial Income                | -9         | -11        | -12        | -12        |
| Net Gain from Inv in Associates     | 0          | 0          | 0          | 0          |
| Pretax Profit                       | 14         | 28         | 33         | 41         |
| Income Tax                          | 3          | 5          | 6          | 7          |
| Profit from Continuing Operations   | 11         | 23         | 27         | 34         |
| Profit from Discontinued Operations | 0          | 0          | 0          | 0          |
| <b>Net Profit</b>                   | <b>11</b>  | <b>23</b>  | <b>27</b>  | <b>34</b>  |
| Controlling Interests               | 12         | 23         | 27         | 34         |
| Non-Controlling Interests           | 0          | 0          | 0          | 0          |
| <b>Total Comprehensive Profit</b>   | <b>8</b>   | <b>23</b>  | <b>27</b>  | <b>34</b>  |
| Controlling Interests               | 8          | 23         | 28         | 34         |
| Non-Controlling Interests           | 0          | 0          | -1         | -1         |
| EBITDA                              | 62         | 75         | 84         | 102        |
| FCF (Free Cash Flow)                | -19        | -47        | -34        | 25         |
| EBITDA Margin (%)                   | 13.7       | 14.6       | 14.7       | 15.7       |
| Operating Profit Margin (%)         | 5.5        | 7.2        | 8.1        | 9.1        |
| Net Profit Margin (%)               | 2.7        | 4.5        | 4.7        | 5.2        |

**Cash Flows (Summarized)**

| (Wbn)                          | 12/15     | 12/16F    | 12/17F    | 12/18F    |
|--------------------------------|-----------|-----------|-----------|-----------|
| Cash Flows from Op Activities  | 54        | 33        | 46        | 55        |
| Net Profit                     | 11        | 23        | 27        | 34        |
| Non-Cash Income and Expense    | 58        | 51        | 55        | 67        |
| Depreciation                   | 33        | 35        | 35        | 40        |
| Amortization                   | 3         | 3         | 3         | 3         |
| Others                         | 22        | 13        | 17        | 24        |
| Chg in Working Capital         | -7        | -25       | -19       | -26       |
| Chg in AR & Other Receivables  | 1         | -15       | -13       | -18       |
| Chg in Inventories             | -17       | -7        | -14       | -19       |
| Chg in AP & Other Payables     | 4         | 2         | 4         | 5         |
| <b>Income Tax Paid</b>         | <b>-1</b> | <b>-5</b> | <b>-6</b> | <b>-7</b> |
| Cash Flows from Inv Activities | -91       | -77       | -80       | -35       |
| Chg in PP&E                    | -73       | -80       | -80       | -30       |
| Chg in Intangible Assets       | -18       | 0         | 0         | 0         |
| Chg in Financial Assets        | 0         | 0         | 0         | 0         |
| <b>Others</b>                  | <b>0</b>  | <b>3</b>  | <b>0</b>  | <b>-5</b> |
| Cash Flows from Fin Activities | 11        | 21        | 35        | 0         |
| Chg in Financial Liabilities   | 14        | 21        | 35        | 0         |
| Chg in Equity                  | 0         | 0         | 0         | 0         |
| Dividends Paid                 | 0         | 0         | 0         | 0         |
| <b>Others</b>                  | <b>-3</b> | <b>0</b>  | <b>0</b>  | <b>0</b>  |
| Increase (Decrease) in Cash    | -26       | -24       | 0         | 20        |
| Beginning Balance              | 50        | 24        | 0         | 0         |
| <b>Ending Balance</b>          | <b>24</b> | <b>0</b>  | <b>0</b>  | <b>21</b> |

