UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2018

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to .

Commission file number: 001-34207

Dynavax Technologies Corporation

(Exact name of registrant as specified in its charter)

Delaware	**33-0728374**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification No.)**

2929 Seventh Street, Suite 100
Berkeley, CA 94710-2753
(510) 848-5100
(Address, including Zip Code, and telephone number, including area code, of the registrant's principal executive offices)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registration was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

As of May 4, 2018, the registrant had outstanding 62,274,096 shares of common stock.

INDEX

DYNAVAX TECHNOLOGIES CORPORATION

		Page No.
PART I FINANCIAL INFORMATION		
Item 1.	Financial Statements (unaudited)	4
	Condensed Consolidated Balance Sheets as of March 31, 2018 and December 31, 2017	4
	Condensed Consolidated Statements of Operations for the Three Months Ended March 31, 2018 and 2017	5
	Condensed Consolidated Statements of Comprehensive Loss for the Three Months Ended March 31, 2018 and 2017	5
	Condensed Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2018 and 2017	6
	Notes to Condensed Consolidated Financial Statements	7
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	20
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	27
Item 4.	Controls and Procedures	27
PART II OTHER INFORMATION		
Item 1.	Legal Proceedings	28
Item 1A.	Risk Factors	29
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	45
Item 5.	Other Information	45
Item 6.	Exhibits	46
SIGNATURES		48

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to a number of risks and uncertainties. All statements that are not historical facts are forward-looking statements, including statements about our ability to successfully commercialize HEPLISAV-B®, our ability to successfully develop and timely obtain regulatory approval of SD-101 and DV281, and our other early stage compounds, our business, collaboration and regulatory strategy, our intellectual property position, our product development efforts, our ability to manufacture commercial supply and meet regulatory requirements, the timing of the introduction of our products, uncertainty regarding our capital needs and future operating results and profitability, anticipated sources of funds as well as our plans, objectives, strategies, expectations and intentions. These statements appear throughout this Quarterly Report on Form 10-Q and can be identified by the use of forward-looking language such as "may," "will," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "future," or "intend," or the negative of these terms or other variations or comparable terminology.

Actual results may vary materially from those in our forward-looking statements as a result of various factors that are identified in "Item 1A—Risk Factors" and "Item 2—Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this document. No assurance can be given that the risk factors described in this Quarterly Report on Form 10-Q are all of the factors that could cause actual results to vary materially from the forward-looking statements. All forward-looking statements speak only as of the date of this Quarterly Report on Form 10-Q. Readers should not place undue reliance on these forward-looking statements and are cautioned that any such forward-looking statements are not guarantees of future performance. We assume no obligation to update any forward-looking statements.

This Quarterly Report on Form 10-Q includes trademarks and registered trademarks of Dynavax Technologies Corporation. Products or service names of other companies mentioned in this Quarterly Report on Form 10-Q may be trademarks or registered trademarks of their respective owners. References herein to "we," "our," "us," "Dynavax" or the "Company" refer to Dynavax Technologies Corporation and its subsidiary.

ITEM 1. FINANCIAL STATEMENTS

Dynavax Technologies Corporation
Condensed Consolidated Balance Sheets
(In thousands, except per share amounts)

	March 31, 2018 (unaudited)	December 31, 2017 (Note 1)
Assets		
Current assets:		
Cash and cash equivalents	$ 36,067	$ 26,584
Marketable securities available-for-sale	214,713	165,270
Accounts and other receivables	763	854
Inventories	550	312
Intangible assets, net	-	1,306
Prepaid expenses and other current assets	3,303	3,697
Total current assets	255,396	198,023
Property and equipment, net	17,064	16,619
Intangible assets, net	18,662	-
Goodwill	2,309	2,244
Restricted cash	635	629
Other assets	1,267	1,270
Total assets	$ 295,333	$ 218,785
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 2,279	$ 4,539
Accrued research and development	4,443	4,359
Accrued liabilities	9,820	9,695
Other current liabilities	7,000	-
Total current liabilities	23,542	18,593
Long-term debt, net	99,232	-
Other long-term liabilities	6,672	643
Total liabilities	129,446	19,236
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock: $0.001 par value; 5,000 shares authorized at March 31, 2018 and December 31, 2017; no shares issued and outstanding at March 31, 2018 and December 31, 2017	-	-
Common stock: $0.001 par value; 139,000 shares authorized at March 31, 2018 and December 31, 2017; 62,254 and 61,533 shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively	62	62
Additional paid-in capital	1,112,321	1,107,693
Accumulated other comprehensive loss	(213)	(881)
Accumulated deficit	(946,283)	(907,325)
Total stockholders' equity	165,887	199,549
Total liabilities and stockholders' equity	$ 295,333	$ 218,785

See accompanying notes.

