Exhibit 1

February 19, 2021

To: The Compensation Committee of the Board of Directors Emergent BioSolutions Inc.

Sue Bailey, Jerome Hauer, George Joulwan, Louis Sullivan
Re: Notice of Compensation Committee Meeting
By authority of the Executive Chairman of the Board of Directors, notice is hereby given that a meeting of the Compensation Committee of Emergent BioSolutions Inc. will be held on Wednesday, March 17, 2021, commencing at 10:45 a.m. (EDT).

Please use the following dial-in information:


Should vou have_anv questions, please feel free to contact me at or

I look forward to speaking with you at the upcoming meeting.
Respectfully,

Daniel Woubishet
Associate General Counsel and Assistant Secretary

| Emergent BioSolutions Inc. <br> Meeting of the Compensation Committee of the Board of Directors <br> (Louis Sullivan, Sue Bailey, Jerome Hauer, George Joulwan) |  |  |  |
| :---: | :---: | :---: | :---: |
| Telephonic <br> Wednesday, March 17, 2021 10:45 a.m. - 11:30 a.m. (EDT) |  |  |  |
| Agenda |  |  |  |
| Item No. | Time | Subject Matter | Area of Oversight |
| Call to Order |  |  |  |
| 1 | 10:45-10:50 | Approve Minutes | Board Operations and Corporate Governance |
| 2 | 10:50-11:05 | Review CD\&A, Risk Assessment and Approve Compensation Committee Report | External Communications |
| 3 | 11:05-11:25 | Review 2021 Share Request and Stock Incentive Plan Amendments | Board Operations and Corporate Governance |
| 4 | 11:25-11:30 | Discuss New Business and Recommendations for Future Topics | Board Operations and Corporate Governance |
|  |  | Proposed Resolutions | Yes |
| Adjourn |  |  |  |
| Informational Agenda |  |  |  |
| 1 |  | Confirmation of Willis Towers Watson Independence | Board Operations and Corporate Governance |
| 2 |  | Willis Towers Watson Director Compensation Review | Board Operations and Corporate Governance |

# EMERGENT BIOSOLUTIONS INC. Minutes of the Compensation Committee 

## February 9, 2021

Pursuant to notice duly given, a telephonic meeting of the Compensation Committee of the Board of Directors (the "Committee") of Emergent BioSolutions Inc. (the "Corporation") was held on February 9, 2021 at 10:05 a.m. The following members of the Committee, constituting a quorum, participated telephonically or in person at the meeting:

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Sue Bailey
Jerome Hauer
George Joulwan
Louis Sullivan
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Others in attendance telephonically (or in person) for all or a portion of the meeting were:

Fuad El-Hibri, Executive Chairman<br>Robert Kramer, Sr., Director, President and Chief Executive Officer<br>David Flaherty, VP, Total Rewards<br>Richard Lindahl, EVP, Chief Financial Officer and Treasurer<br>Elizabeth Petrone, Sr. Corporate Paralegal<br>Atul Saran, EVP, Corporate Development, General Counsel and Corporate Secretary Katy Strei, EVP, Human Resources and Public Affairs and Chief Human Resources Officer (CHRO)<br>Daniel Woubishet, Associate General Counsel and Assistant Secretary<br>Mitchell Bardolf (Willis Towers Watson)<br>Hemant Patel (Willis Towers Watson)

Dr. Sullivan served as the chair of the meeting and Mr. Woubishet kept the minutes thereof.

## Minutes

The Committee reviewed the minutes of the prior Committee meeting held on January 20, 2021. Upon motion duly made and seconded, it was unanimously:

RESOLVED, that the minutes of the meeting of the Committee held on January 20, 2021 are hereby approved.

## Review Performance and Compensation Recommendations for Executive Officers

Ms. Strei introduced a discussion regarding compensation decisions for the Corporation's executive officer beginning with an overview of the framework of the review process and the methodology that was approved by the Committee in November 2020. Ms. Strei presented a brief overview of the overall corporate performance for 2020 and the Corporate Performance Factor of $140 \%$ that was approved by the Committee at the January 2021 meeting. The Committee then proceeded to review the performances of the executive officers for 2020 in the following order.

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Mr. El-Hibri first left the meeting and Mr. Kramer and Ms. Strei presented an overview of Mr. El-Hibri in his role as executive chairman, including Mr. El-Hibri's contributions to the Corporation's exemplary success in 2020, including leveraging his critical relationships with key customers, Congress and other stakeholders. The Committee discussed Mr. El-Hibri's performance and determined to award him with a rating of "exceeds". Mr. El-Hibri's proposed compensation was presented and approved by the Committee members.

Mr. El-Hibri rejoined the meeting and Mr. Kramer left the meeting. Mr. El-Hibri led a discussion and presented an overview of Mr. Kramer's performance in his role as president and chief executive officer. Mr. El-Hibri discussed his assessment of Mr. Kramer's exceptional leadership throughout the year with stellar performance for the Corporation, despite facing extraordinary obstacles during the COVID-19 pandemic and steering the company on a successful path despite such challenges. The Committee discussed Mr. Kramer's performance and determined to award him with a rating of "significantly exceeds". Mr. El-Hibri presented Mr. Kramer's proposed compensation, which was discussed and approved by the Committee.

Mr. Kramer returned to the meeting. Mr. Kramer led a discussion regarding the 2020 performance of each executive officer reporting to him, namely Mr. Lindahl, Mr. Havey, Mr. Saran, Mr. Kirk, Dr. Smith and Ms. Strei.

Mr. Kramer began with an overview of Mr. Lindahl's role as executive vice president, chief financial officer and treasurer during which he discussed Mr. Lindahl's goals and Mr. Kramer's overall assessment of Mr. Lindahl's performance, including executing on the Corporation's inaugural high yield bond issuance in August 2020 and significantly outperforming revenue and earnings targets. The Committee discussed Mr. Lindahl's performance and determined to award him with a rating of "exceeds". Mr. Lindahl's proposed compensation was discussed. The Committee agreed upon Mr. Lindahl's proposed compensation.

Mr. Kramer presented an overview of Mr. Havey's performance in his role as executive vice president, business operations for 2020. He discussed each of Mr. Havey's goals and provided an overall assessment of Mr. Havey's performance in 2020, including his contributions in the successful execution of all six corporate goals. The Committee discussed Mr. Havey's performance and determined to award him with a rating of "exceeds". Mr. Havey's proposed compensation was discussed and agreed upon by the Committee members.

Mr. Kramer presented an overview of Mr. Saran's performance in his role as executive vice president, corporate development, general counsel and secretary. Mr. Kramer discussed Mr. Saran's goals and provided an overall assessment of his performance for 2020, including his contributions towards executing on all six corporate goals. The Committee discussed Mr. Saran's performance and determined to award him with a rating of "exceeds". Mr. Saran's proposed compensation was discussed and agreed upon by the Committee members.

Mr. Kramer then presented an overview of Mr. Kirk's performance in his role as executive vice president, manufacturing and technical operations for 2020, during which he discussed Mr. Kirk's exceptional role in executing on key manufacturing strategy throughout the year and leading business continuity efforts. Mr. Kramer also highlighted Mr. Kirk's role in the significant expansion of CDMO related operations in 2020 and the Corporation's critical role to Operation Warp Speed. The Committee discussed Mr. Kirk's exceptional performance and contribution to the Corporation's stellar financial performance and determined to award him with a rating of "significantly exceeds". Mr. Kirk's proposed compensation was presented. The Committee agreed upon Mr. Kirk's proposed compensation, including a special additional bonus award of \$100,000 for his exceptional performance in 2020.

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Mr. Kramer presented an overview of Dr. Smith's performance in her role as executive vice president and chief medical officer, during which he discussed Dr. Smith's goals and Mr. Kramer's overall assessment of Dr. Smith's performance during her transition into the new role after she joined the Corporation in April 2020. The Committee discussed Dr. Smith's performance and determined to award her with a rating of "meets," commensurate with her new role at the Corporation. Mr. Kramer presented Dr. Smith's proposed compensation. Dr. Smith's proposed compensation was discussed and agreed upon by the Committee members.

Ms. Strei left the meeting. Mr. Kramer presented an overview of Ms. Strei's performance in her role as executive vice president, HR and CHRO. Mr. Kramer discussed Ms. Strei's goals and provided an overall assessment of her performance for 2020. The Committee discussed Ms. Strei's performance and determined to award her with a rating of "exceeds". Mr. Kramer presented Ms. Strei's proposed compensation which was discussed and agreed upon by the Committee.

Following discussion by the Committee regarding each executive officer's performance in 2020, upon motion duly made and seconded, it was, unanimously:

## 2020 Bonus Award to Executive Officers

RESOLVED, that the bonus awards for 2020 for the following current executive officers of the Corporation be and hereby are approved in accordance with the table set forth below:


[^0]February 9, 2021
Katherine Strei
Executive Vice President, HR and
Chief Human Resources Officer
FURTHER RESOLVED, that the foregoing 2020 cash bonus payments shall be paid as soon as practicable; and it is

## 2021 Cash Compensation to Executive Officers

FURTHER RESOLVED, that the annualized base salary and target bonus percentage for 2021 for the following current executive officers of the Corporation be and they hereby are approved in accordance with the table set forth below, effective as of January 1, 2021, and shall continue in effect until adjusted or modified by the Committee:

## Name and Title

Fuad El-Hibri Executive Chairman

Robert G. Kramer
President and Chief Executive Officer

Richard S. Lindahl
Executive Vice President, Chief Financial Officer and Treasurer

Adam Havey
Executive Vice President, Business Operations

Atul Saran
Executive Vice President, Corporate Development and General Counsel

Sean Kirk
Executive Vice President, Manufacturing and Technical Operations

Karen Smith
Executive Vice President and Chief Medical Officer

Katherine Strei
Executive Vice President, HR and Chief Human Resources Officer

## 2021 Annualized Base Salary <br> 2021 Target Bonus \%

N/A Salary 60\% of Base Salary

60\% of Base Salary

60\% of Base Salary

60\% of Base Salary


FURTHER RESOLVED, that the Executive Chairman, Chief Executive Officer ("CEO"), Chief Financial Officer ("CFO"), any executive vice president, senior vice president, secretary or assistant secretary of the Corporation be, and each of them hereby is, authorized, empowered and directed to take such further actions as he/she deems necessary or appropriate to carry out the purposes and intent of the

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foregoing resolutions and the taking of any such action by such employee shall be conclusive evidence that such action was authorized and approved by the Committee; and it is

FURTHER RESOLVED, that any and all actions heretofore taken and any and all papers, instruments, documents or certificates heretofore executed, delivered, filed or recorded, and any sums of money expended in order to carry out the intents and purposes of the foregoing resolutions are in all respects ratified, confirmed and approved.

## Review Performance Stock Unit Plan

Ms. Strei, Mr. Saran and Ms. Petrone rejoined the meeting. Mr. Lindahl joined the meeting. Ms. Strei introduced a discussion regarding the Committee's review of the final payout factor for the 2018-2020 Performance Stock Units (the "2018 PSUs") program for executive officers. She began with an overview of the framework for the long-term incentive program and then reviewed the specific design provisions of the 2018 PSUs, including performance period, eligible recipients, performance measures and goals and award settlements.

Mr. Lindahl then reviewed management's recommendations regarding the award, noting that the performance represents $169 \%$ of the target goal which would result in a $150 \%$ payout factor. Mr. Lindahl also noted that two addbacks to net income from external reporting, i.e., IPR\&D intangible asset impairment charges and changes in fair value of contingent consideration, were not included in the performance measure of adjusted net income margin, however the Committee has the discretion to make any necessary adjustments under the PSU plan document. Mr. Lindahl discussed the recommendation for the Committee to take into account the reconciliation of performance outcome based on the current definition of Adjusted Net Income Margin when determining the payout factor. Ms. Strei then reviewed the schedule of awards by each grant recipient. After discussion by the Committee and upon motion duly made and seconded, it was, unanimously:

## Review and Approve Final Payout Factor for 2018 - 2020 Performance Stock Units, as amended (the "2018 PSUs")

RESOLVED, that the Compensation Committee has evaluated the Corporation's fiscal year 2020 performance against the Performance Objective (as defined in the 2018 PSUs) and hereby certifies that it achieved $169 \%$ of Target Performance, which results in a $150 \%$ maximum payout factor.

Ms. Strei next presented an overview of the performance goals for the new 2021-2023 performance stock unit grant program (the " 2021 PSUs") to the Committee, where she reviewed the design provisions of the 2021 PSUs, including performance period, eligible recipients, performance measures and goals and award settlements. Mr. Lindahl discussed how the use of adjusted EBITDA margin is used as a performance measure for the underlying goal related to EBITDA margin for the 2021 PSU grant. The Committee discussed management's projected revenues. Upon motion duly made and seconded, it was unanimously:

FURTHER RESOLVED, that the 2021-23 Performance Stock Unit Recommendations ("Performance Equity Grant Guidelines") attached hereto as Exhibit A hereby are approved; and it is

FURTHER RESOLVED, that the Performance Equity Grant Guidelines attached hereto as Exhibit A shall continue in effect through the 2023 grant cycle, unless otherwise earlier rescinded; and it is

FURTHER RESOLVED, that the form of 2021-2023 Performance Stock Unit Award Agreement (the "Performance Stock Unit Award Agreement") substantially in the form attached hereto as Exhibit B, including the performance goals set therein, with such administrative and other immaterial changes at the recommendation of counsel to implement grants of performance stock units under the Emergent BioSolutions Inc. Stock Incentive Plan (the "Plan"), be, and it is hereby, approved; and it is

## 2021-2023 Performance Stock Unit Grant Amounts

FURTHER RESOLVED, that on the on the third full business day after the Corporation releases the results of its operations for fiscal year 2020 (the "Grant Date"), the Corporation shall grant to each employee set forth on Exhibit C the number of 2021-2023 Performance Stock Units (each a "Performance Stock Unit," or "PSU") for that number of shares of the Corporation's common stock as is set forth opposite such executive's name on Exhibit C. The Performance Stock Units shall vest as set forth in Exhibit C. The foregoing Performance Stock Units shall be substantially in the form of the Performance Stock Unit Award Agreement attached hereto as Exhibit B. All Performance Stock Units are to be issued in accordance with the terms and provisions of the Plan, and the Performance Stock Unit Award Agreement; and it is

FURTHER RESOLVED, that the Executive Chairman, CEO, CFO, any executive vice president, senior vice president, secretary or assistant secretary of the Corporation be, and each of them hereby are, authorized, empowered and directed to take such further actions as he/she deems necessary or appropriate to carry out the purposes and intent of the foregoing resolutions and the taking of any such action by such employee shall be conclusive evidence that such action was authorized and approved by the Committee; and it is

FURTHER RESOLVED, that any and all actions heretofore taken and any and all papers, instruments, documents or certificates heretofore executed, delivered, filed or recorded, and any sums of money expended in order to carry out the intents and purposes of the foregoing resolutions are in all respects ratified, confirmed and approved.

## Review Recommendations for Other Equity Grants

Mr. Flaherty presented management's recommendation of an equity grant mix for Section 16 Officers for 2021, including allocations of Performance Stock Units (PSUs), Stock Options (Options) and Restricted Stock Units (RSUs). A discussion ensued. Upon motion duly made and seconded, it was, unanimously:

## Equity Mix

RESOLVED, that the total value of all equity incentives made to an executive officer of the Corporation, with the exception of the Executive Chairman, shall be apportioned as follows: $50 \%$ of such value shall be made in the form of stock options, $25 \%$ of such value shall be made in the form of restricted stock units that vest solely based on the passage of time, and $25 \%$ shall be made in the form of Performance Restricted Stock Units; and it is

FURTHER RESOLVED, that the total value of all equity incentives made to the position of Executive Chair, shall be apportioned as follows: $50 \%$ of such value shall be made in the form of stock options and $50 \%$ of such value shall be made in the form of restricted stock units that vest solely on the passage of time; and it is

## Stock Option Grant Amounts

FURTHER RESOLVED, that on the Grant Date, the Corporation shall grant to each employee set forth on Exhibit D, each of whom the Committee hereby determines to be eligible to be granted options within the provisions of the Plan, stock options to purchase that number of shares of the Corporation's common stock as is set forth opposite such executive's name. All options are to be issued in accordance with the terms and provisions of the Plan. The exercise price of each such option shall be equal to the fair market value of the Corporation's common stock on the Grant Date, which the Compensation Committee hereby determines and declares for purposes of the stock option grant shall be the last reported closing price of the Corporation's common stock on the New York Stock Exchange on the last trading day immediately preceding the Grant Date. The foregoing stock options shall be Non-Qualified Stock Options and granted under the Corporation's approved Global Non-Qualified Stock Option Award Agreement. The vesting and term of each option are to be as set forth on Exhibit D; and it is

FURTHER RESOLVED, that the form of consideration acceptable for exercise of any option (but in the case of the third bullet below, not for the payment of any applicable withholding or other taxes or any other financial obligation of the option holder) shall be:

- cash or by check payable to the order of the Corporation; or
- by delivery (i) of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Corporation sufficient funds to pay the exercise price and any required tax withholding or (ii) by the option holder to the Corporation of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Corporation cash or a check sufficient to pay the exercise price and any required tax withholding;
- by delivery (either by actual delivery or attestation) of shares of the Corporation's common stock owned by the option holder valued at fair market value on the date on which the shares of the Corporation's common stock are delivered to the Corporation (which fair market value shall be the closing price of the Corporation's common stock on the New York Stock Exchange (or such other principal exchange on which the Corporation's common stock is then listed for trading) on the date immediately preceding the delivery to the Corporation of the Corporation's common stock) provided: (i) such payment is then permitted by applicable law; (ii) such common stock of the Corporation
was owned by the option holder for a period of not less than six months prior to delivery to the Corporation; and (iii) such common stock of the Corporation is not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements on the date of delivery; or
- any combination of the foregoing; and it is


## Restricted Stock Unit Grant Amounts

FURTHER RESOLVED, that on the Grant Date, the Corporation shall grant to each employee set forth on Exhibit $\mathrm{E}_{\text {, }}$ the number of restricted stock units (each a "Restricted Stock Unit" or "RSU") for that number of shares of the Corporation's common stock as is set forth opposite such executive's name on Exhibit E. The Restricted Stock Units shall vest as set forth in Exhibit E. The grants of the foregoing Restricted Stock Units shall be made in accordance with the terms of the Plan under the Corporation's approved Global Restricted Stock Unit Agreement; and it is

## General Authority

FURTHER RESOLVED, that the Executive Chairman, CEO, CFO, any executive vice president, senior vice president, secretary or assistant secretary of the Corporation be, and each of them hereby are, authorized, empowered and directed to take such further actions as he/she deems necessary or appropriate to carry out the purposes and intent of the foregoing resolutions and the taking of any such action by such employee shall be conclusive evidence that such action was authorized and approved by the Compensation Committee of the Board; and it is

FURTHER RESOLVED, that any and all actions heretofore taken and any and all papers, instruments, documents or certificates heretofore executed, delivered, filed or recorded, and any sums of money expended in order to carry out the intents and purposes of the foregoing resolutions are in all respects ratified, confirmed and approved.

## Discuss New Business and Recommendations for Future Topics

Dr. Sullivan asked the Committee members if there were questions or if the Committee had additional topics they would like to discuss at future meetings. There were none presented. The Committee expressed its gratitude and appreciation to the executive management team for the exceptional performance and delivery of the Corporation in its financial and operational goals for 2020.

## Adjournment

There being no other business, the meeting adjourned at 12:25 p.m.
Respectfully submitted,

Daniel Woubishet
Associate General Counsel and Assistant Secretary

## 2021-2023 Performance Stock Unit Recommendations

## Summary of Program Design Provisions



## 

## Exhibit B

## Form of 2021-2023 Performance Stock Unit Award Agreement

## Form of 2021-2023 Performance-Based Stock Unit Award Agreement

1. Grant of PSUs. In consideration of services rendered to the Company by the Participant, the Company has granted to the Participant, subject to the terms and conditions set forth herein and in the Company's Stock Incentive Plan (the "Plan"), an award of performance-based stock units (individually, a "PSU" and collectively, the "PSUs"), representing the number of PSUs set forth under the Participant's account in the Company's third-party electronic stock administrative platform (the "Grant Summary"). The PSUs entitle the Participant to receive, upon and subject to the vesting of the PSUs (as described in Section 2 below), one share of common stock, $\$ 0.001$ par value per share, of the Company (the "Common Stock") for each PSU that vests. The shares of Common Stock that are issuable upon vesting of the PSUs are referred to herein as the "Shares."

## 2. Vesting of PSUs and Issuance of Shares.

(a) General. Subject to the other provisions of this Section 2, the PSUs shall vest as set forth on Schedule 1 to this Agreement, based on the achievement of the performance goal for the performance period set forth on Schedule 1, as certified by the Compensation Committee promptly following the performance period. Such date on which PSUs vest under this Agreement may be referred to herein as the "Vesting Date." Subject to Section 4, as soon as administratively practicable after the Vesting Date shown on Schedule 1, the Company will issue to the Participant, in certificated or uncertificated form, such number of Shares as is equal to the number of PSUs that vested on such Vesting Date. In no event shall the Shares be issued to the Participant later than 30 days after the Vesting Date.
(b) Service Termination. Except as set forth in Section 2(c) below and on Schedule 1 , upon the cessation of the Participant's services with the Company for any reason, all unvested PSUs shall be automatically forfeited as of such cessation of services. For purposes of this PSU award, services with the Company shall include services as an employee or director of, or consultant or advisor to, the Company or to a parent or subsidiary of the Company, or any successor to the Company.
(c) Change in Control Event. Upon a Change in Control Event (as defined in the Plan), the acquiring or succeeding entity (or an affiliate thereof) shall assume each outstanding PSU such that, following the consummation of the Change in Control Event, the PSU confers the Participant with the right to receive, for each Share subject to the award, the consideration (whether cash, securities or other property) received by each holder of Common Stock immediately prior to the Change in Control Event (the "Replacement Award"), provided that (i) such Replacement Award shall vest solely based on the Participant's continued provision of services with the Company (as described on Section 2(b) hereof) until the last day of the
performance period set forth on Schedule 1 and shall not, for the avoidance of doubt, be subject to achievement of the performance goals set forth on Schedule 1 and (ii) the amount of cash, securities or other property subject to such Replacement Award shall be determined assuming that the number of shares subject to the PSU is equal to the target number of Shares issuable under this Agreement (as set forth on Schedule 1) for the performance period. In the event that the Participant's employment is terminated by either the Company or its successor without Cause or by the Participant for Good Reason (as such terms are defined in the Plan) within eighteen (18) months following a Change in Control Event, the remaining unvested portion of the Replacement Award shall become vested as of the date of the Participant's termination of employment. Notwithstanding the foregoing, in the event that the acquiring or succeeding entity (or an affiliate thereof) refuses to assume the PSUs and grant Replacement Awards in connection with a Change in Control Event, this PSU award shall become vested, immediately prior to the Change in Control Event, with respect to the target number of Shares (as set forth on Schedule 1) for the performance period.
3. Dividends. At the time of the issuance of Shares to the Participant pursuant to Section 2, the Company shall also pay to the Participant an amount of cash equal to the aggregate amount of all dividends paid by the Company, between the grant date and the issuance of such Shares, with respect to the number of Shares so issued to the Participant.
4. Withholding Taxes. Upon vesting, the Company shall, in accordance with the terms of the Plan, withhold such number of Shares from the PSU award as is sufficient to satisfy the required federal, state, and local and other income and employment tax withholding obligations of the Company associated with the PSUs.
5. Restrictions on Transfer. Neither the PSUs, nor any interest therein (including the right to receive dividend payments in accordance with Section 3), may be transferred by the Participant except to the extent specifically permitted in Section 10(a) of the Plan.
6. Provisions of the Plan. This PSU award is subject to the provisions of the Plan. The Participant acknowledges receipt of the Plan, along with the Prospectus relating to the Plan.
7. Section 409A. This PSU award is intended to comply with or be exempt from Section 409A of the Internal Revenue Code of 1986, as amended, and the guidance issued thereunder ("Section 409A") and shall be interpreted and construed consistently therewith. In no event shall either the Participant or the Company have the right to accelerate or defer delivery of the Shares to a date or event other than as set forth herein except to the extent specifically permitted or required by Section 409A. In the event that the Participant is a "specified employee" within the meaning of Section 409A and the Shares are to be delivered in connection with the
termination of the Participant's employment, the delivery of the Shares and any dividends payable under Section 3 in connection with such delivery shall be delayed until the date that is six months and one day following the date of the Participant's termination of employment if required to avoid the imposition of additional taxes under Section 409A. Solely for purposes of determining when the Shares (and any dividends payable under Section 3) may be delivered in connection with the Participant's termination of employment, such termination of employment must constitute a "separation from service" within the meaning of Section 409A. Solely to the extent necessary to comply with Section 409A, any Change in Control Event must also constitute a "Change in Control Event" as described in Treasury Regulation Section 1.409A-3(i)(5).

## 8. Miscellaneous.

(a) No Rights to Employment. The Participant acknowledges and agrees that the grant of the PSUs and their vesting pursuant to Section 2 do not constitute an express or implied promise of continued employment for the vesting period, or for any period.
(b) Entire Agreement. These terms and the Plan constitute the entire agreement between the parties, and supersede all prior agreements and understandings, relating to the subject matter of this PSU award; and, with respect to this PSU award, these terms shall, for the avoidance of doubt, supersede the terms in any separate employment or severance plan or agreement between the Company and the Participant relating to the acceleration of vesting of equity awards.
(c) Governing Law. This PSU award shall be construed, interpreted and enforced in accordance with the internal laws of the State of Delaware without regard to any applicable conflict of law principles.
(d) Interpretation. The interpretation and construction of any terms or conditions of the Plan or this PSU award by the Compensation Committee shall be final and conclusive.

## COMPANY CONFIDENTIAL

## SCHEDULE 1

## VESTING CRITERIA FOR PSUs

## A. Performance Measure

PSUs shall vest based upon the Company's achievement of a specific target, as described in Section B below (the "Performance Objective"), of Adjusted EBITDA (as defined below) as a percentage of total Revenue (as defined below) (such percentage, "Adjusted EBITDA Margin") calculated on a cumulative basis for the three-year performance period described below (the "Performance Period"). The number of Shares issuable upon vesting of the PSUs shall be determined based upon the extent to which the Performance Objective is achieved, as certified by the Compensation Committee following the end of the Performance Period.
"Adjusted EBITDA" is defined as Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization as reported by the Company
"Revenue" is defined as revenue, determined in accordance with GAAP.
The Performance Period and the Threshold Number of Shares, Target Number of Shares and Maximum Number of Shares that can vest at the end of the Performance Period are as follows:

| Performance <br> Period | Threshold Number <br> of Shares for <br> Performance Period | Target Number <br> of Shares for <br> Performance Period | Maximum Number <br> of Shares for <br> Performance Period |
| :---: | :---: | :---: | :---: |
| January 1, 2021 to <br> December 31, 2023 | $50 \%$ of Target <br> Number of Shares | $100 \%$ of Target <br> Number of Shares | $150 \%$ of Target <br> Number of Shares |

## B. Performance Objective Target

The Performance Objective shall be Adjusted EBITDA Margin equal to $34 \%$ calculated on a cumulative basis for the three years in the Performance Period. The achievement of the Performance Objective shall constitute Target Performance.

Achievement of Adjusted EBITDA Margin equal to 30\% calculated on a cumulative basis for the three years in the Performance Period shall constitute Threshold Performance of the Performance Objective.

Achievement of Adjusted EBITDA Margin equal to $38 \%$ calculated on a cumulative basis for the three years in the Performance Period shall constitute Maximum Performance of the Performance Objective.

For the avoidance of doubt, the calculation of Adjusted EBITDA Margin on a cumulative basis shall equal the sum of Adjusted EBITDA for each year in the performance period divided by the sum of Revenue for each year in the performance period.

If, at the end of the Performance Period, the Company is required to make periodic reports under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Company's consolidated financial statements filed with the Securities and Exchange Commission on Form 10-K shall constitute its "Public Company Financial Statements" and shall apply for the Performance Period. If, at the end of the Performance Period, the Company is not required to make periodic reports under the Exchange Act, the Company's regularly prepared annual audited financial statements prepared by management shall be its "Private Company Financial Statements" and shall apply for the Performance Period. The applicable financial statements may be referred to herein as the "Financial Statements." The Compensation Committee shall certify the level of achievement of the Performance Objective promptly following the end of the Performance Period.

Notwithstanding anything herein to the contrary, the Compensation Committee shall have the discretion to determine the level of payout at the end of the Performance Period in recognition of broader performance outcomes and otherwise in its discretion.

## C. Calculation of Number of Shares Issuable

The number of Shares issuable at the end of the Performance Period upon certification of the extent of achievement of the Performance Objective by the Compensation Committee shall be equal to the product of (i) the Target Number of Shares for the Performance Period and (ii) the Payout Factor for the Performance Period.

The table below sets forth the Payout Factor based on the level of achievement of the Performance Objective for the Performance Period:

| Threshold <br> Performance Payout <br> Factor | Target Performance <br> Payout Factor | Maximum <br> Performance Payout <br> Factor |
| :---: | :---: | :---: |
| $50 \%$ | $100 \%$ | $150 \%$ |

In measuring the achievement of the Performance Objective for the Performance Period and calculating the related Payout Factor, achievement will be linearly interpolated between the percentages that constitute Threshold Performance and Target Performance and the percentages that constitute Target Performance and Maximum Performance based on actual results as determined and certified by the Compensation Committee. If the Adjusted EBITDA Margin achieved is below Threshold Performance, the Payout Factor for the Performance Objective shall be $0 \%$ and this award shall be terminated without the issuance of any Shares and the Participant shall have no further rights with respect to the Award.

In no event may the number of Shares issuable at the end of the Performance Period exceed the Maximum Number of Shares for the Performance Period.

## E. Effect of Death or Disability: Retirement

If the Participant dies or is disabled (within the meaning of Section 409A) prior to the end of the Performance Period, then the PSUs shall vest as to a number of Shares equal to the greater of (i) the Target Number of Shares and (ii) such number of Shares as the Compensation Committee shall determine in its sole discretion exercised in good faith based upon the projected level of achievement of the Performance Objective for the Performance Period, in either case prorated based on the portion of the Performance Period during which the Participant performed services with the Company. The Shares of Common Stock represented by such vested PSUs shall be delivered to the Participant or the Participant's estate within 30 days following such death or disability.

In the event of the Retirement (as defined below) of the Participant, the Participant shall be entitled to receive, following the end of the Performance Period, a prorated number of Shares that the Participant would have earned had the Participant remained employed through the end of the Performance Period based on the Compensation Committee's certification of the level of achievement of the Performance Objective, such proration based on the portion of the Performance Period during which the Participant performed services with the Company ending on the date of the Participant's Retirement. "Retirement" means attainment of age 60 and completion of 5 years of service with the Company or a parent or subsidiary of the Company, or any successor of the Company, with "services" including service to the Company or a parent or subsidiary of the Company, or any successor to the Company as an employee or director of, or consultant or advisor to such entity.

## Exhibit C

Schedule of Performance Stock Unit Grants

| Name | \# of <br> shares* | Price <br> Per <br> Share | Grant <br> Date | Vesting Schedule for <br> shares under PSUs |
| :--- | :---: | :---: | :---: | :---: |
| Robert G. Kramer | TBD, based <br> on value of <br> $\$ 1,400,000$ | $\$ .001$ | $\infty$ | $* *$ |
| Richard S. Lindahl | TBD, based <br> on value of <br> $\$ 375,000$ | $\$ .001$ | $\infty$ | $* *$ |
| Adam Havey | TBD, based <br> on value of <br> $\$ 350,000$ | $\$ .001$ | $\infty$ | $* *$ |
| Atul Saran | TBD, based <br> on value of <br> $\$ 350,000$ | $\$ .001$ | $\infty$ | $* *$ |
| Sean Kirk | TBD, based <br> on value of <br> $\$ 300.000$ | $\$ .001$ | $\infty$ | $* *$ |
| Karen Smith | $\$ .001$ | $\infty$ | $* *$ |  |
| Katherine Strei |  |  | $\infty$ | $* *$ |

* The target number of Performance Stock Units to be granted to each participant will be determined by dividing (i) the value desired to be granted to such participant as set forth in this table by (ii) the value of each PSU to be granted. The value of each PSU to be granted is equal to the closing price of the Corporation's common stock on the New York Stock Exchange on the trading day prior to the Grant Date. It is understood that each Performance Stock Unit award shall be granted assuming that the maximum number of shares issuable under each Performance Stock Unit Award Agreement (i.e., 1.5x the target number of Performance Stock Units) upon achievement of Maximum Performance of the Performance Objective will be issued.
+ The price per share shall be deemed satisfied by achievement of the threshold level of performance on the last day of the three-year performance period.
$\infty$ The third full business day after the Corporation releases the results of its operations for fiscal year 2020.
** The applicable performance period for each Performance Stock Unit shall be the three-year period beginning on January 1, 2021 and ending on December 31, 2023. The Performance Stock Units will vest, if at all, based upon the extent to which the Performance Objective is achieved as of the end of 2023, as certified by the Committee promptly following the end of the performance period.

Exhibit D
Schedule of Option Grants

| Name | \# of shares* | Price Per Share | Grant Date | Vesting Schedule for shares under option | Expiration Date |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fuad El-Hibri | TBD, based on value of \$1,300,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Robert G. Kramer | TBD, based on value of \$2,800,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Richard S. Lindahl | TBD, based on value of \$750,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Adam Havey | TBD, based on value of \$700,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Atul Saran | TBD, based on value of \$700,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Sean Kirk | TBD, based on value of \$600,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Karen Smith |  | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Katherine Strei |  | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |

[^1]
## Exhibit E

Schedule of Time-based RSU Grants

| Name | \# of shares* | Price Per Share | Grant <br> Date | Vesting Schedule for shares under RSUs |
| :---: | :---: | :---: | :---: | :---: |
| Fuad El-Hibri | TBD, based on value of \$1,300,000 | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Robert G. Kramer | TBD, based on value of \$1,400,000 | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Richard S. Lindahl | TBD, based on value of \$375,000 | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Adam Havey | TBD, based on value of \$350,000 | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Atul Saran | TBD, based on value of $\$ 350,000$ | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Sean Kirk | TBD, based on value of $\$ 300,000$ | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Karen Smith |  | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Katherine Strei |  | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |

* The number of time-based Restricted Stock Units to be granted to each participant will be determined by dividing (i) the value desired to be granted to such participant by (ii) the value of each Restricted Stock Unit to be granted. The value of each Restricted Stock Unit to be granted is equal to the closing stock price of the Corporation's common stock on the trading day prior to the Grant Date.
$\infty$ The third full business day after the Corporation releases the results of its operations for fiscal year 2020.


## COMPENSATION DISCUSSION AND ANALYSIS

This section discusses the principles underlying our executive compensation programs, policies and decisions and the most important factors relevant to an analysis of these programs, policies and decisions. It provides qualitative information regarding the manner and context in which compensation is earned by, and awarded to, our named executive officers and is intended to place in perspective the data presented in the compensation tables included in this proxy statement. For 2020, our named executive officers, whose compensation is set forth in the 2020 Summary Compensation Table and other compensation tables contained in this proxy statement, and their current positions with the company, are:

## 2020 Named Executive Officers

- Fuad El-Hibri - Executive Chairman of the Board of Directors
- Robert Kramer - President and Chief Executive Officer
- Richard Lindahl - Executive Vice President, Chief Financial Officer and Treasurer
- Adam Havey - Executive Vice President, Business Operations
- Atul Saran - Executive Vice President, Corporate Development, General Counsel and Secretary

The compensation committee oversees our executive compensation programs. In this role, the compensation committee reviews and approves all compensation decisions relating to our named executive officers. The compensation committee has engaged Willis Towers Watson as its independent compensation consultant to provide competitive compensation data and assist with the implementation of various aspects of our base salary determinations, annual bonus plan, long-term incentive program and other executive compensation decisions from time to time. Willis Towers Watson provides data and advice that the compensation committee considers in making its decisions.

## Executive Summary

## Select Strategic Accomplishments and Other Achievements

In 2020, we achieved the following:

- Significantly exceeded budgeted plan to achieve annual revenue of $\$ 1.274$ billion (actual 2020 revenue was $\$ 1.555$ billion), including expansion of the contract development and manufacturing ("CDMO") services business unit with execution of contracts with an aggregate value across all such agreements of $\$ 1.5$ billion from 2020 through 2022;
- Significantly exceeded budgeted plan to achieve annual Adjusted EBITDA of $\$ 357$ million (actual 2020 Adjusted EBITDA was $\$ 630$ million);
- Completed a successful corporate bond offering, further strengthening our corporate capital structure ( $\$ 450$ million in aggregate principal amount of $3.875 \%$ Senior Unsecured Notes due 2028);
- Advanced our product development pipeline and evaluation of M\&A opportunities consistent with our plan, despite disruptions from the COVID-19 pandemic;
- Recruited, onboarded and trained new employees, representing net workforce growth of approximately $25 \%$ from the start of the year, including approximately 250 newly created roles in response to CDMO and COVID-19-related work and delivered a meaningful improvement in targeted employee engagement, increasing our percentile rank by $10 \%$ and more than doubling our engagement index ratio from 2019; and
- Continued, and in some cases accelerated, our planned infrastructure investments both in manufacturing capability and quality systems, as well as in key functions and systems consistent with our 2020-2024 strategic plan.


## Highlights of Recent Compensation Decisions and Actions

The following information highlights the compensation committee's key recent compensation decisions and actions. These decisions and actions were made with the advice of the compensation committee's independent consultant, Willis Towers Watson, and are discussed in greater detail herein.

Base Salary. Base pay for our named executive officers is generally set at levels commensurate with their experience and the market data from Willis Towers Watson. In February 2021, the compensation committee increased base salaries for our named executive officers by an average of $6.7 \%$. These increases were implemented to competitively position our named executive officers' base salaries to the market for companies comparable in size given our recent growth and reflective of the relative expertise of the individual in the role relative to benchmark. A significant portion of our named executive officers' total compensation continues to be performance-based and at-risk. Our named executive officers' total compensation continues to benchmark around the $50^{\text {th }}$ percentile of the market using a range across multiple benchmark sources.

Bonus Awards. Bonus awards based on the company's 2020 performance were paid in early 2021 at $140 \%$ of target for our named executive officers. The company's performance in 2020 significantly exceeded the performance goals set by the compensation committee relative to our overall performance measures. Further discussion about the performance targets set for 2020 and the company's performance against these targets can be found under the section titled "Elements of 2021 Executive Compensation Decisions."

2021 Performance-Based Stock Unit ("PSU") Grant. In February 2021, the compensation committee, with input from Willis Towers Watson, approved grants of PSU awards under the company's Stock Incentive Plan to Messrs. Kramer, Lindahl, Havey and Saran (the "2021 PSU Grant"). The 2021 PSU Grant will only result in the issuance of shares based on the level of achievement with respect to Adjusted EBITDA Margin ${ }^{1}$ calculated on a cumulative basis over the three-year period beginning January 1, 2021 and ending December 31, 2023 (the "Performance Period"). Awards issued under the agreement governing the terms of the 2021 PSU Grant will vest based on the achievement of the performance objective, as certified by the compensation committee following the end of the Performance Period.

2018 PSU Payout. The PSUs granted to Messrs. Kramer, Lindahl, Havey and Saran in 2018 (the "2018 PSUs") for the 2018-2020 performance period vested this year based on the achievement of the performance goal of Adjusted Net Income ${ }^{2}$ as a percentage of total GAAP revenue for the 2020 fiscal year, as certified by the compensation committee in February 2021. The compensation committee determined that $169 \%$ of the target performance goal had been achieved and certified a payout factor of $150 \%$, the maximum payout factor contemplated by the plan.

Updates to the Proxy Peer Group. In November 2019, Willis Towers Watson conducted a review of the company's Proxy Peer Group (as defined below) in anticipation of the annual executive competitive market review to be conducted by the compensation committee in early 2020. Although there were no significant changes to the Proxy Peer Group selection methodology used to determine which companies to include in the Proxy Peer Group for 2020, the compensation committee relied upon a broader set of biotechnology and pharmaceutical industry data by replacing the Mercer SIRS Life Sciences survey (a second benchmarking data set previously relied upon) with the Willis Towers Watson survey.

In November 2020, Willis Towers Watson once again conducted a review of the company's proxy peer group in anticipation of the annual executive competitive market review to be conducted in early 2021. Although there were no significant changes to the Proxy Peer Group selection methodology used to determine which companies to include in the Proxy Peer Group for 2021, Willis Towers Watson noted that finding exact comparators to the company in terms of growth trajectory, financial/size and business composition is challenging due to the uniqueness of the company's business. Accordingly, certain tradeoffs were considered by the compensation committee in determining the most appropriate peer group for comparison. In making decisions related to the Proxy Peer Group for 2021, upon the advice of Willis Towers Watson, the compensation committee also considered the fact that the company's CDMO services business had expanded significantly during 2020 .

[^2]For further information on both Proxy Peer Groups, see sections titled "2020 Compensation Decisions" and "2021 Compensation Decisions" in the chart below.

Competitive Analysis. The compensation committee also extensively reviewed external executive compensation pay data and related trends to ensure the company's executive compensation practices continue to align with market best practices.

## Our Approach

Our compensation committee abides by the following philosophy when evaluating executive compensation:

## Compensation Philosophy

- Support a pay-for-performance culture;
- Focus on achieving well-articulated goals while demonstrating leadership values;
- Make compensation market-competitive to attract and retain top talent;
- Reward individual contributions; and
- Employ disciplined use of equity.

We continue to be committed to the ongoing review and alignment of our programs to ensure pay-for-performance while targeting our overall compensation within a range of the competitive market median.

We also have the following policies, which are applicable to the named executive officers, in furtherance of good governance practices:

| What Emergent Does... | What Emergent Does Not Do... |
| :---: | :---: |
| - Stock ownership guidelines; <br> - Compensation recoupment policy; <br> - Significant weight on performance-based compensation; <br> - Change-in-control severance payments and benefits are conditioned upon a "doubletrigger" (i.e., change in control and qualifying termination must both occur); <br> - Independent compensation consultant directly engaged by the compensation committee; <br> - Regular competitive benchmarking to ensure compensation aligns to common life science practices; <br> - Payout caps in all incentive compensation programs; and <br> - Annual assessment to review and mitigate risks arising from incentive compensation. | - No single trigger vesting of equity awards in the event of a change in control; <br> - No backdating or repricing of stock options; <br> - No payment of dividends or dividend equivalents unless equity awards are earned and/or vested; <br> - No short sales or other individual hedging transactions; <br> - No tax gross-ups in connection with change in control severance payments and benefits; and <br> - No employment agreements with executive officers. |

## Role of Executive Officers in Determining Executive Compensation

The compensation committee approves all compensation decisions relating to our named executive officers, including our executive chairman and our chief executive officer. As part of this process, our chief executive officer, together with our executive vice president of human resources, prepares compensation recommendations for each of our named executive officers, other than the executive chairman of the board and the chief executive officer, and presents these recommendations to the compensation committee for approval. Willis Towers Watson assists in this effort, periodically meeting with management to gain input on objectives with respect to executive compensation and assisting the compensation committee in its deliberations. Compensation recommendations for the executive chairman and chief executive officer are developed and
approved by the compensation committee based on data and context provided by the executive vice president of human resources and Willis Towers Watson. No named executive officer is present when the compensation committee makes decisions regarding their own compensation.

