How and Why Pre-Commercial Biotech CEO Pay is Different

Part Four: Drivers of Say-on-Pay Results

In this four-part series, we examine the current state of pre-commercial biotech CEO pay, how it is tailored to the sector, and what drives differences between companies. We will explore:

Part One:	*Tailoring Pay to the Business*
Part Two:	*Founders vs. Non-Founders*
Part Three:	*East Coast vs. West Coast*
Part Four:	***Drivers of Say-on-Pay Results***

We encourage you to review:

- Part One for extensive observations and commentary relating to the pre-commercial biotech business model and how the typical CEO pay program within the sector is tailored to that model—but not necessarily aligned with Proxy Advisory Firm ("PAF") preferred practices.
- Part Two for an examination of whether founder-led companies within the sector demonstrate distinct CEO compensation programs. Founder CEOs are common among pre-commercial small cap biotechnology companies, and led one-third of the 18 benchmark companies in our study.
- Part Three for a review of whether and how CEO compensation programs of East Coast companies (including Boston/Cambridge, New York/New Jersey and the DC Area) differ from programs of West Coast companies (primarily San Francisco Bay Area and San Diego).

As described in Part One, pre-commercial biotech company pay programs have evolved to address the sector-specific business environment and diverge from both typical broader market practices and PAF preferred practices. However, this distinct pay model did not appear to negatively impact SOP results. Overall SOP support for our benchmark companies averaged 96%, well above the 91% average for the broader Russell 3000 during the same time period[1]. In fact, the *lowest* level of SOP result for our sample of pre-commercial biotech companies was 82%, and only three of the benchmark companies failed to reach 90% support.

These results indicate that misalignment with PAF-preferred practices *alone* is unlikely to seriously jeopardize SOP support in this sector. However, lessons may be still learned from examining whether companies with *relatively* weak Say-on-Pay ("SOP") support demonstrate markedly different CEO compensation programs than companies with stronger SOP support. This is the focus of Part Four of our series.

[1] Annual meetings during the 12 month period ending June 1, 2020.

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CEO Pay Program Design: Key Takeaways

Our research determined that Moderate and Strong SOP outcomes for pre-commercial biotech companies compare to broader sector benchmarks and PAF preferred practices as follows:

Item	Pre-Commercial Biotech	Does Practice Vary Significantly for Moderate SOP?	PAF Perspective
Target Cash Opportunities	• Remarkably consistent across companies • Modest relative to company valuation	• No	• Not an area of intense focus
STI / Bonus Design	• Scorecards emphasizing progress against discovery and pipeline development milestones • Cash management and financing activities receive lower weightings • Payouts often discretionary	• Were less likely to disclose specific goals, indicate relative weighting of various performance categories, or clarify that bonus opportunities were capped	• Strong preference for formulaic plans • Skeptical of discretionary payouts • Prefer that bonus opportunities are capped
STI / Bonus Payouts	• Generally at or slightly above target amount (25^{th} – 75^{th} percentiles are 100% - 120% of target)	• No	• Consider payout amount within context of overall quantum of pay for pay-for-performance assessments • Skeptical if bonus amounts consistently at or above target during multi-year periods of poor shareholder returns or poor financial performance relative to peers
LTI Design	• Stock options dominate (90% of mix) • Time-based RSUs rare for NEOs • Very rare to use performance measures • Reference target percentage of common shares outstanding for benchmarking purposes	• Moderate SOP companies demonstrate a "premium" when awards expressed Grant Date Fair Value ("GDFV") and a significant premium when awards expressed as % of Common Shares Outstanding ("CSO") • Moderate SOP companies used stock options as their *sole* LTI instrument	• Strong preference for at least 50% weighting to performance-based vehicles • Do not consider stock options to be performance-based • Valuation protocols akin to GDFV, but often punitive to stock options (e.g., use full term for valuation purposes)
Aggregate Equity Spend	• Trend towards 5% burn rate • Overhangs north of 20% common, including high levels of dilution associated with unexercised stock options that remain outstanding much longer than full value awards • Common to have evergreen provisions in equity plans to provide for additional shares without subsequent shareholder approval	• No meaningful differences in burn rates • CEO grants accounted for a higher percentage of the aggregate burn rate at Moderate SOP companies, suggesting Strong SOP companies are driving equity further down into the organization and/or providing higher "per employee" grant levels	• Burn rate caps specific to company size & sector • Strongly oppose evergreen provisions • Consider overhang when assessing vote recommendations for equity plan refresh requests

Overarching takeaways: Companies with more modest SOP results tended to (1) provide less detailed public disclosures with respect to CEO bonus payout determinations and (2) provide their CEO larger LTI awards, ultimately allocating a much higher percentage of overall equity spend towards the CEO.