Dynavax Technologies Corporation
Condensed Consolidated Statements of Operations
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended March 31,	
	2018	2017
Revenues:		
Product revenue, net	$ 165	$ -
Grant revenue	-	148
Total revenues	165	148
Operating expenses:		
Cost of sales - product	205	-
Cost of sales - amortization of intangible assets	2,417	-
Research and development	18,966	16,345
Selling, general and administrative	16,891	6,472
Restructuring	-	2,783
Total operating expenses	38,479	25,600
Loss from operations	(38,314)	(25,452)
Other income (expense):		
Interest income	740	145
Interest expense	(1,161)	-
Other (expense) income, net	(223)	20
Net loss	$ (38,958)	$ (25,287)
Basic and diluted net loss per share	$ (0.63)	$ (0.60)
Weighted average shares used to compute basic and diluted net loss per share	61,744	41,830

Condensed Consolidated Statements of Comprehensive Loss
(In thousands)
(Unaudited)

	Three Months Ended March 31,	
	2018	2017
Net loss	$ (38,958)	$ (25,287)
Other comprehensive income (loss), net of tax:		
Unrealized loss on marketable securities available-for-sale	(22)	(29)
Cumulative foreign currency translation adjustments	690	303
Total other comprehensive income	668	274
Total comprehensive loss	$ (38,290)	$ (25,013)

See accompanying notes.

Dynavax Technologies Corporation
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Three Months Ended March 31,	
	2018	2017 (As Adjusted)
Operating activities		
Net loss	$ (38,958)	$ (25,287)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	823	789
Gain on disposal of property and equipment	-	(21)
Accretion of discounts on marketable securities	(176)	(10)
Stock compensation expense	4,799	3,821
Cost of sales - amortization of intangible assets	2,417	-
Non-cash interest expense	348	-
Changes in operating assets and liabilities:		
Accounts and other receivables	91	(123)
Inventories	(238)	-
Prepaid expenses and other current assets	394	(39)
Other assets	3	(907)
Accounts payable	349	(2,110)
Accrued liabilities and other long term liabilities	276	(1,363)
Net cash used in operating activities	(29,872)	(25,250)
Investing activities		
Acquisition of technology licenses	(9,500)	-
Purchases of marketable securities	(141,103)	(44,652)
Proceeds from maturities of marketable securities	91,815	37,875
Purchases of property and equipment, net	(897)	(234)
Net cash used in investing activities	(59,685)	(7,011)
Financing activities		
Proceeds from long-term debt, net	99,000	-
Proceeds from issuance of common stock, net	-	29,535
Tax withholding from exercise of stock options and restricted stock awards, net	(426)	(303)
Proceeds from Employee Stock Purchase Plan	255	155
Net cash provided by financing activities	98,829	29,387
Effect of exchange rate changes on cash, cash equivalents and restricted cash	217	60
Net increase (decrease) in cash, cash equivalents and restricted cash	9,489	(2,814)
Cash, cash equivalents and restricted cash at beginning of period	27,213	24,891
Cash, cash equivalents and restricted cash at end of period	$ 36,702	$ 22,077
Supplemental disclosure of cash flow information		
Cash paid during the period for interest	$ 813	$ -
Release of accrual for litigation settlement and insurance recovery (Note 6)	$ -	$ 4,050
Non-cash investing and financing activities:		
Disposal of fully depreciated property and equipment	$ 37	$ -
Non-cash acquisition of technology license	$ 12,773	$ -

See accompanying notes.