## Executive Compensation Principles

Our executive compensation programs are based on four key principles:

## Key Executive Compensation Principles

- Pay should be linked to performance;
- Compensation opportunities should be competitive with relevant peer companies;
- The equity compensation program should align executive interests with those of stockholders; and
- Supplemental benefits and perquisites should be limited and used selectively in specific circumstances to attract and retain executives.

Pay should be linked to performance. We believe that a significant portion of each senior executive's compensation should be variable. The performance of our senior executives has a significant impact on the overall performance of our company. To that end, a significant portion of the compensation opportunity provided to our senior executives is currently variable based on corporate performance. We consider both annual cash bonuses and equity awards to be variable compensation.

Compensation opportunities should be competitive with relevant peer companies. The compensation committee reviews compensation levels and designs at comparable companies as part of its decision-making process so it can set total compensation levels that it believes are competitive and aligned with the company's performance. The compensation committee reviews compensation data for executives in comparable roles at life sciences companies using both published compensation surveys and the proxy statements of public companies in its chosen proxy peer group (the "Proxy Peer Group"). The compensation committee generally sets target total direct compensation for our executives to be competitive with the published surveys and Proxy Peer Group, taking into consideration the scope of job responsibilities, individual performance, experience, internal pay equity and other relevant factors.

Each year, the compensation committee reviews the sources of market compensation data, including both the published compensation surveys and the proxy statements of companies in the Proxy Peer Group. Both the published compensation surveys and the Proxy Peer Group are based on other life sciences companies, which is the primary industry in which the company competes for executive talent. As part of its review, the committee considers specific criteria to assess the comparability of the published compensation surveys and the proxy statements of companies in the Proxy Peer Group. In the case of the published compensation surveys, based on the company size parameters available in the surveys, revenues and number of employees are the two primary criteria for including companies in the underlying data sample. In the case of the Proxy Peer Group, we seek companies based on the following criteria: (i) revenue, (ii) market capitalization, (iii) net income, (iv) number of employees and (v) research and development expense.

The following table describes the published compensation surveys, the criteria for selecting companies for the Proxy Peer Group and the companies in the Proxy Peer Group as used by the compensation committee in making 2020 and 2021 compensation decisions (the data described below as it relates to 2020 compensation decisions is referred to herein as the "2020 Survey Data" and the "2021 Survey Data," as it relates to 2021 compensation decisions).

|  | 2020 Compensation Decisions | 2021 Compensation Decisions |
| :---: | :---: | :---: |
| Published <br> Compensation Surveys | Radford Life Sciences: <br> -Data sample comprised of publicly traded commercial biopharmaceutical, medical devices and diagnostics and contract research/manufacturing companies with 500 to 5,000 employees; and -Median revenue of this sample was $\$ 851$ million. | Radford Life Sciences: <br> -Data sample comprised of publicly traded commercial biopharmaceutical, medical devices and diagnostics and contract research/manufacturing companies with 617 to 17,500 employees; and -Median revenue of this sample was \$1,449 million. |


|  | 2020 Compensation Decisions | 2021 Compensation Decisions |
| :---: | :---: | :---: |
|  | Willis Towers Watson Pharmaceutical and Health Sciences: <br> -Data sample comprised of biopharmaceutical and medical equipment companies; <br> -Regression data was used to predict the compensation by those companies most similar in size to the company (regression data was available for all company executive positions); and <br> -Based on advice from Willis Towers Watson, the compensation committee replaced the Mercer SIRS Life Sciences survey data used in the previous year with the Willis Towers Watson survey data. The Willis Towers Watson survey provides additional information on longterm equity practices and given the company's recent growth, contains companies that are comparable in size. | Willis Towers Watson Pharmaceutical and Health Sciences: <br> -Data sample comprised of pharmaceutical and health care equipment and supply and life sciences tools and services companies with 487 to 15,250 employees; Median revenue of this sample was $\$ 2,123$ million; and <br> - Where available, regression data was used reflecting projected organizational revenue of $\$ 1.5$ billion (supplemented with tabular data where necessary); |
| Proxy Peer Group Selection Criteria | Focus on U.S.-based, publicly-traded companies classified within the pharmaceutical, biotechnology healthcare equipment and life sciences tools and services categories that generally met three of the following five criteria:* <br> - Revenues between $\$ 500$ million and $\$ 3.0$ billion; <br> - Market capitalization between $\$ 1.4$ billion and $\$ 8.5$ billion; <br> - Positive net income; <br> - Employee size of 850 to 5,100 full-time employees; and <br> - Research and development expense between $5 \%$ and $25 \%$ of revenue. <br> Based on the advice of Willis Towers Watson, the compensation committee approved the elimination of one company in the 2019 Proxy Peer Group (Repligen) and the addition of four new companies that met the screening criteria. Additionally, two companies (Amphastar and Supernus) were below the low end of the size-related criteria but were retained in the Proxy Peer Group for 2020 based on their relevance as competitors for executive talent. | Focus on U.S.-based, publicly-traded companies classified within the pharmaceutical, biotechnology healthcare equipment and life sciences tools and services categories that generally met three of the following five criteria:* <br> - Revenues between $\$ 750$ million and $\$ 4.5$ billion; <br> - Market capitalization between $\$ 1.9$ billion and $\$ 11.5$ billion; <br> - Positive net income; <br> - Employee size of 1,100 to 6,600 fulltime employees; and <br> - Research and development expense between $5 \%$ and $25 \%$ of revenue. <br> Based on the advice of Willis Towers Watson, the compensation committee approved the elimination of four companies that were previously included in the 2020 Proxy Peer Group (Akorn, Cambrex, Myriad and Supernus) and the addition of six new companies that met a majority of the financial/size criteria (BioRad Laboratories, Horizon Therapeutics, Incyte Corporation, Ionis Pharmaceuticals, PRA Health Sciences and Varian Medical Systems). |
| Proxy Peer Group | Akorn, Inc.; <br> Alkermes plc; <br> Amneal Pharmaceuticals, Inc.; <br> Amphastar Pharmaceuticals, Inc.; | Alkermes plc; <br> Amneal Pharmaceuticals, Inc.; <br> Amphastar Pharmaceuticals, Inc.; <br> Bio-Techne Corporation; |


|  | 2020 Compensation Decisions | 2021 Compensation Decisions |
| :---: | :---: | :---: |
|  | Bio-Techne Corporation; <br> Bruker Corporation; <br> Cambrex Corporation; <br> Catalent, Inc.; <br> Exelixis, Inc.; <br> Globus Medical, Inc.; <br> Integra LifeSciences Holdings <br> Corporation; <br> Jazz Pharmaceuticals plc; <br> Masimo Corporation <br> Myriad Genetics, Inc.; <br> NuVasive, Inc.; <br> OPKO Health, Inc.; <br> Supernus Pharmaceuticals, Inc.; and United Therapeutics Corporation. | Bio-Rad Laboratories, Inc.,** <br> Bruker Corporation; <br> Catalent, Inc.; <br> Exelixis, Inc.; <br> Globus Medical, Inc.; <br> Horizon Therapeutics plc;** <br> Incyte Corporation,** <br> Integra LifeSciences Holdings <br> Corporation; <br> Ionis Pharmaceuticals, Inc. ** <br> Jazz Pharmaceuticals plc; <br> Masimo Corporation; <br> NuVasive, Inc.; <br> OPKO Health, Inc.; <br> PRA Health Sciences, Inc.;** <br> United Therapeutics Corporation; and <br> Varian Medical Systems, Inc.** |
| * | -Healthcare equipment companies include manufacturers of health care equipment and devices, including medical instruments, drug delivery systems, cardiovascular and orthopedic devices and diagnostic equipment. <br> -Life sciences tools and services companies include companies enabling drug discovery, development and a production continuum through the provision of analytical tools, instruments, consumables and supplies, clinical trial services and contract research services (primarily servicing the pharmaceutical and biotechnology industries). |  |
| ** | -Represents a new member of the Proxy Peer Group for 2021. |  |

In determining pay decisions for 2020 and 2021, Willis Towers Watson utilized the most recent survey data and proxy data available, collecting from each data source each of the $25^{\text {th }}, 50^{\text {th }}$ and $75^{\text {th }}$ percentiles for the assessed pay elements as additional points of reference for the compensation committee. The compensation committee relied on these data sources to assist in setting base salaries, target bonus percentages, target total cash compensation, long-term incentive award guidelines and target total direct compensation.

Executive Chairman Compensation Decisions. In making its compensation decisions for the executive chairman, the compensation committee historically reviewed market data of a broad range of similarly sized companies from various industries with an executive chairman role. However, that data demonstrated that companies often use very different approaches in determining compensation for the executive chairman position based on company-specific circumstances, which leads to divergent compensation practices across the reference group of companies. Moreover, maintaining a consistent sample of executive chairman compensation data for similarly sized companies has been challenging. Accordingly, in 2015, the compensation committee determined that it would consider internal parity within the executive team and competitive market data summaries for comparable roles when determining appropriate pay recommendations for the executive chairman, in addition to considering factors such as level of involvement, scope of responsibilities, founder status, equity held and tenure, which had been historically considered. The compensation committee has continued to follow the same procedure in setting compensation for our executive chairman in 2020 and 2021.

The equity compensation program should align executive interests with those of our stockholders. We believe annual equity awards align the compensation opportunity for our executives with stockholder value creation and encourage participants to focus on long-term company performance.

We grant a mix of PSUs, stock options and RSUs, except for our executive chairman who receives a mix of stock options and RSUs. Our mix of long-term equity vehicles is shown in the following charts.


Beginning in 2017, we added PSUs to our equity compensation program, a practice we have continued to date. The PSUs weight a portion of annual equity grants on long-term financial performance. If a threshold level of financial performance is achieved, PSUs result in the issuance of common shares to the participant according to the below table:

| Performance Level | Number of Shares Issued <br> as \% of PSUs Granted |
| :--- | :---: |
| Below threshold | $0 \%$ |
| Threshold | $50 \%$ |
| Target | $100 \%$ |
| Maximum | $150 \%$ |

${ }^{1}$ Straight line interpolation is used to determine the number of shares issued between the threshold, target and maximum performance levels.

To receive a share issuance, participants must meet the continued service requirements, which include either active employment or continued service as a consultant on the date that the compensation committee certifies performance after completion of the performance period. Also, any dividend equivalent payments associated with PSUs are only paid after completion of the performance period and only commensurate with the attainment of the performance goals. No dividend equivalents are paid if the threshold performance goal is not satisfied.

Supplemental benefits and perquisites should be limited and used selectively in specific circumstances to attract and retain executives.

We use supplemental benefits on a very limited case-by-case basis and only to the extent we consider necessary to attract or retain specific executives. None of the named executive officers received supplemental benefits or perquisites in 2020, as reflected in the Summary Compensation Table.

## Elements of Executive Compensation

The following table summarizes the key elements that comprise our compensation program as well as the objectives behind each of these elements:

| Element | Objectlive |
| :--- | :--- |
| Base salary | Provide base cash compensation for each job position that is competitive and reflects <br> the individual's experience, responsibility and expertise. |
| Annual cash bonuses | Provide performance-based, short-term cash compensation relative to the achievement <br> of pre-set objectives, and performance, based on a payout range of $0-150 \%$. |


| Equity awards | Provide awards that align the interests of our executives with those of our stockholders <br> over the long term. |
| :--- | :--- |
| Retirement and Health and <br> Welfare Benefits (generally <br> available to all employees) | Promote healthiness and financial readiness for retirement. |
| Severance and change of <br> control benefits | Provide severance benefits for qualifying termination both related and unrelated to a <br> change-in-control to enable the attraction and retention of key executive talent and <br> mitigate uncertainties about ongoing employment if a change-in-control is pursued. |

As noted above, we provide base cash compensation for each job position which we believe is competitive and reflects the individual's experience, responsibility and expertise. Below is a summary of the key elements considered by the compensation committee in setting base salaries.

Base Salary. We generally provide base salaries to our named executive officers within a competitive range of the $50^{\text {th }}$ percentile of the applicable survey and proxy data as described above, with the exception of our executive chairman, whose base salary is determined by the range of factors addressed in detail above. While we target the market median, we recognize that the percentile for any given executive may vary below or above market median based on a variety of factors, including the executive's time in the role, scope of responsibilities, individual performance and potential future contributions to our company. In addition, we consider our overall financial performance in making decisions to adjust executive salaries. The compensation committee reviews base salaries at least annually and adjusts such salaries from time to time to realign them with market levels after taking into account individual responsibilities, performance and experience. The factors considered in making a specific adjustment to base salary may relate to a change in the emphasis placed on one or more of the factors that were used to set the initial base salary for a particular named executive officer or reflect a new factor that arises in the course of our operations.

The compensation committee used the information described above in approving the following annual base salaries paid to our named executive officers for 2020 and 2021.

| Name | 2020 Base Salary ${ }^{(1)}$ |  | 2021 Base Salary ${ }^{(2)}$ |  | Increase from 2021 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fuad El-Hibri | \$ | 1.085,677 | \$ | 1.135 .000 | $\$$ | 49,323 |
| Robert Kramer . | \$ | 875,014 | \$ | 1,000,000 | \$ | 124,986 |
| Richard Lindahl.... | \$ | 550,014 | \$ | 575,000 | \$ | 24.986 |
| Adam Havey ...... | \$ | 530,005 | \$ | 555,000 | \$ | 24,995 |
| Atul Saran | \$ | 530.005 | \$ | 555,000 | \$ | 24,995 |

(1) The 2020 Base salary reflects: a 3 $\%$ merit increase over 2019 for Mr. El-Hibri; a $25 \%$ market and merit increase for Mr. Kramer; and market and merit increases of $7 \%, 9 \%$ and $5 \%$ for Messrs. Lindahl, Havey and Saran, respectively.
(2) The 2021 Base salary reflects: a $4.5 \%$ merit increase over 2020 for Mr. El-Hibri; a $14 \%$ market and merit increase for Mr. Kramer, and a $5 \%$ merit increase for each of Mr. Lindahl, Mr. Havey and Mr. Saran.

Annual Cash Bonuses. The compensation committee has the authority under our annual bonus plan for executive officers to award annual cash bonuses to our executives. Each executive, other than our executive chairman, is eligible for an annual bonus, which is intended to motivate and compensate each executive for achieving strategic, financial and operational goals and individual performance objectives. The amount of annual bonuses that are payable under this plan is reviewed and approved by the compensation committee each year. The plan provides that bonus amounts shall be determined as follows:


The philosophy of the compensation committee is to set bonus targets at approximately the 50th percentile as measured
against the applicable survey data and proxy peer data. No participant may earn a bonus of more than $150 \%$ of target under the annual bonus plan. The corporate factor may range from 0 to 1.5 , based on our achievement of corporate goals determined by the compensation committee, and the individual factor may range from 0 to 1.5 , based on an evaluation of each participant's performance of day-to-day responsibilities, behavioral competencies, and achievement of individual goals determined by the compensation committee. The compensation committee may also award discretionary bonuses outside of the framework of the bonus plan.

Furthermore, since 2015 , in order to ensure alignment and collaboration among the executive management team, the compensation committee principally utilized the corporate factor and the performance objectives to calculate bonuses for all executive officers, effectively placing a $100 \%$ weighting on the corporate factor. Beginning with the payout in 2022 with respect to 2021 performance, the compensation committee has determined that it will begin to utilize the individual performance component weighted at $10 \%$, except for the chief executive officer for whom the corporate component will be weighted $100 \%$. Performance will be measured against each individual executive's highest priority business or leadership goal for the performance year. As previously noted, the chief executive officer's bonus opportunity will continue to be based on $100 \%$ of the corporate performance objectives.

Applying this approach, the compensation committee met in January 2021 to assess the company's performance and determine the corporate factor to be applied to bonuses for named executive officers to be paid in March 2021 for the company's 2020 performance. The compensation committee approved a corporate factor of 1.4 and approved payment of $140 \%$ of the target bonuses for each of the named executive officers, other than our executive chairman, based on the following assessment:

- The compensation committee determined that the company had met, exceeded or significantly exceeded all six of the 2020 corporate goals. More specifically, the company's revenue exceeded budget by $22 \%$ and adjusted EBITDA exceeded budget by $76 \%$, and these goals were deemed to be significantly exceeded. The company was deemed to have exceeded its goals for improvements in employee engagement (noted above) as well as expansion of critical functions. And the company was deemed to have met its goals related to advancement of pipeline candidates and evaluation of potential merger and acquisition opportunities.
- In addition to execution against the company's 2021 corporate goals, the compensation committee considered a number of additional accomplishments. Notably, the company's execution in light of the COVID-19 pandemic was a key consideration, particularly in terms of the expansion of the CDMO business, development of the potential COVID-19 therapeutic product candidates, and adjustments required to internal operations as a result of the pandemic. In addition, the company completed a highly successful corporate bond offering, further strengthening the company's capital structure.
- The compensation committee also reviewed management's assessment of its progress against its long-range goals tied to the 2020-2024 strategic plan and factored that assessment into its determination of the corporate factor.
- Finally, the compensation committee also considered whether there were any significant setbacks or unexpected challenges that were not effectively resolved in assessing the corporate factor. The disruption of international travel due to the pandemic resulted in a disruption to the company's travel health business. The compensation committee considered the company's actions to restructure and reduce costs while maintaining the long-term growth prospects for this portion of the business in its assessment.

Equity Awards. Stock options, RSUs and PSUs serve as the forms of long-term incentive compensation for our named executive officers, except for our executive chairman, who only receives stock options and RSUs. PSUs were included beginning in 2017 to provide a long-term performance-based element to the mix of annual equity grants. All stock option, RSU and PSU grants to named executive officers are approved by the compensation committee.

Equity awards made to named executive officers in early 2021 were determined using a combination of the survey data and peer proxy data, as applicable. The survey and proxy data are used to determine the dollar value of equity grants that we make to the named executive officers. Target equity award values are intended to align with the market median, but actual grants may be positioned above or below based on individual performance.

The following calculations form the basis for the number of stock options, RSUs and PSUs granted to our named executive officers:

- The actual number of options granted to each named executive officer is equal to $50 \%$ of the total desired long-term incentive value divided by $50 \%$ of the closing price of our common stock on the New York Stock Exchange ("NYSE") one day prior to the date of grant.
- The number of RSUs is equal to $25 \%$ ( $50 \%$ in the case of our executive chairman) of the desired long-term incentive value divided by the closing price of our common stock on the NYSE one day prior to the date of grant.
- For named executive officers, other than our executive chairman, the target number of PSUs is equal to $25 \%$ of the desired long-term incentive value divided by the closing price of our common stock on the NYSE one day prior to the date of grant. The actual number of shares issued will depend on the level of performance achieved under the terms of the PSU agreement. For additional discussion of the PSUs, please see the section titled "The equity compensation program should align executive interests with those of stockholders." Our executive chairman does not receive PSU grants.

We generally make an equity grant in the month following the hire date for new executives and in the month following the date of executive promotions. If circumstances warrant, we also may make equity grants at various other points throughout the year. The compensation committee makes all awards to executive officers, while our chief executive officer, chief financial officer, and executive chairman have been authorized to make awards to eligible employees other than executive officers.

The exercise price of all stock options we grant is equal to the fair market value of our common stock on the date of grant, which we consider to be the closing sales price of our common stock on the NYSE on the trading day immediately preceding the date of grant. Stock options and RSUs vest in three equal annual installments beginning on the day prior to the one-year anniversary of the date of grant and stock options have a seven-year term. The vesting feature of our stock option and RSUs awards is intended to aid in executive retention by providing an incentive to our executives to remain in our employ during the vesting period.

The compensation committee reviews all components of each executive's compensation when determining equity awards to ensure that an executive's total compensation conforms to our overall philosophy and objectives. The compensation committee may consider the value of previously granted equity awards in making future grants, but a significant amount of value represented by previous awards or a significant level of stock ownership will not necessarily cause the committee to forego making, or reduce the amount of, any future award.

With stock options, executives are rewarded if our stock price increases above the exercise price of the stock option. We believe that stock option awards are an effective method of motivating executives to manage our company in a manner that is consistent with the long-term interests of our stockholders. We believe that RSUs are another effective tool for motivating, retaining and incentivizing executives, particularly when used in combination with stock option awards. The stock ownership opportunities afforded by RSUs align motivation of executives with the goals of stockholders even in situations where declines in our stock price diminish the retentive or incentivizing effects of stock options. In addition, we believe that stock options and RSUs are simple for participants to understand and have engaged in training to ensure that these forms of equity-based compensation are familiar to our executives. The compensation committee introduced PSUs to the overall long-term incentive mix for named executive officers other than the executive chairman in 2017 to further align their interests with the long-term interests of our stockholders.

For the 2018 to 2020 performance period, the following table reports the final share issuance to recipients of the 2018 PSU grant. The number of shares issued is based on the company's Adjusted Net Income as a percentage of GAAP revenue performance, which represented $169 \%$ of the target goal.

|  | Shares Issued Under Award |  |  |
| :--- | :---: | :---: | :---: |
| Grant Recipient |  | Number of Shares <br> Issued (Pre-Tax) | \% of PSUs <br> Originally Granted |
| Robert Kramer | 6,563 | 9,844 | $150 \%$ |
| Richard Lindahl | 4,991 | 7,486 | $150 \%$ |
| Adam Havey | 5,036 | 7,554 | $150 \%$ |
| Atul Saran | 5,313 | 7,969 | $150 \%$ |

Below is a listing of the outstanding and unvested PSUs granted in 2019 and 2020, the recipients who received the awards, the performance period covered and the performance measure that will be used to determine whether the associated performance goal has been achieved following the end of each performance period.

| Grant Recipients | Date of Award | Performance Period | Performance <br> Measure |
| :--- | :--- | :--- | :--- |
| Messrs. Kramer, <br> Havey, Lindahl and <br> Saran | February 2019 | January 1, 2019 to <br> December 31, 2021 | Adjusted Net Income <br> as a percentage of <br> GAAP revenue for the <br> 2021 Fiscal Year. |
| Messrs. Kramer, <br> Havey, Lindahl and <br> Saran | February 2020 | January 1, 2020 to <br> December 31, 2022 | Adjusted EBITDA as <br> a percentage of GAAP <br> revenue on a <br> cumulative basis over <br> the Performance <br> Period. |

In February 2021, all of the named executive officers were granted PSUs for the 2021 to 2023 performance period, except for Mr. El-Hibri (who does not receive PSUs). Because of the company's focus on Adjusted EBITDA performance as a key profitability metric for the company's 2020-2024 strategic plan, in 2020 the compensation committee discontinued the use of Adjusted Net Income as a percentage of GAAP revenue as a performance measure. In its place, the issuance of any shares with respect to the PSUs granted in 2020 and 2021 (covering the 2020-2022 and 2021-2023 performance periods, respectively) will be based on Adjusted EBITDA as a percentage of GAAP revenue and the continued service requirements as previously described.

The compensation committee has reviewed and will continue to monitor market trends with respect to equity incentives and may periodically evaluate the appropriateness of other forms of equity-based compensation.

Benefits. We maintain broad-based benefits that are generally available to all employees, including health insurance, life and disability insurance, dental insurance and a $401(\mathrm{k})$ plan. Executives are eligible to participate in all of our employee benefit plans, in each case on the same basis as other employees. We provide a matching contribution for each 401 (k) plan participant of $50 \%$ of the participant's elective deferrals for the year up to $6 \%$ of the participant's eligible compensation, subject to IRS limitations. The matching contribution is fully and immediately vested.

Executive Severance Arrangements. Compensation for our named executive officers includes severance and change of control arrangements, which are reflected in our Second Amended and Restated Senior Management Severance Plan (the "Senior Management Severance Plan") effective July 16, 2015, which applies broadly to any employee of the company with the title of chief executive officer, president, executive vice president, senior vice president or vice president who has been designated to participate by the Board or, with the authorization of the Board, by the chief executive officer of the company. In addition, our executive chairman remains a participant in the plan subject to the payout and benefit levels described under "-Executive Compensation - Payments Upon Termination or Change of Control." Our Senior Management Severance

Plan provides for payments and benefits as a result of involuntary termination without cause or termination of employment in particular circumstances in connection with a change of control. The compensation committee periodically reviews benchmarking data to evaluate whether the benefits to be received by each executive continue to be competitive compared to our updated Proxy Peer Group. The Senior Management Severance Plan is designed based on our understanding of market practice at comparable companies for similarly situated executives and in a manner that we believe is likely to attract and help retain high quality executive talent. The Senior Management Severance Plan is described in greater detail under "Executive Compensation - Payments Upon Termination or Change of Control."

In making its decision to adopt the Senior Management Severance Plan, the compensation committee considered the views of Willis Towers Watson that the program was generally consistent with market practice, as well as information on the potential costs associated with the program. The triggers for benefits are based on the compensation committee's view of market practice and the compensation committee's view that some level of income continuation should be provided in the event a named executive officer's employment is terminated without cause or by the executive with good reason as those terms are defined in the Senior Management Severance Plan. The plan provides for "double-trigger" rather than "singletrigger" equity acceleration upon a change of control because the compensation committee believes that, based on its view of market practice, the vesting of outstanding equity awards should accelerate only if the executive is terminated without cause or leaves for good reason following a change of control. The plan does not provide any payments or benefits in the case of termination by an executive without good reason or in the case of termination for cause.

## 2020 Compensation Mix

The following pie charts set forth information regarding the actual mix of compensation for 2020 for our executive chairman, chief executive officer and our other named executive officers.






The annual cash bonus in the chart immediately above is based on cash bonuses actually paid for 2020 performance. The target value delivered by long-term equity-based awards in the chart above is calculated based on a modified BlackScholes model.

## Elements of 2021 Executive Compensation Decisions

The following sections set forth a detailed discussion of specific compensation committee decisions made in the first quarter of 2021 regarding the award of bonuses to our named executive officers for fiscal year 2020 performance, the award of equity grants in February 2021 and the establishment of base salaries and target bonuses for fiscal 2021.

Fuad El-Hibri. Mr. El-Hibri serves as our executive chairman. In this role, Mr. El-Hibri is not eligible for an annual cash bonus. In February 2021, the compensation committee evaluated Mr. El-Hibri's 2020 performance and referenced the 2021 executive chairman compensation primary factors for the purpose of determining his 2021 base salary and 2021 equity award, consisting of the following:

- Board leadership and direction, including the annual board retreat and operations of the board and its committees;
- Maintenance of critical external relationships, including with Congressional and business leaders;
- Merger and acquisitions transaction guidance, including involvement in evaluations and due diligence planning; and
- Support for the executive team, including mentoring and advising the chief executive officer team (senior executives) on strategy, business development, and management culture.

Because maintaining a consistent sample of executive chairman compensation data for similarly sized companies is challenging, as previously noted, the compensation committee continued to focus on internal parity within the executive team when determining appropriate pay recommendations for Mr. El-Hibri. However, a summary of competitive market data for comparable roles was provided for the compensation committee's reference as well

Based on its evaluation of Mr. El-Hibri's 2020 performance and reference to the executive chairman compensation factors, the compensation committee increased Mr. El-Hibri's base salary from $\$ 1,085,677$ to $\$ 1,135,000$, a $4.5 \%$ merit increase, and approved an equity award of $\$ 2.6$ million to Mr. El-Hibri, which was granted on February 24, 2021.

Robert Kramer. Mr. Kramer serves as our president and chief executive officer. In February 2020, the compensation committee referenced a combination of the 2020 Survey Data and peer proxy data in approving a target annual cash bonus percentage for Mr. Kramer of $100 \%$ of his base salary. In February 2021, the compensation committee evaluated Mr. Kramer's performance taking into consideration the following factors, among others:

- Leadership of the Executive Management Team to deliver exemplary overall 2020 corporate performance, including significantly outperforming revenue and earnings targets;
- Successful execution of all six corporate goals and significant progress against long-term goals tied to the company's 2020-2024 strategic plan;
- Leadership of the company overall; and
- High visibility and engagement with all key stakeholders, including customers, employees, shareholders, the media and the Board of Directors (of which he is a member).

Based on its evaluation of corporate performance as indicated by the corporate factor, the compensation committee determined to award Mr. Kramer a cash bonus of $\$ 1,225,020$ for his contributions to our performance in 2020, which was $140 \%$ of his 2020 annual incentive target opportunity.

Based on his performance evaluation and the market data from the 2021 Survey Data and peer proxy data, in February 2021, the compensation committee increased Mr. Kramer's base salary as president and chief executive officer from $\$ 875,014$ to $\$ 1,000,000$, which reflects a $14 \%$ combined market and merit increase on an annualized basis; determined to increase his target annual cash bonus percentage to $120 \%$ of base salary; and approved an equity award of $\$ 5.6$ million, which was granted to Mr. Kramer on February 24, 2021. Willis Towers Watson's recommendations for Mr. Kramer's salary as chief executive officer reflect its competitive market findings. The following table represents Mr. Kramer's total direct compensation for 2020 and 2021 as compared to the 2021 Survey Data and peer proxy data and the market median range The table reports a composite $25^{\text {th }}, 50^{\text {th }}$ and $75^{\text {th }}$ percentile based on all three sources by averaging the lowest and highest $25^{\text {th }}$, $50^{\text {th }}$ and $75^{\text {th }}$ percentile observation amongst the data sources.


## 202 <br> Compensation



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Richard Lindahl. Mr. Lindahl serves as our executive vice president, chief financial officer and treasurer, and is our principal financial and accounting officer. In February 2020, the compensation committee referenced a combination of the 2020 Survey Data and peer proxy data in approving a target annual cash bonus percentage for Mr. Lindahl of $60 \%$ of base salary. In February 2021, the compensation committee evaluated Mr. Lindahl's performance taking into consideration the following factors, among others:

- Service as member of the Executive Management Team to deliver exemplary overall 2020 corporate performance, including significantly outperforming revenue and earnings targets;
- Successful execution of all six corporate goals and significant progress against long-term goals tied to the company's 2020-2024 strategic plan; and
- Leadership of Finance and IT organizations.

Based on its evaluation of corporate performance as indicated by the corporate factor, the compensation committee determined to award Mr. Lindahl a cash bonus of $\$ 462,012$ for his contributions to our performance in 2020, which was $140 \%$ of his 2020 annual incentive target opportunity.

Based on the performance evaluation and the market data from the 2021 Survey Data and peer proxy data, in February 2021, the compensation committee increased Mr. Lindahl's base salary from $\$ 550,014$ to $\$ 575,000$, which reflects a $5 \%$ merit increase, determined to maintain his target annual cash bonus percentage at $60 \%$ of base salary and approved an equity award of $\$ 1.5$ million to Mr. Lindahl, which was granted on February 24, 2021. The increase in base salary, coupled with the consistent target annual cash bonus percentage to base salary and equity award, resulted in Mr. Lindahl's total direct compensation remaining within a competitive range around market median aligned with our stated compensation philosophy. The following table represents Mr. Lindahl's total direct compensation for 2020 and 2021 as compared to the 2021 Survey Data and peer proxy data and the market median range. The table reports a composite $25^{\text {th }}, 50^{\text {th }}$ and $75^{\text {th }}$ percentile based on all three sources by averaging the lowest and highest $25^{\text {th }}, 50^{\text {th }}$ and $75^{\text {th }}$ percentile observation amongst the data sources.


2021
Compensation


Market Ronge - Midpoint of Sor gate

Adam Havey. Mr. Havey serves as our executive vice president, business operations. In February 2020, the compensation committee referenced a combination of the 2020 Survey Data and peer proxy data in approving a target annual cash bonus percentage for Mr. Havey of $60 \%$ of base salary. In February 2021, the compensation committee evaluated Mr. Havey's performance taking into consideration the following factors, among others:

- Service as member of the Executive Management Team to deliver exemplary overall 2020 corporate performance, including significantly outperforming revenue and earnings targets;
- Successful execution of all six corporate goals and significant progress against long-term goals tied to the company's 2020-2024 strategic plan; and
- Leadership of three product business units as well as the medical countermeasures, commercial operations, international procurement and quality teams.

Based on its evaluation of corporate performance as indicated by the corporate factor, the compensation committee determined to award Mr. Havey a cash bonus of $\$ 445,204$ for his contributions to our performance in 2020, which was $140 \%$ of his 2020 annual incentive target opportunity.

Based on the performance evaluation and the market data from the 2021 Survey Data and peer proxy data, in February 2021, the compensation committee increased Mr. Havey's 2021 base salary from $\$ 530,005$ to $\$ 555,000$, which reflects a $5 \%$ merit increase, determined to maintain his target annual cash bonus percentage to $60 \%$ of base salary and approved an equity award of $\$ 1.4$ million, which was granted on February 24, 2021. The increase in base salary, coupled with the consistent target annual cash bonus percentage to base salary and equity award, resulted in Mr. Havey's total direct compensation
remaining within a competitive range around market median aligned with our stated compensation philosophy. The following table represents Mr. Havey's total direct compensation for 2020 and 2021 as compared to the 2021 Survey Data and peer proxy data and the market median range. The table reports a composite $25^{\text {th }}, 50^{\text {th }}$ and $75^{\text {th }}$ percentile based on all three sources by averaging the lowest and highest $25^{\text {th }}, 50^{\text {th }}$ and $75^{\text {th }}$ percentile observation amongst the data sources.


Atul Saran. Mr. Saran serves as our executive vice president, corporate development, general counsel and secretary. In February 2020, the compensation committee referenced a combination of the 2020 Survey Data and peer proxy data in approving a target annual cash bonus percentage for Mr. Saran of $60 \%$ of base salary. In February 2021, the compensation committee evaluated Mr. Saran's performance taking into consideration the following factors, among others:

- Service as member of the Executive Management Team to deliver exemplary overall 2020 corporate performance including significantly outperforming revenue and earnings targets;
- Successful execution of all six corporate goals and significant progress against long-term goals tied to the company's 2020-2024 strategic plan; and
- Leadership of our corporate development, legal, and ethics and compliance teams.

Based on its evaluation of corporate performance as indicated by the corporate factor, the compensation committee determined to award Mr. Saran a cash bonus of $\$ 445,204$ for his contributions to our performance in 2020, which was $140 \%$ of his 2020 annual incentive target opportunity.

Based on the performance evaluation and the market data from the 2021 Survey Data and peer proxy data, in February 2021, the compensation committee increased Mr. Saran's 2021 base salary from $\$ 530,005$ to $\$ 555,000$, which reflects a $5 \%$ merit increase, determined to maintain his target annual cash bonus percentage to $60 \%$ of base salary and approved an equity award of $\$ 1.4$ million, which was granted on February 24, 2021. The increase in base salary, coupled with the consistent target annual cash bonus percentage to base salary and equity award, resulted in Mr. Saran's total direct compensation remaining within a competitive range around market median aligned with our stated compensation philosophy. The following table represents Mr. Saran's total direct compensation for 2020 and 2021 as compared to the 2021 Survey Data and peer proxy data and the market median range. The table reports a composite $25^{\text {th }}, 50^{\text {th }}$ and $75^{\text {th }}$ percentile based on all three sources by averaging the lowest and highest $25^{\text {th }}, 50^{\text {th }}$ and $75^{\text {th }}$ percentile observation amongst the data sources.


## Stockholder Engagement regarding Executive Compensation

Our Board of Directors and compensation committee recognize the importance of receiving regular input from our stockholders on important issues such as our executive compensation. Accordingly, for the past nine years, our company has provided stockholders with the opportunity to vote on the executive compensation of our named executive officers on an annual basis, a frequency which was approved by the stockholders at our 2011 and 2017 annual meetings.

At our 2020 annual meeting, we conducted our annual non-binding stockholder advisory vote on executive compensation, or "say-on-pay." Consistent with prior years, our stockholders approved our 2019 executive compensation, with more than $90 \%$ of voting stockholders casting their vote in favor of the say-on-pay resolution. Because most of the significant 2020 compensation decisions had already been made at the time of the vote, the committee primarily considered the results of the 2020 say-on-pay vote relating to 2019 executive compensation along with other factors when making executive compensation decisions for 2021. In making executive compensation decisions for 2021 , the committee's main considerations included our stockholders' support for our executive compensation program and the committee's satisfaction with the 2020 pay mix and levels. In light of the overwhelmingly positive outcome of the 2020 say-on-pay vote, the committee continued its use of performance-based equity for named executive officers in 2021 in order to continue to align the interests of our executives with the long-term interests of our stockholders. The committee intends to continue to consider our stockholders' views when making executive compensation decisions in the future.

## Other Executive Compensation Practices

Stock Ownership Requirements and Hedging Policies. We continue to believe it is important for directors and executives to have an equity stake in our company to help align their interests with those of our stockholders and periodically review our formal stock ownership requirements for our directors and executive officers. In 2020 , we increased these requirements after reviewing the practices of our Proxy Peer Group and other industry best practices. Directors and executive officers must now directly or indirectly hold stock or RSUs in our company with a value equal to the amounts set forth in the table below.

| Position | Requirement |
| :---: | :---: |
| Members of the Board of Directors. | Five times Board annual retainer fees ${ }^{(1)}$ |
| Chief Executive Officer. | Five times base salary ${ }^{(2)}$ |
| Other Executive Officers. | Two times base salary |

(1) Annual retainer fees exclude meeting fees, committee retainers, committee chair retainers and lead independent director retainers.
(2) Only applies once if the chief executive officer is also a member of the Board of Directors.

Covered persons under the policy have until five years after becoming a covered person to satisfy the ownership requirements. Unvested RSUs may also be used to satisfy the stock ownership requirements. Until these ownership requirements are satisfied, covered persons must retain $50 \%$ of after-tax shares after vesting of RSUs or exercise of stock options. Our insider trading policy prohibits our directors and executive officers from entering into derivative transactions such as puts, calls, or short sales of our common stock, among many other actions. We provide training and distribute periodic reminders to our directors and executive officers regarding this policy.

Compensation Recovery Policy. We have adopted a compensation recovery policy pursuant to which certain incentivebased compensation can be recouped from a current or former executive if the Board of Directors determines that:

- Such compensation has been awarded or received by such executive based on financial results that were achieved or operating metrics that were satisfied as a result of fraudulent or illegal conduct;
- Certain restatements of our financial results are required due to material noncompliance with financial reporting requirements by such executive; or
- Such executive engaged in intentional misconduct that contributed in any material respect to improper accounting or incorrect financial data resulting in a restatement of our financial results.

Tax and Accounting Considerations. Sections 280G and 4999 of the Internal Revenue Code of 1986, as amended (the "Code") impose certain adverse tax consequences on compensation treated as excess parachute payments. An executive is treated as having received excess parachute payments if such executive receives compensatory payments or benefits that are contingent on a change-in-control, and the aggregate amount of such payments and benefits equals or exceeds three times the executive's base amount (which is generally such executive's average compensation from us over the five years prior to the change-of-control). The portion of the payments and benefits in excess of one times base amount is treated as excess parachute payments and are subject to a $20 \%$ excise tax, in addition to any applicable federal income and employment taxes. Also, our compensation deduction in respect of the executive's excess parachute payments is disallowed. If we were to undergo a change-of-control, certain amounts received by our executives (for example, certain severance payments and amounts attributable to the accelerated vesting of stock options, RSUs and PSUs) could be excess parachute payments under Sections 280G and 4999 of the Code. As discussed below under "Payments Upon Termination or Change of Control" we do not provide executive officers with tax gross up payments in the event that Sections 280 G and 4999 apply to their compensatory payments.

## COMPENSATION COMMITTEE REPORT

The information contained in this report shall not be deemed to be "soliciting material" or "filed" with the SEC or subject to the liabilities of Section 18 of the Exchange Act, except to the extent that Emergent BioSolutions Inc. specifically incorporates it by reference into a document filed under the Securities Act of 1933 or the Exchange Act.

The compensation committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management. Based on this review and discussion, the compensation committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement.

