How and Why Pre-Commercial Biotech CEO Pay is Different Part Three: East Coast vs. West Coast

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.

Biotech company headquarters are geographically concentrated in urban areas near feeder universities, research hospitals and venture capital. Notable clusters are found in Boston/Cambridge, the San Francisco Bay Area, New York/New Jersey, the DC Area and San Diego.

The resulting concentration of talent drives relatively high local cost-of-labor. An obvious question often posed by compensation committees reflects this dynamic: "Ought we consider geography when selecting executive compensation benchmark peer group companies and paying our executives?"

To assist in these deliberations, Part Three of our series examines whether 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).



CEO Pay Program Design: Key Takeaways

Our research determined that East Coast and West Coast pre-commercial biotech companies compare to broader sector benchmarks and PAF preferred practices as follows:

Item	Pre-Commercial Biotech	Does Practice Vary Significantly by Coast?	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 discretionary 	• No	 Strong preference for formulaic plans Skeptical of discretionary payouts
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 	 While no consistent "premium" for either coast when awards expressed as % of Common Shares Outstanding ("CSO"), West Coast had higher grant date fair values ("GDFV"), reflecting higher market capitalizations in this sample West Coast companies slightly more likely to use time-based restricted stock—but where used, still represents small percentage of aggregate LTI award 	 Strong preference for at least 50% weighting to performance-based vehicles Do not consider stock options to be performance-based Valuation protocols akin to grant date fair value, but often punitive to stock options (e.g., use full term for valuation purposes)
Aggregate Equity Spend	 Trend towards 5% for 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 shareholder approval 	 West Coast companies had moderately higher burn rates CEO grants accounted for a higher percentage of the aggregate burn rate at East Coast companies, suggesting West Coast 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 takeaway: <u>CEO</u> pay programs are generally tailored to sector- and stage-specific dynamics, but not to the local labor market/geography. However, <u>broad-based LTI</u> programs may be more "generous" on the West Coast, with implications for assessing aggregate equity program spend relative to market practice.



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.

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

	All Statistics as of Fiscal-Year End for Year CEO Compensation Reported					
Summary Median Statistics	Market Cap (millions)	Employees	Revenue (millions)	Operating Expense (millions)	Cash & Short-Term Investments (millions)	
East Coast (n=11)	\$313	141	\$21	\$73	\$112	
West Coast (n=7)	\$744	111	\$8	\$111	\$248	
Total Sample (n=18)	\$397	118	\$10	\$88	\$162	

West Coast companies were, at median, approximately 2.4x the size of East Coast companies in this sample. This dynamic appeared to impact CEO LTI award grant date fair values ("GDFV").

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.

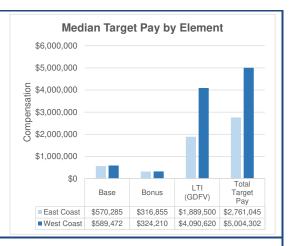


CEO General Pay Practices

Total Target Pay Opportunity

Key Takeaways

- Very similar salary and target total cash
- West Coast CEOs had higher LTI Grant Date Fair Value ("GDFV"), as expected in light of much higher market capitalizations
- Taking into account that most precommercial companies will reference a % of Common Shares Outstanding ("CSO") rather than targeting a GDFV amount when setting pay for executives, there is no consistent pay "premium" for either coast

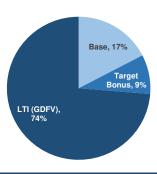


Pay Mix

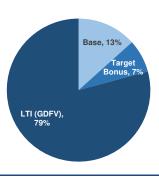
Key Takeaways

- · Strong emphasis on LTI for both coasts
- Apparent greater emphasis on LTI on West Coast is an artifact of the larger market capitalizations for these companies (while West Coast LTI is higher when expressed as GDFV, East Coast companies provide comparable or even higher LTI opportunities when expressed as a % of CSO)
- Both coasts set target bonus at approximately 55% of base salary

Target Pay Mix - East Coast



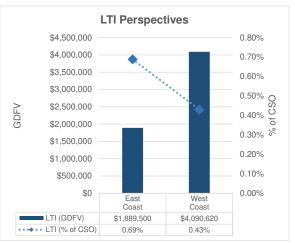
Target Pay Mix - West Coast



Setting LTI Amounts

Key Takeaways

- At median, West Coast CEOs have GDFV LTI that is 2.2x that of East Coast CEOs, well-aligned with the 2.4x multiple of West Coast (\$744m) to East Coast (\$313m) market capitalization
- Most pre-commercial companies reference a % of CSO benchmark rather than GDFV when setting pay for executives, to accommodate the significant stock price volatility in the sector
- The interquartile ranges for LTI as a % of CSO for East Coast CEOs (0.56% - 0.86%) and West Coast CEOs (0.36% - 0.72%) overlapped





CEO Short-Term Incentive / Bonus Design

Plan Type & Performance Measures

Key Takeaways

- No consistent differences found between East Coast and West Coast programs
- 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

CEO Long-Term Incentive Design

Grant Types & Vesting

Key Takeaways

- Stock options are by far the most popular vehicle, and are the SOLE equity vehicle used for 73% of East Coast CEOs and 71% of West Coast CEOs
- Extremely rare in this sector and at this stage to use performance shares or performance vesting criteria
- West Coast companies slightly more likely to use time-based restricted stock than East Coast companies—but where used, still represents relatively small percentage of aggregate LTI award (less than 1/3 weighting)



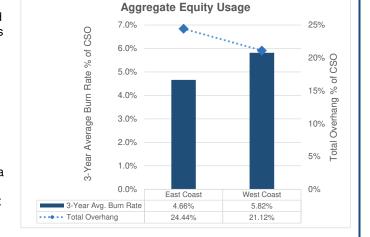
- Options typically have a 25% cliff vest after one year of service, followed by monthly pro-rata vesting
- Time-based restricted stock programs included both 3- and 4-year total vests, with vesting events typically on annual anniversary dates of grant (it is more administratively burdensome to administer monthly or quarterly vesting programs since vesting triggers a taxable event)

Aggregate Equity Usage

Burn Rate and Total Overhang

Key Takeaways

- West Coast companies had modestly higher Burn Rates (shares granted as a percentage of common shares outstanding)
- Total Overhang (shares granted & outstanding plus shares reserved for future grant) modestly higher at East Coast companies
- CEO grants accounted for a higher percentage of the aggregate burn rate at East Coast companies:



- East Coast Companies:
 - Median % of burn rate allocated to CEO award: 14%
 - Average % of burn rate allocated to CEO award: 17%
- West Coast Companies:
 - Median % of burn rate allocated to CEO award: 7%
 - Average % of burn rate allocated to CEO award: 11%



Appendix: Companies Included in Study

ADMA Biologics, Inc.

Adverum Biotechnologies, Inc.

Albireo Pharma, Inc.

AnaptysBio, Inc.

Ardelyx, Inc.

Cellular Biomedicine Group, Inc.

CEL-SCI Corporation

Concert Pharmaceuticals, Inc.

Corbus Pharmaceuticals Holdings, Inc.

Denali Therapeutics Inc.

Dicerna Pharmaceuticals, Inc.

Editas Medicine, Inc.

Fate Therapeutics, Inc.

GlycoMimetics, Inc.

Mirati Therapeutics, Inc.

Pfenex Inc.

Pieris Pharmaceuticals, Inc.

REGENXBIO Inc.

