



## **CEO Pay in the Medical Device and Biopharmaceutical Industries**

### **A comparative study**

**Top 5** publishes annual reports that analyze executive pay for the medical device and biopharmaceutical industries in publicly traded companies. While there are many reports covering executive pay for the more general “life sciences” industry, our experience over the past 15 years has been that the inherent differences between the medical device and drug businesses leads to consistent differences in total compensation and the structure of pay. This compensation overview is drawn from our recently published annual reports in each respective industry. All data was derived from our proprietary executive compensation database using SEC filings through May 2009.

#### **Industry Demographics**

|                     | Medical Device | Biopharmaceutical |
|---------------------|----------------|-------------------|
| Companies Analyzed  | 289            | 408               |
| Median Employment   | 238            | 84                |
| Median Revenues     | \$48.5M        | \$12.3M           |
| Median Earnings     | -\$2.9M        | -\$11.8M          |
| Net Loss/Net Profit | 177/112        | 314/94            |

The universe of U.S.-based publicly traded biopharmaceutical companies is substantially larger than that of the medical device industry. The percentage of publicly traded biopharmaceutical companies that are development-stage is also greater, resulting in smaller median employment, revenues and earnings figures, and a greater proportion of companies showing a net loss for the year. A complete list of companies in each of the 2009 reports, along with more details of the analysis presented can be found on our website at [www.top5.com](http://www.top5.com).

Each of our annual reports covers the full details of executive pay for 13 or more functional executive positions. This comparison focuses on **CEO** pay as a way of illustrating the similarities and key differences in compensation between the two industries. In the full report for each industry, compensation for each position is analyzed in six brackets of annual revenue and six brackets by total company employment, ensuring that relevant results are available to companies of any size. The data presented in this overview are median results for all CEO’s in each respective industry.



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**Base Pay**

All executives (including the CEO position) analyzed in the reports were in the position for the entire last completed fiscal year. For those executives also in the position for the entire *prior* fiscal year, we looked at changes in base pay across the two year period.

|                          | Medical Device      | Biopharmaceutical   |
|--------------------------|---------------------|---------------------|
| Number of CEO's reviewed | 254                 | 365                 |
| In Job Two Full Years    | 201 (79.1%)         | 276 (75.6%)         |
| Median Base Pay Increase | 5.0%                | 5.0%                |
| No change in Base Pay    | 17.9% of incumbents | 13.0% of incumbents |
| Decrease in Base Pay     | 6.0% of incumbents  | 4.3% of incumbents  |
| Median Base Pay          | \$373,858           | \$427,596           |

Although the median CEO pay increase in 2008 was identical in both industries, a larger percentage of medical device industry CEO's received no increase in base pay, or took a pay cut from the prior year. This suggests that the biopharmaceutical companies, on average, had a larger cash cushion than their medical device industry counterparts, and/or that the medical device companies were more conservative in their use of cash compensation. Traditionally, both of these have been the case. The higher median base pay for biopharmaceutical industry CEO's is also a long-standing finding.

**Variable Cash**

We also analyzed variable cash paid (discretionary and formula bonuses, as well as commissions earned) for executives in each industry. The bonuses were only examined for executives in the position for the full year, and represent actual payments, not targets. A summary of findings for the CEO position is presented below.

|                              | Medical Device | Biopharmaceutical |
|------------------------------|----------------|-------------------|
| Percentage Receiving a Bonus | 66.5%          | 62.2%             |
| Median Bonus as % Base       | 50.5%          | 50.0%             |
| Median Bonus Paid            | \$222,000      | \$240,000         |

Roughly the same percentage of CEO's in both industries received a full-year bonus, regardless of how it was categorized. The median bonus paid as a percentage of base pay was nearly identical in both industries. The larger median bonus paid to the biopharmaceutical industry CEO's is consistent with



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**Variable Cash (continued)**

the higher median base pay. The reason that the median bonus paid is higher than the median base pay would suggest is due to the fact that a larger percentage of the smaller companies (that had the lower base salaries) did not pay a bonus.

**Stock Option Grants**

Our executive pay analysis also covers all forms of equity grants. Stock options and SARs granted to CEO's in the last full year that vest solely based on time are compared below. Grant value is as disclosed in the SEC filing. If not disclosed, we calculated the value using standardized assumptions in a Black-Scholes model.

|                              | Medical Device | Biopharmaceutical |
|------------------------------|----------------|-------------------|
| Percentage Receiving a Grant | 56.3%          | 66.6%             |
| Median Grant Value as % Base | 130%           | 90%               |
| Median Grant Value           | \$564,383      | \$446,520         |

Here we see some clear differentiation in pay strategy between the two industries. The biopharmaceutical companies made more frequent use of standard stock option grants to their CEO's than their counterparts in the medical device industry, but the typical grant value to CEO's in the medical device industry was larger in absolute terms and as a percentage of base salary.

**Restricted Stock Grants**

We also looked at full-year restricted stock grants to CEO's that vest solely based on time. The grant values were as presented in the SEC filings, or calculated based on stock prices at the time of grant if not presented in the filing.

|                              | Medical Device | Biopharmaceutical |
|------------------------------|----------------|-------------------|
| Percentage Receiving a Grant | 29.5%          | 26.0%             |
| Median Grant Value           | \$584,850      | \$495,250         |

A slightly higher percentage of medical device companies made time-based restricted stock grants to CEO's than did the biopharmaceutical companies. The median value of the grants was substantially higher in the device industry than the drug industry in the last full year analyzed.