By the Compensation Committee of the
Board of Directors of Emergent
BioSolutions Inc.
Dr. Sue Bailey
Jerome M. Hauer, Ph.D.
General George A. Joulwan
Louis W. Sullivan, M.D., Chairperson

## Emergent BioSolutions Inc. <br> Preliminary Equity Plan Modeling Results and Recommendations

March 17, 2021


## Background

- Emergent BioSolutions Inc. (Emergent) is preparing an equity plan proposal for shareholder approval at the May 20, 2021 annual meeting
- Maintaining a sufficient share reserve is critical to supporting the long-term incentive (LTI) component of Emergent's compensation philosophy and facilitate the attraction, retention, and motivation of key talent
- Emergent's current LTI grant practices include annual, new hire, and promotional grants to employees at or above the senior manager level (or individual contributor equivalent); this includes the potential for incremental awards related to acquisition
( Emergent last requested shareholder approval of the Stock Incentive Plan (Plan) at the 2018 annual shareholder meeting (additional detail provided in Exhibit 1 of the Appendix); though timing can vary by company, it is common to request additional shares every $3-4$ years
- Determining an appropriate equity pool request for 2021 involves balancing a number of key decision criteria
- ISS perspective - review results from ISS's Equity Plan ScoreCard (EPSC) to maximize the likelihood of receiving support (see Exhibit 2 of the Appendix for additional detail)
- Dilutive impact - ensure the impact of the new share request results in dilution levels that are reasonably aligned with peer practice
- Pool duration - ensure Emergent maintains the flexibility to support its LTI strategy, recognizing the potential for continued growth over the next several years
- We summarize alternatives considered as well as the resulting recommendation on the following pages

While we have a strong degree of confidence in our modeling, Willis Towers Watson cannot guarantee that results will be identical to the ISS Research report due to potential differences in interpretation of plan features and inputs used in the model

## Summary of Alternatives

## ISS Equity Plan ScoreCard (EPSC) and Dilution Results

- ISS evaluates three categories to inform its vote recommendation when assessing the appropriateness of equity plan proposals: Plan Cost (SVT), Plan Features and Grant Practices - detailed EPSC methodology in Appendix Exhibit 3
- A maximum of 100 points can be achieved; at least 55 points are required to achieve ISS support

| $\begin{aligned} & \text { efref } \\ & \text { craterory } \\ & \text { prate } \end{aligned}$ | Total | Eses 2018 | Estimed EES Point - Potentin New Stric Requests |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Petentint ISS Petintis | recturst $\frac{\text { famishates) }}{39.1}$ | 3011 Nev chates | 9.6NTEW Strives |  Strates | 106014N Strates |
| Plan Cost [SVI] | 45 | $\begin{array}{r} 39.1 \\ 45 \text { total } \end{array}$ | 35.4 | 31.8 | 27.6 | 22.8 |
| Plan reatures | 17 | $\begin{gathered} 10.0 \\ \text { is towi } \end{gathered}$ |  | 9 |  |  |
| Grant Practices | 38 | $\begin{gathered} 26.9 \\ 36 \text { totu } \end{gathered}$ |  | 35.5 |  |  |
| Total Points | 100 | 76.0 | 79.9 | 76.3 | 72.1 | 67.3 |
| Toftrexste Dinton |  | 24titic |  | 183\% | 198爯 | 704tit |
| Stie Rank va Petrs |  | 6fprefle | Egar mite | 6819xte | 74myle | 7649xie |
| Total Shares Available after Approval |  | 7.917 M | 5.965M | 6.465M | 6.965 H | 7.465M |
| Expected Share Pool Duration ${ }^{\text {3 }}$ |  | 4.5 years | 4.9 years | 5.3 years | 5.7 years | 6.1 years |

Reflects management recommendation; additional detail and supporting rationale
is provided on the following page

[^3]
## Recommendation for Consideration

- Based on our analysis and discussions with management, we recommend Emergent request 3.5 M new shares as part of the 2021 equity plan proposal
- The expected 76.3 total scenario points are well above the ISS threshold ( 55 points) and the WTW suggested buffer (60 points)
- While the 3.5 M shares request is significantly less than the maximum acceptable share request ( 5.325 M ) under ISS's model, the reduced request balances Emergent's historical philosophy of managing shareholder dilution with maintaining a sufficient share reserve to accommodate future growth
- Resulting dilution of $18.5 \%$ is positioned between the peer group $50^{\text {th }}$ and $75^{\text {th }}$ percentile ( $68^{\text {th }} \%$ ile) and reflects a point-in-time; dilution will continue to decrease as outstanding RSU awards vest and/or stock options are exercised
- The share reserve would be expected to have a duration of approximately 5 years of grants (2022-2027)

| Scenarto | Culicmity Axallablo for termintes | Potential Newshare Request | Total Shatus Avatablotprer Shareholeter Apmarit | totat <br> stemate Pants | Outstandire Equty shates | Iss Bertic Bilition ${ }^{1}$ (25x max | Expected Shame Pot Burtiton: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Recommendation <br> -3.5 m New Shares | 2,956,086 | 3,500,000 | 6,456,086 | 76.3 | 3,368,084 | $\begin{gathered} 18.5 \% \\ \hline \begin{array}{c} \text { (Approximates } \\ \text { peer 68th \%ile) } \end{array} \\ \hline \end{gathered}$ | 5.3 years |

[^4][^5]
## Next Steps

- Willis Towers Watson will work with Emergent to complete the following steps (in advance of the definitive proxy filing estimated for April 8, 2021):
- Refine/update modeling as additional information becomes available (e.g., record date common shares outstanding)
- Review draft Plan document (as needed) and draft proxy proposal language and provide comments/feedback as appropriate


## Appendix

## Appendix

## Looking Back: A Refresher of the 2018 Equity Plan Share Request

- Emergent last requested shareholder approval of an amendment (fourth amendment and restatement) to the 2006 Plan at the 2018 annual shareholder meeting
- The equity plan proposal received a total score of 76.1 points under ISS' EPSC

| Key Aspect | Detailed Commentary |
| :---: | :---: |
| Request to increase the number of shares reserved for issuance by 3,000,000 | - Prior to share request approval, there were 4,919,295 shares remaining available for issuance under the 2006 Plan, and $3,005,161$ equity shares outstanding <br> - Emergent had 49,808,692 shares of common stock outstanding <br> - The total equity reserve, to include the new share request, represented basic dilution of 21.93\% (as determined by ISS) <br> - Three-year average burn rate was calculated by ISS to be $3.72 \%$ (vs. industry benchmark of $7.08 \%$ ) <br> - ISS estimated share duration of approximately 4.8 years (based on three-year historical grant average) <br> - Emergent did not adjust the fungible ratio of 2.30:1 as part of the 2018 or 2016 proposals (ratio was last adjusted as part of the 2014 proposal from 1.86:1 to 2.30:1) |

## Appendix

## Current Considerations vs 2018

- Emergent's ability to ask for a larger number of new shares in 2020 is explained in part by the following factors:

| Consideration | Current | 2018 | Comments |
| :---: | :---: | :---: | :---: |
| Common Shares Outstanding | 52,999,139 | 49,808,692 | - Increase in common shares coupled with Emergent's strong stock price performance yields a larger current market cap - a larger market cap generally yields more room to add shares as the ISS SVT is determined as a percentage of market cap |
| 200-day Average Stock Price | \$87.14 | \$34.63 |  |
| Shareholder Value Transfer (SVT) Benchmark | 11.4\% | 15.1\% | - A lower SVT industry benchmark decreases ability to add new shares |
| Fungible Design Breakeven Ratio | 2.12:1 | 2.32:1 | - Emergent's current ratio of 2.30:1 is not materially different than the current breakeven ratio, which is a positive impact to the Plan Cost score |
| 3-Yr Avg. Burn Rate (Industry Benchmark) | $\begin{gathered} \text { 3.31\% } \\ \text { (7.91\%) } \end{gathered}$ | $\begin{gathered} \text { 3.72\% } \\ (7.08 \%) \end{gathered}$ | - Emergent has used equity at a conservative rate relative to the broader biotechnology, pharmaceutical and life sciences industry <br> - This limited usage is a positive towards the EPSC score (grant practices category) |

## Appendix <br> Key Data Assumptions for 2021 Modeling

- Emergent provided equity plan share disclosure projected for March 18, 2021 (estimated post-March 2021 grants), unless otherwise noted
- The Plan is projected to have 2,956,086 shares available for issuance (estimated post-March 2021 grants)
- Aggregate overhang of $3,368,084$ comprised of:
- $2,391,712$ stock options - weighted average exercise price of $\$ 49.07$; weighted average remaining term of 5.00 years
- 976,372 full-value awards
- Common shares outstanding of 52,999,139 (as of October 30, 2020)
- The preliminary burn rate calculation used the following shares granted for FY 2020:
- Options granted - 395,011
- Full-value granted - 837,281
- FY 2020 weighted average (basic) common shares outstanding - 52,999,139
- Performance-based equity mix:
- 16,683 time-based restricted shares granted February 25, 2020 (closing price \$59.91)
- 16,683 performance-based shares granted February 25, 2020 (closing price \$59.91)
- 66,731 options granted February 25, 2020


## Appendix

## Maximum Acceptable Request Under Current Equity Plan

- Preliminary modeling results indicate that Emergent is able to request a maximum of $5,325,000$ new shares under the current Plan and receive ISS support
- The maximum new share request would be incremental to the estimated $2,956,086$ shares remaining in the pool ${ }^{1}$, or a total of $8,281,086$ shares for future grants


## 

## Estimated Shares Avallable for Future issuance ${ }^{-1}$

Maximum Shares ISS Projected to Approve?

## Average 3-Year Historical

 Share UtilizationPreliminary ISS Historical 3Year Annual Run Rate ${ }^{4}$
$=2,956,086$ (Projected as of March 18,2021 )

- Current Plan (2.30:1 Fungble Ratio): $5,325,000$
* $1,047,161$ shares granted lor $1,909,407$ as edusted for 2.31 fungbe ratio) or $1.98 \%(36 \%)$ of cirrent common shares outstanding $(52,959,139)$
- $3.31 \%$ of weighted average basic common shares outstanding

[^6]
## Appendix

## Maximum Acceptable Request Under Current Equity Plan, cont.

- Below we provide additional detail on the estimated maximum share request ISS is projected to approve under the current plan, consisting of an additional $5,325,000$ new shares and resulting in a total of $8,281,086$ shares projected to be available post-February 2021 grants

| Stentrita | Curenty Avaltatio tar Hestratiee | Potentit Newshate Eequest | Tontillares Avallable Upon Strareholder Aprovat | Total <br> Sentrio <br> Peints | Outctardirg Equity Shares | ISS Exate Dilitiont (25x Max) | expected <br> Shric Perl <br> Duration ${ }^{\text {² }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5.325 M Now Shares Estimated Maximum Acceptable Request! | 2,956086 | 5,325,000 | $8,281,086$ | 60.0 | 3.368 .084 | $21.98 \%$ <br> THaftiy ataru <br>  | 6.8 years |

[^7]
## Appendix ISS EPSC Methodology Overview

m We summarize the three categories underyling ISS's EPSC methodology below - the evaluation of the factors within these categories significantly contributes to ISS's equity plan vote recommendation

- ISS also reviews "red flag" items that do not impact the EPSC score but do have the potential to impact vote recommendations
- Emergent is aligned with ISS best practice (additional detail is provided on the following page)


Note: In order to meet the ISS standards, a threshold score of 55 points must be achieved by Russell 3000 Index companies out of a potential maximum of 100 points. Willis Towers Watson recommends applying a five-point buffer in excess of the threshold (i.e., a minimum of 60 points) to maximize the likelihood of receiving ISS support

## Appendix ISS "Red Flag" Items

- Below we summarize Emergent's alignment with typical "red flag" / bright-line areas of focus for ISS
- "Red flag" / bright-line items will have a potential impact on ISS vote recommendation, but no impact on the overall EPSC score
- As illustrated below, Emergent is aligned with ISS best practice

| Plan Feature | Findines | voto <br> Pecemmendation Impact |
| :---: | :---: | :---: |
| Change-in-Control Definition | Not liberal | 8 |
| Change-in-Control Excise Tax Gross-ups | Not provided | $\delta$ |
| Repricing / Cash Buyout | Prohibited without shareholder approval | $\Leftrightarrow$ |
| Evergreen Provision | Not included | $\delta$ |
| Reload Options | Not provided | \$) |
| Repricing History (prior three years) | None | \$ |

## Appendix

Alernatives Considered - Dilution Detail

| Pete Crilegary |  |  | Torel Patemtat ISS Pomts | $\begin{aligned} & \text { Eess ente } \\ & \text { Request } \end{aligned}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | STOUNT: clatis |  | 3 HENTM ctracs | 4.011nNow Shares | terveraw Sthites |
|  |  |  |  |  |  |  |  |  |
| Estimated Shares Available for Future Issuance |  |  |  | 4.917M | 2.956M |  |  |  |
| Outstanding Equity Shares (Overhang) |  |  |  | 2.973M | 3.368M |  |  |  |
|  |  | Curren |  | Basic Dilution | 15.9\% | 11.9\% |  |  |  |
|  |  | Potential New Share Request |  | 3.0M | 3.0M | 3.5M | 4.0M | 4.5M |
| B | Incremental Basic Dilution (New Shares) |  |  | 6.0\% | 5.7\% | 6.6\% | 7.6\% | 8.5\% |
|  | $A+B=$ Total Basic Dilution |  |  | 21.9\% | 17.6\% | 18.5\% | 19.5\% | 20.4\% |
|  | \%ile Rank vs Peers ${ }^{1}$ |  |  | $66^{\text {th }}$ \%ile | $59^{\text {th }} \%$ ile | $68^{\text {th }} \%$ ile | $74^{\text {th }}$ \%ile | $75^{\text {th }} \%$ ile |
| 3 Total Shares Available after Approva! |  |  |  | 7.917M | 5.965 M | 6.465M | 6.965 M | 7.465M |
|  | Expected Share Pool Duration? |  |  | 4.5 years | 4.9 years | 5.3 years | 5.7 years | 6.1 years |

${ }^{1}$ Peer dilution and historical burn rate data is provided in Exhibit 4 of the Appendix for reference
${ }^{2}$ Pool duration modeling reflects 2021 grants, which are considered to be more indicative of future year grants, consisting of a total of 1.2 M shares ( 293 K options, 366 K RSUs @ 2.3 fungible ratio and 35 K PSUs @ 2.3 fungible ratio)

## Appendix

## Peer Share Utilization Summary

| Company | current Dilution | 1-yr Bum Rate | 3-rear Avg Burn Rate |
| :---: | :---: | :---: | :---: |
|  | Basic | Easic | Easic |
| Alkermes plc | 22.7\% | 6.0\% | 4.3\% |
| Amneal Pharmaceuticals | 13.0\% | 3.8\% | N/A |
| Amphastar Pharmaceuticals, Inc. | 49.8\% | 4.2\% | 5.1\% |
| Bio-Rad Laboratories, Inc. | 7.8\% | 1.3\% | 1.4\% |
| Bio-Techne Corp. | 17.7\% | 2.2\% | 2.8\% |
| Bruker Corporation | 6.4\% | 0.5\% | 0.6\% |
| Catalent, Inc. | 10.3\% | 1.2\% | 2.0\% |
| Exelixis, Inc. | 18.5\% | 4.3\% | 3.1\% |
| Globus Medical, Inc. | 17.6\% | 2.9\% | 2.9\% |
| Horizon Therapeutics PLC | 19.3\% | 7.2\% | 7.0\% |
| Incyte Corporation | 11.6\% | 2.9\% | 2.5\% |
| Integra Lifesciences Holdings Corp | 5.4\% | 2.0\% | 1.6\% |
| Ionis Pharmaceuticals, Inc. | 13.8\% | 3.4\% | 3.5\% |
| Jazz Pharmaceuticals plc | 46.0\% | 5.4\% | 4.7\% |
| Masimo Corporation | 24.7\% | 1.9\% | 2.2\% |
| NuVasive, Inc. | 9.5\% | 2.1\% | 2.4\% |
| OPKO Health, Inc. | 8.3\% | 1.3\% | 0.9\% |
| PRA Health Sciences, Inc. | 12.8\% | 2.9\% | 3.2\% |
| United Therapeutics Corporation | 25.9\% | 5.8\% | 4.5\% |
| Varian Medical Systems, Inc. | 9.8\% | 1.3\% | 1.4\% |
|  |  |  |  |
| 25th fercentile | 97.7 P1 | 1.74 | 1.3\% |
| Eth Percentile | 13 4tw | 234 | 28\% |
| FithPercontile | 20.20 | 4.2\% | 39 |
|  |  |  |  |
|  |  | 2ET4 | 4. |
|  | 449 |  | Q44 |

Note: For peers, data reflects most recent public filings, primarily reflecting FY19 data; For all companies, burn rate calculations assumes 2.00 multiplier applied by ISS to full-value shares

## EMERGENT BIOSOLUTIONS INC. AMENDED AND RESTATED STOCK INCENTIVE PLAN

## 1. Purpose

The purpose of this Amended and Restated Stock Incentive Plan (the ${ }^{*=P}$ Plan":) of Emergent BioSolutions Inc., a Delaware corporation (the ${ }^{4 \prime}=$ Company ${ }^{4 \prime \prime}$ ), is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who are expected to make important contributions to the Company and by providing such persons with equity ownership opportunities and performance-based incentives that are intended to align their interests with those of the Company's stockholders. The Plan amends and restates the 2006 Stock Incentive Plan the "Origillla")-that was originally adopted by the board of directors of the Company (the """Board"") on October 25, 2006 and approved by the stockholders on October 27, 2006, was amended by the Board on March 31, 2009 and approved by the stockholders on May 21, 2009, was amended by the Board on March 6, 2012 and approved by the stockholders on May 17, 2012, was amended by the Board on March 20, 2014 and approved by the stockholders on May 22, 2014, was amended by the Board on March 24, 2016 and approved by our stockholders on May 19, 2016, and-was amended by the Board on March 22, 2018 and approved by our stockholders on May 24, 2018, and was amended by the Board on March 18, 2021 and approved by our stockholders on May 20, 2021. Except where the context otherwise requires, the term ${ }^{* \prime \prime}$ Company ${ }^{\prime \prime \prime \prime \prime}$, shall include any of the Company's present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the ${ }^{4 \times \prime}$ Code ${ }^{\underline{2 n} "}$ ") and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a controlling interest, as determined by the Board.

## 2. Eligibility

All of the Company's employees, officers, directors, consultants and advisors to the Company (as such terms consultants and advisors are defined and interpreted for purposes of Form S-8 under the Securities Act of 1933, as amended (the ""'Securities Act ${ }^{\prime \prime \prime}=$ ), or any successor form) are eligible to receive options, stock appreciation rights, restricted stock, restricted stock units and other stock-unit awards (each, an ""Award" $=$ ) under the Plan. Each person who receives an Award under the Plan is deemed a """Participant"."."

## 3. Administration and Delegation

(a) Administration by Board of Directors. The Plan will be administered by the Board. The Board shall have authority to grant Awards and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may construe and interpret the terms of the Plan and any Award agreements entered into under the Plan. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board's sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award. No director or person acting pursuant to the authority delegated by the Board shall be liable for any action or determination relating to or under the Plan made in good faith.
(b) Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a " "Committee""). All references in the Plan to the $=$ "Board $\stackrel{=\prime}{=}$ shall mean the Board or a Committee of the Board or the officers referred to in Section 3(c) to the extent that the Board's powers or authority under the Plan have been delegated to such Committee or officers.
(c) Delegation to Officers. Subject to any requirements of applicable law (including as applicable Sections 152 and 157 (c) of the General Corporation Law of the State of Delaware), the Board may delegate to one or more officers of the Company the power to grant Awards (subject to any limitations under the Plan) to employees or officers of the Company and to exercise such other powers under the Plan as the Board may determine, provided that the Board shall fix the terms of Awards to be granted by such officers, the maximum number of shares subject to Awards that the officers may grant, and the time period in which such Awards may be granted; and provided further, that no officer shall be authorized to grant Awards to any ""executive officer """ of the Company (as defined by Rule 3b-7 under the Securities Exchange Act of 1934, as amended (the ""Exchange Act"")) or to any ""officer """ of the Company (as defined by Rule 16a-1(f) under the Exchange Act).
(d) Awards to Non-Employee Directors. Awards made to non-employee directors will be granted and administered by a Committee, all of the members of which are independent directors as defined by Section 303A. 02 of the New York Stock Exchange Listed Company Manual.

## 4. Stock Available for Awards

(a) Maximum Number of Shares. An aggregate of $3,000,0003,500,000$ shares of common stock, $\$ 0.001$ par value per share, of the Company (the "Common Stock") shall be added to the $\$ 8,028,82621,928,826$ shares authorized for issuance or transferable under the Plan as of March $24 \underline{17}, 20182021$ for a total of $21,928,32625,428,826$ shares.

If any Award expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award being repurchased by the Company at the original issuance price pursuant to a contractual repurchase right), is settled in cash, or results in any shares of Common Stock not being issued, the unused shares of Common Stock covered by such Award shall again be available for the grant of Awards under the Plan. Shares of Common Stock delivered (either by actual delivery, attestation or net exercise) to the Company by a Participant to (i) purchase shares of Common Stock upon the exercise of an Award or (ii) satisfy tax withholding obligations with respect to Options and Stock Appreciation Rights (including shares retained from the Option or Stock Appreciation Right creating the tax obligation) shall not be added back to the number of shares available for future grant of Awards (for the avoidance of doubt, shares of Common Stock delivered to the Company by a Participant to satisfy tax withholding obligations with respect to Restricted Stock, Restricted Stock Units and Other Stock Unit Awards (including shares retained from the Restricted Stock, Restricted Stock Unit or Other Stock Unit Award creating the tax obligation) shall be added back to the number of shares available for future grant of Awards). However, in the case of Incentive Stock Options (as hereinafter defined), the foregoing provisions shall be subject to any limitations under the Code. Shares of Common Stock issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares. Notwithstanding anything to the contrary herein, with respect to Stock Appreciation Rights settled in shares of Common Stock upon exercise, the aggregate number of shares of Common Stock with respect to which the Stock Appreciation Right is exercised, rather than the number of shares of Common Stock actually issued upon exercise, shall be counted against the number of shares of Common Stock available for Awards under the Plan. In no event shall shares of Common Stock repurchased by the Company on the open market using the proceeds from the exercise of an Award increase the number of shares available for future grant of Awards.
(b) Computing the Total Number of Shares of Common Stock Available Under the Plan. For purposes of computing the maximum aggregate number of shares of Common Stock available for issuance under the Plan, the following rules shall apply:
(i) Any shares of Common Stock made subject to Awards of Options or Stock Appreciation Rights shall be counted against the maximum aggregate number of shares of Common Stock available for issuance under the Plan as one (1) share of Common Stock for every one (1) share of Common Stock granted.
(ii) Any shares of Common Stock made subject to Awards of Options or Stock Appreciation Rights which shares are returned to the Plan pursuant to Section 4(a) shall be returned as one (1) share of Common Stock for every one (1) share of Common Stock granted.
(iii) Any shares of Common Stock made subject to a Full-Value Award (as defined below): (A) granted prior to May 21,2009 , shall be counted against the maximum aggregate number of shares of Common Stock available for issuance under the Plan as one (1) share of Common Stock for every one (1) share of Common Stock granted; (B) granted on or after May 21, 2009 but prior to May 17, 2012, shall be counted against the maximum aggregate number of shares of Common Stock available for issuance under the Plan as 1.5 shares of Common Stock for every one (1) share of Common Stock granted; (C) granted on or after May 17, 2012 but prior to May 22, 2014, shall be counted against the maximum aggregate number of shares of Common Stock available for issuance under the Plan as 1.86 shares of Common Stock for every one (1) share of Common Stock granted; and (D) granted on or after May 22, 2014, shall be counted against the maximum aggregate number of shares of Common Stock available for issuance under the Plan as 2.3 shares of Common Stock for every one (1) share of Common Stock granted. A ""Full-Value Award"" is an Award of Restricted Stock, a Restricted Stock Unit Award, an Other Stock Unit Award or a Performance Award (as defined below).
(iv) Any shares of Common Stock made subject to a Full-Value Award which shares are returned to the Plan pursuant to Section 4(a): (A) shall be returned as one (1) share of Common Stock for every one (1) share of Common Stock granted prior to May 21, 2009; (B) shall be returned as 1.5 shares of Common Stock for every one (1) share of Common Stock granted on or subsequent to May 21, 2009 and prior to May 17, 2012; (C) shall be returned as 1.86 shares of Common Stock for every one (1) share of Common Stock granted on or subsequent to May 17, 2012 and prior to May 22, 2014. Beginning on May 22, 2014, any shares of Common Stock subject to a Full-Value Award that are returned to the Plan will be returned as 2.3 shares of Common Stock for every one (1) share of Common Stock subject to such Award, regardless of when the Award was granted.
(c) Sublimits.
(i) Per Participant Limit. The maximum number of shares of Common Stock with respect to which Awards may be granted to any Participant under the Plan shall be $1,000,000$ per calendar year. For purposes of the foregoing limit, the combination of an Option in tandem with a SAR (as each is hereafter defined) shall be treated as a single Award. The per Pampinan limit deseribed in this Secton 4 (c) chatl be consfued and appled eemastenty wifh Section
 avoidance of doubt, all shares of Common Stock underlying Awards granted under the Plan shall be counted on a one-for-one basis for purposes of the sublimit set forth in this section.
(ii) Limit Applicable to Non-Employee Directors. In any calendar year, the sum of cash compensation paid to any non-employee director for service as a director and the value of Awards under the Plan made to such non-employee director (calculated based on the grant date fair value of such Awards for financial reporting purposes) shall not exceed $\$ 1,000,000$.
(d) Substitute Awards. In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock of an entity, the Board may grant Awards in substitution for any options or other stock or stock unit awards granted by such entity or an affiliate thereof. Substitute Awards may be granted on such terms as the Board deems appropriate in the circumstances, notwithstanding any limitations on Awards contained in the Plan. Substitute Awards shall not count against the overall share limit set forth in Section $4(a)$, except as may be required by reason of Section 422 and related provisions of the Code.

## 5. Stock Options

(a) General. The Board may grant options to purchase Common Stock (each, an $=$ Option") and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable. An Option that is not intended to be an Incentive Stock Option (as hereinafter defined) shall be designated a $\stackrel{4 .}{=}$ Nonstatutory Stock Option $"=$.".
(b) Incentive Stock Options. An Option that the Board intends to be an ""cincentive stock option"-"" as defined in Section 422 of the Code (an " "'Incentive Stock Option"") shall only be granted to employees of Emergent BioSolutions Inc., any of Emergent BioSolutions Inc.'s present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Code, and any other entities the employees of which are eligible to receive Incentive Stock Options under the Code, and shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. The Company shall have no liability to a Participant, or any other party, if an Option (or any part thereof) that is intended to be an Incentive Stock Option is not an Incentive Stock Option or for any action taken by the Board, including without limitation the conversion of an Incentive Stock Option to a Nonstatutory Stock Option.
(c) Exercise Price. The Board shall establish the exercise price of each Option and specify such exercise price in the applicable option agreement; provided, however, that the exercise price shall not be less than $100 \%$ of the Fair Market Value (as defined below) on the date the Option is granted.
(d) Duration and Vesting of Options. Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable option agreement subject to the limitations of the Plan; provided, however, that no Option granted before March 6, 2012 will be granted for a term in excess of 10 years and no Option granted on or after March 6, 2012 will be granted for a term in excess of 7 years. Options granted to

Participants other than non-employee directors that vest solely based on the passage of time shall not vest (i) prior to the first anniversary of the date of grant; (ii) as to more than one-third of the Award prior to the second anniversary of the date of grant; and (iii) as to more than two-thirds of the Award prior to the third anniversary of the date of grant. Options to non-employee directors that vest solely based on the passage of time shall not vest: (i) prior to the earlier of the first anniversary of the date of grant and the date of the first annual meeting held after the date of grant; (ii) as to more than one-third of the Award prior to the earlier of the second anniversary of the date of grant and the date of the second annual meeting held after the date of grant; and (iii) as to more than two-thirds of the Award prior to the earlier of the third anniversary of the date of grant and the date of the third annual meeting held after the date of grant. Notwithstanding the foregoing, the Board or the Committee, either at the time the Option is granted or at any time thereafter, may allow an Option to accelerate and become vested, in whole or in part, prior to the vesting date specified above, in the event of the death or disability of the Participant. Options that do not vest solely based on the passage of time shall not vest prior to the first anniversary of the date of grant (or, in the case of Awards to non-employee directors, the earlier of the first anniversary of the date of grant and the date of the first annual meeting held after the date of grant). The foregoing minimum vesting requirements shall not apply to Awards granted, in the aggregate, for up to $5 \%$ of the authorized number of shares specified in Section 4(a). For the avoidance of doubt, all shares of Common Stock underlying Awards granted under the Plan shall be counted on a one-for-one basis for purposes of the mimmum vesting provision set forth in this section. The six foregoing sentences shall apply to Options granted on or after May 19, 2016.
(e) Exercise of Option. Options may be exercised by delivery to the Company of a written notice of exercise signed by the proper person or by any other form of notice (including electronic notice) approved by the Board together with payment in full as specified in Section 5(f) for the number of shares for which the Option is exercised. Subject to Section 10(e), shares of Common Stock subject to the Option will be delivered by the Company following exercise either as soon as practicable.
(f) Payment Upon Exercise. Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:
(i) in cash or by check, payable to the order of the Company;
(ii) except as otherwise provided in the applicable option agreement, by (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price and any required tax withholding or (ii) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required tax withholding; (iii) to the extent provided for in the applicable option agreement or approved by the Board, in its sole discretion, by delivery (either by actual delivery or attestation) of shares of Common Stock owned by the Participant valued at their fair market value as determined by (or in a manner approved by) the Board ( ${ }^{*}$ "Fair Market Value ${ }^{*}$ "), provided (i) such method of payment is then permitted under applicable law, (ii) such Common Stock, if acquired directly from the Company, was owned by the Participant for such mimmum period of time, if any, as may be established by the Board in its discretion and (iii) such Common Stock is not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements;
(iv) to the extent permitted by applicable law and provided for in the applicable option agreement or approved by the Board, in its sole discretion, by (i) delivery of a promissory note of the Participant to the Company on terms determined by the Board, or (ii) payment of such other lawful consideration as the Board may determine; or
(v) by any combination of the above permitted forms of payment.
(g) Limitation on Repricing. Unless such action is approved by the Company's stockholders or is pursuant to Section 9 of the Plan: (i) outstanding Options granted under the Plan may not be amended to provide an exercise price per share that is lower than the then-current exercise price per share of such outstanding Option, (ii) the Board may also not cancel any outstanding option (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan covering the same or a different number of shares of Common Stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled option, (iii) the Board may not cancel in exchange for a cash payment any outstanding Option with an exercise price per share above the then-current Fair Market Value or (iv) the Board may not take any other action under the Plan that constitutes a

6. Stock Appreciation Rights
(a) General. A Stock Appreciation Right, or SAR, is an Award entitling the holder, upon exercise, to receive an amount of Common Stock determined by reference to appreciation, from and after the date of grant, in the fair market value of a share of Common Stock. The date as of which such appreciation or other measure is determined shall be the exercise date.
(b) Grants. Stock Appreciation Rights may be granted in tandem with, or independently of, Options granted under the Plan.
(i) Tandem Awards. When Stock Appreciation Rights are expressly granted in tandem with Options, (i) the Stock Appreciation Right will be exercisable only at such time or times, and to the extent, that the related Option is exercisable (except to the extent designated by the Board in connection with a Reorganization Event or a Change in Control Event) and will be exercisable in accordance with the procedure required for exercise of the related Option; (ii) the Stock Appreciation Right will terminate and no longer be exercisable upon the termination or exercise of the related Option, except to the extent designated by the Board in connection with a Reorganization Event or a Change in Control Event and except that a Stock Appreciation Right granted with respect to less than the full number of shares covered by an Option will not be reduced until the number of shares as to which the related Option has been exercised or has terminated exceeds the number of shares not covered by the Stock Appreciation Right; (iii) the Option will terminate and no longer be exercisable upon the exercise of the related Stock Appreciation Right; and (iv) the Stock Appreciation Right will be transferable only with the related Option. No tandem SAR may have a base amount that is less than $100 \%$ of the fair market value of a share of Common Stock on the date of grant. No tandem SAR granted prior to March 6, 2012 may have a term of more than ten (10) years from the date of grant and no tandem SAR granted on or after March 6, 2012 may have a term of more than seven (7) years from the date of grant.
(ii) Independent SARs. A Stock Appreciation Right not expressly granted in tandem with an Option will become exercisable at such time or times, and on such conditions, as the Board may specify in the SAR Award; provided, however, that the base amount specified on the date of grant to calculate appreciation shall be no less than $100 \%$ of the fair market value of a share of Common Stock on the date of grant and the maximum term of any Stock Appreciation Right shall (i) with respect to Stock Appreciation Rights granted prior to March 6, 2012, be no more than ten (10) years from the date of grant and (ii) with respect to Stock Appreciation Rights granted on or after March 6, 2012 be no more than seven (7) years from the date of grant.
(c) Exercise. Stock Appreciation Rights may be exercised by delivery to the Company of a written notice of exercise signed by the proper person or by any other form of notice (including electronic notice) approved by the Board, together with any other documents required by the Board.
(d) Vesting. Stock Appreciation Rights granted to Participants other than non-employee directors that vest solely based on the passage of time shall not vest (i) prior to the first anniversary of the date of grant; (ii) as to more than one-third of the Award prior to the second anniversary of the date of grant; and (iii) as to more than two-thirds of the Award prior to the third anniversary of the date of grant. Stock Appreciation Rights granted to non-employee directors that vest solely based on the passage of time shall not vest: (i) prior to the earlier of the first anniversary of the date of grant and the date of the first annual meeting held after the date of grant; (ii) as to more than one-third of the Award prior to the earlier of the second anniversary of the date of grant and the date of the second annual meeting held after the date of grant; and (iii) as to more than two-thirds of the Award prior to the earlier of the third anniversary of the date of grant and the date of the third annual meeting held after the date of grant. Notwithstanding the foregoing, the Board or the Committee, either at the time the Stock Appreciation Right is granted or at any time thereafter, may allow an Stock Appreciation Right to accelerate and become vested, in whole or in part, prior to the vesting date specified above, in the event of the death or disability of the Participant. Stock Appreciation Rights that do not vest solely based on the passage of time shall not vest prior to the first anniversary of the date of grant (or, in the case of Awards to non-employee directors, the earlier of the first anniversary of the date of grant and the date of the first annual meeting held after the date of grant). The foregoing mimimum vesting requirements shall not apply to Awards granted, in the aggregate, for up to $5 \%$ of the authorized number of shares specified in Section 4(a). For the avoidance of doubt, all shares of Common Stock underlying Awards granted under the Plan shall be counted on a one-for-one basis for purposes of the mimmum vesting provision set forth in this section. The six foregoing sentences shall only apply to Stock Appreciation Rights granted on or after May 19, 2016.
(e) Limitation on Repricing. Unless such action is approved by the Company's stockholders or is pursuant to Section 9 of the Plan: (i) outstanding Stock Appreciation Rights granted under the Plan may not be amended to provide a base price per share that is lower than the then-current base price per share of such outstanding Stock Appreciation Right, (ii) the Board may also not cancel any outstanding stock appreciation right (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan covering the same or a different number of shares of Common Stock and having a base price per share lower than the then-current base price per share of the cancelled stock appreciation right, (iii) the Board may not cancel in exchange for a cash payment any outstanding Stock Appreciation Right with a base price per share above the then-current Fair Market Value or (iv) the Board may not take any other action under the Plan that constitutes a " "'repricing"", under the rules of the NYSE.

## 7. Restricted Stock; Restricted Stock Units

(a) General. The Board may grant Awards entitling recipients to acquire shares of Common Stock (""Restricted Stock ${ }^{\prime \prime \prime}=$ ), subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price from the recipient in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award. Instead of granting Awards for Restricted Stock, the Board may grant Awards entitling the recipient to receive shares of Common Stock to be delivered at the time such shares of Common Stock vest ( ${ }^{\prime \prime-}$ - Restricted Stock Units"") (Restricted Stock and Restricted Stock Units are each referred to herein as a ""Restricted Stock Award"").
(b) Terms and Conditions for all Restricted Stock Awards. The Board shall determine the terms and conditions of a Restricted Stock Award, including the conditions for vesting and repurchase (or forfeiture) and the issue price, provided that for Restricted Stock Awards granted on or after May 19, 2016, the following minimum vesting provisions shall apply. Restricted Stock Awards granted to Participants other than non-employee directors that vest solely based on the passage of time shall not vest: (i) prior to the first anniversary of the date of grant; (ii) as to more than one-third of the Award prior to the second anniversary of the date of grant; and (iii) as to more than two-thirds of the Award prior to the third anniversary of the date of grant. Restricted Stock Awards granted to non-employee directors that vest solely based on the passage of time shall not vest: (i) prior to the earlier of the first anniversary of the date of grant and the date of the first annual meeting held after the date of grant; (ii) as to more than one-third of the Award prior to the earlier of the second anniversary of the date of grant and the date of the second annual meeting held after the date of grant; and (iii) as to more than two-thirds of the Award prior to the earlier of the third anniversary of the date of grant and the date of the third annual meeting held after the date of grant. Restricted Stock Awards that do not vest solely based on the passage of time (excluding Performance Awards granted pursuant to Section 10(i)) shall not vest prior to the first anniversary of the date of grant (or, in the case of Awards to non-employee directors, the earlier of the first anniversary of the date of grant and date of the first annual meeting held after the date of grant).

Notwithstanding any other provision of the Plan (other than Section 10(i), if applicable), the Board or Committee may, either at the time a Restricted Stock Award is made or at any time thereafter, waive any right to repurchase shares of Common Stock (or waive the forfeiture thereof) or remove or modify the restrictions applicable to the Restricted Stock Award, in whole or in part, in the event of the death or disability of the Participant. The foregoing mimmum vesting requirements shall not apply to Awards granted, in the aggregate, for up to $5 \%$ of the authorized number of shares specified in Section 4(a). For the avoidance of doubt, all shares of Common Stock underlying Awards granted under the Plan shall be counted on a one-for-one basis for purposes of the minimum vesting provisions set forth in this section.
(c) Additional Provisions Relating to Restricted Stock
(i) Dividends. Unless otherwise provided in the applicable Award agreement, any dividends (whether paid in cash, stock or property) declared and paid by the Company with respect to shares of Restricted Stock ( Dividends ${ }^{(1 ")}$ ) shall be paid to the Participant only if and when such shares become free from the restrictions on transferability and forfeitability that apply to such shares. Each payment of Unvested Dividends will be made no later than the end of the calendar year in which the dividends are paid to stockholders of that class of stock or, if later, the 15th day of the third month following the lapsing of the restrictions on transferability and the forfeitability provisions applicable to the shares of Restricted Stock.
(ii) Stock Certificates. The Company may require that any stock certificates issued in respect of shares of Restricted Stock shall be deposited in escrow by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or if the Participant has died, to the beneficiary designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant's death (the ""=Designated Beneficiary""). In the absence of an effective designation by a Participant, "" "Designated Beneficiary"" shall mean the Participant's estate.

## (d) Additional Provisions Relating to Restricted Stock Units

(i) Settlement. Upon the vesting of and/or lapsing of any other restrictions (i.e., settlement) with respect to each Restricted Stock Unit, the Participant shall be entitled to receive from the Company such number of shares of Common Stock or an amount of cash equal to the Fair Market Value of such number of shares of Common Stock, as provided in the applicable Award agreement. The Board may, in its discretion, provide that settlement of Restricted Stock Units shall be deferred, on a mandatory basis or at the election of the Participant.
(ii) Voting Rights. A Participant shall have no voting rights with respect to any Restricted Stock Units.
(iii) Dividend Equivalents. To the extent provided by the Board, in its sole discretion, a grant of Restricted Stock Units may provide Participants with the right to receive an amount equal to any dividends or other distributions declared and paid on an equal number of outstanding shares of Common Stock ( Equivalents may be settled in cash and/or shares of Common Stock and shall be subject to the same restrictions on transfer and forfeitability as the Restricted Stock Units with respect to which paid, as determined by the Board in its sole discretion, subject in each case to such terms and conditions as the Board shall establish, in each case to be set forth in the applicable Award agreement.

## 8. Other Stock-Unit Awards

Other Awards of shares of Common Stock, and other Awards that are valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property, may be granted hereunder to Participants ( ${ }^{\text {"/ }}=$ Other Stock Unit Awards"""), including without limitation Awards entitling recipients to receive shares of Common Stock to be delivered in the future. Such Other Stock Unit Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan or as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock Unit Awards may be paid in shares of Common Stock or cash, as the Board shall determine. Subject to the provisions of the Plan, the Board shall determine the terms and conditions of each Other Stock Unit Award, including any purchase price applicable thereto, provided that for Other Stock Unit Awards granted on or after May 19, 2016 the following minimum vesting provisions shall apply.

Other Stock Unit Awards granted to Participants other than non-employee directors that vest solely based on the passage of time shall not vest: (i) prior to the first anniversary of the date of grant; (ii) as to more than one-third of the Award prior to the second anniversary of the date of grant; and (iii) as to more than two-thirds of the Award prior to the third anniversary of the date of grant. Other Stock Unit Awards granted to non-employee directors that vest solely based on the passage of time shall not vest: (i) prior to the earlier of the first anniversary of the date of grant and the date of the first annual meeting held after the date of grant; (ii) as to more than one-third of the Award prior to the earlier of the second anniversary of the date of grant and the date of the second annual meeting held after the date of grant; and (iii) as to more than two-thirds of the Award prior to the earlier of the third anniversary of the date of grant and the date of the third annual meeting held after the date of grant. Other Stock Unit Awards that do not vest solely based on the passage of time (excluding Performance Awards granted pursuant to Section 10(i)) shall not vest prior to the first anniversary of the date of grant (or, in the case of Awards to non-employee directors, the earlier of the first anniversary of the date of grant and date of the first annual meeting held after the date of grant).

Notwithstanding any other provision of the Plan (other than Section 10(i), if applicable), the Board or Committee may, either at the time a Stock Unit Award is made or at any time thereafter, waive any right to repurchase shares of Common Stock (or waive the forfeiture thereof) or remove or modify the restrictions applicable to the Stock Unit Award, in whole or in part, in the event of the death or disability of the Participant. The foregoing minimum vesting requirements shall not apply to Awards granted, in the aggregate, for up to $5 \%$ of the authorized number of shares
specified in Section 4(a)(1). For the avoidance of doubt, all shares of Common Stock underlying Awards granted under the Plan shall be counted on a one-for-one basis for purposes of the mimmum vesting provisions set forth in this section.

## 9. Adjustments for Changes in Common Stock and Certain Other Events

(a) Changes in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of Common Stock other than an ordinary cash dividend, (i) the number and class of securities available under this Plan, (ii) the limits set forth in Section 4(c), (iii) the share- and per-share provisions and the exercise price of each SAR, (iv) the number of shares subject to and the repurchase price per share subject to each outstanding Restricted Stock Award, and (v) the share- and per-share-related provisions and the purchase price, if any, of each outstanding Other Stock Unit Award, shall be appropriately adjusted by the Company (or substituted Awards may be made, if applicable) to the extent determined by the Board. Without limiting the generality of the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the exercise price of and the number of shares subject to any outstanding Options are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then optionees who exercise such Options between the record date and the distribution date for such stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

## (b) Reorganization and Change in Control Events

(i) Definitions
(A) A $\stackrel{*}{=}$ Reorganization Event ${ }_{=}^{\prime \prime}$ " shall mean:
(1) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or is cancelled;
(2) any exchange of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange transaction; or
(3) any liquidation or dissolution of the Company
(B) A $\stackrel{\text { ""C }}{=}$ Change in Control Event $\stackrel{\prime \prime \prime}{=}$ shall mean:
(1) the acquisition by an individual, entity or group (within the meaning of Section $13(\mathrm{~d})(3)$ or $14(\mathrm{~d})(2)$ of the Exchange Act) (a ""Person"") of beneficial ownership of any capital stock of the Company if, after such acquisition, such Person beneficially owns (within the meaning of Rule 13d 3 promulgated under the Exchange Act) $50 \%$ or more of either ( x ) the aggregate number of shares of Common Stock then-outstanding (the ""."Outstanding Company Common Stock ${ }^{-1,}$ ) or (y) the combined voting power of the then-outstanding securities of the Company entitled to vote generally in the election of directors (the """Outstanding Company Voting Securities"'"); provided, however, that for purposes of this subsection (1), the following acquisitions shall not constitute a Change in Control Event: (A) any acquisition directly from the Company (excluding an acquisition pursuant to the exercise, conversion or exchange of any security exercisable for, convertible into or exchangeable for common stock or voting securities of the Company, unless the Person exercising, converting or exchanging such security acquired such security directly from the Company or an underwriter or agent of the Company), (B) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company, or (C) any acquisition by any corporation pursuant to a Business Combination (as defined below) which complies with clauses (x) and (y) of subsection (3) of this definition; or
(2) such time as the Continuing Directors (as defined below) do not constitute a majority of the Board (or, if applicable, the Board of Directors of a successor corporation to the Company), where the term ""Continuing Director $=$ means at any date a member of the Board ( $x$ ) who was a member of the Board on the date of the initial adoption of this Plan by the Board or (y) who was nominated or elected subsequent to such date by at least a majority of the directors who were Continuing Directors at the time of such nomination or election or whose election to the Board was recommended or endorsed by at least a majority of the directors who were Continuing Directors at the time of such nomination or election; provided, however, that there shall be excluded from this clause (y) any
individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board; or (3) the consummation of a merger, consolidation, reorganization, recapitalization or share exchange involving the Company or a sale or other disposition of all or substantially all of the assets of the Company (a $\stackrel{n}{=}$ "Business Combination""), unless, immediately following such Business Combination, each of the following two conditions is satisfied: ( x ) all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than $50 \%$ of the then-outstanding shares of common stock and the combined voting power of the then-outstanding securities entitled to vote generally in the election of directors, respectively, of the resulting or acquiring corporation in such Business Combination (which shall include, without limitation, a corporation which as a result of such transaction owns the Company or substantially all of the Company's assets either directly or through one or more subsidiaries) (such resulting or acquiring corporation is referred to herein as the ""Acquiring Corporation ":") in substantially the same proportions as their ownership of the Outstanding Company Common Stock and Outstanding Company Voting Securities, respectively, immediately prior to such Business Combination and (y) no Person (excluding any employee benefit plan (or related trust) maintained or sponsored by the Company or by the Acquiring Corporation) beneficially owns, directly or indirectly, $50 \%$ or more of the then-outstanding shares of common stock of the Acquiring Corporation, or of the combined voting power of the then-outstanding securities of such corporation entitled to vote generally in the election of directors (except to the extent that such ownership existed prior to the Business Combination); or
(3) the liquidation or dissolution of the Company.
(C) "'Good Reason $=$ ". shall mean any significant diminution in the Participant's title, authority, or responsibilities from and after such Reorganization Event or Change in Control Event, as the case may be, or any reduction in the annual cash compensation payable to the Participant from and after such Reorganization Event or Change in Control Event, as the case may be, or the relocation of the place of business at which the Participant is principally located to a location that is greater than 50 miles from its location immediately prior to such Reorganization Event or Change in Control Event.
(D) ${ }^{4 \prime}$ "Cause"" shall mean any (i) willful failure by the Participant, which failure is not cured within 30 days of written notice to the Participant from the Company, to perform his or her material responsibilities to the Company, (ii) willful misconduct by the Participant which affects the business reputation of the Company, (iii) material breach by the Participant of any employment, consulting, confidentiality, non-competition or non-solicitation agreement with the Company, (iv) conviction or plea of nolo contendere (no contest) by the Participant to a felony, or (v) commission by the Participant of any act involving fraud, theft or dishonesty with respect to the Company's business or affairs. The Participant shall be considered to have been discharged for ${ }^{4 \prime \prime}$ "Cause $"=$ if the Company determines, within 30 days after the Participant's resignation, that discharge for Cause was warranted.
(ii) Effect on Options
(A) Reorganization Event. Upon the occurrence of a Reorganization Event (regardless of whether such event also constitutes a Change in Control Event), or the execution by the Company of any agreement with respect to a Reorganization Event (regardless of whether such event will result in a Change in Control Event), the Board shall provide that all outstanding Options shall be assumed, or equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof); provided that if such Reorganization Event also constitutes a Change in Control Event, except to the extent specifically provided to the contrary in the instrument evidencing any Option or any other agreement between a Participant and the Company such assumed or substituted options shall become immediately exercisable in full if, on or prior to the first anniversary of the date of the consummation of the Reorganization Event, the Participant's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason by the Participant or is terminated without Cause by the Company or the acquiring or succeeding corporation or the Participant's service on the Board is terminated. For purposes hereof, an Option shall be considered to be assumed if, following consummation of the Reorganization Event, the Option confers the right to purchase, for each share of Common Stock subject to the Option immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however,
that if the consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise of Options to consist solely of common stock of the acquiring or succeeding corporation (or an affiliate thereof) equivalent in value (as determined by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.