Source: Company data, Daewoo Securities Research estimates

**Statement of Financial Condition (Summarized)**

| (Wbn)                            | 12/15      | 12/16F     | 12/17F     | 12/18F     |
|----------------------------------|------------|------------|------------|------------|
| <b>Current Assets</b>            | <b>255</b> | <b>253</b> | <b>280</b> | <b>337</b> |
| Cash and Cash Equivalents        | 24         | 0          | 0          | 21         |
| AR & Other Receivables           | 102        | 117        | 130        | 147        |
| Inventories                      | 120        | 127        | 141        | 160        |
| Other Current Assets             | 9          | 9          | 9          | 9          |
| <b>Non-Current Assets</b>        | <b>452</b> | <b>495</b> | <b>537</b> | <b>524</b> |
| Investments in Associates        | 0          | 0          | 0          | 0          |
| Property, Plant and Equipment    | 354        | 399        | 445        | 435        |
| Intangible Assets                | 61         | 58         | 55         | 52         |
| <b>Total Assets</b>              | <b>707</b> | <b>747</b> | <b>817</b> | <b>861</b> |
| <b>Current Liabilities</b>       | <b>161</b> | <b>179</b> | <b>221</b> | <b>232</b> |
| AP & Other Payables              | 74         | 71         | 79         | 89         |
| Short-Term Financial Liabilities | 60         | 81         | 116        | 0          |
| Other Current Liabilities        | 27         | 27         | 26         | 143        |
| <b>Non-Current Liabilities</b>   | <b>288</b> | <b>288</b> | <b>288</b> | <b>288</b> |
| Long-Term Financial Liabilities  | 261        | 261        | 261        | 0          |
| Other Non-Current Liabilities    | 27         | 27         | 27         | 288        |
| <b>Total Liabilities</b>         | <b>449</b> | <b>467</b> | <b>510</b> | <b>520</b> |
| <b>Controlling Interests</b>     | <b>258</b> | <b>280</b> | <b>307</b> | <b>341</b> |
| Capital Stock                    | 84         | 84         | 84         | 84         |
| Capital Surplus                  | 147        | 147        | 147        | 147        |
| Retained Earnings                | 29         | 51         | 79         | 112        |
| <b>Non-Controlling Interests</b> | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>   |
| <b>Stockholders' Equity</b>      | <b>258</b> | <b>280</b> | <b>307</b> | <b>341</b> |

**Forecasts/Valuations (Summarized)**

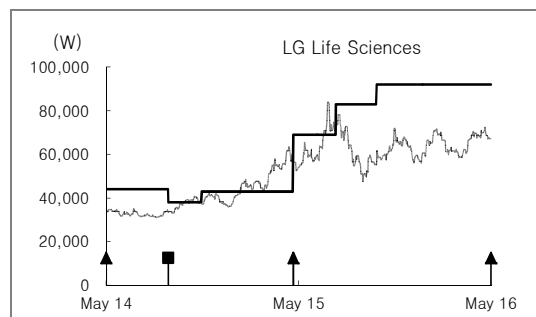
|                                  | 12/15  | 12/16F | 12/17F | 12/18F |
|----------------------------------|--------|--------|--------|--------|
| P/E (x)                          | 88.4   | 50.2   | 41.7   | 33.8   |
| P/CF (x)                         | 14.7   | 15.4   | 13.7   | 11.2   |
| P/B (x)                          | 4.0    | 4.0    | 3.7    | 3.3    |
| EV/EBITDA (x)                    | 21.3   | 19.6   | 17.9   | 14.5   |
| EPS (W)                          | 686    | 1,339  | 1,612  | 1,993  |
| CFPS (W)                         | 4,120  | 4,366  | 4,902  | 5,983  |
| BPS (W)                          | 15,312 | 16,651 | 18,264 | 20,257 |
| DPS (W)                          | 0      | 0      | 0      | 0      |
| Payout ratio (%)                 | 0.0    | 0.0    | 0.0    | 0.0    |
| Dividend Yield (%)               | 0.0    | 0.0    | 0.0    | 0.0    |
| Revenue Growth (%)               | 5.9    | 14.0   | 10.9   | 13.7   |
| EBITDA Growth (%)                | 29.2   | 21.0   | 12.0   | 21.4   |
| Operating Profit Growth (%)      | 56.3   | 48.0   | 24.3   | 28.3   |
| EPS Growth (%)                   | -      | 95.2   | 20.4   | 23.6   |
| Accounts Receivable Turnover (x) | 4.4    | 4.7    | 4.6    | 4.7    |
| Inventory Turnover (x)           | 4.0    | 4.2    | 4.3    | 4.3    |
| Accounts Payable Turnover (x)    | 7.7    | 7.7    | 7.8    | 7.7    |
| ROA (%)                          | 1.7    | 3.1    | 3.5    | 4.0    |
| ROE (%)                          | 4.6    | 8.4    | 9.2    | 10.3   |
| ROIC (%)                         | 3.9    | 5.2    | 5.9    | 7.1    |
| Liability to Equity Ratio (%)    | 174.4  | 166.8  | 165.8  | 152.7  |
| Current Ratio (%)                | 158.0  | 141.2  | 126.4  | 145.3  |
| Net Debt to Equity Ratio (%)     | 115.3  | 122.1  | 122.5  | 104.5  |
| Interest Coverage Ratio (x)      | 2.4    | 3.4    | 3.9    | 4.8    |

## APPENDIX 1

### Important Disclosures & Disclaimers

#### 2-Year Rating and Target Price History

| Company (Code)           | Date       | Rating      | Target Price |
|--------------------------|------------|-------------|--------------|
| LG Life Sciences(068870) | 10/04/2015 | Buy         | 92,000       |
|                          | 07/19/2015 | Buy         | 83,000       |
|                          | 04/29/2015 | Buy         | 69,000       |
|                          | 11/06/2014 | Trading Buy | 43,000       |
|                          | 09/04/2014 | Trading Buy | 38,000       |
|                          | 05/02/2014 | Buy         | 44,000       |