1. Organization and Summary of Significant Accounting Policies

Dynavax Technologies Corporation ("we," "our," "us," "Dynavax" or the "Company"), is a fully-integrated biopharmaceutical company focused on leveraging the power of the body's innate and adaptive immune responses through toll-like receptor ("TLR") stimulation. Our first commercial product, HEPLISAV-B® (Hepatitis B Vaccine (Recombinant), Adjuvanted), was approved by the United States Food and Drug Administration ("FDA") in November 2017 for prevention of infection caused by all known subtypes of hepatitis B virus in adults age 18 years and older. We commenced commercial shipments of HEPLISAV-B in January 2018 and deployed our field sales force in late February 2018. Our development efforts are primarily focused on stimulating the innate immune response to treat cancer in combination with other immunomodulatory agents. Our lead investigational immuno-oncology products are SD-101, currently being evaluated in Phase 2 clinical studies, and DV281, in a Phase 1 safety study. We were incorporated in California in August 1996 under the name Double Helix Corporation, and we changed our name to Dynavax Technologies Corporation in September 1996. We reincorporated in Delaware in 2000.

Basis of Presentation

Our accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and pursuant to the instructions to Form 10-Q and Article 10 of Regulation S-X. In our opinion, these unaudited condensed consolidated financial statements include all adjustments, consisting of normal recurring adjustments, which we consider necessary to present fairly our financial position and the results of our operations and cash flows. As permitted under those rules, certain footnotes or other financial information that are normally required by GAAP have been condensed or omitted. Interim-period results are not necessarily indicative of results of operations or cash flows to be expected for a full-year period or any other interim-period. The condensed consolidated balance sheet at December 31, 2017 has been derived from audited financial statements at that date, but excludes disclosures required by GAAP for complete financial statements.

The unaudited condensed consolidated financial statements and these notes should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the Securities and Exchange Commission (the "SEC").

The unaudited condensed consolidated financial statements include the accounts of Dynavax and our wholly-owned subsidiary, Dynavax GmbH. All significant intercompany accounts and transactions among these entities have been eliminated from the condensed consolidated financial statements. We operate in one business segment: the discovery, development and commercialization of biopharmaceutical products.

Liquidity and Financial Condition

As of March 31, 2018, we had cash, cash equivalents and marketable securities of $250.8 million. On February 20, 2018, we entered into a $175.0 million term loan agreement ("Loan Agreement") with CRG Servicing LLC. The Loan Agreement provides for a $175.0 million term loan facility, $100.0 million of which was borrowed at closing and, subject to the satisfaction of certain market capitalization and other borrowing conditions, up to an additional $75.0 million is available for borrowing at our option on or before July 17, 2019. During the three months ended March 31, 2018, we used $29.9 million of cash in operating activities and paid $9.5 million in fees under patent license agreements relating to HEPLISAV-B.

We have incurred significant operating losses and negative cash flows from our operations since our inception and we expect to incur significant expenses and operating losses for the foreseeable future as we continue to invest in commercialization of HEPLISAV-B, clinical trials and other development, manufacturing and regulatory activities for our immuno-oncology product candidates and discovery research and development. Until we can generate a sufficient amount of revenue from product sales, we will need to finance our operations through strategic alliance and licensing arrangements and/or future public or private debt and equity financings. Adequate financing may not be available to us on acceptable terms, or at all. If adequate funds are not available when needed, we may need to delay, reduce the scope of or put on hold one or more programs while we seek strategic alternatives, which could have an adverse impact on our ability to achieve our intended business objectives.

Our ability to raise additional capital in the equity and debt markets, should we choose to do so, is dependent on a number of factors, including, but not limited to, the market demand for our common stock, which itself is subject to a number of development and business risks and uncertainties, our creditworthiness and the uncertainty that we would be able to raise such additional capital at a price or on terms that are favorable to us.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make informed estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Management's estimates are based on historical information available as of the date of the condensed consolidated financial statements and various other assumptions we believe are reasonable under the circumstances. Actual results could differ materially from these estimates.

Summary of Significant Accounting Policies

Revenue Recognition

On January 1, 2018, we adopted Accounting Standards Codification, ("ASC") 606, Revenue from Contracts with Customers, using the modified retrospective method applied to those contracts which were not completed as of January 1, 2018. Under the modified retrospective method, results for the reporting period beginning January 1, 2018 are presented under ASC 606, while the cumulative effect of initially applying the guidance is reflected as an adjustment to the opening balance of retained earnings at January 1, 2018. Adoption of this ASU did not have a material impact on our consolidated financial statements as there were no remaining performance obligations under our license and collaboration agreements as of the adoption date.