Notwithstanding the foregoing, if the acquiring or succeeding corporation (or an affiliate thereof) does not agree to assume, or substitute for, some or all of such Options, or in the event of a liquidation or dissolution of the Company, the Board shall, upon written notice to the Participants, provide with respect to any Options that are not to be assumed by an acquiring or succeeding corporation that all then unexercised Options will become exercisable in full as of a specified time prior to the Reorganization Event and will terminate immediately prior to the consummation of such Reorganization Event, except to the extent exercised by the Participants before the consummation of such Reorganization Event; provided, however, that in the event of a Reorganization Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share of Common Stock surrendered pursuant to such Reorganization Event (the $\stackrel{\text { ""‘Acquisition Price " " " }}{=}$ ), then the Board may instead provide that all such outstanding Options shall terminate upon consummation of such Reorganization Event and that each Participant shall receive, in exchange therefor, a cash payment equal to the amount (if any) by which (A) the Acquisition Price multiplied by the number of shares of Common Stock subject to such outstanding Options (whether or not then exercisable), exceeds (B) the aggregate exercise price of such Options and any applicable tax withholdings.
(B) Change in Control Event that is not a Reorganization Event. Upon the occurrence of a Change in Control Event that does not also constitute a Reorganization Event, except to the extent specifically provided to the contrary in the instrument evidencing any Option or any other agreement between a Participant and the Company, then outstanding Options shall continue to become vested in accordance with the original vesting schedule set forth in such Option, provided, however, that each such Option shall be immediately exercisable in full if, on or prior to the first anniversary of the date of the consummation of the Change in Control Event, the Participant's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason by the Participant or is terminated without Cause by the Company or the acquiring or succeeding corporation.
(iii) Effect on Restricted Stock Awards
(A) Reorganization Event that is not a Change in Control Event. Upon the occurrence of a Reorganization Event that is not a Change in Control Event, the repurchase and other rights of the Company under each outstanding Restricted Stock Award shall inure to the benefit of the Company's successor and shall apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to the Common Stock subject to such Restricted Stock Award.
(B) Change in Control Event. Upon the occurrence of a Change in Control Event (regardless of whether such event also constitutes a Reorganization Event), except to the extent specifically provided to the contrary in the instrument evidencing any Restricted Stock Award or any other agreement between a Participant and the Company, each then outstanding Restricted Stock Award shall continue to become free from conditions or restrictions in accordance with the original schedule set forth in such Restricted Stock Award, provided, however, that each such Restricted Stock Award shall immediately become free from all conditions or restrictions if, on or prior to the first anniversary of the date of the consummation of the Change in Control Event, the Participant's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason by the Participant or is terminated without Cause by the Company or the acquiring or succeeding corporation.
(iv) Effect on Stock Appreciation Rights and Other Stock Unit Awards

The Board may specify in an Award at the time of the grant the effect of a Reorganization Event and Change in Control Event on any SAR and Other Stock Unit Award.
10. General Provisions Applicable to Awards
(a) Transferability of Awards. Awards shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution or, other than in the case of an Incentive Stock Option, pursuant to a qualified domestic relations order, and, during the life of the Participant, shall be exercisable only by the Participant, except as may be otherwise provided in an Award agreement; provided, however, that the gratuitous transfer of the Award by the Participant to or for the benefit of any immediate family member, domestic partner, family trust or other entity established for the benefit of the Participant and/or an immediate family member thereof if, with respect to such proposed transferee, the Company would be eligible to use a Registration Statement on Form S-8 for the registration of the sale of the Conmon Stock subject to such Award under the Securities Act ; provided, further, that the Company shall not be required to recognize any such transfer until such time as the Participant and such authorized transferee shall, as a condition to such transfer, deliver to the Company a written instrument in form and substance satisfactory to the Company confirming that such transferee shall be bound by all of the terms and conditions of the Award; and, provided, further, that no option intended to be an incentive stock option shall be transferable unless the Board shall otherwise permit. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees.
(b) Documentation. Each Award shall be evidenced in such form (written, electronic or otherwise) as the Board shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan.
(c) Board Discretion. Except as otherwise provided by the Plan, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award need not be identical, and the Board need not treat Participants uniformly.
(d) Termination of Status. The Board shall determine the effect on an Award of the disability, death, termination of employment, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, or the Participant's legal representative, conservator, guardian or Designated Beneficiary, may exercise rights under the Award.
(e) Withholding. The Participant must satisfy all applicable federal, state, and local or other income and employment tax withholding obligations before the Company will deliver stock certificates or otherwise recognize ownership of Conımon Stock under an Award. The Company may decide to satisfy the withholding obligations through additional withholding on salary or wages. If the Company elects not to or cannot withhold from other compensation, the Participant must pay the Company the full amount, if any, required for withholding or have a broker tender to the Company cash equal to the withholding obligations. Payment of withholding obligations is due before the Company will issue any shares on exercise or release from forfeiture of an Award or, if the Company so requires, at the same time as is payment of the exercise price unless the Company determines otherwise. If provided for in an Award or approved by the Board in its sole discretion, a Participant may satisfy such tax obligations in whole or in part by delivery of shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value; provided, however, except as otherwise provided by the Board, that the total tax withholding where stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income), except that, to the extent that the Company is able to retain shares of Common Stock having a Fair Market Value that exceeds the statutory minimum applicable withholding tax without financial accounting implications or the Company is withholding in a jurisdiction that does not have a statutory minimum withholding tax, the Company may retain such number of shares of Common Stock (up to the number of shares having a fair market value equal to the maximum individual statutory rate of tax (determined by (or in a manner approved by) the Company)) as the Company shall determine in its sole discretion to satisfy the tax liability associated with any Award. Shares surrendered to satisfy tax withholding requirements cannot be subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements.
(f) Amendment of Award. Except as otherwise provided in Sections $5(\mathrm{~g})$ and $6(\mathrm{e})$ with respect to repricings, Sections $5(\mathrm{~d}), 6(\mathrm{~d}), 7(\mathrm{~b}), 8$ and $810(\mathrm{i})$ with respect to minimum vesting of-Awads, Seetion $10(\mathrm{f})$ with respeete Perfermance Awards or Section 11 (d) with respect to actions requiring stockholder approval, the Board may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Nonstatutory Stock Option, provided either (i) that the Participant's consent to such action shall be required unless
the Board determines that the action, taking into account any related action, would not materially and adversely affect the Participant or (ii) that the change is permitted under Section 9 hereof; provided further, notwithstanding anything to the contrary herein, the Board shall have no authority to amend, modify or terminate any outstanding Award that has the same effect of actions expressly prohibited by Section $5(\mathrm{~g})$ and requires approval by the Company's stockholders.
(g) Conditions on Delivery of Stock. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions from shares previously delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.
(h) Acceleration. Except as provided in Sections 5(d), 6(d), 7(b), 8 and 10(i), the Board may at any time provide that any Award shall become immediately exercisable in full or in part, free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be.

## (i) Performance Awards

(i) Grants. Restricted Stock Awards and Other Stock Unit Awards under the Plan may be made subject to the achievement of performance goals pursuant to this Section 10(i) (" "Performance Awards"." each a "Performance Award"), subject to the limit in Section 4(c) on shares covered by such grants. Performance Awards can also provide for cash payments of up to $\$ 2,000,000$ per calendar year per individual. Performance Awards shall not vest prior to the first anniversary of the date of grant. If Dividends or Dividend Equivalents are granted in connection with a Performance Award, such Dividend or Dividend Equivalent shall be paid only if the performance goal or goals associated with such Performance Award are satisfied.
(ii) Commitue Grats of porformmee Anarde to my Comered Hmployee intended to quatif as


 such A Ards granted to Covered Employees, references to the Board or to a Commithee shall be deemed to be
 employee under Section $162($ m $)(3)$ of the Cede.
(iii
 the Committee-shallBoard may specify that the degree of granting, vesting and/or payout shall be subject to the achievement of one or more obeerformance measures established by the Commitee Board, which fonlmay be based on the relative or absolute attainment of specified levels of one or any combination of the following, which may be determined in accordance with Generally Accepted Accounting Principles ("""GAAP"") or on a non-GAAP basis:
(A) Earnings or Profitability Measures, including but not limited to: (i) revenue (gross, operating or net); (ii)
 (v) earnings before interest, taxes, depreciation and amortization (""EBITDA""); (vi) earnings growth, (vii) profit margins or contributions; and (viii) expense levels or ratios;
(B) Return Measures, including, but not limited to: return on (i) investment; (ii) assets; (iii) equity; or (iv) capital (total or invested);
(C) Cash Flow Measures, including but not limited to: (i) operating cash flow, (ii) cash flow sufficient to achieve financial ratios or a specified cash balance; (iii) free cash flow; (iv) cash flow return on capital; (v) net cash provided by operating activities; (vi) cash flow per share; and (vii) working capital or adjusted working capital;
(D) Stock Price and Equity Measures, including, but not limited to: (i) return on stockholders' equity; (ii) total stockholder return; (iii) stock price; (iv) stock price appreciation; (v) market capitalization; (vi) earnings per share (basic or diluted) (before or after taxes); and (vii) price-to-earnings ratio;
（E）Strategic Metrics，including，but not limited to：（i）acquisitions or divestitures；（ii）collaborations，licensing or joint ventures；（iii）product research and development；（iv）clinical trials；（v）regulatory filings or approvals；（vi） patent application or issuance；（vii）manufacturing or process development；（viii）sales or net sales；（ix）sales growth，（X）market share；（xi）market penetration；（xii）inventory control；（xiii）growth in assets；（xiv）key hires；（xv） business expansion；（xvi）achievement of milestones under a third－party agreement；（xvii）financing；（xviii） resolution of significant litigation；（xix）legal compliance or risk reduction；（xx）improvement of financial ratings；or （xxi）achievement of balance sheet or income statement objectives，
（F）In each case such performance measures may be adjusted to exclude any one or more of（i）extraordinary items， （ii）gains or losses on the dispositions of discontinued operations，（iii）the cumulative effects of changes in accounting principles，（iv）the impairment or writedown of any asset or assets，（v）charges for restructuring and rationalization programs or（vi）other extraordinary or non－recurring items，speeffed by Comenter when establiching the performance menerfes．Such performance measures：（i）may vary by Participant and may be different for different Awards－⿰⿱丶万⿱⿰㇒一乂， subsidiary or other unit in which the Participant works and（iii）may cover such period as may be specified by the Committee，and（iii）shall be set by the Commitee within the time peried preseribed by，and shall atherwise eemply With the requirements of Section $162(\mathrm{~m})$ ．Awards that are not intended to qualify asBoard．Performance－Based Compenstion Awards may be based on these or such other performance measures，may be subject to these or other adjustments，and may be set at the time，in each case，as the Board may determine．
（ixiii）Adjustments．Notwithstanding any provision of the Plan，with respect to any Performance Award that is intended to quelify as Perfernenee－Bused Compenstion，the CemmiteeBoard may adjust denmurds，bu－not mpards－the cash or number of Shares payable pursuant to such Award，and the CemmitteeBoard may－net，at any time，waive the achievement of the applicable performance measures excepte，including in the case of the death or disability of the Participant or a change in control of the Company．
（＋iv）Other．The CommitteeBoard shall have the power to impose such other restrictions on Performance Awards as it may deem necessary or appropriate－to ensure the such Awards witify all requirementwor Performanee Based Compensution．

## 11．Miscellaneous

（a）No Right To Employment or Other Status．No person shall have any claim or right to be granted an Award，and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company．The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan，except as expressly provided in the applicable Award．
（b）No Rights As Stockholder．Subject to the provisions of the applicable Award，no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Award until becoming the record holder of such shares．
（c）Effective Date and Term of Plan．The Plan shall become effective immediately prior to the closing of the Company＇s initial public offering．No Awards shall be granted prior to（i）the date on which the Plan was adopted by the Board or（ii）the date the Plan was approved by the Company＇s stockholders．The Plan shall expire on May 23， 2028.
（d）Amendment of Plan．The Board may amend，suspend or terminate the Plan or any portion thereof at any time； provided，however，that，to the extent determined by the Board，no amendment requiring stockholder approval under any applicable legal，regulatory or listing requirement shall become effective until such stockholder approval is obtained；provided further，that stockholder approval shall be required for any amendment to the Plan that（i） materially increases the number of shares of Common Stock available for issuance under the Plan（other than an increase to reflect an adjustment described in Section 9）or（ii）materially expands the class of service providers eligible to participate in the Plan．
（e）Authorization of Sub－Plans．The Board may from time to time establish one or more sub－plans under the Plan for purposes of satisfying applicable blue sky，securities or tax laws of various jurisdictions．The Board shall
establish such sub-plans by adopting supplements to this Plan containing (i) such limitations on the Board's discretion under the Plan as the Board deems necessary or desirable or (ii) such additional terms and conditions not otherwise inconsistent with the Plan as the Board shall deem necessary or desirable. All supplements adopted by the Board shall be deemed to be part of the Plan, but each supplement shall apply only to Participants within the affected jurisdiction and the Company shall not be required to provide copies of any supplement to Participants in any jurisdiction which is not the subject of such supplement.
(f) Provisions for Foreign Participants. The Board may modify Awards or Options granted to Participants who are foreign nationals or employed outside the United States or establish subplans or procedures under the Plan to recognize differences in laws, rules, regulations or customs of such foreign jurisdictions with respect to tax, securities, currency, employee benefit or other matters.
(g) Compliance with Code Section 409A. Except as provided in individual Award agreements initially or by amendment, if and to the extent (i) any portion of any payment, compensation or other benefit provided to a Participant pursuant to the Plan in connection with his or her employment termination constitutes ":s nonqualified deferred compensation $=$ within the meaning of Section 409A of the Code and (ii) the Participant is a specified employee as defined in Section $409 \mathrm{~A}(\mathrm{a})(2)(\mathrm{B})(\mathrm{i})$ of the Code, in each case as determined by the Company in accordance with its procedures, by which determinations the Participant (through accepting the Award) agrees that he or she is bound, such portion of the payment, compensation or other benefit shall not be paid before the day that is six months plus one day after the date of ""separation from service"" (as determined under Section 409A of the Code) (the ${ }^{-" ‘}$ New Payment Date ${ }^{["]}$ ), except as Section 409A of the Code may then permit. The aggregate of any payments that otherwise would have been paid to the Participant during the period between the date of separation from service and the New Payment Date shall be paid to the Participant in a lump sum on such New Payment Date, and any remaining payments will be paid on their original schedule.

The Company makes no representations or warranty and shall have no liability to the Participant or any other person if any provisions of or payments, compensation or other benefits under the Plan are determined to constitute nonqualified deferred compensation subject to Section 409A of the Code but do not to satisfy the conditions of that section.
(h) Governing Law. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, excluding choice-of-law principles of the law of such state that would require the application of the laws of a jurisdiction other than such state.

Approved by the Board of Directors of Emergent BioSolutions Inc. on March 2218,20182021 , subject to stockholder approval.

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| Description | EBSI SIP 2018 (as amended - Final) |
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| Insertions | 126 |
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## EMERGENT BIOSOLUTIONS INC.

## Draft Resolutions for <br> Meeting of the Compensation Committee of the Board of Directors

March 17, 2021

## Approve Minutes

RESOLVED, that the minutes of the meeting of the Compensation Committee held on February 9, 2021 be, and they hereby are, approved.

## Approve Compensation Discussion and Analysis (CD\&A), Compensation Committee Report and Compensation Consultant Independence

RESOLVED, that having reviewed and discussed with management the Corporation's "Compensation Discussion and Analysis" required by Item 402(b) of Regulation S-K (the "CD\&A"), the Compensation Committee hereby approves and adopts the CD\&A, substantially in the form presented to the Compensation Committee at this meeting, with such clarifying and presentation changes thereto as the officers of the Corporation or legal counsel deem appropriate, and approve the CD\&A for inclusion in the Corporation's Proxy Statement and incorporation by reference into the Corporation's Annual Report on Form 10-K for the year ended December 31, 2020.

RESOLVED, that the Compensation Committee Report be, and it hereby is, approved substantially in the form presented to the Compensation Committee at this meeting (the "Compensation Committee Report") and that the Compensation Committee Report be included in the Corporation's Proxy Statement.

RESOLVED, that having reviewed the statement from Willis Towers Watson, dated February 26,2021 , regarding its independence as compensation consultant under the factors specified by the Securities and Exchange Commission and the New York Stock Exchange, the Compensation Committee determines Willis Towers Watson to be an independent compensation consultant and without conflicts of interest.

## Approve 2021 Share Request and Stock Incentive Plan Amendment

RESOLVED, that having reviewed and considered the Amended and Restated Emergent BioSolutions Inc. Stock Incentive Plan, substantially in the form presented to the Compensation Committee at this meeting and as set forth in Exhibit A (the "Amended Plan"), the Compensation Committee hereby recommends that, subject to stockholder approval, the Board approve and adopt the Amended Plan, among other things, to (a) increase the number of shares of common stock, par value $\$ 0.001$ per share of the Company, reserved for issuance under the Amended Plan by 3.5 million shares of common stock; and (b) undertake miscellaneous confirmatory amendments of the terms and conditions of the Amended Plan to take into account certain legislative changes.

## Say-on-Pay

RESOLVED, that it is in the best interest of the Corporation that the stockholders of the Corporation be provided with an opportunity at the 2021 Annual Meeting of Stockholders to cast a non-binding advisory vote to approve the compensation of the Corporation's named executive officers, as disclosed in the Corporation's 2020 Proxy Statement.

RESOLVED, that the Committee recommends to the Board of Directors that a proposal to submit a non-binding advisory vote on executive compensation be submitted to the stockholders of the Corporation at the 2021 Annual Meeting of Stockholders.

RESOLVED, that the Compensation Committee recommends to the Board of Directors to recommend that the stockholders of the Corporation vote "FOR" the approval of the non-binding advisory vote on the compensation of the named executive officers at the 2021 Annual Meeting of Stockholders.

## General Authority

RESOLVED, that the officers of the Corporation be, and each of them acting singly hereby is, authorized, acting for and on behalf of the Corporation, to prepare, negotiate, execute and deliver all offer letters, agreements and other documents or instruments as any officer of the Corporation may deem necessary or desirable to effectuate the purposes and intent of the foregoing resolutions, in each case in such form and on such terms not inconsistent with the foregoing resolutions as any such officer shall approve, the execution and delivery thereof to be conclusive evidence of such approval and the authorization therefor by the Compensation Committee; and that the Corporation be and hereby is authorized to enter into and perform its obligations under each of the foregoing.

## WillisTowersWatson IIIIIII

February 26, 2021
Dr. Louis W. Sullivan, M.D.
Chairman, Compensation Committee of the Board of Directors
Emergent BioSolutions, Inc.
400 Professional Drive, Suite 400
Gaithersburg, MD 20879

## WILLIS TOWERS WATSON'S INDEPENDENCE AS EXECUTIVE COMPENSATION CONSULTANT

Dear Dr. Sullivan:
Securities and Exchange Commission (SEC) regulations issued under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 specify six factors that compensation committees must consider in selecting and monitoring the independence of their compensation advisors. These regulations retain the basic Dodd-Frank principle that compensation committees should have the final say in determining the independence and objectivity of their advisors and that no single factor is more important than any other or automatically disqualifies an advisor that the committee is comfortable with.

We provide the information below to assist our clients in assessing Willis Towers Watson's independence in terms of the six factors spelled out in the SEC regulations, although clients are free to consider other factors:

1. Other services provided by the advisor's firm: Willis Towers Watson provided no other services to Emergent BioSolutions, Inc. during the year ending December 31, 2020.
2. Fees as a percentage of firm revenue: Willis Towers Watson released its consolidated financial results on February 10, 2021. No single client represented more than $1 \%$ of our consolidated revenues in 2020. Willis Towers Watson's revenues for the fiscal year ended December 31, 2020 were approximately $\$ 9.4$ billion.
3. Any policies and procedures maintained by the advisory firm to prevent or mitigate potential conflicts of interest: Willis Towers Watson recognizes that our clients count on their executive compensation consultants to provide objective advice. Our formal executive compensation consulting protocols help to ensure that our advice is fully objective and independent.

All Willis Towers Watson associates are subject to a comprehensive Code of Business Conduct, which addresses issues including conflicts of interest and associates' ownership and trading of client company stock, among other areas. In addition, Willis Towers Watson's Professional Excellence (quality) policies mandate rigorous peer reviews of all of our client work and periodic compliance reviews. Further, to ensure the objectivity of our consulting on executive compensation for officers and directors (EC consulting services), Willis Towers Watson adheres to additional consulting protocols which have been in effect for a number of years and these protocols apply whether we are retained by the compensation committee of the board or by management:

[^8]- Our executive compensation work, and the practitioners who conduct the work, must be objective. Our conclusions and opinions are guided by objective facts and professional expertise, and our processes ensure that they are not influenced by direct or indirect pressures from clients or others who may be seeking a particular outcome. We avoid accepting or continuing engagements where we do not believe our objective professional advice is being sought.
- We work for the enterprise - not for individuals. Regardless of whether we are retained by the compensation committee of the board or by management, we work on behalf of the enterprise, rather than for particular individuals. Our conclusions and recommendations are shaped by what is appropriate for the organization, rather than by their effect on the personal interests of individual executives or committee members.
- Our Professional Excellence (quality) policies require that all of our work products receive rigorous peer reviews from qualified reviewers. For certain work, additional reviews must be conducted by senior EC consultants who do not regularly perform work for the client (other than conducting peer reviews).

四 Our executive compensation advice is not influenced by other Willis Towers Watson work for the client. The executive compensation consulting approaches we follow and conclusions we reach are unaffected by the number or magnitude of any other services Willis Towers Watson provides to the client. To this end, we adhere to the following policies:

- Individuals who are not part of the executive compensation consulting team (other than designated quality reviewers) are precluded from involvement in the development of recommendations regarding the compensation of the client's executive officers and directors.
- Executive compensation consultants who advise clients on the compensation of executive officers and directors may not serve in broader relationship-management roles for those clients.
- The compensation paid to Willis Towers Watson executive compensation consultants is not directly tied to the fees paid, or to the expansion of the fees paid, by that client.
- Willis Towers Watson executive compensation consultants provide clients with information sufficient to enable them to evaluate whether Willis Towers Watson and the individuals on the consulting team are "independent" and have no conflicts of interest.

4. Any business or personal relationship of the compensation advisor with a member of the Compensation Committee: We are not aware of any business or personal relationships the committee members may have with the regular members of the Willis Towers Watson executive compensation team.
5. Any company stock owned by the compensation advisor: No regular member of the Willis Towers Watson executive compensation team serving you owns any stock of the Company, other than perhaps investments in mutual funds or other funds that are managed without the member's input.
6. Any business or personal relationship of the compensation advisor or the firm employing the advisor with an executive officer of the issuer: We are not aware of any business or personal relationships that executive officers of the company may have with Willis Towers Watson or with the regular members of the Willis Towers Watson executive compensation team.

Based on the foregoing, we believe Willis Towers Watson serves as an independent advisor and has no conflicts of interest. If you have any questions about our response, our qualifications or our policies, please don't hesitate to call me.

Sincerely,


Mitchell J. Bardolf
Director, Executive Compensation

## Emergent BioSolutions, Inc. 2021 Board of Director Compensation Review

March 17, 2021

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WillisTowersWatson Millillill

## Executive Summary

## Introduction

- For the last several years, Emergent's Nominating and Governance Committee has conducted an annual review to ensure the Board of Directors compensation program remains competitive
- Our competitive review is based on market data from the most recent proxy statements from the 20-company proxy peer group approved by the Committee in November 2020
- While there tends to be some correlation between company size and Director pay levels, the relationship tends to be more muted than we typically see for executive pay
- As companies grow in size and scope it is common to increase the number of outside Directors on the Board to manage individual Director workload; this approach tends to have more impact on overall Board cost than individual Director pay
- Based on our review, the current Board compensation package is generally aligned with the peer group $50^{\text {th }}$ percentile; however, there is an opportunity to make the following adjustments to improve positioning recognizing the potential for increased market movement in future years
- Board cash retainer - increase from $\$ 60,000$ to $\$ 70,000$
- Board annual equity retainer - increase from $\$ 250,000$ to $\$ 285,000$
- At the March meeting, the primary purpose is to gain alignment on adjustments to the current Director compensation program, which will go into effect at the time of the annual meeting
- This report provides additional detail on the current outside Director compensation program, competitive findings and considerations for adjustment


## Executive Summary

## Philosophy and Current Program Summary

- Emergent targets the outside Director compensation program to be positioned between the $50^{\text {th }}$ and $75^{\text {th }}$ percentiles of the peer group; supporting rationale is as follows:
- Ensures effective attraction and retention of highly qualified Directors
- Provides flexibility in evaluating the timing and degree of pay program adjustments relative to peer practice, particularly given the often narrow range of competitive practice with respect to cash compensation
- Recognizes that Emergent has historically required more from its Board relative to peers (e.g., the number of annual Board meetings exceeds the peer group $75^{\text {th }}$ percentile)
. The table below provides a summary of Emergent's current outside Director compensation program - we also provide commentary on historical program changes for reference

| Element | Current EES Program |
| :---: | :---: |
| Annual Board Retainer | $\$ 60,000$ |
| Lead Director Additional Retainer | $\$ 30,000$ |
| Committee Chair Total Retainer | Audit \& Strategic Ops $1: \$ 25,000$ <br> Compensation, Nom/Gov \& Scientific <br> Review: $\$ 20,000$ |
| Committee Member Total Retainer | Audit \& Strategic Ops ${ }^{2}: \$ 15,000$ <br> Compensation, Nom/Gov \& Scientific <br> Review: $\$ 10,000$ |
| Annual Equity Awards | $\$ 250,000$ (RSUs) |
| Initial Election Equity Awards ${ }^{3}$ | $\$ 375,000$ (RSUs) |

## Summary of Recent Program Changes

- 2016 - adopted a fixed value approach to Director equity grants, realigned annual and initial equity grants to ensure alignment with the competitive market and reflect fixed value approach
- 2017 and 2018 - n/a
- 2019 - increased Board cash retainer from $\$ 55,000$ to $\$ 60,000$, Compensation Committee member retainer from $\$ 9,000$ to $\$ 10,000$ and Compensation Committee Chair retainer from $\$ 17,500 \$ 20,000$ (includes member retainer)
- 2020 - increased Nom/Gov \& Scientific Review Committee chair total retainer from $\$ 17,500$ to $\$ 20,000$ and member retainer from $\$ 9,000$ to $\$ 10,000$ (in-line with Compensation Committee)
${ }^{1}$ Chair of the Strategic Operations Committee (Fuad El-Hibri) does not receive a retainer
${ }^{2}$ Employee Directors (Fuad El-Hibri and Bob Kramer) do not receive additional cash retainers for service on the Strategic Operations Committee
${ }^{3}$ Initial election equity award values are inclusive of the annual equity award; our understanding is that in the year of initial appointment to the Board, outside Directors receive the initial equity award only


## Executive Summary

Overview of Program Structure

- Emergent's current retainer only structure (for both Board and Committee service) continues to be well-aligned with the peer group and broader market practice
- On average, the total pay mix (including Committee member retainers) is approximately $25 \%$ cash and $75 \%$ equity
- The vast majority of peers (75\%) denominate equity awards based on fixed value rather than fixed shares (20\%)
- Long-term incentive mix varies, though the use of $100 \%$ RSUs is most prevalent ( $40 \%$ )
- Peers tend to have a three-tier compensation structure for committees:
- Audit (highest retainer)
- Compensation
- Nominating/Governance (lowest retainer)

| Program Element | Emergent Practice | Peer Prevalence |
| :---: | :---: | :---: |
| Regular Board Compensation |  |  |
| Cash Compensation |  |  |
| Cash Retainer | V | 100\% |
| Meeting Fees | [ | 0\% |
| Equity Compensation |  |  |
| Annual Equity Award | (V) | 95\% ${ }^{1}$ |
| RSUs only | V | 40\% |
| Stock options only | $\sqrt{4}$ | 30\% |
| RSU / option mix | [1] | 25\% |
| Initial Equity Award ${ }^{2}$ | (V) | 30\% |
| Additional Compensation - Committee Service |  |  |
| Committee Chair Retainers | V | 90-100\% ${ }^{3}$ |
| Committee Member Retainer | V | 65-85\% ${ }^{3}$ |
| Committee Meeting Fees | [ | 0\% |
| Additional Compensation - Board Leadership |  |  |
| Lead Independent Director | - | 50\% |
| Chairman of the Board | [ | 50\% |

[^9] ${ }^{3}$ Peer group prevalence varies by Committee

## Executive Summary

## Competitive Findings

- Annual total direct compensation (Board and Committee cash plus annual equity) is positioned at or slightly above the $50^{\text {th }}$ percentile
- Positioning relative to 2020 review reflects slight increases in peer group Committee member cash compensation (approximately $5 \%-10 \%$ increase at median)
- Emergent's cash-to-equity mix (approximately $25 \%$ to $75 \%$ respectively) remains appropriate and aligned with peer practice
- Emergent's aggregate Board compensation cost is aligned with the $50^{\text {th }}$ percentile

Emergent's program generally remains aligned with the peer group; however, the peer data would support modest increases to the extent there is interest in improving market positioning.

We outline potential adjustments for consideration on the following page

As presented below, total cash and total direct compensation reflect committer member service only IL.e. excludes Conmittee Chalf retainers) and assumes Committee members setve on the their respective Cemmitice as well as two ofler Commitecs

| Element |  | EES | Peer Group |  |  | EBS Positioning |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $25^{4} \%$ \%ie | $50^{4}$ \% \%ie | 75 \% \%ile | 2021 | 2020 |
| Board Cash Retainer |  |  | \$60,000 | \$59,500 | \$60,000 | \$75,000 | $50^{\text {th }}$ \%ile | $50^{\text {th }} \%$ ile |
| Total Cash Compensation (TCC) | Audit | \$95,000 | \$80,500 | \$94,500 | \$103,000 | $53^{\text {rd }}$ \%ile | $60^{\text {th }} \%$ ile |
|  | Comp | \$90,000 | \$79,000 | \$90,000 | \$100,000 | $50^{\text {th }}$ \%ile | $60^{\text {th }}$ \%ile |
|  | Nom/Gov | \$90,000 | \$75,000 | \$88,000 | \$98,000 | $58^{\text {th }}$ \%ile | $61^{\text {st }}$ \%ile |
| Annual Equity Grant |  | \$250,000 | \$180,000 | \$210,000 | \$359,000 | $56^{\text {th }}$ \%ile | $56^{\text {th }} \%$ ile |
| Total Direct Compensation (TDC) | Audit | \$345,000 | \$264,000 | \$305,500 | \$454,000 | $55^{\text {th }}$ \%ile | $56^{\text {th }} \%$ ile |
|  | Comp | \$340,000 | \$264,000 | \$301,000 | \$451,000 | $55^{\text {th }}$ \%ile | $56^{\text {th }} \%$ ile |
|  | Nom/Gov | \$340,000 | \$264,000 | \$297,500 | \$448,500 | $56^{\text {th }}$ \%ile | $68^{\text {th }}$ \%ile |
| Initial Equity Grant |  | \$375,000 | \$180,000 | \$210,000 | \$530,000 | $67^{\text {th }}$ \%ile | $77^{\text {th }} \%$ ile |



## Executive Summary

Adjustments for Consideration

- Consideration could be given to making the following adjustments to the existing Board compensation program - we summarize the impact of these adjustments on positioning relative to the peer group in the table below
- Board cash retainer - increase from \$60,000 to \$70,000
- Board annual equity retainer - increase from $\$ 250,000$ to $\$ 285,000$
- In evaluating the appropriateness of the proposed adjustments, consideration should be given to the following:
- Emergent's recent growth provides a platform to recognize the increased responsibilities and enhanced scrutiny associated with corporate Board service
- Historically, Emergent has required more from its Board relative to peers, with the number of annual Board meetings exceeding $75^{\text {th }}$ percentile practice

| Element |  | EBSCurrent | Proposed Change | EBS <br> Proposed | Peer Group |  |  | EBS Positioning |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $25^{\text {th }} 9$ ile |  |  | $50^{4 .}$ \%fle | $75^{\text {th }}$ \% 11 e | Curent | Proposed |
| Board Cash Retainer |  |  | \$60,000 | +\$10,000 | \$70,000 | \$59,500 | \$60,000 | \$75,000 | $50^{\text {th }} \%$ ile | $58^{\text {th }} \%$ ile |
| Total Cash Compensation (TCC) | Audit | \$95,000 |  | \$105,000 | \$80,500 | \$94,500 | \$103,000 | $53^{\text {rd }} \%$ ile | $79^{\text {th }} \%$ ile |
|  | Comp | \$90,000 |  | \$100,000 | \$79,000 | \$90,000 | \$100,000 | $50^{\text {th }} \%$ ile | $68^{\text {th }}$ \%ile |
|  | Nom/Gov | \$90,000 | \% | \$100,000 | \$75,000 | \$88,000 | \$98,000 | $58^{\text {th }} \%$ ile | $79^{\text {th }}$ \%ile |
| Annual Equity Grant |  | \$250,000 | +\$35,000 | \$285,000 | \$180,000 | \$210,000 | \$359,000 | $56^{\text {th }} \%$ ile | $64^{\text {th }} \%$ ile |
| Total Direct Compensation (TDC) | Audit | \$345,000 | +\$45,000 | \$390,000 | \$264,000 | \$305,500 | \$454,000 | $55^{\text {th }} \%$ ile | $64^{\text {th }} \%$ ile |
|  | Comp | \$340,000 |  | \$385,000 | \$264,000 | \$301,000 | \$451,000 | $55^{\text {th }} \%$ ile | $63^{\text {rd }} \%$ ile |
|  | Nom/Gov | \$340,000 |  | \$385,000 | \$264,000 | \$297,500 | \$448,500 | $56^{\text {th }} \%$ ile | $67^{\text {th }}$ \%ile |
| Initial Equity Grant |  | \$375,000 | -- | \$375,000 | \$180,000 | \$210,000 | \$530,000 | $67^{\text {th }} \%$ ile | $67^{\text {th }} \%$ ile |

As presented, total cash and lotel direet compensation reflect Cormitree momber somiee only lle axcludes Commituen Chair
patainers) and assumes Committee members serve on the theif papective Commiteeas well as two ether Contminens.


## Methodology

- The following data were collected from the most recent proxies (mostly 2020) of Emergent's current compensation comparator peer group and compared against the compensation elements awarded to Emergent's outside Directors:
- Board annual cash retainer and meeting fees (as applicable)
- Committee annual cash retainer and meeting fees (as applicable)
- Committee Chair additional cash retainer and meeting fees (as applicable)
- Lead Director additional cash retainer, where available
- Annual equity compensation (i.e., stock options, restricted stock, etc.)
- Initial, one-time equity compensation (i.e., stock options, restricted stock, etc.)
- In an attempt to normalize compensation practice across companies with Board/meeting fees, we use the following assumptions (which are consistent with Emergent's practice) to calculate total annual compensation:
- Audit Committee members serve on 3 Committees (Audit plus two "Other" Typical Committees)
- Compensation Committee members serve on 3 Committees (Comp plus two "Other" Typical Committees)
- Nominating/Governance Committee members serve on 3 Committees (Nom/Gov plus two "Other" Typical Committees)
- Long-term incentive (LTI) compensation reflects the "as reported" equity values associated with annual equity grants collected from the most recent proxy disclosure (typically 2020 proxies) for each peer company


## Summary Findings <br> Cash Compensation


${ }^{1}$ For Emergent and the peers, given the lack of Board meeting fees, Annual Board Member Retain and Annual Baseline Board Member Compensation are the same. Annual Baseline Board Member Compensation is intended to reflect Board meeting fees, where reported
${ }^{2}$ For Emergent, Total Committee Member Cash Compensation reflects committee member retainers only. For Emergent and the peer group, committee service assumes Audit, Comp, and Nom/Gov Committee members serve on their respective committees and two other typical committees. Peer group competitive market data reflects committee member retainer plus committee meeting fees, as applicable ( 0 out of 20 peers), and assumes nine Audit Committee meetings, seven Compensation Committee meetings, four Nominating and Governance Committee meetings, and six Other Committee meetings
${ }^{3}$ Total Board Cash Compensation reflects Annual Baseline Board Member Compensation plus Annual Total Committee Member Cash Compensation as described above; excludes Committee Chair retainer and Lead Director retainer

## Summary Findings

## Equity Awards and Total Direct Compensation

| Element | Emergent | Poile Rank (vs Peers) | Peer croup |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $2517$ <br> Percentile | 50th Percentile | 75th <br> Percentile |
| Initial Equity Grant | \$375,000 | 67\% | \$180,000 | \$210,000 | \$530,000 |
| Annual Equity Grant | \$250,000 | 56\% | \$180,000 | \$210,000 | \$359,000 |
| Annual Total Direct Compensation |  |  |  |  |  |
| Audit | \$345,000 | 55\% | \$264,000 | \$305,500 | \$454,000 |
| Compensation | \$340,000 | 55\% | \$264,000 | \$301,000 | \$451,000 |
| Nominating/Governance | \$340,000 | 56\% | \$264,000 | \$297,500 | \$448,500 |

## Summary Findings

## Lead Director Retainer

- Emergent provides its Independent Lead Director with an additional retainer of \$30,000
- Among the peers, ten (10) companies provide additional retainers (delivered in cash) ranging from \$10,000 to $\$ 50,000$; median practice is $\$ 27,500$, consistent with Emergent's additional retainer
- Many of the peers do not have a Lead Director role because they have a Non-Executive Chairman that carries out the duties typical of a Lead Director

| Peers with a Lead Director | Lead Director <br> Additional Retainer |
| :--- | :---: |
| Amphastar Pharmaceuticals, Inc. | $\$ 20,000$ |
| Bio-Rad Laboratories, Inc. | $\$ 15,000$ |
| Bruker Corporation | $\$ 10,000$ |
| Catalent, Inc. | $\$ 30,000$ |
| Horizon Therapeutics Public Limited Company | $\$ 40,000$ |
| Incyte Corporation | $\$ 30,000$ |
| Integra LifeSciences Holdings Corporation | $\$ 25,000$ |
| Jazz Pharmaceuticals plc | $\$ 50,000$ |
| NuVasive, Inc. | $\$ 25,000$ |
| United Therapeutics Corporation | $\$ 35,000$ |
| Emergent BioSolutions Inc. | $\$ 30,000$ |

## Competitive Assessment Detail

Committee Chair Total Retainer
Note: Values include both additional member retainer and additional Chair retainers

- The table on the right provides additional detail on peer group practice for Committee Chair Retainers
(" As discussed previously, typical practice in broader industry as well as Emergent's peers is to have a three-tier compensation structure for committees:
- Audit (highest retainer)
- Compensation
- Nominating \& Governance (lowest retainer)

| Company | Commitee Chair Total Retainer |  |  |
| :---: | :---: | :---: | :---: |
|  | Audit | Comp | Nomicov |
| Alkermes plc | \$25,000 | \$25,000 | \$18,000 |
| Amneal Pharmaceuticals, Inc. | \$25,000 | \$20,000 | \$15,000 |
| Amphastar Pharmaceuticals, Inc. | \$25,000 | \$18,000 | \$12,500 |
| Bio-Rad Laboratories, Inc. | \$20,000 | \$5,000 | -- |
| Bio-Techne Corporation | \$25,000 | \$17,500 | \$15,000 |
| Bruker Corporation | \$33,000 | \$18,000 | \$9,000 |
| Catalent, Inc. | \$25,000 | \$12,500 | \$10,000 |
| Exelixis, Inc. | \$25,000 | \$20,000 | \$15,000 |
| Globus Medical, Inc. | \$30,000 | \$7,500 | -- |
| Horizon Therapeutics Public Limited Co. | \$30,000 | \$20,000 | \$15,000 |
| Incyte Corporation | \$25,000 | \$25,000 | \$16,000 |
| Integra LifeSciences Holdings Corp. | \$20,000 | \$15,000 | \$15,000 |
| Ionis Pharmaceuticals, Inc. | \$24,000 | \$20,000 | \$10,000 |
| Jazz Pharmaceuticals plc | \$25,000 | \$22,500 | \$20,000 |
| Masimo Corporation | \$25,000 | \$20,000 | \$15,000 |
| NuVasive, Inc. | \$20,000 | \$20,000 | \$10,000 |
| Opko Health, Inc. ${ }^{1}$ | \$25,500 | \$10,000 | \$5,000 |
| PRA Health Sciences, Inc. | \$35,000 | \$20,000 | \$15,000 |
| United Therapeutics Corporation | \$25,000 | \$25,000 | \$25,000 |
| Varian Medical Systems, Inc. | \$24,000 | \$21,000 | \$12,500 |
| Values rounded to the nearest \$500 |  |  |  |
| Provelence | 10utu | 10tw | sitis |
| 2sth Percentie | \$25,000 | \$17,000 | \$10,500 |
| sompercentes | 525.000 | s20 000 | 315,000 |
| Fethreccentie | tastor | sers00 | p1,000 |

Emergent BioSolutions Inc.
\$25,000
$\$ 20,000$
S20.000
${ }^{1}$ Opko Audit Committee Chair total retainer includes additional cash and equity