#### Stock Ratings

|             |   |
|-------------|---|
| Buy         | : Relative performance of 20% or greater                      |
| Trading Buy | : Relative performance of 10% or greater, but with volatility |
| Hold        | : Relative performance of -10% and 10%                        |
| Sell        | : Relative performance of -10%                                |

#### Industry Ratings

|             |  |
|-------------|--|
| Overweight  | : Fundamentals are favorable or improving              |
| Neutral     | : Fundamentals are steady without any material changes |
| Underweight | : Fundamentals are unfavorable or worsening            |

Ratings and Target Price History (Share price (—), Target price (—), Not covered (■), Buy (▲), Trading Buy (■), Hold (●), Sell (◆))

\* Our investment rating is a guide to the relative return of the stock versus the market over the next 12 months.

\* Although it is not part of the official ratings at Daewoo Securities, we may call a trading opportunity in case there is a technical or short-term material development.

\* The target price was determined by the research analyst through valuation methods discussed in this report, in part based on the analyst's estimate of future earnings.

\* The achievement of the target price may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

#### Equity Ratings Distribution

| Buy    | Trading Buy | Hold   | Sell  |
|--------|-------------|--------|-------|
| 68.29% | 17.56%      | 14.15% | 0.00% |

\* Based on recommendations in the last 12-months (as of March 31, 2016)

#### Disclosures

As of the publication date, Daewoo Securities Co., Ltd and/or its affiliates do not have any special interest with the subject company and do not own 1% or more of the subject company's shares outstanding.

#### Analyst Certification

The research analysts who prepared this report (the "Analysts") are registered with the Korea Financial Investment Association and are subject to Korean securities regulations. They are neither registered as research analysts in any other jurisdiction nor subject to the laws and regulations thereof. Opinions expressed in this publication about the subject securities and companies accurately reflect the personal views of the Analysts primarily responsible for this report. Daewoo Securities Co., Ltd. policy prohibits its Analysts and members of their households from owning securities of any company in the Analyst's area of coverage, and the Analysts do not serve as an officer, director or advisory board member of the subject companies. Except as otherwise specified herein, the Analysts have not received any compensation or any other benefits from the subject companies in the past 12 months and have not been promised the same in connection with this report. No part of the compensation of the Analysts was, is, or will be directly or indirectly related to the specific recommendations or views contained in this report but, like all employees of Daewoo Securities, the Analysts receive compensation that is impacted by overall firm profitability, which includes revenues from, among other business units, the institutional equities, investment banking, proprietary trading and private client division. At the time of publication of this report, the Analysts do not know or have reason to know of any actual, material conflict of interest of the Analyst or Daewoo Securities Co., Ltd. except as otherwise stated herein.

#### Disclaimers

This report is published by Daewoo Securities Co., Ltd. ("Daewoo"), a broker-dealer registered in the Republic of Korea and a member of the Korea Exchange. Information and opinions contained herein have been compiled from sources believed to be reliable and in good faith, but such information has not been independently verified and Daewoo makes no guarantee, representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information and opinions contained herein or of any translation into English from the Korean language. If this report is an English translation of a report prepared in the Korean language, the original Korean language report may have been made available to investors in advance of this report. Daewoo, its affiliates and their directors, officers, employees and agents do not accept any liability for any loss arising from the use hereof. This report is for general information purposes only and it is not and should not be construed as an offer or a solicitation of an offer to effect transactions in any securities or other financial instruments. The intended recipients of this report are sophisticated institutional investors who have substantial knowledge of the local business environment, its common practices, laws and accounting principles and no person whose receipt or use of this report would violate any laws and regulations or subject Daewoo and its affiliates to registration or licensing requirements in any jurisdiction should receive or make any use hereof. Information and opinions contained herein are subject to change without notice and no part of this document may be copied or reproduced in any manner or form or redistributed or published, in whole or in part, without the prior written consent of Daewoo. Daewoo, its affiliates and their directors, officers, employees and agents may have long or short positions in any of the subject securities at any time and may make a purchase or sale, or offer to make a purchase

or sale, of any such securities or other financial instruments from time to time in the open market or otherwise, in each case either as principals or agents. Daewoo and its affiliates may have had, or may be expecting to enter into, business relationships with the subject companies to provide investment banking, market-making or other financial services as are permitted under applicable laws and regulations. The price and value of the investments referred to in this report and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide to future performance. Future returns are not guaranteed, and a loss of original capital may occur.

#### **Distribution**

**United Kingdom:** This report is being distributed by Daewoo Securities (Europe) Ltd. in the United Kingdom only to (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"), and (ii) high net worth companies and other persons to whom it may lawfully be communicated, falling within Article 49(2)(A) to (E) of the Order (all such persons together being referred to as "Relevant Persons"). This report is directed only at Relevant Persons. Any person who is not a Relevant Person should not act or rely on this report or any of its contents.