While results for reporting periods beginning after January 1, 2018 are presented under ASC 606, prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior period. The accounting policy for revenue recognition for periods prior to January 1, 2018 is described in Note 1 of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2017.

Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. We only apply the five-step model to contracts when it is probable that we will collect the consideration we are entitled to in exchange for the goods or services we transfer to the customer. At contract inception, once the contract is determined to be within the scope of ASC 606, we assess the goods or services promised within each contract and determine those that are performance obligations, and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Product Revenue, Net

We sell our product to a limited number of wholesalers and specialty distributors in the U.S. (collectively, our "Customers"). Revenues from product sales are recognized when we have satisfied our performance obligation, which is the transfer of control of our product upon delivery to the Customer. The timing between the recognition of revenue for product sales and the receipt of payment is not significant. Because our standard credit terms are short-term and we expect to receive payment in less than one-year, there is no financing component on the related receivables. Overall, product revenue, net, reflects our best estimates of the amount of consideration to which we are entitled based on the terms of the contract. The amount of variable consideration is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue recognized will not occur in a future period. If our estimates differ significantly from actuals, we will record adjustments that would affect product revenue, net in the period of adjustment.

Reserves for Variable Consideration

Revenues from product sales are recorded at the net sales price, which includes estimates of variable consideration such as product returns, chargebacks, discounts and other fees that are offered within contracts between us and our Customers, health care providers, and others relating to our product sales. We estimate variable consideration using either the most likely amount method or the expected value method, depending on the type of variable consideration and what method better predicts the amount of consideration we expect to receive. We take into consideration relevant factors such as industry data, current contractual terms, available information about Customers' inventory, resale and chargeback data and forecasted customer buying and payment patterns, in estimating each variable consideration. The variable consideration is recorded at the time product sales is recognized, resulting in a reduction in product revenue and a reduction in accounts receivable (if the amount is due to the Customer) or as an accrued liability (if the amount is payable to a party other than a Customer). Variable consideration requires significant estimates, judgment andinformation obtained from external sources. The amount of variable consideration is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue recognized will not occur in a future period. If our estimates differ significantly from actuals, we will record adjustments that would affect product revenue, net in the period of adjustment.

Product Returns: Consistent with industry practice, we offer our Customers a limited right of return based on the product's expiration date for product that has been purchased from us. We estimate the amount of our product sales that may be returned by our Customers and record this estimate as a reduction of revenue in the period the related product revenue is recognized. We consider several factors in the estimation of potential product returns including expiration dates of the product shipped, the limited product return rights, available information about Customers' inventory, shelf life of the product and other relevant factors.

Chargebacks: Our Customers subsequently resell our product to health care providers. In addition to distribution agreements with Customers, we enter into arrangements with health care providers that provide for chargebacks and discounts with respect to the purchase of our product. Chargebacks represent the estimated obligations resulting from contractual commitments to sell product to qualified healthcare providers at prices lower than the list prices charged to Customers who directly purchase the product from us. Customers charge us for the difference between what they pay for the product and the ultimate selling price to the qualified healthcare providers. These reserves are established in the same period that the related revenue is recognized, resulting in a reduction of product revenue and accounts receivable. Chargeback amounts are generally determined at the time of resale to the qualified healthcare provider by Customers, and we issue credits for such amounts generally within a few weeks of the Customer's notification to us of the resale. Reserves for chargebacks consists of credits that we expect to issue for units that remain in the distribution channel inventories at each reporting period end that we expect will be sold to qualified healthcare providers, and chargebacks that Customers have claimed but for which we have not yet issued credit.

Trade Discounts and Allowances: We provide our Customers with discounts which include early payment incentives that are explicitly stated in our contracts, and are recorded as a reduction of revenue in the period the related product revenue is recognized.

Distribution fees: Distribution fees include fees paid to certain Customers for sales order management, data and distribution services. Distribution fees are recorded as a reduction of revenue in the period the related product revenue is recognized.

Inventories

Inventory is stated at the lower of cost or estimated net realizable value. We consider regulatory approval of product candidates to be uncertain and product manufactured prior to regulatory approval may not be sold unless regulatory approval is obtained. As such, the manufacturing costs for product candidates incurred prior to regulatory approval are not capitalized as inventory but are expensed as research and development costs. We begin capitalization of these inventory related costs once regulatory approval is obtained.