## Competitive Assessment Detail Basic Director Compensation Package Detail

 (Excluding Incremental Compensation for Committee Chair or Lead Director)| Company | Number of Eoara Meetings | Arnue: Board cash Retaner | Total Beara Cast Cons | Commite Nember Extratetaner |  |  | Total Gast conpensationt |  |  | Vatre of Amual Equity Awards | Totalamua Compensation |  |  | Value of Intra Equity AwardS | htra <br> Equity <br> Award <br> Multep |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Avolit | Comp | Nomear | Avoliz | Camp | Namicor |  | Audit | Comp | Nomeer |  |  |
| Alkermes plc | 4 | \$74,000 | \$74,000 | \$15,000 | \$15,000 | \$10,000 | \$119,000 | \$119,000 | \$114,000 | \$267,236 | \$386,236 | \$386,236 | \$381,236 | \$922,316 | 3.5 |
| Amneal Pharmaceuticals, Inc. | 11 | \$75,000 | \$75,000 | \$15,000 | \$10,000 | \$7,500 | \$105,000 | \$100,000 | \$97,500 | \$274,998 | \$379,998 | \$374,998 | \$372,498 | \$274,998 | 1.0 |
| Amphastar Pharmaceuticals, Inc. | 6 | \$55,000 | \$55,000 | \$12,000 | \$10,000 | \$5,000 | \$87,000 | \$85,000 | \$80,000 | \$220,007 | \$307,007 | \$305,007 | \$300,007 | \$220,007 | 1.0 |
| Bio-Rad Laboratories, Inc. | 10 | \$125,000 | \$125,000 | \$10,000 | \$3,000 |  | \$145,000 | \$138,000 | \$125,000 | \$0 | \$145,000 | \$138,000 | \$125,000 | \$0 | -- |
| Bio-Techne Corporation | 4 | \$75,000 | \$75,000 |  |  |  | \$75,000 | \$75,000 | \$75,000 | \$199,786 | \$274,786 | \$274,786 | \$274,786 | \$199,786 | 1.0 |
| Bruker Corporation | 4 | \$60,000 | \$60,000 | \$18,000 | \$8,000 | \$3,000 | \$94,000 | \$84,000 | \$79,000 | \$125,012 | \$219,012 | \$209,012 | \$204,012 | \$125,012 | 1.0 |
| Catalent, Inc. | 5 | \$100,000 | \$100,000 | \$10,000 |  |  | \$100,000 | \$100,000 | \$100,000 | \$190,000 | \$290,000 | \$290,000 | \$290,000 | \$190,000 | 1.0 |
| Exelixis, Inc. | 7 | \$50,000 | \$50,000 | \$12,000 | \$8,000 | \$5,000 | \$72,000 | \$68,000 | \$65,000 | \$380,780 | \$452,780 | \$448,780 | \$445,780 | \$1,060,780 | 2.8 |
| Globus Medical, Inc. | 6 | \$57,500 | \$57,500 | \$10,000 | \$7,500 |  | \$82,500 | \$80,000 | \$57,500 | \$329,459 | \$411,959 | \$409,459 | \$386,959 | \$329,459 | 1.0 |
| Horizon Therapeutics Public Limited Company | 7 | \$60,000 | \$60,000 | \$15,000 | \$10,000 | \$7,500 | \$97,500 | \$92,500 | \$90,000 | \$399,986 | \$497,486 | \$492,486 | \$489,986 | \$399,986 | 1.0 |
| Incyte Corporation | 6 | \$60,000 | \$60,000 | \$12,000 | \$10,000 | \$8,000 | \$92,000 | \$90,000 | \$88,000 | \$456,310 | \$548,310 | \$546,310 | \$544,310 | \$456,310 | 1.0 |
| Integra LifeSciences Holdings Corporation | 9 | \$75,000 | \$75,000 |  |  |  | \$75,000 | \$75,000 | \$75,000 | \$190,045 | \$265,045 | \$265,045 | \$265,045 | \$190,045 | 1.0 |
| Ionis Pharmaceuticals, Inc. | 8 | \$55,000 | \$55,000 | \$12,000 | \$10,000 | \$5,000 | \$87,000 | \$85,000 | \$80,000 | \$801,312 | \$888,312 | \$886,312 | \$881,312 | \$2,697,225 | 3.4 |
| Jazz Pharmaceuticals plc | 5 | \$60,000 | \$60,000 | \$15,000 | \$12,500 | \$10,000 | \$100,000 | \$97,500 | \$95,000 | \$460,073 | \$560,073 | \$557,573 | \$555,073 | \$1,163,337 | 2.5 |
| Masimo Corporation | 5 | \$70,000 | \$70,000 | \$12,500 | \$10,000 | \$5,000 | \$102,500 | \$100,000 | \$95,000 | \$179,887 | \$282,387 | \$279,887 | \$274,887 | \$179,887 | 1.0 |
| NuVasive, Inc. | 10 | \$70,000 | \$70,000 |  |  |  | \$70,000 | \$70,000 | \$70,000 | \$190,000 | \$260,000 | \$260,000 | \$260,000 | \$190,000 | 1.0 |
| Opko Health, Inc. | 8 | \$20,000 | \$20,000 | \$10,000 | \$5,000 |  | \$40,000 | \$35,000 | \$20,000 | \$21,000 | \$61,000 | \$56,000 | \$41,000 | \$63,000 | 3.0 |
| PRA Health Sciences, Inc. | 10 | \$60,000 | \$60,000 | \$15,000 | \$10,000 | \$7,500 | \$95,000 | \$90,000 | \$87,500 | \$125,000 | \$220,000 | \$215,000 | \$212,500 | \$125,000 | 1.0 |
| United Therapeutics Corporation | 4 | \$60,000 | \$60,000 | \$15,000 | \$15,000 | \$15,000 | \$105,000 | \$105,000 | \$105,000 | \$351,740 | \$456,740 | \$456,740 | \$456,740 | \$751,740 | 2.1 |
| Varian Medical Systems, Inc. | ND | \$100,000 | \$100,000 | \$14,000 | \$7,500 | \$5,000 | \$124,000 | \$117,500 | \$115,000 | \$179,977 | \$303,977 | \$297,477 | \$294,977 | \$179,977 | 1.0 |
| Values rounded to the nearest \$500 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Prevalence 25 th Percentile 501 P Percentile 75 th Percentile | 95\% | 100\% | 100\% | 85\% | 80\% | 65\% | 100\% | 100\% | 100\% | 95\% | 100\% | 100\% | 100\% | 95\% | 95\% |
|  | 5 | \$59,500 | \$59,500 | \$12,000 | \$8,000 | \$5,000 | \$80,500 | \$79,000 | \$75,000 | \$180,000 | \$264,000 | \$264,000 | \$264,000 | \$180,000 | 1.0 |
|  | 6 | \$60,000 | \$60,000 | \$12,500 | \$10,000 | \$7,500 | \$94,500 | \$90,000 | \$88,000 | \$210,000 | \$305,500 | \$301,000 | \$297,500 | \$210,000 | 1.0 |
|  | 9 | \$75,000 | \$75,000 | \$15,000 | \$10,000 | \$8,000 | \$103,000 | \$100,000 | \$98,000 | \$359,000 | \$454,000 | \$451,000 | \$448,500 | \$530,000 | 2.3 |
|  | 14 | P60ppob | S606be | 516000 | S109093 | 610pho | 835-b6 | Seopora | Srapors | 19250pob | CWh5000 | S340000 | Srabopo | ss76pob | $1{ }^{1}$ |
|  | 100\% | 50\% | 50\% | 63\% | 40\% | 83\% | 53\% | 47\% | 58\% | 56\% | 55\% | 55\% | 56\% | 67\% | 69\% |
| Emergent BioSolutions Inc. - Proposed | 11 | \$70,000 | \$70,000 | \$15,000 | \$10,000 | \$10,000 | \$105,000 | \$100,000 | \$100,000 | \$285,000 | \$390,000 | \$385,000 | \$385,000 | \$375,000 | 1.3 |
|  | 100\% | 58\% | 58\% | 63\% | 40\% | 83\% | 79\% | 68\% | 79\% | 64\% | 64\% | 63\% | 67\% | 67\% | 68\% |

${ }^{1}$ For the peer group, Total Board Comp reflects retainer only; no peers provide meeting fees
 retainer
${ }^{3}$ Total Annual Compensation reflects Total Board Cash Compensation plus the Value of Annual Equity Awards

## Competitive Assessment Detail

## Total Board Compensation Cost

- Based on total compensation costs reported in its 2020 proxy disclosure, Emergent's actual Board compensation cost is positioned just slightly above the peer group 50th percentile
- Emergent's eight (8) independent Directors is positioned at the peer group median, while the number of standing Committees (5) is above the $75^{\text {th }}$ percentile

Note: Total compensation cost reflects compensation data as reported in 2019 proxies

| Company | Tota <br> Beard Cost | \# of Independent Directors | Total Commitees |
| :---: | :---: | :---: | :---: |
| Alkermes plc | \$4,455,715 | 9 | 3 |
| Amneal Pharmaceuticals, Inc. | \$3,886,567 | 9 | 4 |
| Amphastar Pharmaceuticals, Inc. | \$1,679,344 | 6 | 3 |
| Bio-Rad Laboratories, Inc. | \$690,000 | 5 | 4 |
| Bio-Techne Corporation | \$2,420,670 | 8 | 4 |
| Bruker Corporation | \$1,793,108 | 9 | 3 |
| Catalent, Inc. | \$2,879,250 | 10 | 5 |
| Exelixis, Inc. | \$5,017,815 | 11 | 5 |
| Globus Medical, Inc. | \$3,164,766 | 6 | 3 |
| Horizon Therapeutics Public Limited Co. | \$3,968,456 | 8 | 4 |
| Incyte Corporation | \$3,913,952 | 8 | 3 |
| Integra LifeSciences Holdings Corp. | \$2,348,713 | 8 | 4 |
| Ionis Pharmaceuticals, Inc. | \$13,575,252 | 10 | 6 |
| Jazz Pharmaceuticals plc | \$6,730,356 | 11 | 3 |
| Masimo Corporation | \$1,873,584 | 6 | 3 |
| NuVasive, Inc. | \$2,128,013 | 8 | 3 |
| Opko Health, Inc. | \$319,417 | 6 | 5 |
| PRA Health Sciences, Inc. | \$1,028,098 | 5 | 3 |
| United Therapeutics Corporation | \$4,356,678 | 10 | 3 |
| Varian Medical Systems, Inc. | \$2,915,375 | 9 | 4 |



Emergent Biesolutions inc
$\$ 2,949,226$

## Peer Group Financial Summary

| Company | Ticker | Revenue (GM) | Net Income (SM) | R8: <br> Expense <br> (SM) | Spet Market Cap $($ SM) | 12 Month Avg Market Cap (SM) | Employees |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alkermes plc | ALKS | \$1,039 | -\$111 | \$395 | \$3,465 | \$2,742 | 2,235 |
| Amneal Pharmaceuticals, Inc. | AMRX | \$1,626 | -\$362 | \$235 | \$729 | \$602 | 5,500 |
| Amphastar Pharmaceuticals, Inc. | AMPH | \$322 | \$49 | \$69 | \$877 | \$888 | 2,027 |
| Bio-Rad Laboratories, Inc. | BIO | \$2,312 | \$1,759 | \$203 | \$17,471 | \$10,878 | 8,120 |
| Bio-Techne Corporation | TECH | \$739 | \$229 | \$100 | \$13,130 | \$8,002 | 2,300 |
| Bruker Corporation | BRKR | \$2,073 | \$197 | \$189 | \$8,886 | \$7,618 | 7,230 |
| Catalent, Inc. | CTLT | \$3,094 | \$221 | \$64 | \$19,350 | \$8,939 | 13,900 |
| Exelixis, Inc. | EXEL | \$968 | \$321 | \$337 | \$6,894 | \$5,226 | 617 |
| Globus Medical, Inc. | GMED | \$785 | \$155 | \$60 | \$6,072 | \$5,197 | 2,000 |
| Horizon Therapeutics Public Limited Co. | HZNP | \$1,300 | \$573 | \$334 | \$17,004 | \$6,460 | 1,275 |
| Incyte Corporation | INCY | \$2,667 | -\$296 | \$2,224 | \$19,911 | \$15,739 | 1,773 |
| Integra LifeSciences Holdings Corp. | IART | \$1,518 | \$50 | \$190 | \$5,616 | \$4,726 | 4,000 |
| Ionis Pharmaceuticals, Inc. | IONS | \$1,123 | \$294 | \$414 | \$8,245 | \$8,203 | 817 |
| Jazz Pharmaceuticals plc | JAZZ | \$2,162 | \$523 | \$653 | \$8,649 | \$8,110 | 1,620 |
| Masimo Corporation | MASI | \$938 | \$196 | \$93 | \$14,286 | \$9,097 | 1,600 |
| NuVasive, Inc. | NUVA | \$1,168 | \$65 | \$72 | \$2,731 | \$4,016 | 2,800 |
| Opko Health, Inc. | OPK | \$902 | -\$315 | \$163 | \$4,013 | \$965 | 6,096 |
| PRA Health Sciences, Inc. | PRAH | \$3,066 | \$243 | \$0 | \$8,014 | \$6,408 | 17,500 |
| United Therapeutics Corporation | UTHR | \$1,449 | -\$105 | \$1,183 | \$7,476 | \$4,286 | 920 |
| Varian Medical Systems, Inc. | VAR | \$3,168 | \$269 | \$281 | \$16,087 | \$12,779 | 10,000 |




Note: Peer financials were extracted from Standard and Poor's Capital IQ (CapIQ) financial database and reflect the most recent fiscal year end information available unless noted otherwise

1. Spot market capitalization as of February 1, 2021. 12 month avg market capitalization data from February 1, 2020 to February 1, 2021

Exhibit 2

January 20, 2021

To: The Compensation Committee of the Board of Directors
Emergent BioSolutions Inc.
Sue Bailey, Jerome Hauer, George Joulwan, Louis Sullivan
Re: Notice of Compensation Committee Meeting

By authority of the Executive Chairman of the Board of Directors, notice is hereby given that a telephonic meeting of the Compensation Committee of Emergent BioSolutions Inc. will be held on Tuesday, February 9, 2021, commencing at 10:00 a.m. (EDT).

Please use the following information to join the meeting through video or audio. If you prefer to join via video, please click on the "Click here to join meeting" link in yellow highlighting below. If you prefer to participate via audio only, please use the dial in number and code underneath the "Or call in (audio only)" further down the page.

## Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting


Find a local number | Reset PIN
Learn More | Meeting options

Should vou have_anv auestions, please feel free to contact me at


I look forward to speaking with you at the upcoming meeting.
Respectfully,
Daniel Woubishet
Associate General Counsel and Assistant Secretary

| Emergent BioSolutions Inc. Meeting of the Compensation Committee of the Board of Directors <br> (Sue Bailey, George Joulwan, Jerome Hauer, Lou Sullivan) <br> Telephonic <br> Tuesday, February 9, 2021 <br> 10:00 a.m. - 12:30 p.m. (EST) <br> Agenda |  |  |  |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Item } \\ \text { No. } \end{gathered}$ | Time | Subject Matter | Area of Oversight |
| Call to Order |  |  |  |
| 1 | 10:00-10:05 | Approve Minutes | Board Operations and Corporate Governance |
| 2 | 10:05-11:30 | Approve Performance and Compensation Recommendations for Executive Officers: <br> > Overall Compensation Recommendations for Executive Officers <br> > Individual Performance Reviews of Executive Officers <br> - Fuad El-Hibri <br> - Robert Kramer <br> - Richard Lindahl <br> - Adam Havey <br> - Sean Kirk <br> - Atul Saran <br> - Karen Smith <br> - Katy Strei <br> - Sean Kirk | Executive Compensation |
| 3 | 11:30-12:10 | Review Performance Stock Unit Plan: <br> > Review and Approve Final Payout Factor for 20182020 Performance Stock Units <br> > Review and Approve Performance Goals for 20212023 Performance Stock Units | Executive Compensation |
| 4 | 12:10-12:25 | Review Recommendations for Equity Grants | Executive Compensation |
| 5 | 12:25-12:30 | Discuss New Business and Recommendations for Future Topics | Board Operations and Corporate Governance |
|  |  | Proposed Resolutions | Yes |
| Adjourn |  |  |  |
| Informational Agenda |  |  |  |
| 1 |  | Compensation Actions for All Employees | Executive Compensation |

Draft- February 1, 2021

## EMERGENT BIOSOLUTIONS INC. Minutes of the Compensation Committee

## January 20, 2021

Pursuant to notice duly given, a telephonic meeting of the Compensation Committee of the Board of Directors (the "Committee") of Emergent BioSolutions Inc. (the "Corporation") was held on January 20, 2021 at 2:36 p.m. The following members of the Committee, constituting a quorum, participated telephonically or in person at the meeting:

```
Sue Bailey
Jerome Hauer
George Joulwan
Louis Sullivan
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Others in attendance telephonically (or in person) for all or a portion of the meeting were:

Fuad El-Hibri, Executive Chairman<br>Robert Kramer, Sr., Director, President and Chief Executive Officer<br>Marvin White, Director<br>David Flaherty, VP, Total Rewards<br>Jennifer Fox, SVP, Legal Affairs and Deputy General Counsel<br>Richard Lindahl, EVP, Chief Financial Officer and Treasurer<br>Elizabeth Petrone, Sr. Corporate Paralegal<br>Atul Saran, EVP, Corporate Development, General Counsel and Corporate Secretary<br>Katy Strei, EVP, CHRO and Public Affairs<br>Daniel Woubishet, Associate General Counsel and Assistant Secretary<br>Mitchell Bardolf (Willis Towers Watson)<br>Hemant Patel (Willis Towers Watson)

Dr. Sullivan served as the chair of the meeting and Mr. Woubishet kept the minutes thereof.

## Minutes

The Committee reviewed the minutes of the prior Committee meeting held on November 11, 2020. Upon motion duly made and seconded, it was unanimously:

RESOLVED, that the minutes of the meeting of the Committee held on November 11, 2020 are hereby approved.

## 2020 Corporate Performance Factor

Ms. Strei introduced a discussion regarding the Corporate Performance Factor with a review of the evaluation of the corporate performance and plan design. Mr. Kramer began his discussion on the Corporation's 2020 performance with a recognition of the extraordinary challenges faced by the Corporation in 2020, along with other significant successes and opportunities. He presented the overall enterprise performance of the Corporation as compared to the six corporate goals that were previously approved by the Committee in January 2020. He reviewed the specific performance details, proposed rating and score against each goal. A discussion ensued. Next, Mr. Kramer presented several additional

Compensation Committee Meeting Minutes
Page 2
January 20, 2021
significant business accomplishments and COVID-related accomplishments and discussed the overall performance against the reprioritized Corporate Operating Plan goals for 2020, despite challenges encountered from managing the effects of the global pandemic. The Committee discussed the long-term strategy of the Contract Development Manufacturing and Operations business unit, having seen such a surge of opportunity in 2020 due to the urgent need for vaccine development and manufacturing. Mr. Kramer reported on the historical data trend for the corporate factor at Emergent for the last eight years. Having reviewed the metrics of performance against the corporate goals, as well as presented additional business accomplishments, Mr. Kramer presented a recommendation by management of a performance factor of 1.4 based on the analysis of performance against the Corporate Goals for 2020. The Committee took into consideration the Corporation's exceptional performance against the corporate goals for 2020 and the premium of results achieved while facing such difficult obstacles throughout the year.
After discussion and upon motion made and duly seconded, it was unanimously:
RESOLVED, that in making bonus determinations for employees of the Corporation for 2020, management shall take into account corporate performance and individual performance, and that the adjustment factor to be applied in making such determinations for corporate performance shall be 1.4.

## 2021 Goals for Executive Officers

Mr. Kramer presented the 2021 corporate goals and goals for executive officers. He provided a brief overview of the goal setting process and the roles of the Committee in considering the recommendations by management. Mr. Kramer reviewed the 2021 goals, including details and the areas of focus for each corporate goal related to revenue and adjusted EBITDA targets, M\&A, pipeline, engagement and inclusion and COVID-19/CDMO projects. He noted that the goals for the executive officers will consist of the same proposed corporate goals. The Committee and management discussed the six goals and supporting details. Upon motion duly made and seconded, it was, unanimously:

RESOLVED, that the Corporate Goals and Executive Officer Goals for 2021 set forth on Exhibit A are hereby approved.

## Individual Weighting for Executive Officer 2021 Bonus Program

Ms. Strei introduced a discussion regarding the annual incentive plan design framework for the Corporation's Section 16 Officers, where she discussed that the weighting of results at $90 \%$ for performance against the corporate factor and $10 \%$ for individual performance applied to all Section 16 Officers. Mr. Bardolf discussed how the framework of the program, including the individual component, is meant to reflect the Corporation's compensation guiding principles, while providing an additional mechanism to recognize individual contributions and remain competitive with peers. Mr. Bardoff explained the practice of the Corporation's peers in the same regard.

Mr. Bardolf then presented the structure of the framework for the individual component of Section 16 Officers. He explained how the recommendations included a shift in performance for the CEO position, which would no longer include an individual factor and consider only the component related to corporate performance of $100 \%$. The Section 16 Officer components would be formalized to reflect an element of $10 \%$ weighted for individual performance and $90 \%$ weighted for performance against corporate goals. The individual performance would be measured against the individual executive's highest priority business or leadership goal for the performance year. The individual component would be subject to the same assessment
range as the corporate component, or $50 \%-150 \%$ of target. The Committee discussed the formalization of the proposed changes to the individual weighting factors for the CEO and other Section 16 Officers. Upon motion made and duly seconded, it was, unanimously:

RESOLVED, that the proposed changes to the determination of the individual weighted performance factor of the annual incentive plan for (a) the Corporation's CEO should be based $100 \%$ on the corporate performance and with no individual performance factor and (b) the other Section 16 Officers should be based on $90 \%$ on the corporate performance and $10 \%$ on the individual's performance or contribution, with such individual performance to be measured against the individual executive's highest priority business or leadership goal for the performance year;

RESOLVED, that the proposed changes set forth in the foregoing resolution shall not be effective until the determination of the 2021 annual incentive, which will occur in the first quarter of 2022.

## Competitive Market Data for Executive Officers

Mr. Lindahl and Mr. Saran left the meeting. Mr. Bardolf led a discussion regarding the results of Willis Towers Watson's research regarding competitive market reviews of executive officer compensation, beginning with a review of the sources of competitive data. He noted that the review is being presented as a market reference point for the Committee's review, but that management will be proposing specific recommendations for 2021 pay adjustments and incentive awards for the Committee's consideration and approval at the upcoming meeting in February. Mr. Bardolf reviewed key findings of the data source results, reminding the Committee of the recent adjustment in data sources to better align with Emergent's increased revenues over the past year. He reported on observations from the data sources with respect to market movement of the CEO position and Section 16 Officers. A discussion ensued. The Committee expressed its approval of the data and analysis as presented.

## Discuss New Business and Recommendations for Future Topics

Dr. Sullivan asked the Committee members if there were questions or if the Committee had additional topics they would like to discuss at future meetings. There were none presented.

## Adjournment

There being no other business, the meeting adjourned at 3:58 p.m.
Respectfully submitted,

Daniel Woubishet
Associate General Counsel and Assistant Secretary

## Exhibit A

## 2021 Corporate Goals and Executive Officer Goals

1. Execute budgeted plan to achieve revenue of $\$ 2.110$ billion.
2. Execute budgeted plan to achieve adjusted EBITDA of $\$ 834$ million.
3. Execute one transaction that aligns to our 2024 strategic objectives and expands our core product, pipeline and/or service offerings.
4. Continue advancement of clinical pipeline programs in order to obtain approval of these products as planned and support growth from fiscal 2024 onward.
5. Sustain improvements achieved in 2020 on Employee Engagement as measured by the 2021 Gallup Q12 Improve (statistically significant) 2020 baseline for the Gallup inclusion index.
6. Supply quality drug substance and drug product for COVID-19 vaccines and therapeutics meeting or exceeding customer expectations.


## Presenters and Guest Attendees

- Presenter(s)

Robert Kramer, President and Chief Executive Officer
Katy Strei, Executive Vice President, CHRO and Public Affairs

- Guest Attendee(s)
- Dave Flaherty, Vice President Total Rewards


## Agenda

- Questions / Issues for the Compensation Committee
- Methodology
- Recommendations

Executive Chairman
President and Chief Executive Officer
EVP, Chief Financial Officer \& Treasurer
EVP, Business Operations
EVP, Corporate Development \& General Counsel
EVP, Manufacturing \& Technical Operations
EVP, Chief Medical Officer
EVP, CHRO and Public Affairs

## Questions / Issues for the Compensation Committee

$\qquad$
Does the Compensation Committee approve the Executive Officer compensation recommendations?

## Methodology

Follows the methodology approved by the Committee in November 2020




[^10]
## Fuad El-Hibri, Executive Chairman

## I. Compensation Recommendations for 2020 Performance - No action required of Committee

| Base Salary | $\$ 1,085,677$ |
| :--- | :---: |
| Actual Bonus | $\mathrm{n} / \mathrm{a}^{1}$ |
| 2020 Equity Award Value | $\$ 2,400,000$ |
| Total Direct Compensation | $\$ 3,485,677$ |

${ }^{1}$ Upon assuming Executive Chairman role in 2012, Mr. El-Hibri was no longer bonus eligible

## II. Primary Factors Driving Performance

- Board leadership and direction, including board retreat, operations of board and committees
- Maintenance of critical external relationships, including Congressional and business leaders
- M\&A transaction guidance, negotiations and due diligence
- Executive team support, including mentorship and guidance to CEO on strategic, business development, management and culture

[^11]
## Fuad El-Hibri, Executive Chairman

III. Compensation Recommendations for 2021 - All Items Require Committee Approval

Performance Rating
Exceeds

## Merit Increase

New Base Salary
Target Bonus (\% Base Salary)
Feb. 2021 Equity Award Value
Total Direct Compensation
\$49,323
\$1,135,000
$n / a^{1}$
$\$ 2,600,000$
(compared to $\$ 2,400,000$ in Feb 2020)
\$3,735,000
${ }^{1}$ Upon assuming Executive Chairman role in 2012, Mr. El-Hibri was no longer bonus eligible

## IV. 2021 Compensation Recommendations vs. Competitive Market Data

Prior to 2016, Emergent utilized proxy data for Executive Chair positions for the purpose of understanding Executive Chairman pay levels and practices; however, given that many Executive Chair arrangements are transitional in nature, maintaining a consistent data set is extremely difficult.

The Committee agreed that in addition to considering factors such as level of involvement, scope of responsibilities, founder status, equity held and tenure, it will also consider internal parity with the executive team when determining appropriate pay recommendations

## Robert Kramer, President \& CEO

I. Compensation Recommendations for 2020 Performance (Only items in red need approval)

Performance Rating
Base Salary
Target Bonus \% of Salary
Actual Bonus @ 1.4 Factor
Total Cash Compensation
2020 Equity Award Value
Total Direct Compensation

Significantly Exceeds
$\$ 875,014$
100\%
$\$ 1,225,020$
\$2,100,035
\$ 4,100,000
$\$ 6,200,035$

## II. Primary Factors Driving Performance

- Led Executive Management Team to deliver exemplary overall 2020 corporate performance including significantly outperforming revenue and earnings targets
- Ensured successful execution of all 6 corporate goals and $84 \%$ of CoP Goals
- Leadership of overall company; highly visible and engaged with all key stakeholders, including customers, employees, shareholders, media and Board of Directors (of which CEO is a member)

[^12]
## Robert Kramer, President \& CEO

III. Compensation Recommendations for 2021 - All Items Require Committee Approval

| Merit Increase | $\$ 124,986$ | (14\% combined merit/market increase) |
| :--- | :---: | :---: |
| New Base Salary | $\$ 1,000,000$ |  |
| Target Bonus $\%$ | $120 \%$ |  |
| Total Cash Compensation | $\$ 2,200,000$ |  |
| Feb. 2021 Equity Award Value | $\$ 5,600,000$ |  |
| Total Direct Compensation | $\$ 7,800,000$ |  |



[^13]

## Competitive Market Findings

Chief Executive Officer

- In general, Willis Towers Watson considers the following to be competitive ranges when assessing competitiveness against market - base salary within +/- $10 \%$; target TCC within +/- $15 \%$; target TDC within $+/-20 \%$

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| EBS Current |  | \$875 |  |  | 100\% |  |  | \$1,750 |  |  | \$4,100 |  |  | \$5,850 |  |  |
| Competitive Market Data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Data Souliee | Sample Stre: | Base saley |  |  | Targatind |  |  | Tarder |  |  | Tanem |  |  | maghtic |  |  |
|  |  | $2 \mathrm{Tl1}$ | 5011 | 8611 | 2911 | 5011 | 75111 | 2517 | 20111 | 76111 | 2511 | 5017 | (6)117 | 2511 | 5017 | (6)117 |
|  |  | Pactic | Rte | Mic | Mes | exe | dide | 2xase | dict | 2ric | 2ate | ere | \%ct | \%c | Pre | \% 4 c |
| Peer Proxy Data - CEO | $\mathrm{n}=20$ | \$1,000 | \$1,085 | \$1,195 | 100\% | 115\% | 125\% | \$1,930 | \$2,060 | \$2,250 | \$4,855 | \$7,310 | \$9,220 | \$6,875 | \$9,190 | \$11,460 |
| Radford Custom Tabular | $\mathrm{n}=18$ | \$865 | \$1,050 | \$1,150 | 100\% | 105\% | 120\% | \$1,735 | \$2,115 | \$2,515 | \$4,030 | \$6,145 | \$8,860 | \$5,765 | \$7,510 | \$10,100 |
| WTW Custom Tabular | $n=16$ | \$850 | \$980 | \$1,050 | 100\% | 120\% | 125\% | \$1,880 | \$2,105 | \$2,300 | \$4,500 | \$5,765 | \$7,085 | \$6,355 | \$7,970 | \$9,450 |
| WTW Custom Regression | $\mathrm{n}=16$ | \$885 | \$945 | \$1,005 | 110\% | 115\% | 120\% | \$1,860 | \$2,025 | \$2,205 | \$4,865 | \$5,855 | \$7,035 | \$6,725 | \$7,880 | \$9,240 |
| \% Difference - EBS Current vs Market |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peer Proxy Data - CEO |  | -12\% | -19\% | -27\% | 0\% | -15\% | -25\% | -9\% | -15\% | -22\% | -16\% | -44\% | -56\% | -15\% | -36\% | -49\% |
| Radford Custom Tabular |  | 1\% | -17\% | -24\% | 0\% | -5\% | -20\% | 1\% | -17\% | -30\% | 2\% | -33\% | -54\% | 1\% | -22\% | -42\% |
| WTW Custom Tabular |  | 3\% | -11\% | -17\% | 0\% | -20\% | -25\% | -7\% | -17\% | -24\% | -9\% | -29\% | -42\% | -8\% | -27\% | -38\% |
| WTW Custom Regression |  | -1\% | -7\% | -13\% | -10\% | -15\% | -20\% | -6\% | -14\% | -21\% | -16\% | -30\% | -42\% | -13\% | -26\% | -37\% |
| Competitive Market Ranges |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Low | Mid ${ }^{\text {a }}$ | High | Low | Mid ${ }^{\text {a }}$ | High | Low | Mid* | High | Low | Mid* | High | Low | Mid* | High |
| 25 Pr Percentie |  | \$850 | \$925 | \$1,000 | 100\% | 105\% | 110\% | \$1,735 | \$1835 | \$1930 | \$4,030 | \$4.450 | \$4865 | \$5,765 | \$6, 320 | \$6875 |
| 50 th Percentile |  | \$945 | \$1,015 | \$1,085 | 105\% | 115\% | 120\% | \$2,025 | \$2.070 | \$2.115 | \$5,765 | \$6.540 | \$7,310 | \$7,510 | \$8,350 | \$9.190 |
| 75 t Percentie |  | \$1,005 | \$1,100 | \$1. 195 | 120\% | 125\% | 125\% | \$2,205 | \$2,360 | \$2.515 | \$7.035 | \$8. 130 | \$9.220 | \$9,240 | \$10,350 | \$11.450 |
| Additional Peer Proxy Data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 25th | 50th | 75th | 25th | 50th | 75th | 25th | 50th | 75th | 25th | 50th | 75th | 25th | 50th | 75th |
| CEO Rdes Only | $\mathrm{n}=9$ | \$900 | \$1,000 | \$1,015 | 100\% | 120\% | 125\% | \$1,975 | \$2,035 | \$2,200 | \$4,000 | \$6,115 | \$8,230 | \$5,955 | \$8,315 | \$10,230 |
| Chairman and CEO Roles | $n=11$ | \$955 | \$1,035 | \$1,105 | 100\% | 100\% | 115\% | \$1,895 | \$2,075 | \$2,325 | \$5,870 | \$9,140 | \$11,000 | \$8,125 | \$11,440 | \$13,465 |

Represents a calculated value reflecting the midpoint between the "low" and "high" of the competitive market percentile
Note: Peer proxy data, Radford data and WTW tabular data represent independently arrayed data for all pay elements. For regressed data, target STI and LTI has been derived based on independently arrayed base salary, target TCC and target TDC data

## Rich Lindahl, EVP \& CFO

I. Compensation Recommendations for 2020 Performance (Only items in red need approval)

| Performance Rating |
| :--- |
| Base Salary |
| Target Bonus \% |
| Actual Bonus @ 1.4 Factor |
| Total Cash Compensation |
| 2020 Equity Award Value |
| Total Direct Compensation |

## II. Primary Factors Driving Performance

- Served as member of Executive Management Team to deliver exemplary overall 2020 corporate performance including significantly outperforming revenue and earnings targets
- Ensured successful execution of all 6 corporate goals and $84 \%$ of CoP Goals
- Leadership of Finance and IT organizations

Rich Lindahl, EVP \& CFO
III. Compensation Recommendations for 2021 - All Items Require Committee Approval

| Merit Increase | \$24,986 | ( $5 \%$ merit increase) |
| :---: | :---: | :---: |
| New Base Salary | \$575,000 |  |
| Target Bonus \% | 60\% | ( n c change from current) |