**United States:** This report is distributed in the U.S. by Daewoo Securities (America) Inc., a member of FINRA/SIPC, and is only intended for major institutional investors as defined in Rule 15a-6(b)(4) under the U.S. Securities Exchange Act of 1934. All U.S. persons that receive this document by their acceptance thereof represent and warrant that they are a major institutional investor and have not received this report under any express or implied understanding that they will direct commission income to Daewoo or its affiliates. Any U.S. recipient of this document wishing to effect a transaction in any securities discussed herein should contact and place orders with Daewoo Securities (America) Inc., which accepts responsibility for the contents of this report in the U.S. The securities described in this report may not have been registered under the U.S. Securities Act of 1933, as amended, and, in such case, may not be offered or sold in the U.S. or to U.S. persons absent registration or an applicable exemption from the registration requirements.

**Hong Kong:** This document has been approved for distribution in Hong Kong by Daewoo Securities (Hong Kong) Ltd., which is regulated by the Hong Kong Securities and Futures Commission. The contents of this report have not been reviewed by any regulatory authority in Hong Kong. This report is for distribution only to professional investors within the meaning of Part I of Schedule 1 to the Securities and Futures Ordinance of Hong Kong (Cap. 571, Laws of Hong Kong) and any rules made thereunder and may not be redistributed in whole or in part in Hong Kong to any person.

**All Other Jurisdictions:** Customers in all other countries who wish to effect a transaction in any securities referenced in this report should contact Daewoo or its affiliates only if distribution to or use by such customer of this report would not violate applicable laws and regulations and not subject Daewoo and its affiliates to any registration or licensing requirement within such jurisdiction.

#### **Daewoo Securities International Network**

|   |   |   |
|---|---|---|
| <b>Daewoo Securities Co. Ltd. (Seoul)</b><br>Head Office<br>34-3 Yeouido-dong, Yeongdeungpo-gu<br>Seoul 150-716<br>Korea<br>Tel: 82-2-768-3026  | <b>Daewoo Securities (Hong Kong) Ltd.</b><br>Two International Finance Centre<br>Suites 2005-2012<br>8 Finance Street, Central<br>Hong Kong, China<br>Tel: 85-2-2845-6332 | <b>Daewoo Securities (America) Inc.</b><br>320 Park Avenue<br>31st Floor<br>New York, NY 10022<br>United States<br>Tel: 1-212-407-1000  |
| <b>Daewoo Securities (Europe) Ltd.</b><br>41st Floor, Tower 42<br>25 Old Broad St.<br>London EC2N 1HQ<br>United Kingdom<br>Tel: 44-20-7982-8000   | <b>Daewoo Securities (Singapore) Pte. Ltd.</b><br>Six Battery Road #11-01<br>Singapore, 049909<br><br>Tel: 65-6671-9845   | <b>Tokyo Branch</b><br>7th Floor, Yusen Building<br>2-3-2 Marunouchi, Chiyoda-ku<br>Tokyo 100-0005<br>Japan<br>Tel: 81-3- 3211-5511   |
| <b>Beijing Representative Office</b><br>2401A, 24th Floor, East Tower, Twin Towers<br>B-12 Jianguomenwai Avenue<br>Chaoyang District, Beijing 100022<br>China<br>Tel: 86-10-6567-9299                   | <b>Shanghai Representative Office</b><br>Room 38T31, 38F SWFC<br>100 Century Avenue<br>Pudong New Area, Shanghai 200120<br>China<br>Tel: 86-21-5013-6392                  | <b>Ho Chi Minh Representative Office</b><br>Suite 2103, Saigon Trade Center<br>37 Ton Duc Thang St,<br>Dist. 1, Ho Chi Minh City,<br>Vietnam<br>Tel: 84-8-3910-6000                                       |
| <b>Daewoo Investment Advisory (Beijing) Co., Ltd.</b><br>2401B, 24th Floor, East Tower, Twin Towers<br>B-12 Jianguomenwai Avenue,<br>Chaoyang District, Beijing 100022<br>China<br>Tel: 86-10-6567-9699 | <b>Daewoo Securities (Mongolia) LLC</b><br>#406, Blue Sky Tower, Peace Avenue 17<br>1 Khoroo, Sukhbaatar District<br>Ulaanbaatar 14240<br>Mongolia<br>Tel: 976-7011-0807  | <b>PT. Daewoo Securities Indonesia</b><br>Equity Tower Building Lt.50<br>Sudirman Central Business District Jl.<br>Jendral Sudirman Kav. 52-53, Jakarta Selatan<br>Indonesia 12190<br>Tel: 62-21-515-1140 |