Developing a Roster of Pre-Commercial Biotech Benchmark Companies

In order to investigate CEO pay practices, we isolated publicly-traded biotech sector companies that:

- Were NYSE or Nasdaq listed;
- Were pre-commercial;
- Had annual meetings that included a SOP vote in the 12 month period ending June 1, 2020; and
- Had no CEO turnover in this period.

Relative to other sectors, these companies tended to exhibit very strong overall SOP results (averaging 96%). In order to isolate companies with *relatively* weak SOP results, we used a cutoff of 95% SOP support (i.e., "Moderate SOP" companies had support below 95%).

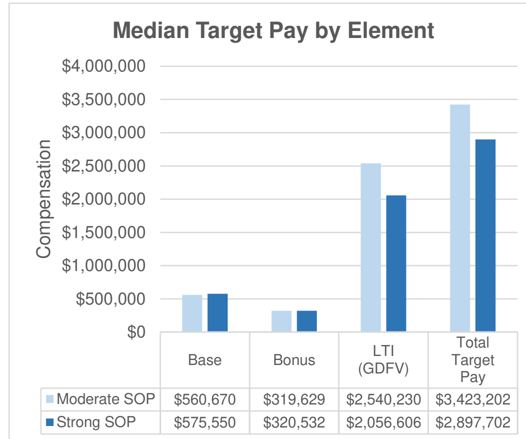
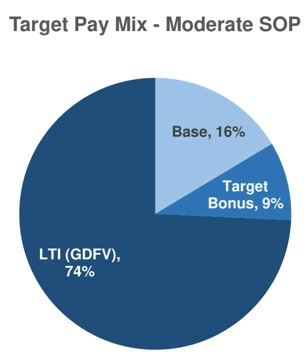
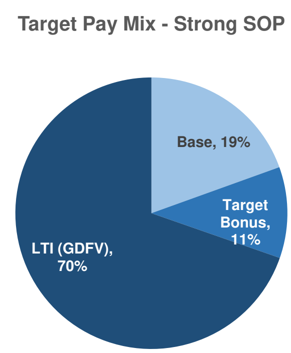
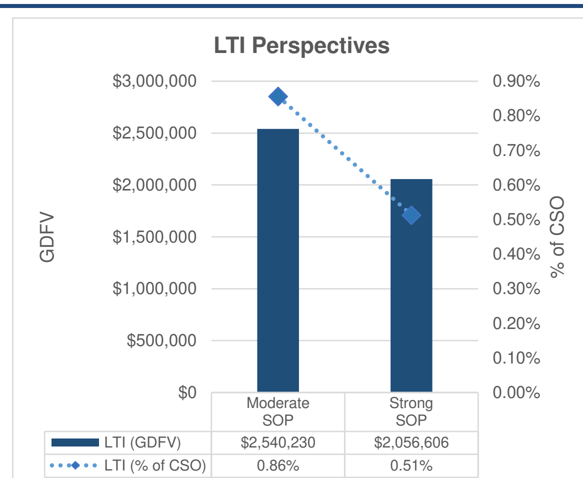
Ultimately, we identified 18 companies (listed in the Appendix) with median key statistics including:

Summary Median Statistics	All Statistics as of Fiscal-Year End for Year CEO Compensation Reported					
	Market Cap (millions)	Employees	Revenue (millions)	Operating Expense (millions)	Cash & Short-Term Investments (millions)	1-Year Total Shareholder Return
Moderate SOP (n=4)	*$275*	*106*	*$15*	*$75*	*$29*	*30%*
Strong SOP (n=14)	*$694*	*118*	*$10*	*$104*	*$234*	*33%*
Total Sample (n=18)	**$397**	**118**	**$10**	**$88**	**$162**	**33%**

Moderate SOP companies were, at median, approximately 0.4x the size of Strong SOP companies in this sample and had significantly lower cash and short-term investments at fiscal year-end. However, operating size measures and one-year total shareholder return through fiscal-year end were reasonably aligned with the Strong SOP companies.

In the remainder of this report, we provide further detail relating to general pay practices, bonus/short-term incentive and long-term incentive design for CEOs, and aggregate equity usage statistics for the benchmark companies.

CEO General Pay Practices

Total Target Pay Opportunity	**Key Takeaways** • Very similar salary and target total cash • Moderate SOP CEOs had higher LTI GDFV, despite having much lower market capitalizations • Consequent to higher LTI amounts, Moderate SOP CEOs exhibited a total target pay premium relative to Strong SOP CEOs • See "Setting LTI Amounts" below for additional detail on LTI that takes into account most pre-commercial companies will reference a % of CSO rather than targeting a GDFV amount when setting pay for executives 
Pay Mix	**Key Takeaways** • Strong emphasis on LTI for both Strong and Moderate SOP companies • Both Strong and Moderate SOP companies had median target bonuses set at 55% of salary • While pay mix includes target annual bonus amounts, please note that actual payouts did not vary significantly between Moderate and Strong SOP groups  
Setting LTI Amounts	**Key Takeaways** • At median, Moderate SOP CEOs have GDFV LTI that is1.2x that of Strong SOP CEOs while leading companies with market cap that is only 0.4x that of Strong SOP companies • Most pre-commercial companies reference a % of CSO benchmark rather than GDFV when setting LTI amounts for executives, to accommodate the significant stock price volatility in the sector; Moderate SOP companies provided LTI opportunities that were 1.7x the size of Strong SOP companies using this metric 