| Total Cash Compensation | \$920,000 |  |
| Feb. 2021 Equity Award Value | \$1,500,000 | (same as Feb. 2020 grant value) |
| Total Direct Compensation | \$2,420,000 |  |



## Competitive Market Findings

## EVP, CFO and Treasurer

- In general, Willis Towers Watson considers the following to be competitive ranges when assessing competitiveness against market - base salary within +/- 10\%; target TCC within +/- $15 \%$; target TDC within +/- $20 \%$

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| EBS Current |  | \$550 |  |  | 60\% |  |  | \$880 |  |  | \$1,500 |  |  | \$2,380 |  |  |
| Competitive Market Data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  | $\begin{gathered} \text { 50f6 } \\ \text { nexie } \\ \hline \end{gathered}$ |  | 2595 | 5unde |  |  |  |  |  |  |  |
| Peer Proxy Data - CFO | $\mathrm{n}=20$ | \$500 | \$560 | \$585 | 50\% | 60\% | 75\% | \$790 | \$875 | \$950 | \$1,165 | \$1,605 | \$2,345 | \$1,900 | \$2,525 | \$3,250 |
| Radford Custom Tabular | $\mathrm{n}=18$ | \$485 | \$560 | \$610 | 55\% | 70\% | 75\% | \$750 | \$925 | \$990 | \$880 | \$1,470 | \$2, 190 | \$1,665 | \$2,285 | \$3,095 |
| WTW Custom Tabular | $\mathrm{n}=16$ | \$480 | \$525 | \$610 | 65\% | 70\% | 75\% | \$810 | \$920 | \$1,070 | \$1,155 | \$1,530 | \$2,030 | \$1,940 | \$2,405 | \$3,205 |
| WTW Custom Regression | $\mathrm{n}=16$ | \$490 | \$535 | \$580 | 60\% | 70\% | 80\% | \$845 | \$905 | \$965 | \$980 | \$1,395 | \$1,940 | \$1,825 | \$2,300 | \$2,905 |
| \% Difference - EBS Current vs Market |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peer Proxy Data - CFO |  | 10\% | -2\% | -6\% | 10\% | 0\% | -15\% | 11\% | 1\% | -7\% | 29\% | -7\% | -36\% | 25\% | -6\% | -27\% |
| Radford Custom Tabular |  | 13\% | -2\% | -10\% | 5\% | -10\% | -15\% | 17\% | -5\% | -11\% | 70\% | 2\% | -32\% | 43\% | 4\% | -23\% |
| WTW Custom Tabular |  | 15\% | 5\% | -10\% | -5\% | -10\% | -15\% | 9\% | -4\% | -18\% | 30\% | -2\% | -26\% | 23\% | -1\% | -26\% |
| WTW Custom Regression |  | 12\% | 3\% | -5\% | 0\% | -10\% | -20\% | 4\% | -3\% | -9\% | $53 \%$ | 8\% | -23\% | 30\% | 3\% | -18\% |
| Competitive Market Ranges |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Low | Mict | High. | Low. | Mic* | High | Low | Mid* | High | Low | Mid* | High | Low | Mict | High |
| 25th Percentile |  | \$480 | \$490 | \$500 | 50\% | 60\% | 65\% | \$750 | \$800 | \$845 | \$880 | \$1025 | \$1,165 | \$1665 | \$1,805 | \$1,940 |
| 50th Percentile |  | \$525 | \$545 | \$560 | 60\% | 65\% | 70\% | \$875 | \$900 | \$925 | \$1,395 | \$1,500 | \$1,605 | \$2,285 | \$2,405 | \$2.525 |
| 75th Percentile |  | \$580 | \$595 | \$610 | 75\% | 80\% | 80\% | \$950 | \$1.010 | \$1070 | \$1,940 | \$2,145 | \$2,345 | \$2905 | \$3,080 | \$3.250 |

Represents a calculated value reflecting the midpoint between the "low" and "high" of the competitive market percentile arrayed base salary, target TCC and target TDC data

## Adam Havey, EVP Business Operations

I. Compensation Recommendations for 2020 Performance (Only items in red need approval)

| Performance Rating |
| :--- |
| Base Salary |
| Exceeds |
| Target Bonus \% |
| Actual Bonus @ 1.4 Factor |
| Total Cash Compensation |
| 2020,005 |
| Total Direct Compensation |

## II. Primary Factors Driving Performance

- Served as member of Executive Management Team to deliver exemplary overall 2020 corporate performance including significantly outperforming revenue and earnings targets
- Ensured successful execution of all 6 corporate goals and $84 \%$ of CoP Goals
- Leadership of three product Business Units as well Medical Countermeasures, Commercial Ops, International Procurement and Quality


## Adam Havey, EVP Business Operations

III. Compensation Recommendations for 2021 - All Items Require Committee Approval

| Merit Increase | $\$ 24,995$ | (5\% merit increase) |
| :--- | :---: | :---: |
| New Base Salary | $\$ 555,000$ |  |
| Target Bonus $\%$ | $60 \%$ | (no change from current) |
| Total Cash Compensation | $\$ 888,000$ |  |
| Feb. 2021 Equity Award Value | $\$ 1,400,000$ | (same as Feb. 2020 grant value) |
| Total Direct Compensation | $\$ 2,288,000$ |  |

IV. 2021 Compensation Recommendations vs. Competitive Market Data


## Competitive Market Findings

 EVP, Business Operations- In general, Willis Towers Watson considers the following to be competitive ranges when assessing competitiveness against market - base salary within +/-10\%; target TCC within +/- $15 \%$; target TDC within $+/-20 \%$

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| EBS Current |  | \$530 |  |  | 60\% |  |  | \$848 |  |  | \$1.400 |  |  | \$2,248 |  |  |
| Competitive Market Data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | se Sale |  |  | d Sill |  |  | 3ge 10 |  |  | arge |  |  | aget |  |
| Dresource | Spe | $3 \operatorname{sent}$ |  | Fintite | exise | exontive | She |  |  |  | Noil |  |  |  |  |  |
| Peer Proxy Data - Gen Mgmt | $\mathrm{n}=27$ | \$480 | \$515 | \$565 | 55\% | 65\% | 80\% | \$730 | \$830 | \$985 | \$735 | \$1,250 | \$2,580 | \$1,520 | \$2,120 | \$3,650 |
| Peer Proxy Data - 3HP | $n=19$ | \$485 | \$550 | \$620 | 50\% | 60\% | 75\% | \$760 | \$900 | \$1,010 | \$1,110 | \$1,580 | \$2,710 | \$1,865 | \$2,605 | \$3,610 |
| Radford Custom Tabular | $\mathrm{n}=6$ | \$435 | \$495 | \$540 | 50\% | 60\% | 60\% | \$690 | \$770 | \$880 | \$300 | \$580 | \$1,400 | \$980 | \$1,345 | \$2,120 |
| WTW Custom Tabular | $\mathrm{n}=9$ | \$385 | \$425 | \$470 | 55\% | 60\% | 75\% | \$580 | \$680 | \$820 | \$415 | \$650 | \$785 | \$1,085 | \$1,280 | \$1,550 |
| WTW <\$5B Tabular | $\mathrm{n}=18$ | \$430 | \$595 | \$645 | 55\% | 75\% | 85\% | \$685 | \$1,035 | \$1,225 | \$405 | \$1,000 | \$1,820 | \$1,235 | \$1,950 | \$3,035 |
| \% Difference - EBS Current vs M arket |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peer Proxy Data - Gen Mgmt |  | 10\% | 3\% | -6\% | 5\% | -5\% | -20\% | 16\% | 2\% | -14\% | 90\% | 12\% | -46\% | 48\% | 6\% | -38\% |
| Peer Proxy Data - 3HP |  | 9\% | -4\% | -15\% | 10\% | 0\% | -15\% | 12\% | -6\% | -16\% | 26\% | -11\% | -48\% | 21\% | -14\% | -38\% |
| Radford Custom Tabular |  | 22\% | 7\% | -2\% | 10\% | 0\% | 0\% | 23\% | 10\% | -4\% | 367\% | 141\% | 0\% | 129\% | 67\% | 6\% |
| WTW Custom Tabular |  | 38\% | 25\% | 13\% | 5\% | 0\% | -15\% | 46\% | 25\% | 3\% | 237\% | 115\% | 78\% | 107\% | 76\% | 45\% |
| WTW <\$5B Tabular |  | 23\% | -11\% | -18\% | 5\% | -15\% | -25\% | 24\% | -18\% | -31\% | 246\% | 40\% | -23\% | 82\% | 15\% | -26\% |
| Competitive Market Ranges |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Low | Mid | High | Low | Mid* | High | Low | Mid* | High | Low | Mid ${ }^{\text {a }}$ | High | Low | Mid* | High |
| 25th Percentle |  | \$385 | \$435 | \$485. | 50\% | 55\% | 55\% | \$580 | \$670 | \$760 | \$300 | \$705. | \$1 110 | \$980 | \$1.425 | \$1865 |
| 50th Percentile |  | \$425 | \$510 | \$595. | 60\% | 70\% | 75\% | \$680 | \$850 | \$1,035 | \$580 | \$1,080 | \$1,580 | \$1,280 | \$1,945 | \$2,605 |
| 75t Percentle |  | \$470 | \$560 | \$645 | 60\% | 75\% | 85\% | \$820 | \$1025 | \$1,225 | \$785 | \$1,750 | \$2.710 | \$1.550 | \$2,600 | \$3.650 |

*Represents a calculated value reflecting the midpoint between the "low" and "high" of the competitive market percentile
Note: Peer proxy data, Radford data and WTW tabular data represent independently arrayed data for all pay elements. For regressed data, target STI and LTI has been derived based on independently arrayed base salary, target TCC and target TDC data

## Atul Saran, EVP General Counsel

| I. Compensation Recommendations for 2020 Performance (Only |  |
| :--- | :---: |
| Performance Rating | Exceeds |
| Base Salary | $\$ 530,005$ |
| Target Bonus $\%$ | $60 \%$ |
| Actual Bonus @ 1.4 Factor | $\$ 445,204$ |
| Total Cash Compensation | $\$ 975,209$ |
| 2020 Equity Award Value | $\$ 1,400,000$ |
| Total Direct Compensation | $\$ 2,375,209$ |

## II. Primary Factors Driving Performance

- Serve as member of Executive Management Team to deliver exemplary overall 2020 corporate performance including significantly outperforming revenue and earnings targets
- Ensured successful execution of all 6 corporate goals and $84 \%$ of CoP Goals
- Leadership of Corporate Strategy, Business Development, Legal and Intellectual Property


## Atul Saran, EVP General Counsel

III. Compensation Recommendations for 2021 - All Items Require Committee Approval

| Merit Increase | $\$ 24,995$ | (5\% merit increase) |
| :--- | :---: | :---: |
| New Base Salary | $\$ 555,000$ |  |
| Target Bonus $\%$ | $60 \%$ | (no change from current) |
| Total Cash Compensation | $\$ 888,000$ |  |
| Feb. 2021 Equity Award Value | $\$ 1,400,000$ | (same as Feb. 2020 grant value) |
| Total Direct Compensation | $\$ 2,288,000$ |  |

IV. 2021 Compensation Recommendations vs. Competitive Market Data


## Competitive Market Findings

## EVP, Corporate Development and General Counsel ${ }^{1}$

- In general, Willis Towers Watson considers the following to be competitive ranges when assessing competitiveness against market - base salary within +/- 10\%; target TCC within +/- $15 \%$; target TDC within +/- $20 \%$

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| EBS Current |  | \$530 |  |  | 60\% |  |  | \$848 |  |  | \$1,400 |  |  | \$2,248 |  |  |
| Competitive Market Data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | - Sa |  |  | el 51 |  |  | get |  |  | reel |  |  | red |  |
| Date Source |  | 267\% | 3146 | 764 | $25 \%$ | 517 | 76415 | 2621 | 6017. | [674 | 25611 | 5014. | 76\% | 26 F \% | 5 TH | 76\%14 |
|  |  | 2003 | 2de | Cile | Dole | Cusis | 2der | 20fe | nodem | qust | - 8 dem | qute | odea | Que | Mas | Oels |
| Peer Proxy Data - GC | $\mathrm{n}=13$ | \$495 | \$605 | \$660 | 50\% | 60\% | 60\% | \$775 | \$930 | \$1,060 | \$1,020 | \$1,550 | \$3,030 | \$2,035 | \$2,610 | \$3,825 |
| Radford Custom Tabular | $\mathrm{n}=15$ | \$530 | \$590 | \$665 | 50\% | 50\% | 65\% | \$800 | \$855 | \$1,105 | \$625 | \$1,125 | \$1,850 | \$1,405 | \$1,880 | \$2,490 |
| WTW Custom Tabular | $n=16$ | \$450 | \$530 | \$660 | 50\% | 60\% | 65\% | \$670 | \$805 | \$1,095 | \$740 | \$1,150 | \$1,725 | \$1,500 | \$1,955 | \$2,705 |
| WTW Custom Regression | $\mathrm{n}=16$ | \$480 | \$540 | \$615 | 55\% | 60\% | 60\% | \$745 | \$860 | \$990 | \$690 | \$1,115 | \$1.725 | \$1,435 | \$1,975 | \$2,715 |
| \% Difference - EBS Current vs Market |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peer Proxy Data - GC |  | 7\% | -12\% | -20\% | 10\% | 0\% | 0\% | 9\% | -9\% | -20\% | 37\% | -10\% | -54\% | 10\% | -14\% | -41\% |
| Radford Custom Tabular |  | 0\% | -10\% | -20\% | 10\% | 10\% | -5\% | 6\% | -1\% | -23\% | 124\% | 24\% | -24\% | 60\% | 20\% | -10\% |
| WTW Custom Tabular |  | 18\% | 0\% | -20\% | 10\% | 0\% | -5\% | 27\% | 5\% | -23\% | 89\% | 22\% | -19\% | 50\% | 15\% | -17\% |
| WTW Custom Regression |  | 10\% | -2\% | -14\% | 5\% | 0\% | 0\% | 14\% | -1\% | -14\% | 103\% | 26\% | -19\% | 57\% | 14\% | -17\% |
| Competitive Market Ranges |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Low | Mick | High | Low | Mid* | High | Low | Midx | High | Low | Midt | High | Low | Mid* | High |
| 25th Percenile |  | \$450 | \$490 | \$530 | 50\% | 55\% | 55\% | \$670 | \$735 | \$800 | \$625 | \$825 | \$1020 | \$1,405 | \$1,720 | \$2,035 |
| 50th Percentile |  | \$530 | \$570 | \$605 | 50\% | 55\% | 60\% | \$805 | \$870 | \$930 | \$1.115 | \$1,335 | \$1,550 | \$1,880 | \$2,245 | \$2,610 |
| 75th Percentile |  | \$615 | \$640 | \$665 | 60\% | 65\% | 65\% | \$990 | \$1.050 | \$1,105 | \$1.725 | \$2,380 | \$3.030 | \$2,490 | \$3.160 | \$3,825 |

Competitive market data reflects a $15 \%$ premium to account for additional responsibilities over the Corporate Development function
"Represents a calculated value reflecting the midpoint between the "low" and "high" of the competitive market percentile
Note: Peer proxy data, Radford data and WTW tabular data represent independently arrayed data for all pay elements. For regressed data, target STI and LTI has been derived based on independently arrayed base salary, target TCC and target TDC data

## Sean Kirk, EVP Manufacturing \& Technical Ops.

I. Compensation Recommendations for 2020 Performance (Only items in red need approval)

Performance Rating
Base Salary
Target Bonus \% of Salary
Actual Bonus \$ @ 1.4 Factor
Special Bonus Award for 2020
Total Cash Compensation
2020 Equity Award Value
Total Direct Compensation

Significantly Exceeds

$\$ 458,016$
50\%
\$320,611
$\$ 100,000 \quad$ For significant CDM0 expansion related to COVID-19
\$878,627
\$900,000
\$1,778,627

## II. Primary Factors Driving Performance

- Served as member of Executive Management Team to deliver exemplary overall 2020 corporate performance including significantly outperforming revenue and earnings targets
- Ensured successful execution of all 6 corporate goals and $84 \%$ of CoP Goals
- Leadership of CDMO, Manufacturing, Supply Chain and Operational Excellence


## Sean Kirk, EVP Manufacturing \& Technical Ops.

III. Compensation Recommendations for 2021 - All Items Require Committee Approval


## Competitive Market Findings

## EVP, Manufacturing and Technical Operations ${ }^{1}$

- In general, Willis Towers Watson considers the following to be competitive ranges when assessing competitiveness against market - base salary within +/-10\%; target TCC within +/- 15\%; target TDC within +/- 20\%

|  |  | Base Salay |  |  | Trage st |  |  | Targe! 96 |  |  | 1arge |  |  | raret |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EBS Current |  | \$458 |  |  | 50\% |  |  | \$687 |  |  | \$900 |  |  | \$1,587 |  |  |
| Competitive Market Data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | - Sall |  |  | [14.]1 |  |  | getit |  |  | Irget |  |  | arget |  |
| Data Squres | Sire |  |  |  |  |  |  |  |  |  | $\frac{1}{2511}$ eneme |  | $\begin{aligned} & \text { Whin } \\ & \text { ene } \\ & \hline \end{aligned}$ |  | ${ }^{5617}$ | \%611 9810 |
| Peer Proxy Data - Gen Mgmt | $\mathrm{n}=27$ | \$480 | \$515 | \$565 | 55\% | 65\% | 80\% | \$730 | \$830 | \$985 | \$735 | \$1,250 | \$2,580 | \$1,520 | \$2,120 | \$3,650 |
| Peer Proxy Data-5HP | $\mathrm{n}=17$ | \$430 | \$485 | \$530 | 50\% | 55\% | 60\% | \$675 | \$760 | \$835 | \$600 | \$1,200 | \$2,235 | \$1,320 | \$1,840 | \$3,070 |
| Radford Custom Tabular | $\mathrm{n}=5$ | \$465 | \$510 | \$535 | 40\% | 65\% | 65\% | \$630 | \$685 | \$845 | \$450 | \$550 | \$1,435 | \$1,140 | \$1,290 | \$2,350 |
| WTW Custom Tabular | $\mathrm{n}=5$ | \$460 | \$475 | \$700 | 50\% | 60\% | 70\% | \$680 | \$760 | \$1,170 | \$870 | \$975 | \$2,290 | \$1,625 | \$1,795 | \$3,360 |
| WTW <\$5B Tabular | $\mathrm{n}=7$ | \$425 | \$465 | \$640 | 40\% | 60\% | 65\% | \$595 | \$745 | \$1,055 | \$255 | \$885 | \$1,185 | \$850 | \$1,630 | \$2,035 |
| \% Difference - EBS Current vs Market |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peer Proxy Data - Gen Mgmt |  | -5\% | -11\% | -19\% | -5\% | -15\% | -30\% | -6\% | -17\% | -30\% | 22\% | -28\% | -65\% | 4\% | -25\% | -57\% |
| Peer Proxy Data - 5HP |  | 7\% | -6\% | -14\% | 0\% | -5\% | -10\% | 2\% | -10\% | -18\% | 50\% | -25\% | -60\% | 20\% | -14\% | -48\% |
| Radford Custom Tabular |  | -2\% | -10\% | -14\% | 10\% | -15\% | -15\% | 9\% | 0\% | -19\% | 100\% | 64\% | -37\% | 39\% | 23\% | -32\% |
| WTW Custom Tabular |  | 0\% | -4\% | -35\% | 0\% | -10\% | -20\% | 1\% | -10\% | -41\% | 3\% | -8\% | -61\% | -2\% | -12\% | -53\% |
| WTW <\$5B Tabular |  | 8\% | -2\% | -28\% | 10\% | -10\% | -15\% | 15\% | -8\% | -35\% | 253\% | 2\% | -24\% | 87\% | -3\% | -22\% |
| Competitive Market Ranges |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Low | Mid* | High | Low | Mid* | High | Low | Mid* | High | Low | Mid* | Hian | Low | Mid ${ }^{\text {+ }}$ | Hiah. |
| 25 th Percentile |  | \$425 | \$455 | \$480 | 40\% | 50\% | 55\% | \$595 | \$665 | \$730 | \$255 | \$565 | \$870 | \$850 | \$1,240 | \$1,625 |
| 50th Percentile |  | \$465 | \$490 | \$515 | 55\% | 60\% | 65\% | \$685 | \$760 | \$830 | \$550 | \$900 | \$1,250 | \$1,290 | \$1,705 | \$2,120 |
| 75 th Percentile |  | \$530 | \$615 | \$700 | 60\% | 70\% | 80\% | \$835 | \$1,005 | \$1.70 | \$1,185 | \$1 885 | \$2.580 | \$2,035 | \$2,845 | \$3,650 |

${ }^{1}$ Published survey data (Radford and WTW) reflects a $15 \%$ premium to account for additional responsibilites related to the CDMO Business Unit
*Represents a calculated value reflecting the midpoint between the "low" and "nigh" of the competitive market percentile
Note: Peer proxy data, Radford data and WTW tabular data represent independently arrayed data for all pay elements. For regressed data, target STI and LTI has been derived based on independently
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## Karen Smith, EVP Chief Medical Officer

I. Compensation Recommendations for 2020 Performance (Only items in red need approval)

Performance Rating
Base Salary
Target Bonus \% of Salary
Actual Bonus \$ @ 1.4 Factor
Total Cash Compensation
2020 Equity Award Value
Total Direct Compensation

## II. Primary Factors Driving Performance

- Beginning in April 2020, served as member of Executive Management Team to deliver exemplary overall 2020 corporate performance including significantly outperforming revenue and earnings targets
- Ensured successful execution of all 6 corporate goals and $84 \%$ of CoP Goals
- Leadership of Clinical Development, Medical Affairs, Pharmacovigilance and Regulatory Affairs


## Karen Smith, EVP Chief Medical Officer

III. Compensation Recommendations for 2021 - All Items Require Committee Approval

Merit Increase
New Base Salary
Target Bonus \%
Total Cash Compensation
Feb. 2021 Equity Award Value
Total Direct Compensation
IV. 2021 Compensation Recommendations vs. Competitive Market Data

## Competitive Market Findings

## EVP, Chief Medical Officer

I In general, Willis Towers Watson considers the following to be competitive ranges when assessing competitiveness against market - base salary within +/-10\%; target TCC within +/- 15\%; target TDC within +/- 20\%

| Eve.ent Mreical oficer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Buse Salay |  |  | Tame findul |  |  | Targeticim |  |  | Targetill |  |  | Trge mice |  |  |
| EBS Current |  | \$540 |  |  | 60\% |  |  | \$864 |  |  | \$1,000 |  |  | \$1,864 |  |  |
| Competitive Market Data $\quad$ Target $L T 1$ reflects a pro-rated new hire award |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Data Source | Sample Sire | Easc Salay |  |  | Taxetsind |  |  | Triget TCC |  |  | Trigetith |  |  | Target DC |  |  |
|  |  | $55 \mathrm{~h}$ |  | $\frac{7}{2}$ |  | 5itivid exicie | $5 \mathrm{Fm}$ | Whin |  | $\text { 5 } 5$ |  |  | $\text { . } 610$ | $651$ |  | $\frac{7651}{965}$ |
| Peer Proxy Data - CMO | $\mathrm{n}=3$ | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Peer Proxy Data - 4HP | $\mathrm{n}=18$ | \$480 | \$540 | \$585 | 50\% | 60\% | 70\% | \$695 | \$845 | \$910 | \$850 | \$1,280 | \$2,575 | \$1,825 | \$2,190 | \$3,335 |
| Radford Custom Tabular | $\mathrm{n}=8$ | \$410 | \$565 | \$640 | 50\% | 55\% | 60\% | \$595 | \$880 | \$1,065 | \$800 | \$1,380 | \$3,870 | \$850 | \$2,195 | \$4,465 |
| WTW Custom Tabular | $\mathrm{n}=6$ | \$385 | \$480 | \$510 | 40\% | 50\% | 50\% | \$575 | \$675 | \$745 | \$580 | \$980 | \$1,460 | \$920 | \$1,580 | \$2,065 |
| WTW Total Sample Regression | $\mathrm{n}=21$ | \$420 | \$495 | \$585 | 55\% | 60\% | 65\% | \$645 | \$795 | \$975 | \$490 | \$910 | \$1,580 | \$1,135 | \$1,705 | \$2,555 |
| \% Difference - EBS Current vs Market |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peer Proxy Data - CMO |  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Peer Proxy Data - 3HP |  | 13\% | 0\% | -8\% | 10\% | 0\% | -10\% | 24\% | 2\% | -5\% | 18\% | -22\% | -61\% | 2\% | -15\% | -44\% |
| Radford Custom Tabular |  | $32 \%$ | -4\% | -16\% | 10\% | 5\% | 0\% | 45\% | -2\% | -19\% | 25\% | -28\% | -74\% | 119\% | -15\% | -58\% |
| WTW Custom Tabular |  | 40\% | 13\% | 6\% | 20\% | 10\% | 10\% | 50\% | 28\% | 16\% | 72\% | 2\% | -32\% | 103\% | 18\% | -10\% |
| WTW Total Sample Regression |  | 29\% | 9\% | -8\% | 5\% | 0\% | -5\% | 34\% | 9\% | -11\% | 104\% | 10\% | -37\% | 64\% | 9\% | -27\% |
| Competitive Market Ranges |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Low | Mid* | High | Low | Mid* | High | Low | Mid* | High | Low | Mid* | High | Low | Mid* | High |
| 25th Percentile |  | \$385 | \$435 | \$480 | 40\% | 50\% | 55\% | \$575 | \$635 | \$695 | \$490 | \$670 | \$850 | \$850 | \$1,340 | \$1.825 |
| 50th Percentile |  | \$480 | \$525 | \$565 | 50\% | 55\% | 60\% | \$675 | \$780 | \$880 | \$910 | \$1,145 | \$1,380 | \$1,580 | \$1,890 | \$2,195 |
| 75 h Percentile |  | \$510 | \$575 | \$640 | 50\% | 60\% | 70\% | \$745 | $\$ 905$ | \$1,065 | \$1460 | \$2.665 | \$3.870 | \$2 065 | \$3265 | \$4,465 |

[^14] arrayed base salary target TCC and target TDC data

## Katy Strei, EVP HR \& CHRO

I. Compensation Recommendations for 2020 Performance (Only items in red need approval)

Performance Rating
Base Salary
Target Bonus \%
Actual Bonus @ 1.4 Factor
Total Cash Compensation
2020 Equity Award Value
Total Direct Compensation


## II. Primary Factors Driving Performance

- Served as member of Executive Management Team to deliver exemplary overall 2020 corporate performance including significantly outperforming revenue and earnings targets
- Ensured successful execution of all 6 corporate goals and $84 \%$ of CoP Goals
- Leadership of Human Resources and Public Affairs


## Katy Strei, EVP HR \& CHRO

III. Compensation Recommendations for 2021 - All Items Require Committee Approval

Merit Increase
New Base Salary
Target Bonus \%
Total Cash Compensation
Feb. 2021 Equity Award Value
Total Direct Compensation
IV. 2021 Compensation Recommendations vs. Competitive Market Data

## Competitive Market Findings

## EVP, CHRO and Public Affairs ${ }^{1}$

- In general, Willis Towers Watson considers the following to be competitive ranges when assessing competitiveness against market - base salary within +/- 10\%; target TCC within +/- $15 \%$; target TDC within $+/-20 \%$

' Published survey data (WTW and Radford) reflects a $10 \%$ premium to account for additional responsibilities related to Public Affairs and Communications functions
Represents a calculated value reflecting the midpoint between the "low" and "high" of the competitive market percentile
Note: Peer proxy data, Radford data and WTW tabular data represent independently arrayed data for all pay elements. For regressed data, target STI and LTI has been derived based on independently arayed base salary, target TCC and target TDC data



## Presenters and Guest Attendees

- Presenter(s)

Rich Lindahl, Executive Vice President, CFO
Katy Strei, Executive Vice President, CHRO and Public Affairs

- Guest Attendee(s)
- Dave Flaherty, Vice President Total Rewards


## Agenda

- Overall Long-Term Incentive Framework
- 2018 Performance Stock Unit (PSU) Overview
- Actual Performance Against Target Goal
- Proposed Awards to Grant Recipients


## Questions/Issues for the Compensation Committee

- Does the Committee have any questions about the provisions of the 2018 PSU program?
- Does the Committee have any questions about actual performance against the target goal for the 2018 performance period (2018-2020)?
- Does the Committee approve the final number of shares to be issued?


## Overall Long-Term Incentive Framework

- Performance Stock Units (PSUs) represent $25 \%$ of Section 16 Officers long-term incentive opportunity (with the exception of the Executive Chairman)

Restricted Stock Units (RSUs) which
vest ratably on the first, second and third anniversary of grant

Performance Stock Units (PSUs) which vests after three years based on performance


Stock Options which vest ratably on the first, second and third anniversary of grant

## Summary of Program Design Provisions



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## Management Recommended Payout

-waw

- FY2020 Adjusted NI Margin is $27 \%$ (unaudited) based on the definition currently disclosed by the Company
- This performance represents $169 \%$ of the target goal ( $16 \%$ ) and results in a maximum payout factor of $150 \%$
- Like last year, the Adjusted NI Margin used to calculate the award follows the definition reported externally

Two addbacks to net income in external reporting were not in the original definition of adjusted NI Margin for the 2018-2020 PSU
These were IPR\&D Intangible Asset Impairment Charges (\$29M for FY20) and Changes in Fair Value of Contingent Consideration ( $\$ 32 \mathrm{M}$ for FY20)

## Schedule of Awards by Grant Recipient

- The following schedule is based on the unaudited FY2020 Adjusted NI Margin result of $27 \%$
- In the event FY2020 Adjusted NI Margin changes based on the audit, management would seek re-approval of the payout via Unanimous Written Consent (UWC)

| Grant Recipient | Target <br> Number of Units | Proposed Shares issued Under Award |  |
| :---: | :---: | :---: | :---: |
|  |  | \% of Target | Number of Shares (PreTax) |
| Robert Kramer | 6,563 | 150\% | 9,844 |
| Richard Lindahl | 4,991 | 150\% | 7,486 |
| Adam Havey | 5,036 | 150\% | 7,554 |
| Atul Saran | 5,313 | 150\% | 7,969 |
| Daniel Abdun-Nabi | 13,371 | 150\% | 20,056 |

## emergent <br> 

## 2021 Executive Officer PSU <br> Grant

Presentation to Compensation Committee

9 February 2021


## Presenters and Guest Attendees

- Presenter(s)

Rich Lindahl, Executive Vice President, CFO
Katy Strei, Executive Vice President, CHRO and Public Affairs

- Guest Attendee(s)
- Dave Flaherty, Vice President Total Rewards


## Agenda

- Overall Long-Term Incentive Framework
- 2021 Performance Stock Unit (PSU) Grant Overview


## Questions/Issues for the Compensation Committee

- Does the Committee have any questions about the provisions of the 2021 PSU grant?
- Does the Committee approve the performance goals on which PSU vesting will be based?


## Overall Long-Term Incentive Framework

- Performance Stock Units (PSUs) represent $25 \%$ of Section 16 Officers long-term incentive opportunity (with the exception of the Executive Chairman)



## Summary of Program Design Provisions



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## Illustration of Cumulative Measurement

This page shows annual Revenue and Adjusted EBITDA projections underlying the Adjusted EBITDA Margin goal for the 2021 PSU grant

| 2021 to 2023 |  | 2021Budget | 2022Expected | 2023Expected | Cumulative |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Total Revenue | $\$$ | 2,110 | $\$$ | 1,774 | $\$$ |
| Adjusted EBITDA (incl. Stock Comp) | 2,035 | $\$$ | 5,919 |  |  |
| Adjusted EBITDA Margin | $\$$ | 834 | $\$$ | 528 | $\$$ |



## Presenters and Guest Attendees

- Presenter(s)

Robert Kramer, President and Chief Executive Officer
Katy Strei, Executive Vice President, CHRO and Public Affairs

- Guest Attendee(s)
- Dave Flaherty, Vice President Total Rewards


## Agenda

- 2021 Equity Grant Recommendations for Executive Officers


## Questions / Issues for the Compensation Committee

- Does the Committee have any questions about 2021 equity grants to Executive Officers?
- Does the Committee approve the equity grants to Executive Officers?


## Schedule of Recommended Grants

| Executive | Total | PSUs |  | Options |  | RSUs |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
|  | Equity | $\%$ of Total | Dollars | $\%$ of Total | Dollars | $\%$ of Total | Dollars |
| Fuad El-Hibri | $\$ 2,600,000$ | $0 \%$ | $\$ 0$ | $50 \%$ | $\$ 1,300,000$ | $50 \%$ | $\$ 1,300,000$ |
| Robert Kramer | $\$ 5,600,000$ | $25 \%$ | $\$ 1,400,000$ | $50 \%$ | $\$ 2,800,000$ | $25 \%$ | $\$ 1,400,000$ |
| Rich Lindahl | $\$ 1,500,000$ | $25 \%$ | $\$ 375,000$ | $50 \%$ | $\$ 750,000$ | $25 \%$ | $\$ 375,000$ |
| Adam Havey | $\$ 1,400,000$ | $25 \%$ | $\$ 350,000$ | $50 \%$ | $\$ 700,000$ | $25 \%$ | $\$ 350,000$ |
| Atul Saran | $\$ 1,400,000$ | $25 \%$ | $\$ 350,000$ | $50 \%$ | $\$ 700,000$ | $25 \%$ | $\$ 350,000$ |
| Sean Kirk | $\$ 1,200,000$ | $25 \%$ | $\$ 300,000$ | $50 \%$ | $\$ 600,000$ | $25 \%$ | $\$ 300,000$ |
| Karen Smith, MD, PhD |  |  |  |  |  |  |  |
| Katy Strei |  |  |  |  |  |  |  |

## EMERGENT BIOSOLUTIONS INC. DRAFT RESOLUTIONS OF THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS February 9, 2021

## Approve Minutes

RESOLVED, that the minutes of the prior meeting of the Compensation Committee (the "Committee") of the Board of Directors (the "Board") held on January 20, 2021 are hereby approved.

## Approve Performance and Compensation Recommendations for Executive Officers

## 2020 Bonus Award to Executive Officers

RESOLVED, that the bonus awards for 2020 for the following current executive officers of the Corporation be and hereby are approved in accordance with the table set forth below:

## Name and Title

Fuad El-Hibri
Executive Chairman
Robert G. Kramer
President and Chief Executive Officer
Richard S. Lindahl
Executive Vice President, Chief
Financial Officer and Treasurer
Adam Havey
Executive Vice President, Business
Operations
Atul Saran
Executive Vice President, Corporate
Development and General Counsel
Sean Kirk
Executive Vice President, Manufacturing and Technical Operations
Karen Smith
Executive Vice President and Chief Medical Officer

Katherine Strei
Executive Vice President, HR and
Chief Human Resources Officer

2020 Bonus Award
\$ N/A
\$1,225,020
\$462,012
\$445,204
\$445,204
\$320,611
$\$ 100,000^{1}$


[^15]FURTHER RESOLVED, that the foregoing 2020 cash bonus payments shall be paid as soon as practicable; and it is

## 2021 Cash Compensation to Executive Officers

FURTHER RESOLVED, that the annualized base salary and target bonus percentage for 2021 for the following current executive officers of the Corporation be and they hereby are approved in accordance with the table set forth below, effective as of January 1, 2021, and shall continue in effect until adjusted or modified by the Committee:

## Name and Title

Fuad El-Hibri
Executive Chairman
Robert G. Kramer
President and Chief Executive Officer
Richard S. Lindahl
Executive Vice President, Chief
Financial Officer and Treasurer
Adam Havey
Executive Vice President, Business
Operations
Atul Saran
Executive Vice President, Corporate
Development and General Counsel
Sean Kirk
Executive Vice President, Manufacturing and Technical Operations

## Karen Smith

Executive Vice President and Chief Medical Officer

Katherine Strei
Executive Vice President, HR and
Chief Human Resources Officer

## 2021 Annualized Base Salary <br> $\$ 1,135,000$ <br> 2021 Target Bonus \% <br> $$
N / A
$$

\$1,000,000
$\$ 575,000$
$\$ 555,000$
$\$ 555,000$
$\$ 510,000$