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**Performance-Based LTIP Grants**

A number of LTIP vehicles vest based on either the company or the recipient achieving specific tangible goals subsequent to the grant. Most of these grants take the form of restricted stock grants, but for the purposes of this analysis we also included performance shares and any other form of equity vehicle that vested solely based on pre-established performance criteria.

|                              | Medical Device | Biopharmaceutical |
|------------------------------|----------------|-------------------|
| Percentage Receiving a Grant | 10.6%          | 10.7%             |
| Median Grant Value           | \$1,600,304    | \$1,490,158       |

As the above table shows, the percentage of companies granting performance-based LTIP grants to CEO's was relatively low and almost identical for the two industries. Since such grants also tend to be made by larger companies rather than smaller or mid-tier ones, the median grant value is fairly large when compared to other annual LTIP grants.

**Total Direct Compensation**

We added together all of the elements of annual compensation described above to analyze total direct compensation. The median figures are for all CEO's in each industry, using the TDC totals for each incumbent.

|                | Medical Device | Biopharmaceutical |
|----------------|----------------|-------------------|
| CEO's reviewed | 254            | 365               |
| Median TDC     | \$831,482      | \$870,260         |

The combined result of higher base pay and bonus and more frequent use of stock option grants yield a higher median TDC level for CEO's in the biopharmaceutical industry than in the medical device industry. This finding is consistent with the results we have obtained in prior year analysis, although the degree of differentiation is not as great as it has been in the past. In part, this may be due to depressed stock values and in the calculated value of stock option grants, which may have impacted the more volatile biopharmaceutical industry relatively more than the generally more sedate medical device industry. When reviewing these figures, it is important to keep in mind that the median size of the biopharmaceutical companies analyzed was smaller than that of the medical device companies, although the median market capitalization for the drug companies may have been higher. Total cash



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**Total Direct Compensation (continued)**

compensation tends to be higher in small drug companies than it is for small medical device companies, with the divergence decreasing as company size increases.

**Value Realized from Exercise of Stock Options and Vesting of Stock Grants**

Companies are required to present the “gain” realized from exercise of stock options or the vesting of stock grants in their filings. The gains presented are simply the difference between the exercise price and the value of the company’s stock at the time of exercise, regardless of whether or not the executive sold the stock on exercise. We looked at value realized from option exercises and stock vesting separately for CEO’s in both industries.

|                               | Medical Device | Biopharmaceutical |
|-------------------------------|----------------|-------------------|
| Percentage Exercising Options | 25.2%          | 18.6%             |
| Median Value Realized         | \$1,676,958    | \$1,073,735       |
|                               |                |                   |
| Percentage Vesting Stock      | 29.1%          | 24.9%             |
| Median Value Realized         | \$358,664      | \$324,580         |

The larger percentage of medical device CEO’s exercising stock options and the higher median value for gains may be a reflection of a somewhat more favorable market for medical device company stock than for drug companies in the period analyzed, or may be a result of more obscure factors. The slightly higher percentage of medical device CEO’s vesting in stock grants is consistent with the finding that restricted stock grants were somewhat more frequent in the medical device industry.

**Conclusions**

The traditional divide between medical device companies and drug companies in compensation to executives continues, but has been somewhat muted recently in large part due to depressed stock values. It remains the case that total cash compensation to executives in smaller drug companies is higher than that of their counterparts in medical device companies. Neither industry is making much use of LTIP vehicles that vest based entirely on company or individual performance criteria. Companies (and their boards) that wish to align pay more closely with performance would do well to make greater use of such grants and to shift a larger percentage of compensation to them.



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**ABOUT TOP 5 DATA SERVICES, INC.**

In 1992 the Securities and Exchange Commission mandated changes to the proxy statements of publicly traded companies that greatly expanded the detail and quality of disclosures regarding executive compensation. When the changes were implemented, **Top 5 Data Services, Inc.** began reviewing and entering this data into a sophisticated database designed for this purpose. Since the proxy disclosures were intended to cover the five most highly compensated executives in the company, we chose the name **Top 5** to emphasize our ability to produce high quality reports utilizing this data.

One of the first executive compensation reports we produced was the **1994 Report on Executive Compensation in the Medical Equipment & Supply Industry**, followed by a similar report for the biopharmaceutical industry. The reports were well received by the life science industry, and continue to be our biggest selling industry-specific annual executive compensation reports. In addition to these industry standard reports, we provide customized reports to clients that provide competitive data on all aspects of executive pay, stock plan administration (run-rates and stock option overhang), board compensation, or any other aspect of corporate governance documented in SEC filings.

Today, **Top 5 Data Services, Inc.** offers companies a wide range of compensation reports, custom surveys, and compensation plan development services. Through our long standing as a data and consulting services vendor, we have extensive contacts in the life science industry. We can assist you in developing and conducting surveys custom tailored to meet your needs and address issues of importance to your organization.

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