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CEO Short-Term Incentive / Bonus Design

Plan Type & Performance Measures

Key Takeaways

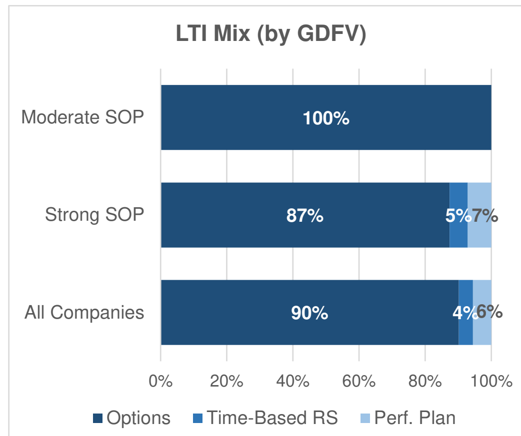
- The majority of these companies have discretionary programs, where ultimate payout is informed by a consideration of progress relative to a "scorecard" of different performance categories and possibly milestones—but there is no range of goals within those categories that formulaically determine payout
- Even where formulaic plans are used, the greatest emphasis is placed on progress against pipeline development rather than on financial performance
- Moderate SOP companies provided considerably less detail to shareholders than Strong SOP companies with respect to the relative weighting applied to different performance categories in their bonus programs
- Moderate SOP companies were also less likely than Strong SOP companies to clearly disclose to shareholders that payouts for bonus programs (e.g., at 150% of target bonus amount)

CEO Long-Term Incentive Design

Grant Types & Vesting

Key Takeaways

- Stock options are by far the most popular vehicle
- Extremely rare in this sector and at this stage to use performance shares or performance vesting criteria
- Strong SOP companies slightly more likely to use time-based restricted stock than Moderate SOP companies—but where used, still represents relatively small percentage of aggregate LTI award (less than 1/3 weighting)
- Options typically have a 25% cliff vest after one year of service, followed by monthly pro-rata vesting

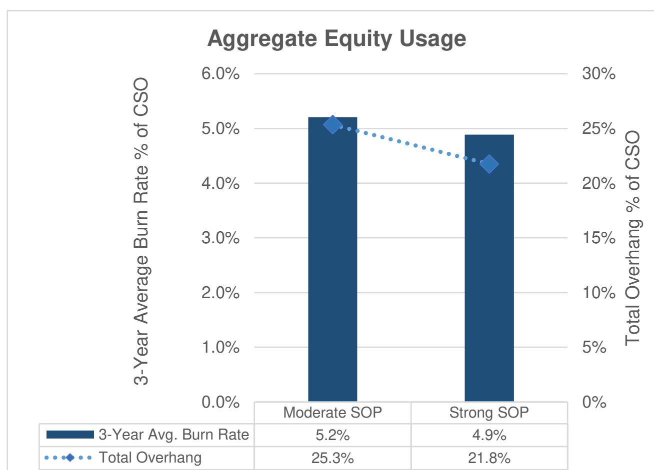


Aggregate Equity Usage

Burn Rate and Total Overhang

Key Takeaways

- Moderate SOP companies had modestly higher **Burn Rates** (shares granted as a percentage of common shares outstanding) and **Total Overhang** (shares granted & outstanding plus shares reserved for future grant)
- CEO grants accounted for a higher percentage of the aggregate burn rate at Moderate SOP companies:
  - — Moderate SOP Companies:
    - ▪ Median % of burn rate allocated to CEO award: 14%
    - ▪ Average % of burn rate allocated to CEO award: 18%
  - — Strong SOP Companies:
    - ▪ Median % of burn rate allocated to CEO award: 11%
    - ▪ Average % of burn rate allocated to CEO award: 11%



Appendix: Companies Included in Study

ADMA Biologics, Inc.	Denali Therapeutics Inc.
Adverum Biotechnologies, Inc.	Dicerna Pharmaceuticals, Inc.
Albireo Pharma, Inc.	Editas Medicine, Inc.
AnaptysBio, Inc.	Fate Therapeutics, Inc.
Ardelyx, Inc.	GlycoMimetics, Inc.
Cellular Biomedicine Group, Inc.	Mirati Therapeutics, Inc.
CEL-SCI Corporation	Pfenex Inc.
Concert Pharmaceuticals, Inc.	Pieris Pharmaceuticals, Inc.
Corbus Pharmaceuticals Holdings, Inc.	REGENXBIO Inc.