```
120% of Base
    Salary
```

$60 \%$ of Base Salary
$60 \%$ of Base Salary 60\% of Base Salary

60\% of Base Salary


FURTHER RESOLVED, that the Executive Chairman, Chief Executive Officer ("CEO"), Chief Financial Officer ("CFO"), any executive vice president, senior vice president, secretary or assistant secretary of the Corporation be, and each of them hereby is, authorized, empowered and directed to take such further actions as he/she deems necessary or appropriate to carry out the purposes and intent of the foregoing resolutions and the taking of any such action by such employee shall be conclusive evidence that such action was authorized and approved by the Committee; and it is

FURTHER RESOLVED, that any and all actions heretofore taken and any and all papers, instruments, documents or certificates heretofore executed, delivered, filed or recorded, and any sums of money expended in order to carry out the intents and purposes of the foregoing resolutions are in all respects ratified, confirmed and approved.

## Review Performance Stock Units

Review and Approve Final Payout Factor for 2018-2020 Performance Stock Units, as amended (the "2018 PSUs")


#### Abstract

RESOLVED, that the Compensation Committee has evaluated the Corporation's fiscal year 2020 performance against the Performance Objective (as defined in the 2018 PSUs) and hereby certifies that it achieved $169 \%$ of Target Performance, which results in a $150 \%$ maximum payout factor; and it is

\section*{Review and Approve Performance Goals for 2021-2023 Performance Stock Units}


FURTHER RESOLVED, that the 2021-23 Performance Stock Unit Recommendations ("Performance Equity Grant Guidelines") attached hereto as Exhibit A hereby are approved; and it is

FURTHER RESOLVED, that the Performance Equity Grant Guidelines attached hereto as Exhibit A shall continue in effect through the 2023 grant cycle, unless otherwise earlier rescinded; and it is

FURTHER RESOLVED, that the form of 2021-2023 Performance Stock Unit Award Agreement (the "Performance Stock Unit Award Agreement") substantially in the form attached hereto as Exhibit B, including the performance goals set therein, with such administrative and other immaterial changes at the recommendation of counsel to implement grants of performance stock units under the Emergent BioSolutions Inc. Stock Incentive Plan (the "Plan"), be, and it is hereby, approved; and it is

## 2021-2023 Performance Stock Unit Grant Amounts

FURTHER RESOLVED, that on the on the third full business day after the Corporation releases the results of its operations for fiscal year 2020 (the "Grant Date"), the Corporation shall grant to each employee set forth on Exhibit C the number of 2021-2023 Performance Stock Units (each a "Performance Stock Unit," or "PSU") for that number of shares of the Corporation's common stock as is set forth opposite such executive's name on Exhibit C. The Performance Stock Units shall vest as set forth in Exhibit C. The foregoing Performance Stock Units shall be substantially in the form of the Performance Stock Unit Award Agreement attached hereto as Exhibit B. All Performance Stock Units are to be issued in accordance with the terms and provisions of the Plan, and the Performance Stock Unit Award Agreement; and it is
FURTHER RESOLVED, that the Executive Chairman, CEO, CFO, any executive vice president, senior vice president, secretary or assistant secretary of the Corporation be, and each of them hereby are, authorized, empowered and directed to take such further actions as he/she deems necessary or appropriate to carry out the purposes and intent of the foregoing resolutions and the taking of any such action by such employee shall be conclusive evidence that such action was authorized and approved by the Committee; and it is

FURTHER RESOLVED, that any and all actions heretofore taken and any and all papers, instruments, documents or certificates heretofore executed, delivered, filed or recorded, and any sums of money expended in order to carry out the intents and purposes of the foregoing resolutions are in all respects ratified, confirmed and approved.

## Review Recommendation for Equity Grants to Section 16 Officers (Equity Mix, Option and RSU Amounts)

Equity Mix

RESOLVED, that the total value of all equity incentives made to an executive officer of the Corporation, with the exception of the Executive Chairman, shall be apportioned as follows: $50 \%$ of such value shall be made in the form of stock options, $25 \%$ of such value shall be made in the form of restricted stock units that vest solely based on the passage of time, and $25 \%$ shall be made in the form of Performance Restricted Stock Units; and it is

FURTHER RESOLVED, that the total value of all equity incentives made to the position of Executive Chair, shall be apportioned as follows: $50 \%$ of such value shall be made in the form of stock options and $50 \%$ of such value shall be made in the form of restricted stock units that vest solely on the passage of time; and it is

## Stock Option Grant Amounts

FURTHER RESOLVED, that on the Grant Date, the Corporation shall grant to each employee set forth on Exhibit D, each of whom the Committee hereby determines to be eligible to be granted options within the provisions of the Plan, stock options to purchase that number of shares of the Corporation's common stock as is set forth opposite such executive's name. All options are to be issued in accordance with the terms and provisions of the Plan. The exercise price of each such option shall be equal to the fair market value of the Corporation's common stock on the Grant Date, which the Compensation Committee hereby determines and declares for purposes of the stock option grant shall be the last reported closing price of the Corporation's common stock on the New York Stock Exchange on the last trading day immediately preceding the Grant Date. The foregoing stock options shall be Non-Qualified Stock Options and granted under the Corporation's approved Global Non-Qualified Stock Option Award Agreement. The vesting and term of each option are to be as set forth on Exhibit D; and it is

FURTHER RESOLVED, that the form of consideration acceptable for exercise of any option (but in the case of the third bullet below, not for the payment of any applicable withholding or other taxes or any other financial obligation of the option holder) shall be:

- cash or by check payable to the order of the Corporation; or
- by delivery (i) of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Corporation sufficient funds to pay the exercise price and any required tax withholding or (ii) by the option holder to the Corporation of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Corporation cash or a check sufficient to pay the exercise price and any required tax withholding;
- by delivery (either by actual delivery or attestation) of shares of the Corporation's common stock owned by the option holder valued at fair market value on the date on which the shares of the Corporation's common stock are delivered to the Corporation
> (which fair market value shall be the closing price of the Corporation's common stock on the New York Stock Exchange (or such other principal exchange on which the Corporation's common stock is then listed for trading) on the date immediately preceding the delivery to the Corporation of the Corporation's common stock) provided: (i) such payment is then permitted by applicable law; (ii) such common stock of the Corporation was owned by the option holder for a period of not less than six months prior to delivery to the Corporation; and (iii) such common stock of the Corporation is not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements on the date of delivery; or
- any combination of the foregoing; and it is


## Restricted Stock Unit Grant Amounts

FURTHER RESOLVED, that on the Grant Date, the Corporation shall grant to each employee set forth on Exhibit $\mathrm{E}_{1}$ the number of restricted stock units (each a "Restricted Stock Unit" or "RSU") for that number of shares of the Corporation's common stock as is set forth opposite such executive's name on Exhibit E. The Restricted Stock Units shall vest as set forth in Exhibit E. The grants of the foregoing Restricted Stock Units shall be made in accordance with the terms of the Plan under the Corporation's approved Global Restricted Stock Unit Agreement; and it is

## General Authority

FURTHER RESOLVED, that the Executive Chairman, CEO, CFO, any executive vice president, senior vice president, secretary or assistant secretary of the Corporation be, and each of them hereby are, authorized, empowered and directed to take such further actions as he/she deems necessary or appropriate to carry out the purposes and intent of the foregoing resolutions and the taking of any such action by such employee shall be conclusive evidence that such action was authorized and approved by the Compensation Committee of the Board; and it is

FURTHER RESOLVED, that any and all actions heretofore taken and any and all papers, instruments, documents or certificates heretofore executed, delivered, filed or recorded, and any sums of money expended in order to carry out the intents and purposes of the foregoing resolutions are in all respects ratified, confirmed and approved.

## Exhibit A

## 2021-2023 Performance Stock Unit Recommendations

## Summary of Program Design Provisions



## 

## Exhibit B

Form of 2021-2023 Performance Stock Unit Award Agreement

## Form of 2021-2023 Performance-Based Stock Unit Award Agreement

1. Grant of PSUs. In consideration of services rendered to the Company by the Participant, the Company has granted to the Participant, subject to the terms and conditions set forth herein and in the Company's Stock Incentive Plan (the "Plan"), an award of performance-based stock units (individually, a "PSU" and collectively, the "PSUs"), representing the number of PSUs set forth under the Participant's account in the Company's third-party electronic stock administrative platform (the "Grant Summary"). The PSUs entitle the Participant to receive, upon and subject to the vesting of the PSUs (as described in Section 2 below), one share of common stock, $\$ 0.001$ par value per share, of the Company (the "Common Stock") for each PSU that vests. The shares of Common Stock that are issuable upon vesting of the PSUs are referred to herein as the "Shares."

## 2. Vesting of PSUs and Issuance of Shares.

(a) General. Subject to the other provisions of this Section 2, the PSUs shall vest as set forth on Schedule 1 to this Agreement, based on the achievement of the performance goal for the performance period set forth on Schedule 1, as certified by the Compensation Committee promptly following the performance period. Such date on which PSUs vest under this Agreement may be referred to herein as the "Vesting Date." Subject to Section 4, as soon as administratively practicable after the Vesting Date shown on Schedule 1, the Company will issue to the Participant, in certificated or uncertificated form, such number of Shares as is equal to the number of PSUs that vested on such Vesting Date. In no event shall the Shares be issued to the Participant later than 30 days after the Vesting Date.
(b) Service Termination. Except as set forth in Section 2(c) below and on Schedule 1, upon the cessation of the Participant's services with the Company for any reason, all unvested PSUs shall be automatically forfeited as of such cessation of services. For purposes of this PSU award, services with the Company shall include services as an employee or director of, or consultant or advisor to, the Company or to a parent or subsidiary of the Company, or any successor to the Company.
(c) Change in Control Event. Upon a Change in Control Event (as defined in the Plan), the acquiring or succeeding entity (or an affiliate thereof) shall assume each outstanding PSU such that, following the consummation of the Change in Control Event, the PSU confers the Participant with the right to receive, for each Share subject to the award, the consideration (whether cash, securities or other property) received by each holder of Common Stock immediately prior to the Change in Control Event (the "Replacement Award"), provided that (i) such Replacement Award shall vest solely based on the Participant's continued provision of services with the Company (as described on Section 2(b) hereof) until the last day of the
performance period set forth on Schedule 1 and shall not, for the avoidance of doubt, be subject to achievement of the performance goals set forth on Schedule 1 and (ii) the amount of cash, securities or other property subject to such Replacement Award shall be determined assuming that the number of shares subject to the PSU is equal to the target number of Shares issuable under this Agreement (as set forth on Schedule 1) for the performance period. In the event that the Participant's employment is terminated by either the Company or its successor without Cause or by the Participant for Good Reason (as such terms are defined in the Plan) within eighteen (18) months following a Change in Control Event, the remaining unvested portion of the Replacement Award shall become vested as of the date of the Participant's termination of employment. Notwithstanding the foregoing, in the event that the acquiring or succeeding entity (or an affiliate thereof) refuses to assume the PSUs and grant Replacement Awards in connection with a Change in Control Event, this PSU award shall become vested, immediately prior to the Change in Control Event, with respect to the target number of Shares (as set forth on Schedule 1) for the performance period.
3. Dividends. At the time of the issuance of Shares to the Participant pursuant to Section 2, the Company shall also pay to the Participant an amount of cash equal to the aggregate amount of all dividends paid by the Company, between the grant date and the issuance of such Shares, with respect to the number of Shares so issued to the Participant.
4. Withholding Taxes. Upon vesting, the Company shall, in accordance with the terms of the Plan, withhold such number of Shares from the PSU award as is sufficient to satisfy the required federal, state, and local and other income and employment tax withholding obligations of the Company associated with the PSUs.
5. Restrictions on Transfer. Neither the PSUs, nor any interest therein (including the right to receive dividend payments in accordance with Section 3), may be transferred by the Participant except to the extent specifically permitted in Section 10(a) of the Plan.
6. Provisions of the Plan. This PSU award is subject to the provisions of the Plan. The Participant acknowledges receipt of the Plan, along with the Prospectus relating to the Plan.
7. Section 409A. This PSU award is intended to comply with or be exempt from Section 409A of the Internal Revenue Code of 1986, as amended, and the guidance issued thereunder ("Section 409A") and shall be interpreted and construed consistently therewith. In no event shall either the Participant or the Company have the right to accelerate or defer delivery of the Shares to a date or event other than as set forth herein except to the extent specifically permitted or required by Section 409A. In the event that the Participant is a "specified employee" within the meaning of Section 409A and the Shares are to be delivered in connection with the
termination of the Participant's employment, the delivery of the Shares and any dividends payable under Section 3 in connection with such delivery shall be delayed until the date that is six months and one day following the date of the Participant's termination of employment if required to avoid the imposition of additional taxes under Section 409A. Solely for purposes of determining when the Shares (and any dividends payable under Section 3) may be delivered in connection with the Participant's termination of employment, such termination of employment must constitute a "separation from service" within the meaning of Section 409A. Solely to the extent necessary to comply with Section 409A, any Change in Control Event must also constitute a "Change in Control Event" as described in Treasury Regulation Section 1.409A-3(i)(5).

## 8. Miscellaneous.

(a) No Rights to Employment. The Participant acknowledges and agrees that the grant of the PSUs and their vesting pursuant to Section 2 do not constitute an express or implied promise of continued employment for the vesting period, or for any period.
(b) Entire Agreement. These terms and the Plan constitute the entire agreement between the parties, and supersede all prior agreements and understandings, relating to the subject matter of this PSU award; and, with respect to this PSU award, these terms shall, for the avoidance of doubt, supersede the terms in any separate employment or severance plan or agreement between the Company and the Participant relating to the acceleration of vesting of equity awards.
(c) Governing Law. This PSU award shall be construed, interpreted and enforced in accordance with the internal laws of the State of Delaware without regard to any applicable conflict of law principles.
(d) Interpretation. The interpretation and construction of any terms or conditions of the Plan or this PSU award by the Compensation Committee shall be final and conclusive.

## COMPANY CONFIDENTIAL

## SCHEDULE 1

## VESTING CRITERIA FOR PSUs

## A. Performance Measure

PSUs shall vest based upon the Company's achievement of a specific target, as described in Section B below (the "Performance Objective"), of Adjusted EBITDA (as defined below) as a percentage of total Revenue (as defined below) (such percentage, "Adjusted EBITDA Margin") calculated on a cumulative basis for the three-year performance period described below (the "Performance Period"). The number of Shares issuable upon vesting of the PSUs shall be determined based upon the extent to which the Performance Objective is achieved, as certified by the Compensation Committee following the end of the Performance Period.
"Adjusted EBITDA" is defined as Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization as reported by the Company.
"Revenue" is defined as revenue, determined in accordance with GAAP.
The Performance Period and the Threshold Number of Shares, Target Number of Shares and Maximum Number of Shares that can vest at the end of the Performance Period are as follows:

| Performance <br> Period | Threshold Number <br> of Shares for <br> Performance Period | Target Number <br> of Shares for <br> Performance Period | Maximum Number <br> of Shares for <br> Performance Period |
| :---: | :---: | :---: | :---: |
| January 1, 2021 to <br> December 31, 2023 | $50 \%$ of Target <br> Number of Shares | $100 \%$ of Target <br> Number of Shares | $150 \%$ of Target <br> Number of Shares |

## B. Performance Objective Target

The Performance Objective shall be Adjusted EBITDA Margin equal to $34 \%$ calculated on a cumulative basis for the three years in the Performance Period. The achievement of the Performance Objective shall constitute Target Performance.

Achievement of Adjusted EBITDA Margin equal to 30\% calculated on a cumulative basis for the three years in the Performance Period shall constitute Threshold Performance of the Performance Objective.

Achievement of Adjusted EBITDA Margin equal to $38 \%$ calculated on a cumulative basis for the three years in the Performance Period shall constitute Maximum Performance of the Performance Objective.

For the avoidance of doubt, the calculation of Adjusted EBITDA Margin on a cumulative basis shall equal the sum of Adjusted EBITDA for each year in the performance period divided by the sum of Revenue for each year in the performance period.

If, at the end of the Performance Period, the Company is required to make periodic reports under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Company's consolidated financial statements filed with the Securities and Exchange Commission on Form 10-K shall constitute its "Public Company Financial Statements" and shall apply for the Performance Period. If, at the end of the Performance Period, the Company is not required to make periodic reports under the Exchange Act, the Company's regularly prepared annual audited financial statements prepared by management shall be its "Private Company Financial Statements" and shall apply for the Performance Period. The applicable financial statements may be referred to herein as the "Financial Statements." The Compensation Committee shall certify the level of achievement of the Performance Objective promptly following the end of the Performance Period.

Notwithstanding anything herein to the contrary, the Compensation Committee shall have the discretion to determine the level of payout at the end of the Performance Period in recognition of broader performance outcomes and otherwise in its discretion.

## C. Calculation of Number of Shares Issuable

The number of Shares issuable at the end of the Performance Period upon certification of the extent of achievement of the Performance Objective by the Compensation Committee shall be equal to the product of (i) the Target Number of Shares for the Performance Period and (ii) the Payout Factor for the Performance Period.

The table below sets forth the Payout Factor based on the level of achievement of the Performance Objective for the Performance Period:

| Threshold <br> Performance Payout <br> Factor | Target Performance <br> Payout Factor | Maximum <br> Performance Payout <br> Factor |
| :---: | :---: | :---: |
| $50 \%$ | $100 \%$ | $150 \%$ |

In measuring the achievement of the Performance Objective for the Performance Period and calculating the related Payout Factor, achievement will be linearly interpolated between the percentages that constitute Threshold Performance and Target Performance and the percentages that constitute Target Performance and Maximum Performance based on actual results as determined and certified by the Compensation Committee. If the Adjusted EBITDA Margin achieved is below Threshold Performance, the Payout Factor for the Performance Objective shall be $0 \%$ and this award shall be terminated without the issuance of any Shares and the Participant shall have no further rights with respect to the Award.

In no event may the number of Shares issuable at the end of the Performance Period exceed the Maximum Number of Shares for the Performance Period.

## E. Effect of Death or Disability: Retirement

If the Participant dies or is disabled (within the meaning of Section 409A) prior to the end of the Performance Period, then the PSUs shall vest as to a number of Shares equal to the greater of (i) the Target Number of Shares and (ii) such number of Shares as the Compensation Committee shall determine in its sole discretion exercised in good faith based upon the projected level of achievement of the Performance Objective for the Performance Period, in either case prorated based on the portion of the Performance Period during which the Participant performed services with the Company. The Shares of Common Stock represented by such vested PSUs shall be delivered to the Participant or the Participant's estate within 30 days following such death or disability.

In the event of the Retirement (as defined below) of the Participant, the Participant shall be entitled to receive, following the end of the Performance Period, a prorated number of Shares that the Participant would have earned had the Participant remained employed through the end of the Performance Period based on the Compensation Committee's certification of the level of achievement of the Performance Objective, such proration based on the portion of the Performance Period during which the Participant performed services with the Company ending on the date of the Participant's Retirement. "Retirement" means attainment of age 60 and completion of 5 years of service with the Company or a parent or subsidiary of the Company, or any successor of the Company, with "services" including service to the Company or a parent or subsidiary of the Company, or any successor to the Company as an employee or director of, or consultant or advisor to such entity.

## Exhibit C

Schedule of Performance Stock Unit Grants

| Name | \# of <br> shares* | Price <br> Pher <br> Share | Grant <br> Date | Vesting Schedule for <br> shares under PSUs |
| :--- | :---: | :---: | :---: | :---: |
| Robert G. Kramer | TBD, based <br> on value of <br> $\$ 1,400,000$ | $\$ .001$ | $\infty$ | $* *$ |
| Richard S. Lindahl | TBD, based <br> on value of <br> $\$ 375,000$ | $\$ .001$ | $\infty$ | $* *$ |
| Adam Havey | TBD, based <br> on value of <br> $\$ 350,000$ | $\$ .001$ | $\infty$ | $* *$ |
| Atul Saran | TBD, based <br> on value of <br> $\$ 350,000$ | $\$ .001$ | $\infty$ | $* *$ |
| Sean Kirk | TBD, based <br> on value of <br> $\$ 300,000$ | $\$ .001$ | $\infty$ | $* *$ |
| Karen Smith |  |  |  |  |
| Katherine Strei |  |  |  |  |

* The target number of Performance Stock Units to be granted to each participant will be determined by dividing (i) the value desired to be granted to such participant as set forth in this table by (ii) the value of each PSU to be granted. The value of each PSU to be granted is equal to the closing price of the Corporation's common stock on the New York Stock Exchange on the trading day prior to the Grant Date. It is understood that each Performance Stock Unit award shall be granted assuming that the maximum number of shares issuable under each Performance Stock Unit Award Agreement (i.e., $1.5 x$ the target number of Performance Stock Units) upon achievement of Maximum Performance of the Performance Objective will be issued.
+ The price per share shall be deemed satisfied by achievement of the threshold level of performance on the last day of the three-year performance period.
$\infty$ The third full business day after the Corporation releases the results of its operations for fiscal year 2020.
** The applicable performance period for each Performance Stock Unit shall be the three-year period beginning on January 1, 2021 and ending on December 31, 2023. The Performance Stock Units will vest, if at all, based upon the extent to which the Performance Objective is achieved as of the end of 2023, as certified by the Committee promptly following the end of the performance period.

Exhibit D - Schedule of Option Grants

| Name | \# of shares* | Price Per Share | Grant Date | Vesting Schedule for shares under option | Expiration Date |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fuad El-Hibri | TBD, based on value of \$1,300,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Robert G. Kramer | TBD, based on value of \$2,800,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Richard S. Lindahl | TBD, based on value of \$750,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Adam Havey | TBD, based on value of \$700,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Atul Saran | TBD, based on value of \$700,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Sean Kirk | TBD, based on value of \$600,000 | + | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date | Day immediately prior to the $7^{\text {th }}$ annual anniversary of Grant Date |
| Karen Smith |  |  |  |  |  |
| Katherine Strei |  |  |  |  |  |

* The number of options to be granted to each participant will be determined by dividing (i) the value desired to be granted to such participant as set forth in this table by (ii) the value of each option to be granted. The value of each option to be granted will be determined by multiplying (i) the closing price of the Corporation's common stock on the New York Stock Exchange on the trading day prior to the Grant Date, by (ii) a Black-Scholes multiplier, which for purposes of these guidelines will be $50 \%$.
+ Closing price of the Corporation's common stock on the New York Stock Exchange on the trading day prior to the Grant Date.
$\infty$ The third full business day after the Corporation releases the results of its operations for fiscal year 2020.


## Exhibit E

Schedule of Time-based RSU Grants

| Name | \# of shares* | Price <br> Per <br> Share | Grant Date | Vesting Schedule for shares under RSUs |
| :---: | :---: | :---: | :---: | :---: |
| Fuad El-Hibri | TBD, based on value of \$1,300,000 | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Robert G. Kramer | TBD, based on value of \$1,400,000 | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Richard S. Lindahl | TBD, based on value of \$375,000 | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Adam Havey | TBD, based on value of $\$ 350,000$ | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Atul Saran | TBD, based on value of $\$ 350,000$ | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Sean Kirk | TBD, based on value of $\$ 300,000$ | \$. 001 | $\infty$ | $1 / 3$ on the day immediately prior to each of the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ annual anniversaries of Grant Date |
| Karen Smith |  |  |  |  |
| Katherine Strei |  |  |  |  |

* The number of time-based Restricted Stock Units to be granted to each participant will be determined by dividing (i) the value desired to be granted to such participant by (ii) the value of each Restricted Stock Unit to be granted. The value of each Restricted Stock Unit to be granted is equal to the closing stock price of the Corporation's common stock on the trading day prior to the Grant Date.
$\infty$ The third full business day after the Corporation releases the results of its operations for fiscal year 2020.
*2021 Compensation Actions for All Non-Section 16 Employees

|  | Funded | Actual | Variance |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Annualized Salary Expense as of } \\ & 12 / 14 / 2020 \end{aligned}$ | \$233,819,603 | \$ 233,819,603 | n/a |
| 2021 Merit Increases |  |  |  |
| Percent with prorations | 2.96\% | 2.92\% | 0.04\% |
| Dollar Amount | \$ 6,922,247 | \$ 6,835,138 | \$ 87,109 |
| Market Adjustments | n/a | \$ 1,291,067 | n/a |
| Promotion Adjustments | n/a | \$ 915,777 | n/a |
| Roundup for Payroll (salaries evenly divisible by \# of pay periods) | n/a | \$ 18,303 | n/a |
| Annualized Salary Expense after All Changes | \$240,741,849 | \$ 242,879,887 | $\$(2,138,038)$ |


| 2021 Bonus Recommendetions |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Funded | Actual | Variance |
| 2021 Bonus Payout |  |  |  |
| Dollar Amount | $\$ 42,704,526$ | $\$ 42,152,805$ | $\$ 551,721$ |

*Preliminary Compensation Actions; subject to final approval by management per standard authorizations

| Performance Rating bistribution | 2 | 2 |
| ---: | ---: | ---: |
| 5 - Significantly Exceeds Expectations | 103 | $5.0 \%$ |
| 4 - Exceeds Expectations | 723 | $35.2 \%$ |
| 3 - Meets Expectations | 1,171 | $57.0 \%$ |
| 2 - Needs Development | 52 | $2.5 \%$ |
| 1 - Does Not Meet Expectations | 2 | $0.1 \%$ |
| Unrated | 2 | $0.1 \%$ |
| Total | 2,053 |  |

Exhibit 3


IMPORTANT: Mark all packages and papers with contract and/or order numbers

B. COST / PRICE SCHEDULE

## B. 1 Prices

B.1.1 The total fixed price of this task order (sum of Task 1 and Task 2) is $\$ 628,250,000$.
B.1.2 The total fixed price of Task 1: Capacity Reservation is $\$ 542,750,000$.
B.1.3 The total fixed price of Task 2: Pharmaceutical Manufacturing Capacity Expansion is $\$ 85,500,000$.

## B. 2 Task 1 Payment Schedule

Following delivery and acceptance of the work described in SECTION C.3.1 Task 1:
Capacity Reservation and the deliverables described in SECTION F, and on submission of a proper invoice, the Government will pay the Contractor as follows:

| Item Description | Reporting Period | Due Date | Unit Price |  |  |  |
| :--- | :---: | :---: | ---: | :---: | :---: | :---: |
| Monthly Report \#1 | $05 / 13 / 2020-05 / 31 / 2020$ | $06 / 15 / 2020$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#2 | $06 / 01 / 2020-06 / 30 / 2020$ | $07 / 15 / 2020$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#3 | $07 / 01 / 2020-07 / 31 / 2020$ | $08 / 15 / 2020$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#4 | $08 / 01 / 2020-08 / 31 / 2020$ | $09 / 15 / 2020$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#5 | $09 / 01 / 2020-09 / 30 / 2020$ | $10 / 15 / 2020$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#6 | $10 / 01 / 2020-10 / 31 / 2020$ | $11 / 15 / 2020$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#7 | $11 / 01 / 2020-11 / 30 / 2020$ | $12 / 15 / 2020$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#8 | $12 / 01 / 2020-12 / 31 / 2020$ | $01 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#9 | $01 / 01 / 2021-01 / 31 / 2021$ | $02 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#10 | $02 / 01 / 2021-02 / 28 / 2021$ | $03 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#11 | $03 / 01 / 2021-03 / 31 / 2021$ | $04 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#12 | $04 / 01 / 2021-04 / 30 / 2021$ | $05 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#13 | $05 / 01 / 2021-05 / 31 / 2021$ | $06 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#14 | $06 / 01 / 2021-06 / 30 / 2021$ | $07 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#15 | $07 / 01 / 2021-07 / 31 / 2021$ | $08 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#16 | $08 / 01 / 2021-08 / 31 / 2021$ | $09 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#17 | $09 / 01 / 2021-09 / 30 / 2021$ | $10 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#18 | $10 / 01 / 2021-10 / 31 / 2021$ | $11 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#19 | $11 / 01 / 2021-11 / 30 / 2021$ | $12 / 15 / 2021$ | $\$ 27,137,500$ |  |  |  |
| Monthly Report \#20 | $12 / 01 / 2021-12 / 31 / 2021$ | $12 / 31 / 2021$ | $\$ 27,137,500$ |  |  |  |
|  |  |  |  |  | Total $=$ | $\$ 542,750,000$ |

## B. 3 Task 2 Payment Schedule

Following delivery and acceptance of the work described in SECTION C.3.2 Task 2:
Pharmaceutical Manufacturing Capacity Expansion and the deliverables described in SECTION F, and on submission of a proper invoice, the Government will pay the Contractor as follows:

| Item Description | Due Date | Unit Price |
| :--- | :---: | ---: |
| Delivery of IMS, WBS, VMP | $06 / 30 / 2020$ | $\$ 21,375,000$ |
| Completion of Camden Construction | Per IMS Milestone | $\$ 1,875,000$ |
| Completion of Rockville Construction | Per IMS Milestone | $\$ 19,500,000$ |
| Arrival of Camden Equipment | Per IMS Milestone | $\$ 1,875,000$ |
| Arrival of Rockville Equipment | Per IMS Milestone | $\$ 19,500,000$ |
| Completion of Camden CQV | $01 / 15 / 2021$ | $\$ 1,875,000$ |
| Completion of Rockville CQV | $10 / 15 / 2021$ | $\$ 19,500,000$ |
|  | Total $=$ |  |

## C. SCOPE OF WORK

## C. 1 Project Background

BARDA established a Center for Innovation in Advanced Development and Manufacturing (CIADM) with a subsidiary of Emergent BioSolutions Inc. (including all of its subsidiaries, "Emergent"), as a public-private partnership to ensure domestic vaccine manufacturing surge capacity to address national preparedness and response priorities. HHS/BARDA requires the services of Emergent to provide core advanced development ("industrialization") and manufacturing services to other commercial partners under contract to the U.S. Government (USG) for development of biopharmaceuticals against public health threats. Additionally, HHS/BARDA requires Emergent to provide manufacturing facilities utilizing flexible manufacturing and modem platform technologies to produce vaccines for outbreaks of an emerging infectious pathogens.

In December 2019, a novel (new) coronavirus known as SARS-CoV-2 ("the virus") was first detected in Wuhan, Hubei Province, People's Republic of China, causing outbreaks of the coronavirus disease COVID-19 that has now spread globally. The Secretary of Health and Human Services (HHS) declared a public health emergency on January 31, 2020, under section 319 of the Public Health Service Act ( 42 U.S.C. 247d), in response to COVID-19. On March 1, 2020, the President of the United States, pursuant to sections 01 and 301 of the National Emergencies Act (50 U.S.C. 1601 et seq.) and consistent with section 1135 of the Social Security Act (SSA), as amended (42 U.S.C. 1320b-5), proclaimed that the COVID-19 outbreak in the United States constitutes a national emergency.

Under the President's Operation Warp Speed Mission, HHS is leading a whole of nation effort with the primary goal to execute on a well-defined portfolio of COVID-19 vaccine candidates to maximize probability of having one or more safe and effective vaccines as fast as possible for mass distribution. As such, it is a national security concern to quickly make available safe and effective COVID-19 vaccines. To this end, BARDA must reserve existing manufacturing capacity and expand manufacturing capacity in order to ensure adequate domestic capabilities are established and ready.

## C. 2 Objectives

The objective of this task order is to expand the public-private partnership with Emergent to reserve and expand the capacities and capabilities at Contractor's CIADM facility, and its affiliated Camden, MD and Rockville, MD facilities.

## C. 3 Tasks

Independently and not as an agent of the Government, the Contractor shall furnish all the necessary services, qualified personnel, material, equipment, and facilities, not otherwise provided by the Government as needed to perform the tasks described below and in Attachment 1 - Contractor Capacity and Pricing.

## C.3.1 Task 1: Capacity Reservation

The Contractor shall reserve drug substance and drug product manufacturing capacity at the contractor's Bayview CIADM, Camden, MD, and Rockville, MD facilities for the exclusive use of the USG for the duration of the period of performance. The Contractor's facilities shall have the capability of producing the number of batches specified as follows in each applicable calendar month. In the event the Contractor is not tasked with producing batches in a given month, the capacity shall lapse and the unused batch production capacity cannot be allocated to a future period. Specifically, the areas to be reserved and number of batches over the period of performance associated with each area under the reservation, shall be as follows (number of batches is based upon a generic manufacturing process):

| Area Description | Estimated <br> Monthly <br> Number of <br> Batches | Total Number <br> of Vials for Full <br> Period of <br> Performance |
| :--- | :---: | ---: |
| Bayview CIADM Area 3 Drug Substance | 5 | Not Applicable |
| Bayview CIADM Area 4 Drug Substance | 5 | Not Applicable |
| Camden, MD Fill/Finish Line 118 | 5 | $3,600,000$ |
| Camden, MD Fill/Finish Line 168 | 10 | $3,600,000$ |
| Camden, MD Fil//Finish Line New | 12 | $3,300,000$ |
| Rockville, MD Fill/Finish Line Existing | 8 | 900,000 |
| Rockville, MD Fil//Finish Line New | 8 | $3,600,000$ |

## Bayview CIADM, Baltimore, MD Facility

The reservation fee per batch for drug substance at Bayview shall include the space and manufacturing activities from batch record preparation through manufacturing execution, including batch readiness activities, labor, and available equipment to produce one batch. Reservation fee does not include tech transfer, process and analytical development, process development, raw materials and lot release testing of a batch; these costs will be paid for under
separate product development task orders/contracts/agreements. When the reserved capacity is utilized for manufacturing drug substance on behalf of the government, the contractor will credit the reservation fee according to the table in Section B to the manufacturing of the batch in the specific area. The government will be responsible for any cost difference between the applied reservation fee and the actual cost of performing the manufacturing of the batch.

## Camden, MD and Rockville, MD Facilities

The reservation fee per batch of drug product at Camden and Rockville, MD facilities shall include the space and manufacturing activities from batch record preparation through manufacturing execution, including batch readiness activities, labor, and available equipment to produce one batch. Reservation fee does not include tech transfer, process and analytical development, process development, raw materials and lot release testing of a batch; these costs will be paid for under separate product development task orders/contracts/agreements. When the reserved capacity is utilized for manufacturing drug product on behalf of the government, the contractor will credit the reservation fee according to the table in Section $B$ to the manufacturing of the batch in the specific area. The government will be responsible for any cost difference between the applied reservation fee and the actual cost of performing the manufacturing of the batch.

The contractor shall maintain the reserved capacities in a state of readiness to perform current good manufacturing practices (cGMP) manufacturing activities, approved by the USG, under separate task orders/contracts/agreements for the entirety of the period of performance. If no manufacturing occurs in reserved capacities, the fees paid to contractor will cover reservation activities for that specific reserved capacity.

On a monthly basis, the contractor shall provide a monthly report that includes capacity availability and utilization or non-utilization, as well as any issues that impact the operational availability of the reserved capacity.

## C.3.2 Task 2: Pharmaceutical Manufacturing Capacity Expansion

The contractor shall expand its existing capacities and capabilities in drug product manufacturing on an accelerated timeline. Specifically, the contractor shall establish a fill/finish manufacturing line at the contractor's Camden, MD facility that is capable of filling approximately 22,000 vials per batch based on vial specifications. The contractor will use it reasonable best efforts to ensure the expanded capacity at the Camden facility will be operational for at-risk manufacturing no later than January 1, 2021. The contractor shall also establish a fill/finish manufacturing line at the contractor's Rockville, MD facility capable of filling approximately 150,000 vials per batch based on vial specifications. The contractor will use its reasonable best efforts to ensure the expanded capacity
at the Rockville facility will be operational for at-risk manufacturing no later than October 1, 2021. Both of the new capacities must be designed to be in compliance with FDA current good manufacturing practices (cGMP) regulations (21 CFR parts 210 and 211) or agreed upon at-risk manufacturing state. The Rockville facility must be able to manufacture drug product from viral drug substance. The contractor shall be responsible for management of all activities, subcontractors, etc. to meet the goals of the Task Order, including holding routine meetings with BARDA, and completion of meeting minutes. BARDA will assist in facilitating appropriate discussions with the FDA.

As a firm-fixed price arrangement, it is expected that all property acquired under this task order will be owned by contractor. To the extent any Contractor Acquired Property is deemed to be owned by the Government, such property shall transfer to the contractor upon completion of the applicable CLIN. In consideration for the government's funding for this capacity expansion, the contractor agrees to provide the government priority access to the new fill/finish lines for the period of performance. The contractor also agrees to fund any/all sustainment costs associated with maintaining the equipment/infrastructure paid for by the government. This maintenance includes compliance with FDA current good manufacturing practices (cGMP) regulations ( 21 CFR parts 210 and 211).

On a monthly basis, the contractor shall provide a monthly report that includes progress in establishing the expanded drug product capacities at the Camden and Rockville facilities, including updates to the IMS.

## D. PACKAGING AND MARKING

All deliverables required under this contract shall be packaged, marked and shipped in accordance with Government specifications. At a minimum, all deliverables shall be marked with the contract number and Contractor name. The Contractor shall guarantee that all required materials shall be delivered in immediate usable and acceptable condition.

## E. INSPECTION AND ACCEPTANCE

Inspection and acceptance of all work, performance, reports and other deliverables, under this task order, will be performed at the CIADM's facility or approved subcontractor facility, by the Contracting Officer or the duly authorized representative of the Government.

The Contracting Officer's Representative (COR) is a duly authorized representative of the Government and is responsible for the inspection and acceptance of all items/activities to be delivered and or completed under this task order.

## F. PERFORMANCE / DELIVERABLES

## F. 1 Period of Performance

The period of performance of this task order shall be from May 13, 2020 through December 31, 2021.

## F. 2 Deliverable Requirements

## F.2.1 Manufacturing Schedule with Allocated Capacity through Period of Performance

A Manufacturing Schedule shall be provided quarterly that includes the utilization and non-utilization of the reserved manufacturing capacities (Bayview Areas 3 and 4; Camden fill/finish lines 118, 168 and the new line; and Rockville existing and new fill/finish lines). The schedule shall include:

- Length of time for manufacturing in each area
- Name of the teaming partner (i.e. Janssen, AstraZeneca, etc)
- Vaccine/product technical information (i.e. cell line expression system, live viral, subunit, etc.)
- Batch Size or Scale
- Number of batches


## F.2.2 Integrated Master Schedule (IMS) for Camden and Rockville New Fill/Finish Lines

The Fill/Finish IMS shall include the time-phased activities to completely execute the Fill/Finish CWBS. Microsoft Project compatible file required and will result in a Gantt Chart for project tracking. The IMS will document the delivery date for each deliverable, critical path, major milestones, tasks/activities, duration, lead/lag/slack time, and schedule relationships, and will be directly traceable to the SOW and the WBS to a minimum of a level five (5).

## F.2.3 Work Breakdown Structure (WBS) for Camden and Rockville New Fill/Finish Lines

The WBS shall extend to elements to completely define the entire effort proposed to establish the fill/finish capability as described in the SOW. The WBS shall be to a depth and breadth necessary to accurately describe the proposed effort, to a minimum of a level five (5).

## F.2.4 Validation Master Plan (VMP)

The VMP shall include a list of the Standard Operating Procedures that will be used in the commissioning, qualification and validation (CQV) of the Camden and Rockville new fill/finish areas. The VMP shall also include a list of the equipment and facilities' systems and extent of their CQV (i.e. Commissioning, Facility Acceptance Testing, Site Acceptance Testing, Installation Qualification, Operational Qualification, Performance Qualification, etc.).

## F.2.5 Monthly Report

Each monthly report must include a description of the activities during the reporting period, and the activities planned for the ensuing reporting period. Specific to Task 1, each monthly report must include a summary of capacity
availability and utilization / non-utilization, as well as any issues that impact the operational availability of the reserved capacity. Specific to Task 2, each monthly report must include a summary of the progress in establishing the expanded drug product capacities at the Camden and Rockville facilities, including updates to IMS.

## F. 3 Schedule of Deliverables

Satisfactory performance of the task order shall be deemed to occur upon performance of the work described in SECTION C of this task order and upon delivery and acceptance of the following items.

| Item | Task | Deliverable | Delivery Method | Due Date |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | Manufacturing Schedule with Allocated Capacity through Period of Performance | Electronically to CO and COR | 30 days after TO award; every 3 months thereafter |
| 2 | 2 | Integrated Master Schedule | Electronically to CO and COR | 06/30/2020 |
| 3 | 2 | Work Breakdown Structure | Electronically to CO and COR | 06/30/2020 |
| 4 | 2 | Validation Master Plan | Electronically to CO and COR | 06/30/2020 |
| 5 | 1 \& 2 | Monthly Report | Electronically to CO and COR | $15^{\text {th }}$ day of every month throughout the task order period of performance |

## F. 4 Meeting Requirements

## F.4.1 Routine Update Teleconferences

The Contractor shall participate in regular teleconferences with USG to discuss the performance of the task order. The frequency will be agreed upon by the Contractor and USG and may be dependent on the activities during that time of the task order. Typically, these meetings are held bi-weekly or monthly. The Contractor is responsible for securing a suitable call in number for relevant participants and be responsible for moderating the meeting. The Contractor shall keep meeting minutes and forward a finalized copy to the CO and COR for approval within three (3) business days after each teleconference, or as otherwise authorized by the Contracting Officer.

## F.4.2 Person-in-Plant

Contractor shall accommodate up to three (3) BARDA personnel at an agreed upon time throughout the performance of this task order. On-site BARDA
personnel will provide support of the work and technical consultation in alignment with Contractor and per guidance from the BARDA program office in Washington, D.C.

## F.4.3 Periodic Site Visits

The Contractor shall accommodate for periodic site visits by BARDA on an ad hoc basis or as agreed upon, with at least three (3) business days prior written notice. The Contractor shall keep meeting minutes and forward a finalized copy to the Contracting Officer and COR for approval within three (3) business days after each site visit, or as otherwise authorized by the CO.

## F.4.4 Quarterly Site Visits

The Contractor shall provide formal presentations summarizing all work accomplished in the previous calendar quarter at the Contractor's site on a quarterly basis. The Contractor shall keep meeting minutes and forward a finalized copy to the CO and COR for approval within three (3) business days after each site visit, or as otherwise authorized by the CO.

## F.4.5 Kick-Off Meeting

The Contractor shall participate in a kick-off meeting, within 14 days of task order award; content, format, and location to be determined by the USG and the Contractor. The Contractor is responsible for securing a physical location or a suitable call in number for relevant participants and be responsible for moderating the meeting. The Contractor shall keep meeting minutes and forward a finalized copy to the Contracting Officer and COR for approval within three (3) business days after the meeting is held, or as otherwise authorized by the Contracting Officer.

## G. CONTRACT ADMINISTRATION

## G. 1 Contracting Officer

The following CO will represent the Government for the purpose of this Contract:


The CO is the only individual who can legally commit the Government to the expenditure of public funds. No person other than the CO can make any changes to the terms, conditions, general provisions, or other stipulations of this Contract.

The CO is the only person with the authority to act as agent of the Government under this contract. Only the CO has authority to (1) direct or negotiate any changes in the Statement of Work; (2) modify or extend the period of performance; (3) change the delivery schedule; (4) authorize reimbursement to the Contractor of any costs incurred during the performance of this Contract; and (5) otherwise change any terms and conditions of this Contract.

No information other than that which may be contained in an authorized modification to this Contract, duly issued by the CO, which may be received from any person employed by the Government, or otherwise, shall be considered grounds for deviation from any stipulation of this Contract.

The Government may unilaterally change its CO designation, after which it will notify the Contractor in writing of such change.

## G. 2 Contracting Officer's Representative

The following Contracting Officer's Representative (COR) will represent the Government for the purpose of this contract:


The COR is responsible for: (1) monitoring the Contractor's technical progress, including the surveillance and assessment of performance and recommending to the Contracting Officer changes in requirements; (2) interpreting the statement of work and any other technical performance requirements; (3) performing technical evaluation as required;
(4) performing technical inspections and acceptances required by this contract; and (5) assisting in the resolution of technical problems encountered during performance.

The Contracting Officer is the only person with authority to act as agent of the Government under this contract. Only the Contracting Officer has authority to: (1) direct or negotiate any changes in the statement of work; (2) modify or extend the period of performance; (3) change the delivery schedule; (4) authorize reimbursement to the Contractor for any costs incurred during the performance of this contract; (5) otherwise change any terms and conditions of this contract; or (6) sign written licensing agreements. Any signed agreement shall be incorporated by reference in Section K of the contract

The Government may unilaterally change its COR designation.

## G. 3 Key Personnel

Key personnel specified in this task order are considered to be essential to work performance. At least 30 days prior to the Contractor voluntarily diverting any of the specified individuals to other programs or contracts, the Contractor shall notify the Contracting Officer and shall submit a justification for the diversion or replacement, and a request to replace the individual. The request must identify the proposed replacement and provide an explanation of how the replacement's skills, experience and credentials meet or exceed the requirements of the contract (including, when applicable, Human Subjects Testing requirements). If the employee of the Contractor is terminated for cause or separates from the Contractor voluntarily with less than 30 day notice, the Contractor shall provide the maximum notice practicable under the circumstances. The Contractor shall not divert, replace or announce any such change to key personnel without the written consent of the Contracting Officer; provided that the Contracting Officer may ratify in writing that such diversion and such ratification shall constitute the
consent of the Contracting Officer required by this clause. The task order will be modified to add or delete key personnel as necessary to reflect the agreement of the parties.

The following individuals are determined to be key personnel.

| Name | Title |
| :--- | :--- |
| Syed Husain | Principal Investigator |
| Dino Muzzin | Head of Manufacturing |
| Scott Kelly | Head of Process Development |
| John Ducote | Head of Global Quality |

## G. 4 Invoicing Instructions

Invoices for payment shall be submitted electronically and shall include an SF-1034 and all supporting documentation.

## G. 5 Evaluation of Contractor Performance

Purpose: In accordance with FAR 42.1502(a), past performance evaluations shall be prepared at least annually and at the time the work under a contract or order is completed, via CPARS, the Government-wide evaluation tool (www.cpars.gov).

Evaluators: The performance evaluation will be completed jointly by the Contracting Officer's Representative and the Contracting Officer.

Performance Evaluation Factors: Per FAR 42.1503(b)(2), evaluation factors for each assessment shall include, at a minimum: technical (quality of product or service); cost control; schedule/timeliness; management and business relations; small business subcontracting; other (as applicable).

Contractor Review: A copy of the evaluation will be electronically sent to the Contractor as soon as practicable after completion of the evaluation. The Contractor shall submit comments, rebutting statements, or additional information to the Contracting Officer within 14 calendar days after receipt of the evaluation.

Resolving Disagreements between the Government and the Contractor: Disagreements between the parties regarding the evaluation will be reviewed at a level above the Contracting Officer. The ultimate conclusion on the performance evaluation is a decision of the contracting agency. Copies of the evaluation, Contractor's response, and review comments, if any, will be retained as part of the evaluation.

Release of Contractor Performance Evaluation Information: The completed evaluation will not be released to other than Government personnel and the Contractor whose performance is being evaluated. Disclosure of such information could cause harm both to the commercial interest of the Government and to the competitive position of the Contractor being evaluated, as well as impede the efficiency of Government operations.

Source Selection Information: Departments and agencies may share past performance information with other Government departments and agencies when requested to support future award decisions. The information may be provided through interview and/or by sending the evaluation and comment document to the requesting source selection official.

Retention Period: The agency will retain past performance information for a maximum period of 3 years after completion of contract performance for the purpose of providing source selection information for future contract awards.

## H. SPECIAL REQUIREMENTS

## H. 1 Advance Understandings

H.1.1 The Government recognizes that Contractor's operations are essential as a matter of national security and, as such, Contractor is directed to maintain operations to the extent practicable regardless of state or local restrictions to the contrary. In addition, all Contractor employees, independent contractors, and subcontractors are considered essential personnel supporting critical infrastructure as set forth in DHS CISA Memorandum dated March 19, 2020.

## H.1.2 Government confirms that all activities conducted by Contractor, any independent contractors and subcontractors under the task order as well as all general operations necessary to ensure execution of activities under the task order are subject to that certain declaration under the Public Readiness and Emergency Preparedness Act (PREP Act) issued by the Secretary of Health and Human Services on March 10, 2020.

H.1.3 Government reserves the right to exercise priorities and allocations authority with respect to this contract, to include rating this order in accordance with 45 CFR Part 101, Subpart A—Health Resources Priorities and Allocations System. Emergent BioSolutions agrees that the Government's right to exercise priorities and allocations authority with respect to this order, to include the use of directives in accordance with 45 CFR Part 101, Subpart A—Health Resources Priorities and Allocations System, constitutes a no-cost change to this order.
H.1.4 Contractor will act as the Contract Development Manufacturing Organization (CDMO) for priority targets as determined by the Government and the scope will encompass Drug Substance and Drug Product within above network.
H.1.5 Upon approval of a direct relationship between Contractor and priority target, the Government will release the associated capacity to Contractor to deploy and contract with identified by the Government.
H.1.6 Contractor will negotiate pricing with the identified party for full scope of activities including manufacturing and raw materials.
H.1.7 Contractor may retain a reasonable quantity of vaccine manufactured at is facilities, not to exceed 20,000 courses of therapy, to vaccinate Contractor's

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employees and critical subcontractors, and their respective immediate families. Any such retained product will be at the Contractor's cost.

## H. 2 Intellectual Property

Execution of a subsequent task order for utilization of capacity reserved under this task order may require a relationship between HHS, the firm that possesses rights to specific Intellectual Property (IP) required for the development effort (the "MCM IP Holder"), and the firm providing the Core Services under the task order (the "CIADM"). The relationship must reflect the Parties' rights to all IP developed and/or IP used in performance of the task order, and be consistent with HHS' IP rights per the Federal Acquisition Regulations (FAR) clauses described in the base contract. Prior to any performance of work, the MCM IP Holder and/or the CIADM shall provide the Contracting Officer with a written description of all IP necessary to develop (the "Description"). The Description must identify the basis for offering HHS less than unlimited rights to any pre-existing IP identified in the Description that will be utilized in performance of the task order. The Description shall also include written verification of the rights provided to HHS to any and all IP utilized or developed during performance of the task order as specified under FAR Clause 52.227-11, FAR Clause 52.227-11 as amended in any applicable subcontract and/or teaming agreement related to performance of the task order, FAR Clause 52.227-14 and FAR Clause 52.227-14 as amended in any applicable subcontract and/or teaming agreement (the "FAR Clauses").

The MCM IP Holder and the CIADM will remain free to negotiate any agreement of their own regarding their use of any of the IP utilized or developed during performance of an task order, so long as the negotiated agreement complies with the requirements under the FAR Clauses, and the terms contained in the agreement do not otherwise adversely affect the performance of work under the task order. The agreement shall be furnished to the Contracting Officer within five (5) calendar days after the agreement is finalized. In addition, this task order incorporates FAR Clause 52.227-1 Authorization and Consent (DEC 2007) and FAR Clause 52.227-3 Patent Indemnity (APR 1984).

## H. 3 Consultants and Sub-Contractors

As a commercial-item, firm fixed price arrangement, BARDA acknowledges that Contracting Officer authorization is not required for use of subcontractors or consultants.

## H. 4 Non-Personal Services and Inherently Governmental Functions

Pursuant to FAR 37.1, no personal services shall be performed under this contract. All work requirements shall flow only from the Contracting Officer's Representative (COR) to the Contractor's Project Manager. No Contractor employee will be directly supervised by the Government. All individual employee assignments, and daily work direction, shall be given by the applicable employee supervisor. If the Contractor believes any Government action or communication has been given that would create a personal services relationship between the Government and any Contractor employee, the

Contractor shall promptly notify the Contracting Officer of this communication or action.

Pursuant to FAR 7.5, the Contractor shall not perform any inherently Governmental actions under this contract. No Contractor employee shall hold him or herself out to be a Government employee, agent, or representative. No Contractor employee shall state orally or in writing at any time that he or she is acting on behalf of the Government. In all communications with third parties in connection with this contract, Contractor employees shall identify themselves as Contractor employees and specify the name of the company for which they work. In all communications with other Government contractors in connection with this contract, the Contractor employee shall state that they have no authority to in any way change the contract and that if the other contractor believes this communication to be a direction to change their contract, they should notify the Contracting Officer for that contract and not carry out the direction until a clarification has been issued by the Contracting Officer.

The Contractor shall ensure that all of its employees working on this contract are informed of the substance of this article. Nothing in this article shall limit the Government's rights in any way under the other provisions of the contract, including those related to the Government's right to inspect and accept the services to be performed under this contract. The substance of this article shall be included in all subcontracts at any tier.

## I. CONTRACT CLAUSES

Only the clauses incorporated in the base contract that are applicable to fixed price contracts and task orders (i.e., 52.212-4 - Contract Terms \& Conditions - Commercial Items) are in full effect at the task order level. This section or other parts of this TO may incorporate one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. In addition, the full text of a clause may be accessed electronically at this address: httos://www.acquisition.gov/.

## J. ATTACHMENTS

Attachment 1 - Contractor Capacity and Pricing

# Attachment 1 - Contractor Capacity and Pricing <br> Emergent CIADM Manufacturing Capacity Reservation and Expansion 

The Government secures the below capacity at the specified pricing:

1. Drug Substance - Baltimore, MD (Bayview - CIADM)
a. Area 3 ( $2 k / 4 k$ scale)
i. Estimated timeframe: 20 months in total, May 2020 through December 2021
ii. Estimated number of batches (assuming generic process parameters, process readiness, availability of raw materials, process specific equipment procurement / installation, approved regulatory pathway, etc): up to 100 batches
iii. Estimated pricing: $\$ 3.0$ million / batch for a total of $\$ 300$ million. This pricing would allow the reservation of associated capacity and manufacturing of product. Please note that raw materials are not included in the foregoing since that will depend on the process and product(s) selected, but these would be passed through to the Government at Contractor's cost.
b. Area 4 (50L scale)
i. Estimated timeframe: 20 months in total, May 2020 through December 2021
ii. Estimated number of batches (assuming generic process parameters, process readiness, availability of raw materials, process specific equipment procurement / installation, approved regulatory pathway, etc): up to 100 batches
iii. Estimated pricing: $\$ 0.7$ million / batch for a total of $\$ 70$ million. This pricing would allow the reservation of associated capacity and manufacturing of product. Please note that raw materials are not included in the foregoing since that will depend on the process and product(s) selected, but these would be passed through to the Government at Contractor's cost.
c. Total for Drug Substance: $\$ 370$ million (excluding raw materials)
2. Drug Product - Baltimore, MD (Camden)
a. Existing Line 118 ( 36,000 vials / batch)
i. Estimated timeframe: 20 months in total, May 2020 through December 2021
ii. Estimated number of batches (assuming generic process parameters, process readiness, availability of raw materials, process specific equipment procurement / installation, approved regulatory pathway, etc): up to 100 batches, 3.6 million units
iii. Estimated pricing: $\$ 0.325$ million / batch for a total of $\$ 32.5 \mathrm{M}$. This pricing would allow the reservation of associated capacity and manufacturing of product. Please note that raw materials are not included in the foregoing since that will depend on the process and product(s) selected, but these would be passed through to the Government at Contractor's cost.
b. Existing Line 168 ( 18,000 vials / batch)
i. Estimated timeframe: 20 months in total, May 2020 through December 2021
ii. Estimated number of batches (assuming generic process parameters, process readiness, availability of raw materials, process specific equipment procurement / installation, approved regulatory pathway, etc): up to 200 batches, 3.6 million units
iii. Estimated pricing: $\$ 0.325$ million / batch for a total of $\$ 65$ million. This pricing would allow the reservation of associated capacity and manufacturing of product. Please note that raw materials are not included in the foregoing since that will depend on the process and product(s) selected, but these would be passed through to the Government at Contractor's cost.
c. New Line ( 22,000 vials / batch)
i. Estimated timeframe: 12 months in total, Jan 2021 through December 2021
ii. Estimated number of batches (assuming generic process parameters, process readiness, availability of raw materials, process specific equipment procurement / installation, approved regulatory pathway, etc): up to 150 batches, 3.3 million units
iii. Estimated CAPEX Acceleration Fee: $\$ 7.5$ million (best estimate, actual numbers may vary)
iv. Estimated pricing: $\$ 0.325$ million / batch for a total of $\$ 48.75$ million. This pricing would allow the reservation of associated capacity and manufacturing of product. Please note that raw materials are not included in the foregoing since that will depend on the process and product(s) selected, but these would be passed through to the Government at Contractor's cost.
d. Total for Drug Product: \$146.25 million (excluding raw materials) + Capex Acceleration of approximately $\$ 7.5$ million
3. Drug Product - Rockville, MD
a. Existing Line ( 22,500 vials / batch)
i. Estimated timeframe: 5 months in total, October 2020 through February 2021
ii. Estimated number of batches (assuming generic process parameters, process readiness, availability of raw materials, process specific equipment procurement / installation, approved regulatory pathway, etc): up to 40 batches, 900,000 units
iii. Estimated pricing: $\$ 0.414$ million / batch for a total of $\$ 16.56$ million. This pricing would allow the reservation of associated capacity and manufacturing of product. Please note that raw materials are not included in the foregoing since that will depend on the process and product(s) selected, but these would be passed through to the Government at Contractor's cost.
b. New Line (150,000 vials / batch)
i. Estimated timeframe: 3 months in total, October 2021 through December 2021
ii. Estimated number of batches (assuming generic process parameters, process readiness, availability of raw materials, process specific equipment procurement / installation, approved regulatory pathway, etc): up to 24 batches, 3.6 million units
iii. Estimated CAPEX Installation / Acceleration Fee: $\$ 78$ million (best estimate, actual numbers may vary)
iv. Estimated pricing: $\$ 0.414$ million / batch for a total of $\$ 9.94$ million. This pricing would allow the reservation of associated capacity and manufacturing of product. Please note that raw materials are not included in the foregoing since that will depend on the process and product(s) selected, but these would be passed through to the Government at Contractor's cost.
c. Total for Drug Product: \$26.5 million (excluding raw materials) + Capex Installation / Acceleration of approximately $\$ 78$ million
4. Total Value for Drug Substance and Drug Product Capacity Commitment \& Manufacturing: $\$ 542.75$ million, excluding raw materials
5. Total Value for Capex: approximately $\$ 85.5 \mathrm{M}$ (best estimate, actual numbers may vary)

Exhibit 4


On the effective date of this modification, Paragraph H. 1 Advance Understandings is modified to include the following:
H.1.8 Contractor agrees to submit a request for determination of inapplicability of the Buy American statute as required by FAR Clause 52.225-11 Buy American Construction Materials Under Trade Agreements (Oct 2019), paragraph (c). Government agrees to consider such a request in good faith.
H.1.9 Government agrees to waive the requirements of paragraph (d)(2) of FAR Clause 52.204-10 Reporting Executive Compensation contingent on the Contractor providing a sufficient explanation of why the waiver is being requested.
H.1.10 Government recognizes the subcontracting constraints associated with the task order. Government' priority is efficient contract performance; as such, there are limited small business subcontracting opportunities for the Contractor.
H.1.11 Government agrees to apply the requirements of paragraph (j) of FAR Clause 52.219-9 Small Business Subcontracting Plan (ALT II) (Oct 2001) to this task order.

On the effective date of this modification, Section I. CONTRACT CLAUSES is superseded by the following:

## I. CONTRACT CLAUSES

## I. 1 FAR 52.252-2 Clauses Incorporated by Reference (Feb 1998)

This task order incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The full text of a clause may be accessed electronically at this address: https://www.acquisition.gov/.

## I. 2 FAR Clauses Incorporated by in Task Order Reference

All clauses included in the IDIQ contract and not otherwise deemed not applicable in this Task Order are in full effect.

The following FAR clauses are also incorporated by reference:

| Clause <br> No. | Date | Clause. |
| :---: | :--- | :--- |
| $52.222-6$ | Aug <br> 2018 | Construction Wage Rate Requirements. |
| $52.222-7$ | May <br> 2014 | Withholding of Funds. |
| $52.222-8$ | Aug <br> 2018 | Payrolls and Basic Records. |
| $52.222-9$ | Jul <br> 2005 | Apprentices and Trainees. |


| 52.222-10 | $\begin{aligned} & \text { Feb } \\ & 1998 \end{aligned}$ | Compliance with Copeland Act Requirements. |
| :---: | :---: | :---: |
| 52.222-11 | $\begin{aligned} & \text { May } \\ & 2014 \end{aligned}$ | Subcontracts (Labor Standards). |
| 52.222-12 | $\begin{array}{\|l\|} \hline \text { May } \\ 2014 \\ \hline \end{array}$ | Contract Termination-Debarment. |
| 52.222-13 | $\begin{aligned} & \hline \text { May } \\ & 2014 \\ & \hline \end{aligned}$ | Compliance with Construction Wage Rate Requirements and Related Regulations. |
| 52.222-14 | $\begin{aligned} & \text { Feb } \\ & 1998 \end{aligned}$ | Disputes Concerning Labor Standards. |
| 52.222-15 | $\begin{aligned} & \text { May } \\ & 2014 \\ & \hline \end{aligned}$ | Certification of Eligibility. |
| 52.236-2 | Apr 1984 | Differing Site Conditions. |
| 52.236-3 | Apr 1984 | Site Investigation and Conditions Affecting the Work. |
| 52.236-5 | $\begin{aligned} & \text { Apr } \\ & 1984 \end{aligned}$ | Material and Workmanship. |
| 52.236-6 | Apr 1984 | Superintendence by the Contractor. |
| 52.236-7 | $\begin{aligned} & \text { Nov } \\ & 1991 \end{aligned}$ | Permits and Responsibility. |
| 52.236-8 | Apr 1984 | Other Contracts. |
| 52.236-9 | Apr 1984 | Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements. |
| 52.236-10 | Apr $1984$ | Operations and Storage Areas. |
| 52.236-11 | Apr 1984 | Use and Possession Prior to Completion. |
| 52.236-12 | Apr 1984 | Cleaning Up. |
| 52.236-13 | $\begin{aligned} & \text { Nov } \\ & 1991 \end{aligned}$ | Accident Prevention. |
| 52.236-14 | $\begin{aligned} & \text { Apr } \\ & 1984 \end{aligned}$ | Availability and Use of Utility Services. |
| 52.236-15 | $\begin{aligned} & \text { Apr } \\ & 1984 \end{aligned}$ | Schedules for Construction Contracts. |
| 52.236-21 | $\begin{aligned} & \text { Feb } \\ & 1997 \end{aligned}$ | Specifications and Drawings for Construction. |

## I. 3 FAR Clauses Incorporated in the IDIQ Contract Waived in this Task Order

The following FAR clauses, which are incorporated in the IDIQ Contract, are not applicable to this Task Order:

| Clause No. | Date | Clause |
| :---: | :---: | :---: |
| 52.219-22 |  | Small Disadvantaged Business Status |
| 52.215-21 | $\begin{array}{\|l\|} \hline \text { Oct } \\ 2010 \\ \hline \end{array}$ | Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data - Modifications |
| 52.215-23 | $\begin{array}{\|l\|} \hline \text { Oct } \\ 2009 \\ \hline \end{array}$ | Limitations on Pass-Through Charges |
| 52.219-25 | $\begin{array}{\|l\|} \hline \text { Dec } \\ 2010 \\ \hline \end{array}$ | Small Disadvantaged Business Participation Program Disadvantaged Status and Reporting |
| 52.225-1 | $\begin{array}{\|l\|} \hline \text { Feb } \\ 2009 \\ \hline \end{array}$ | Buy American Act - Supplies |
| 52.225-13 | $\begin{array}{\|l\|} \hline \text { Jun } \\ 2008 \end{array}$ | Restrictions on Certain Foreign Purchases |
| 52.230-2 | $\begin{array}{\|l\|} \hline \text { Oct } \\ 2010 \\ \hline \end{array}$ | Cost Accounting Standards |
| 52.230-6 | $\begin{array}{\|l\|} \hline \text { Jun } \\ 2010 \\ \hline \end{array}$ | Administration of Cost Accounting Standards (Jun 2010) (except paragraph (b)) (Jun 2010) |
| 52.243-6 | Apr <br> 1984 | Administration of Cost Accounting Standards |
| 52.242-13 | $\begin{array}{\|l\|} \hline \text { Jul } \\ 1995 \\ \hline \end{array}$ | Bankruptcy |
| 52.244-2 | $\begin{array}{\|l\|} \hline \text { Oct } \\ 2010 \\ \hline \end{array}$ | Subcontracts |
| 52.244-5 | $\begin{array}{\|l\|} \hline \text { Dec } \\ 1996 \\ \hline \end{array}$ | Competition in Subcontracting |
| 52.225-12 | $\begin{array}{\|l\|} \hline \text { Apr } \\ 2012 \\ \hline \end{array}$ | Notice of Buy American Requirement - Construction Materials under Trade Agreements |
| 52.228-15 | $\begin{array}{\|l\|} \hline \text { Oct } \\ 2010 \\ \hline \end{array}$ | Performance and Payment Bonds-Construction |
| 52.215-2 | $\begin{array}{\|l\|} \hline \text { Oct } \\ 2010 \\ \hline \end{array}$ | Audit and Records - Negotiation |
| 52.215-12 | $\begin{array}{\|l\|} \hline \text { Oct } \\ 2010 \\ \hline \end{array}$ | Subcontractor Cost or Pricing Data |
| 52.215-13 | $\begin{array}{\|l\|} \hline \text { Oct } \\ 2010 \\ \hline \end{array}$ | Subcontractor Cost or Pricing Data - Modifications |
| 52.215-19 | $\begin{array}{\|l\|} \hline \text { Oct } \\ 1997 \end{array}$ | Notification of Ownership Changes |

## I. 4 Additional FAR Contract Clauses Included in Full Text

This task order incorporates the following clauses in full text:

## I.4.1 FAR Clause 52.236-1 Performance of Work by the Contractor (Apr 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least zero (0) percent of the total amount of work to be performed under the contract. This percentage may be reduced by a
supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.
(End of clause)

## Exhibit 5


$\square$ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing
Items 8 and 15, and returning $\quad$ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By
separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE
RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT INREJECTION OF YOUR
OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided
each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.
12. ACCOUNTING ANDAPPROPRIATION DATA (If required)
See SChedule
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT <br> ORDER NO. IN ITEM 10A. |
| :---: | :--- |
|  | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, <br> appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43. 103(b). |
| X | C. THIS SUPPLEMENTALAGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: <br> MUTUAL AGREEMENT OF THE PARTIES. |
|  | D. OTHER (Specify type of modification and authority) |

E. IMPORTANT: Contractor $\quad \square$ is not $\quad \mathrm{Q}$ is required to sign this document and return $\quad 1 \quad$ copies to the issuing office.
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Tax ID Number:
DUNS Number:
The purpose of the modification is to provide an Advance Understanding that requires the Contractor to reduce the firm fixed price of the task order. Any reduction is dependent on the number of DOD personnel on site at the contractor's facility.

All other terms and conditions remain unchanged.

See attached.
Period of Performance: 05/13/2020 to $12 / 31 / 2021$

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)
Sean Kirk
EVP, mfg and tech ops
15B. CONTRACTOR/OFFEROR

| 15B. CONTRACTOR/OFFEROR |  | 15C. DATE SIGNED |
| :---: | :---: | :---: |
| (Signature of person a | Electronically signed by: Sean Kirk Reason: I approve this document Date: Oct 7,2020 18:14 EDT uthorized to sign) | $\text { Oct 7, } 2020$ |

16B. UNITED STATES OF AMERICA
16C. DATE SIGNED

Previous edition unusable
STANDARD FORM 30 (REV. 11/2016)
Prescribed by GSA FAR ( 48 CFR) 53.243

On the effective date of this modification, Paragraph H. 1 Advance Understandings is modified to include the following:
H.1.12 The Government may provide personnel under a separate agreement to support the Contractor. The Contractor agrees to reduce the Unit Price in Paragraph B.2. Task 1 Payment Schedule by $\$ 3,750$ per person per week for any portion of a week that the Government-provided personnel are on site at the Contractor's facility. The Contractor will reduce the Unit Price once each calendar quarter for the three Reporting Periods of the calendar quarter in which personnel were on site.

Any reduction to the Unit Price will result in a corresponding reduction to the total fixed price of Task 1: Capacity Reservation listed in Paragraph B.1.2 and the total fixed price of this task order listed in Paragraph B.1.1.

For instance, if six personnel are on site for 8 weeks for the quarter ending December 31, 2020, the Contractor agrees to reduce the unit price associated with Monthly Report \#8 by $\$ 180,000$. The Unit Price for Monthly Report \#8 would be $\$ 26,957,500$. The total fixed price of Task 1: Capicity Reservation would be reduced by $\$ 180,000$. The total fixed price of the task order would be reduced by $\$ 180,000$.

Exhibit 6


All others terms and conditions remain in full force and effect.
Period of Performance: 05/13/2020 to 12/31/2021

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10 A , as heretofore changed, remains unchanged and in full force and effect.

| $15 A$. NAME AND TITLE OF SIGNER (Type or print) | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) |
| :--- | :--- |

Neil Verma Director, Project Management
15B. CONTRACTOR/OFFEROR 15 C. DATE SIGNED

## JEFFREY R. SCHMIDT

Exhibit 7

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.



On the effective date of this modification, the following changes are made to Task Order 75A50120F33007, Contract Number HHSO100201200004I:

Paragraph B.1. Prices is superseded by the following:

## B. 1 Prices

B.1.1. The total fixed price of this task order (sum of Task 1 and Task 2) is $\$ 627,980,000$.
B.1.2. The total fixed price of Task 1: Capacity Reservation is $\$ 542,480,000$.
B.1.3. The total fixed price of Task 2: Pharmaceutical Manufacturing Capacity Expansion is $\$ 85,500,000$.

Payment B.2. Task 1 Payment Schedule is superseded by the following:
Following delivery and acceptance of the work described in SECTION C. 3 and the deliverables described in SECTION F, and on submission of a proper invoice, the Government will pay the Contractor as follows:

| Item Description | Reporting Period | Due Date | Unit Price |
| :--- | :---: | :---: | :---: |
| Monthly Report \#1 | $05 / 13 / 2020-05 / 31 / 2020$ | $06 / 15 / 2020$ | $\$ 27,137,500$ |
| Monthly Report \#2 | $06 / 01 / 2020-06 / 30 / 2020$ | $07 / 15 / 2020$ | $\$ 27,137,500$ |
| Monthly Report \#3 | $07 / 01 / 2020-07 / 31 / 2020$ | $08 / 15 / 2020$ | $\$ 27,137,500$ |
| Monthly Report \#4 | $08 / 01 / 2020-08 / 31 / 2020$ | $09 / 15 / 2020$ | $\$ 27,137,500$ |
| Monthly Report \#5 | $09 / 01 / 2020-09 / 30 / 2020$ | $10 / 15 / 2020$ | $\$ 27,137,500$ |
| Monthly Report \#6 | $10 / 01 / 2020-10 / 31 / 2020$ | $11 / 15 / 2020$ | $\$ 27,137,500$ |
| Monthly Report \#7 | $11 / 01 / 2020-11 / 30 / 2020$ | $12 / 15 / 2020$ | $\$ 27,137,500$ |
| Monthly Report \#8 | $12 / 01 / 2020-12 / 31 / 2020$ | $01 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report \#9 | $01 / 01 / 2021-01 / 31 / 2021$ | $02 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report \#10 | $02 / 01 / 2021-02 / 28 / 2021$ | $03 / 15 / 2021$ | $\$ 26,867,500$ |
| Monthly Report \#11 | $03 / 01 / 2021-03 / 31 / 2021$ | $04 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report\#12 | $04 / 01 / 2021-04 / 30 / 2021$ | $05 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report \#13 | $05 / 01 / 2021-05 / 31 / 2021$ | $06 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report \#14 | $06 / 01 / 2021-06 / 30 / 2021$ | $07 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report \#15 | $07 / 01 / 2021-07 / 31 / 2021$ | $08 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report \#16 | $08 / 01 / 2021-08 / 31 / 2021$ | $09 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report\#17 | $09 / 01 / 2021-09 / 30 / 2021$ | $10 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report \#18 | $10 / 01 / 2021-10 / 31 / 2021$ | $11 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report \#19 | $11 / 01 / 2021-11 / 30 / 2021$ | $12 / 15 / 2021$ | $\$ 27,137,500$ |
| Monthly Report \#20 | $12 / 01 / 2021-12 / 31 / 2021$ | $12 / 31 / 2021$ | $\$ 27,137,500$ |
|  |  |  | Total $=$ |
|  |  |  |  |

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

Exhibit 8


IMPORTANT: Mark all packages and papers with contract and/or order numbers.


## B. COST / PRICE SCHEDULE

## Cost-Plus-Fixed Fee CLINS

| Base CLIN Table |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CLIN | ITEM DESCRIPTION | Cost | Fee (8\%) | Cost Plus Fixed Fee |
| 0001 | - Collection of human plasma containing antibodies to SARS-CoV-2 sufficient to supply at least 400 doses of drug product. <br> - cGMP manufacture of at least 400 doses of drug product for use in a controlled clinical trial; manufacturing approach must be amenable to commercial-scale production within potential EUA timeframe estimated to be 12 months; stability testing as needed to support clinical use. <br> - Development and validation/qualification of assays as required for screening, stability testing, and manufacturing. <br> - Supportive nonclinical studies as required for development of drug product. <br> - Regulatory filings to FDA, including formal interactions (e.g., Pre-IND) as necessary, IND submission, and EUA submission within targeted 12 months of task order award. <br> - Support of clinical trial through drug supply, including storage and shipping as required. <br> - Program management and reporting as required. | \$13,445,371 | \$1,076,430 | \$14,531,801 |


| Option CLIN Table |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
| CLIN | ITEM DESCRIPTION | Cost | Fee (8\%) | Cost Plus Fixed Fee |  |
| 0002 | -Support of additional clinical trial, <br> including the supply of at least 100 <br> doses, plus storage and shipping as <br> required. <br> -Program management and <br> reporting as required. <br> $\$ 7,066,238$ | $\$ 565,299$ | $\$ 7,631,537$ |  |  |

## Total Not to Exceed Amount

## C. STATEMENT OF OBJECTIVES

## C. 1 Background

In December 2019, a novel (new) coronavirus known as SARS-CoV-2 ("the virus") was first detected in Wuhan, Hubei Province, People's Republic of China, causing outbreaks of the coronavirus disease COVID-19. As a result of the virus' global spread, HHS declared a public health emergency for the U.S. on January 31, 2020 to aid the nation's healthcare community in responding to COVID-19. On March 13, 2020, the President proclaimed that the COVID-19 outbreak in the U.S. constitutes a national emergency.

Currently, there are no FDA-approved therapeutics for the treatment of COVID-19. There is great interest in evaluating the use of convalescent plasma and plasma-derived products as therapeutics for COVID-19, given their historical use as treatments in other outbreaks. Notably, the FDA recently published guidance on the investigational use of COVID-19 convalescent plasma under emergency INDs.

As part of the HHS' response to COVID-19, BARDA is seeking solutions for the manufacture and development of plasma-derived polyclonal antibody-based COVID-19 therapeutics for clinical evaluation, with potential for commercial-scale manufacture under EUA.

## C. 2 Scope of Work (SOW)/Objectives

Independently and not as an agent of the US Government (USG), the Contractor shall furnish all the necessary services, qualified personnel, materials, supplies, equipment and facilities not otherwise provided by the USG as needed to perform the work described below.

The Contractor shall:

- Collect human plasma containing antibodies to SARS-CoV-2 sufficient to supply at least 400 doses of drug product.
- Manufacture at least 400 doses of cGMP drug product for use in a controlled clinical trial using an approach amenable to commercial-scale production within potential EUA timeframe of 12 months, plus stability testing as required for clinical use. The clinical trial is anticipated to start within 6 months of contract award.
- Develop and validate/qualify assays required for screening, manufacturing, and stability testing as necessary.
- Conduct supportive nonclinical studies as required for development of drug product.
- Prepare and submit regulatory filings to FDA, including IND submission, and conduct formal meetings (e.g., Pre-IND) with FDA as necessary. EUA submission is targeted within 12 months of task order award.
- Support clinical trial(s) through the delivery of cGMP drug product (includes storage and shipping) and all supporting information as required.
- Provide program management and reporting as required.


## C. 3 (SOW) Tasks

## TASKS

The Contractor shall perform the following Tasks:

## CLIN 0001: Manufacture and Development of Human Immune Globulin Drug Product from Human Plasma for Clinical Evaluation

A. Collection of Human Plasma Containing Antibodies to SARS-CoV-2

The Contractor shall collect human plasma containing antibodies to SARS-CoV-2 which will include utilizing FDA-approved plasma collection centers in the U.S. Collection may rely on a combination of donations from convalescent COVID-19 patients, mass screening of plasma units for anti-SARS-CoV-2 activity, or other approaches as appropriate. The volume of plasma collected shall be sufficient to supply at least 400 doses of final human immune globulin drug product.
B. Manufacture of at Least 400 doses of Human Immune Globulin Drug Product

The Contractor shall use the collected plasma to manufacture at least 400 doses of fill-finished human immune globulin final drug product under cGMP conditions. The manufacturing approach used should be scalable based on the availability and timing of plasma collections, with potential to scale-up to commercial manufacturing within a potential EUA timeframe of 12 months from task order award. A manufacturing process used previously for FDA-approved
human immune globulin products is preferred as a means of reducing technical and regulatory risk. The process should include purification and viral inactivation/removal as necessary. BARDA anticipates that the purified product will be formulated as a liquid formulation.

The 400 doses of fill-finished drug product must be made available for clinical evaluation; the clinical trial is expected to start within 6 months of task order award. The Contractor must oversee storage and shipping of plasma, intermediates, and drug product between facilities as required. The Contractor must also conduct stability testing as required to support clinical use of the product.
C. Development and Validation/Qualification of Assays to Support Screening and Manufacturing

The Contractor shall develop assays as needed to support cGMP manufacturing, including (but not limited to) in-process, release, and stability assays. Potency assays specific to SARS-CoV-2 will need to be developed based on either wildtype SARS-CoV-2 (will require BSL-3 capabilities) or pseudotype virus (will require BSL-2 capabilities). The assays must be qualified and/or validated as appropriate using available reference standards or positive controls. This shall include the production of all analytical documentation, training and facility readiness required to support on-going testing. In the event that assays are to be subcontracted, the Contractor shall provide copies of the Supply and Quality Agreements between the Prime Contractor and Subcontractor for review prior to approval.
D. Conduct Supportive Nonclinical Studies as Required for Development of Drug Product

The Contractor shall conduct nonclinical studies to support the development of the human immune drug product, including any as specified by FDA. Supportive efficacy studies in animal models (e.g., mice or ferrets) may also be warranted (for example, for the submission of an EUA to FDA). In the event that studies are to be subcontracted, the Contractor shall provide copies of the Subcontractor Agreements between the Prime Contractor and Subcontractor for review prior to approval.
E. Prepare and Submit Regulatory Filings to FDA (including IND Submission and EUA Submission)

The Contractor shall prepare and submit regulatory filings to the FDA as required for the development and clinical use of the human immune globulin drug product, including the submission of an IND. Preliminary discussions, including (but not limited to) Pre-IND meetings, may be necessary to ensure FDA concurrence with regulatory strategy. Following the conduct of a clinical trial(s) using the drug product, the Contractor should also be prepared to support an expedited EUA submission within 12 months of task order award.
F. Support clinical trial through the delivery of cGMP drug product and all supporting information as required.

The Contractor shall support the conduct of a clinical trial evaluating the safety and efficacy of the human immune globulin drug product. BARDA anticipates that the clinical trial will be
conducted in partnership with another entity (e.g., The National Institutes of Health), who will oversee the clinical operations of the trial; the Contractor is not expected to manage the clinical operations of the trial. The Contractor is expected to support the clinical trials through the supply of clinical trial material as necessary (includes storage and shipping as necessary), while also providing all documentation and information as required by the study sponsor.
G. Provide program management and reporting as required

This task shall reimburse the cost for managing the contract in connection with the deliverables described in section F2. Schedule of Deliverable below. The following are examples of those typically required: project plans, tech transfer plans, protocols, validation reports, monthly and final reports. Additionally, regular update meetings, ad hoc meetings, periodic site visits and quarterly site visits shall be included.

## OPTIONAL TASKS

## CLIN 0002 (Option): Support for Additional Clinical Trial

A. Support clinical trial through the delivery of cGMP drug product and all supporting information as required.

The Contractor shall support the conduct of an additional a clinical trial evaluating the safety and efficacy of the human immune globulin drug product. The Contractor is expected to support the clinical trials through the supply of clinical trial material (at least 100 doses) as necessary (includes storage and shipping as necessary), while also providing all documentation and information as required by the study sponsor
B. Provide program management and reporting as required

This task shall reimburse the cost for managing the contract in connection with the deliverables described in section F2. Schedule of Deliverable below. The following are examples of those typically required: project plans, tech transfer plans, protocols, validation reports, monthly and final reports. Additionally, regular update meetings, ad hoc meetings, periodic site visits and quarterly site visits shall be included.

## D. PACKAGING AND MARKING (if applicable)

All deliverables shall be preserved, packaged, and packed in accordance with normal commercial practices to meet the packaging requirements of the carrier, including that, which is necessary, to prevent deterioration and damages due to the hazard of shipping, handling, and storing.

## E. INSPECTION AND ACCEPTANCE

Inspection and acceptance of all work, performance, reports and other deliverables, under this task order, will be performed at the Contractor's facility or approved subcontractor facility, by the Contracting Officer or the duly authorized representative of the Government.

The Contracting Officer's Representative (COR) is a duly authorized representative of the Government and is responsible for the inspection and acceptance of all items/activities to be delivered and or completed under this task order.

## F. PERFORMANCE / DELIVERABLES

## F. 1 Period of Performance

The period of performance for all optional tasks, $\underline{\text { if exercised }}$, will fall within the Task Order award date through eighteen (18) months.

Therefore, the entire period of performance for this task order will be eighteen (18) months from task order issuance. Period of performance for CLINs with stability testing beyond this date will be adjusted as needed to accommodate completion.

The location of performance should be at the CIADM Contractor's U.S.-based facility, unless otherwise authorized by the Contracting Officer. Subcontractors may be offered for specific tasks (alternate facilities); however, the CIADM Contractor's capability and capacity, as outlined in the CIADM base contract, is the USG's preferred location for executing the majority of this work

## F. 2 Schedule of Deliverables

| Task |  |  |  |
| :--- | :--- | :--- | :--- |
| CLIN0001/CLIN0002 | Deliverable Title | Format | Deliverable Due Dates |
| CLIN0001/CLIN0002 | Regular update teleconferences | BARDA and Contractor <br> to determine format | First meeting will be 2 <br> weeks post kick off <br> meeting, subsequent <br> meetings will be at a <br> frequency (as short as <br> every 2 weeks) to be <br> agreed by the Contractor <br> and BARDA |
| CLIN0001/CLIN0002 | Meeting agenda and minutes for <br> teleconferences | Contractor-determined <br> format | Agenda - draft 1 day <br> before teleconference; <br> Minutes - draft within 3 <br> days of teleconference |
| CLIN0001/CLIN0002 | Monthly Status Report | BARDA-provided <br> template | Monthly, on 15th day <br> following period |
| CLIN0001/CLIN0002 | Integrated Master Schedule | Contractor-determined <br> format | Within 60 days of contract <br> award, updated monthly |


| Task | Deliverable Title | Format | Deliverable Due Dates |
| :---: | :---: | :---: | :---: |
| CLIN0001/CLIN0002 | Incident Report | Contractor-determined format | Notification of incident within 24 hours. Draft report within 48 hours of incident. final report within 7 days of resolution |
| CLIN0001/CLIN0002 | Quality Assurance Plan | Contractor-determined format | Draft - 14 days Final - 28 days post contract award |
| CLIN0001/CLIN0002 | Risk Management Plan / Risk Register | Contractor-determined format | Within 14 days of contract award; Risk Register updated monthly |
| CLIN0001/CLIN0002 | Detailed data regarding locations where work will be performed | Contractor-determined format | Within 7 days of contract award, updated monthly |
| CLIN0001/CLIN0002 | Detailed spreadsheet on critical project materials that are sourced from a location other than the United States, | Contractor-determined format | Within 7 days of contract award, updated monthly |
| CLIN0001/CLIN0002 | Final Task Order Report and Assessment | Contractor-determined format | Draft - 14 days <br> Final - 28 days <br> post completion of task |
| CLIN0001/CLIN0002 | Continuity of Operations Plan (to continue operations in the event of a declared pandemic emergency) | Contractor-determined format | Draft - 15 days <br> Final - 30 days post award of contract |
| CLIN0001 |  |  |  |
| CLIN0001 | Plasma Collection Plan (including list of sources) | Contractor-determined format | Draft - 30 days <br> Final -60 days post award of CLIN0001 |
| CLIN0001 | Reports for Plasma Collection | Contractor-determined format | Draft - 14 days <br> Final - 28 days post completion of task |
| CLIN0001 | Final Manufacturing Report | Contractor-determined format | Draft - 14 days <br> Final - 28 days post completion of task |
| CLIN0001 | Analytical Verification Protocols | Contractor-determined format | Draft - 14 days prior to planned execution Final-2 days after protocol execution |
| CLIN0001 | Analytical Reports | Contractor-determined format | Draft - 14 days <br> Final - 28 days post completion of task |
| CLIN0001 | Validation Protocols | Contractor-determined format | Draft - 14 days prior to planned execution Final-2 days after protocol execution |
| CLIN0001 | Validation Reports | Contractor-determined format | Draft - 14 days <br> Final - 28 days <br> post completion of task |
| CLIN0001 | Fill / Finish Strategy Report | Contractor-determined format | Draft - 60 days <br> Final - 90 days post award of CLIN0001 |


| Task | Deliverable Title | Format | Deliverable Due Dates |
| :---: | :---: | :---: | :---: |
| CLIN0001 | Nonclinical Protocols (BARDA approval needed prior to study execution) | Contractor-determined format | Draft - 7 days prior to planned execution Final - 2 days after study execution |
| CLIN0001 | Nonclinical Reports | Contractor-determined format | Draft - 14 days <br> Final - 28 days <br> post completion of task |
| CLIN0001 | Regulatory Submissions to FDA (e.g., Meeting Requests, Briefing Books, etc.) | Contractor-determined format | Draft - 7 days prior to submission to FDA (or as agreed-to by the COR) Final-2 days post submission to FDA |
| CLIN0001 | Investigation New Drug (IND) Application | Contractor-determined format | Draft - 7 days prior to submission to FDA (or as agreed to by the COR), within 4 months post award of CLIN0001 Final-2 days post submission to FDA |
| CLIN0001 | Information supporting Emergency Use Authorization (EUA) Request | BARDA-determined format | Within 7 days of BARDA's request |
| CLIN0001 | Documentation of drug product as requested by Sponsor of Clinical Trial | Determined by Sponsor of clinical trial | Final - 2 days post submission to trial sponsor |
| CLIN0001 | Documentation of delivery of batch of fill-finished drug product for clinical trials | Determined by Sponsor of clinical trial | Final - 2 days post submission to trial sponsor |
| CLIN0001 | Confirmation of cumulative availability of at least 400 doses of fill-finished drug product | Contractor-determined format | Final - 2 days post completion of task |
| CLIN0002 (Option) |  |  |  |
| CLIN0002 (Option) | Regulatory Submissions to FDA (e.g., Meeting Requests, Briefing Books, etc.) | Contractor-determined format | Draft - 14 days prior to submission to FDA Final-2 days post submission to FDA |
| CLIN0002 (Option) | Documentation of drug product as requested by Sponsor of Clinical Trial | Determined by Sponsor of clinical trial | Final - 2 days post submission to trial sponsor |
| CLIN0002 (Option) | Documentation of delivery of batch of fill-finished drug product for clinical trials | Determined by Sponsor of clinical trial | Final - 2 days post submission to trial sponsor |
| CLINOOO2 (Option) | Confirmation of cumulative availability of at least 100 | Contractor-determined format | Final-2 days post completion of task |


| Task | Deliverable Title | Format | Deliverable Due Dates |
| :--- | :--- | :--- | :--- |
|  | (additional) doses of fill-finished <br> drug product |  |  |

## Meetings

## Routine Update Teleconferences

The CIADM shall participate in regular teleconferences with USG to discuss the performance of the task order. The frequency will be agreed upon by the CIADM and USG and may be dependent on the activities during that time of the task order. Typically, these meetings are held bi-weekly or monthly. The CIADM shall keep meeting minutes and forward a finalized copy to the Contracting Officer (CO) and Contracting Officer's Representative (COR) for approval within three (3) business days after each teleconference, or as otherwise authorized by the Contracting Officer.

## Person-in-Plant

CIADM shall accommodate up to three (3) BARDA personnel at any given time throughout the performance of this task order. On-site BARDA personnel will provide oversight of the work and real-time technical direction per guidance from the BARDA program office in Washington, D.C.

## Periodic Site Visits

The CIADM shall accommodate for periodic site visits by USG on an ad hoc basis. The CIADM shall keep meeting minutes and forward a finalized copy to the Contracting Officer and COR for approval within three (3) business days after each site visit, or as otherwise authorized by the CO.

## Quarterly Site Visits

The CIADM shall provide formal presentations summarizing all work accomplished in the previous calendar quarter at the CIADM's site on a quarterly basis. The CIADM shall keep meeting minutes and forward a finalized copy to the CO and COR for approval within three (3) business days after each site visit, or as otherwise authorized by the CO.

## Kick-Off Meeting

The Contractor shall participate in a kick-off meeting, within 14 days of task order award; content, format and location to be determined by the USG and the Contractor. The Contractor shall keep meeting minutes and forward a finalized copy to the Contracting Officer and COR for approval within three (3) business days after the meeting is held, or as otherwise authorized by the Contracting Officer.

## G. CONTRACT ADMINISTRATION

## G. 1 Government Personnel

(a) Contracting Officer

ASPR/BARDA/CMA
O'Neill House Office Building
Washington. DC 20015

The Contracting Officer is the only individual who can legally commit the Government to the expenditure of public funds. No person other than the Contracting Officer can make any changes to the terms, conditions, general provisions or other stipulations of this Task Order.

The Contracting Officer is also the only individual with authority to act as agent of the Government under this Task Order, with authority to (1) direct or negotiate any changes in the statement of work, (2) modify or extend the period of performance, (3) authorize reimbursement to the Contractor for any costs incurred during the performance of this Task Order and/or (5) otherwise change any terms and conditions of this Task Order.
(b) Contracting Officer's Representative

ASPR/BARDA
24H26, O'Neill House Office Building
Washington, DC 20515


ASPR/BARDA
O'Neill House Office Building
Washington, DC 20515


## G. 2 Invoicing Instructions

Invoices for payment shall be submitted as two (2) hard copies and one (1) electronic copy to the following address, and shall include SF-1034. In addition, for Cost Plus Fixed Fee (CPFF) CLINs, the CIADM shall provide supporting documentation with the invoice to support all claimed costs. This includes an itemized breakdown of all associated costs such as labor classification, labor hours, labor rate, indirect costs, timecards, etc. This shall be provided for the CIADM (prime contractor) and all subcontractors. Further invoicing details are included in Section G of the base CIADM contract.


The Government may request additional information (timecards, receipts, etc.) to support costs claimed in the Contractor's invoices.

## G. 3 Evaluation of Contractor Performance

(a) Purpose: In accordance with FAR 42.1502(a), past performance evaluations shall be prepared at least annually and at the time the work under a contract or order is completed, via CPARS, the Government-wide evaluation tool (www.cpars.gov).
(b) Evaluators: The performance evaluation will be completed jointly by the Contracting Officer's Representative and the Contracting Officer.
(c) Performance Evaluation Factors: Per FAR 42.1503(b)(2), evaluation factors for each assessment shall include, at a minimum: technical (quality of product or service); cost control; schedule/timeliness; management and business relations; small business subcontracting; other (as applicable).
(d) Contractor Review: A copy of the evaluation will be electronically sent to the Contractor as soon as practicable after completion of the evaluation. The Contractor shall submit comments, rebutting statements, or additional information to the Contracting Officer within 14 calendar days after receipt of the evaluation.
(e) Resolving Disagreements between the Government and the Contractor: Disagreements between the parties regarding the evaluation will be reviewed at a level above the Contracting Officer. The ultimate conclusion on the performance evaluation is a decision of the contracting agency. Copies of the evaluation, Contractor's response, and review comments, if any, will be retained as part of the evaluation.
(f) Release of Contractor Performance Evaluation Information: The completed evaluation will not be released to other than Government personnel and the Contractor whose performance is being evaluated. Disclosure of such information could cause harm both to the commercial interest of the Government and to the competitive position of the Contractor being evaluated, as well as impede the efficiency of Government operations.
(g) Source Selection Information: Departments and agencies may share past performance information with other Government departments and agencies when requested to support future award decisions. The information may be provided through interview and/or by sending the evaluation and comment document to the requesting source selection official.
(h) Retention Period: The agency will retain past performance information for a maximum period of 3 years after completion of contract performance for the purpose of providing source selection information for future contract awards.

## H. SPECIAL REQUIREMENTS

## H. 1 Intellectual Property

Execution of a task order may require a relationship between HHS, the firm that possesses rights to specific Intellectual Property (IP) required for the development effort (the "MCM IP Holder"), and the firm providing the Core Services under the task order (the "CIADM"). The relationship must reflect the Parties' rights to all IP developed and/or IP used in performance of the task order, and be consistent with HHS' IP rights per the Federal Acquisition Regulations (FAR) clauses described in the base contract. Prior to any performance of work, the MCM IP Holder and/or the CIADM shall provide the Contracting Officer with a written description of all IP necessary to develop (the "Description"). The Description must identify the basis for offering HHS less than unlimited rights to any pre-existing IP identified in the Description that will be utilized in performance of the task order. The Description shall also include written verification of the rights provided to HHS to any and all IP utilized or developed during performance of the task order as specified under FAR Clause $52.227-11$, FAR Clause $52.227-11$ as amended in any applicable subcontract and/or teaming agreement related to performance of the task order, FAR Clause 52.227-14 and FAR Clause 52.227-14 as amended in any applicable subcontract and/or teaming agreement (the "FAR Clauses").

The MCM IP Holder and the CIADM will remain free to negotiate any agreement of their own regarding their use of any of the IP utilized or developed during performance of an task order, so long as the negotiated agreement complies with the requirements under the FAR Clauses, and the terms contained in the agreement do not otherwise adversely affect the performance of work under the task order. The agreement shall be furnished to the Contracting Officer within five (5) calendar days after the agreement is finalized. In addition, this task order incorporates FAR Clause 52.227-1 Authorization and Consent (DEC 2007) and FAR Clause 52.227-3 Patent Indemnity (APR 1984).

## H. 2 Key Personnel

Key personnel specified in this task order are considered to be essential to work performance. At least 30 days prior to the Contractor voluntarily diverting any of the specified individuals to other programs or contracts, the Contractor shall notify the Contracting Officer and shall submit a justification for the diversion or replacement, and a request to replace the individual. The request must identify the proposed replacement and provide an explanation of how the replacement's skills, experience and credentials meet or exceed the requirements of the contract (including, when applicable, Human Subjects Testing requirements). If the employee of the Contractor is terminated for cause or separates from the Contractor voluntarily with less than 30 day notice, the Contractor shall provide the maximum notice practicable under the circumstances. The Contractor shall not divert, replace or announce any such change to key personnel without the written consent of the Contracting Officer. The task order will be modified to add or delete key personnel as necessary to reflect the agreement of the parties.

The following individuals are determined to be key personnel. The offeror may list other individual(s) it deems would fall under the Key Personnel category, for USG evaluation.

Name
Title

| Christine Hall | Principal Investigator |
| :--- | :--- |
| James O'Meara | Head of Manufacturing |
| Evelyn Van der Hart | Head of Process Development |
| Jeff Broadfoot | Head of Quality |
| Deanna Wiebe | Head of Quality Control |

## H. 3 Personnel Qualifications

The offeror shall provide curriculum vitae (CV) for each individual specified in its proposal as key personnel. The CV shall clearly describe the individual's knowledge, work experiences, registrations, and certifications, and applicable experience. The CV shall include a summary describing the individual's involvement in similar work.

## H. 4 Consultants and Sub-Contractors

If the Contractor determines that the use of Subcontractors or Consultants is needed, the Contractor is directed to submit a Contracting Officer's Authorization request.

## H. 5 No Personal Services or Inherently Governmental Function

Pursuant to FAR 37.1, no personal services shall be performed under this contract. All work requirements shall flow only from the COR to the Contractor's Project Manager. No Contractor employee will be directly supervised by the Government. All employee assignments, and daily work direction, shall be given by the applicable Contractor supervisor. If the Contractor believes any Government action or communication has been given that would create a personal services relationship between the Government and any Contractor employee, the Contractor shall promptly notify the Contracting Officer of this communication or action.

Pursuant to FAR 7.5, the Contractor shall not perform any inherently governmental actions under this contract. No Contractor employee shall hold him or herself out to be a Government employee, agent, or representative. No Contractor employee shall state orally or in writing at any time that he or she is acting on behalf of the Government. In all communications with third parties in connection with this contract, Contractor employees shall identify themselves as Contractor employees and specify the name of the company for which they work. In all communications with other Government Contractors in connection with this contract, the Contractor employee shall state that they have no authority to in any way change this contract and that if the other Contractor believes this communication to be a direction to change their contract, they shall notify the Contracting Officer for that contract and not carry out the direction until a clarification has been issued by the Contracting Officer.

The Contractor shall ensure that all of its employees working on this contract are informed of the substance of this article. Nothing in this article shall limit the Government's rights in any way under the other provisions of this contract, including those related to the Government's right to inspect and accept the services to be performed under this contract. The substance of this article shall be included in all subcontracts at any tier.

## H. 6 ADDITIONAL TERMS AND CONDITIONS

The terms and conditions applicable to this Task Order Award are as follows:

## References:

- Base Contract Number: HHSO 100201200004I
- Task Order (TO) Award Number: 75A50120F33006
- HHS reserves the right to exercise priorities and allocations authority with respect to this task order, to include rating this order in accordance with 45 CFR Part 101, Subpart A-Health Resources Priorities and Allocations System.


## Documents Incorporated By Reference:

1. Proposal dated March 20, 2020
2. Revised price proposal dated March 31, 2020

## I. FAR/HHSAR CONTRACT CLAUSES

## I. $1 \quad$ 52.232-2 Clauses Incorporated by Reference

All clauses incorporated in the base contract are in full effect at the task order level. This section or other parts of this TOR may incorporate one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. In addition, the full text of a clause may be accessed electronically at this address:
https://www.acquisition.gov/

Exhibit 9



## 12 ACCOUNTNI NNDARGFCFFLATON DATA IT IEquIEN

2020.-29900V2.25103

Met Increase:
\$946,003.00





[^0]:    ${ }^{1}$ Represents a Special Bonus Award for significant CDMO expansion related to COVID-19 in 2020.

[^1]:    * The number of options to be granted to each participant will be determined by dividing (i) the value desired to be granted to such participant as set forth in this table by (ii) the value of each option to be granted. The value of each option to be granted will be determined by multiplying (i) the closing price of the Corporation's common stock on the New York Stock Exchange on the trading day prior to the Grant Date, by (ii) a BlackScholes multiplier, which for purposes of these guidelines will be $50 \%$.
    + Closing price of the Corporation's common stock on the New York Stock Exchange on the trading day prior to the Grant Date.
    $\infty$ The third full business day after the Corporation releases the results of its operations for fiscal year 2020.

[^2]:    1 "Adjusted EBITDA Margin" on a cumulative basis is equal to the sum of Adjusted EBITDA for each year in the Performance Period divided by the sum of GAAP revenue for each year in the Performance Period. "Adjusted EBITDA" is defined as adjusted earnings before interest, taxes, depreciation and amortization, as reported by the company.
    2 "Adjusted Net Income" is equal to GAAP net income, excluding acquisition-related costs (transaction and integration), non-cash amortization charges, contingent consideration, impairment charges, exit and disposal costs, and the impact of purchase accounting on inventory step-up (for which exclusions are tax-effected utilizing the statutory U.S. federal income tax rate) and the impact of material changes in the U.S. federal income tax rate subsequent to the first year of the performance period.

[^3]:    ${ }^{1}$ Total basic dilution consists of current dilution of $11.9 \%$, comprised of 2.956 M shares available for future issuance, 3.368 M outstanding equity shares (i.e., overhang) and incremental basic dilution resulting from the potential new share requests outlined above; additional detail is provided in Exhibit 4 of the Appendix
    ${ }^{2}$ Peer dilution and historical burn rate data is provided in Exhibit 5 of the Appendix
    ${ }^{3}$ Pool duration modeling reflects 2021 grants, which are considered to be more indicative of future year grants, consisting of a total of 1.2 M shares (293K options, 366K RSUs @ 2.3 fungible ratio and 35K PSUs @ 2.3 fungible ratio)

[^4]:    Total points meet suggested buffer ( 60 points) and sufficiently meets threshold (55 points) for ISS support

[^5]:    Basic dilution is calculated as aggregate equity shares divided by common shares outstanding
    ${ }^{2}$ Pool duration modeling reflects 2021 grants, which are considered to be more indicative of future year grants, consisting of a total of 1.2 M shares ( 293 K options, 366 K RSUs @ 2.3 fungible ratio and 35K PSUs @ 2.3 fungible ratio)

[^6]:    ${ }^{1}$ Estimate reflects modeling conducted by management and is based on expected available shares for future issuance after the 2021 annual grant cycle (projected as of March 18, 2021). Modeling reflects a conservative estimate assuming full-year 2021 equity usage in Q1 of 2021; as a result, the number of shares remaining in the pool is likely to be higher when the modeling is updated after the 2021 annual grant
    ${ }^{2}$ Emergent may have an opportunity to request an incremental 600,000 additional shares if certain adjustments are made to Plan language; however, the existing Plan language provides flexibility in a number of areas and modifications are unlikely to materially change how investors view the design
    ${ }^{3}$ Average of Emergent shares granted from FY 2018 - FY 2020
    ${ }^{4}$ Assumes 2.00 multiplier applied by ISS to full-value shares; GICS 3520 (Pharmaceuticals, Biotechnology \& Life Sciences) and Russell 3000 burn rate benchmark (2021) $=7.91 \%$

[^7]:    ${ }^{1}$ Basic dilution is calculated as aggregate equity shares divided by common shares outstanding
    ${ }^{2}$ Pool duration modeling reflects 2021 grants, which are considered to be more indicative of future year grants, consisting of a total of 1.2 M shares (293K options, 366K RSUs @ 2.3 fungible ratio and 35 K PSUs @ 2.3 fungible ratio)

[^8]:    Mitchell J. Bardolf
    Director

    800 North Glebe Road
    Arlington, VA 22203

[^9]:    Note: Bio-Rad does not grant annual equity awards to Directors; no specific rationale provided
    ${ }^{2}$ Initial equity awards reflect higher grant values provided to Directors in their first year of Board service

[^10]:    Barma Bave: Fomita
    

[^11]:    6
    

[^12]:    \%
    Execmive ontcin pirormancenne companaiton

[^13]:    \%

[^14]:    *Represents a calculated value reflecting the midpoint between the "Iow" and "high" of the competitive market percentile
    信

[^15]:    ${ }^{1}$ Represents a Special Bonus Award for significant CDMO expansion related to COVID-19 in 2020.