HEPLISAV-B was approved by the FDA on November 9, 2017, at which time we began to capitalize inventory costs associated with HEPLISAV-B. Prior to FDA approval of HEPLISAV-B, all costs related to the manufacturing of HEPLISAV-B that could potentially be available to support the commercial launch of our products, were charged to research and development expense in the period incurred as there was no alternative future use. We periodically analyze our inventory levels, and will write down inventory that has become obsolete, inventory that has a cost basis in excess of its estimated realizable value and inventory in excess of expected sales requirements. Expired inventory will be disposed of and the related costs written off.

Intangible Assets

We record definite-lived intangible assets related to certain capitalized milestone and license payments. After determining that the pattern of future cash flows associated with intangible asset could not be reliably estimated with a high level of precision, these assets are amortized on a straight-line basis over their remaining useful lives, which are estimated to be the remaining patent life. If our estimate of HEPLISAV-B's useful life is shorter than the remaining patent life, then the shorter period is used. We assess our intangible assets for impairment if indicators are present or changes in circumstance suggest that impairment may exist. No impairment of intangible assets has been identified during the three months ended March 31, 2018.

Research and Development Expenses and Accruals

Research and development expenses include personnel and facility-related expenses, outside contracted services including clinical trial costs, manufacturing and process development costs, research costs and other consulting services and non-cash stock-based compensation. Research and development costs are expensed as incurred. Amounts due under contracts with third parties may be either fixed fee or fee for service, and may include upfront payments, monthly payments and payments upon the completion of milestones or receipt of deliverables. Non-refundable advance payments under agreements are capitalized and expensed as the related goods are delivered or services are performed.

We contract with third parties to perform various clinical trial activities in the on-going development of potential products. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows to our vendors. Payments under the contracts depend on factors such as the achievement of certain events, successful enrollment of patients, and completion of portions of the clinical trial or similar conditions. Our accrual for clinical trials is based on estimates of the services received and efforts expended pursuant to contracts with clinical trial centers and clinical research organizations. We may terminate these contracts upon written notice and we are generally only liable for actual effort expended by the organizations to the date of termination, although in certain instances we may be further responsible for termination fees and penalties. We estimate our research and development expenses and the related accrual as of each balance sheet date based on the facts and circumstances known to us at that time. There have been no material adjustments to the prior period accrued estimates for clinical trial activities through March 31, 2018.

Restructuring

Restructuring costs are comprised of severance costs related to workforce reductions. We recognize restructuring charges when the liability is incurred. Employee termination benefits are accrued at the date management has committed to a plan of termination and employees have been notified of their termination dates and expected severance payments.

Income Taxes

We account for income taxes using the asset and liability method, under which deferred tax assets and liabilities are determined based on the differences between the financial reporting and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Tax law and rate changes are reflected in income in the period such changes are enacted. The Company includes interest and penalties related to income taxes, including unrecognized tax benefits, within income tax expense.

On December 22, 2017, President Trump signed U.S. tax reform legislation, commonly referred to as the Tax Cuts and Jobs Act (the “Tax Act”), which became effective January 1, 2018. The Tax Act significantly changes the fundamentals of U.S. corporate income taxation by, among many other things, reducing the U.S. federal corporate income tax rate to 21%, converting to a territorial tax system, and creating various income inclusion and expense limitation provisions. We have performed a review of the Tax Act, and based on information available at March 31, 2018, recorded certain provisional amounts related to the revaluation of our deferred taxes and the realization of certain tax credit carryforwards. The accounting for these provisional amounts is expected to be completed within the one year measurement period allowed under Staff Accounting Bulletin 118. Due to insufficient guidance on certain aspects of the Tax Act, such as officer’s compensation, as well as uncertainty around the GAAP treatment associated with many other parts of the Tax Act, such as the implementation of certain international provisions, we cannot be certain that all deferred tax assets and liabilities have been established for the future effects of the legislation. Therefore, the final accounting for these provisions is subject to change as further information becomes available and further analysis is complete. Additionally, given the uncertainty and complexity of these new international tax regimes, we are continuing to evaluate how these provisions will be accounted for under U.S. generally accepted accounting principles; therefore, we have not yet adopted an accounting policy for treating the effects of these provisions as either a component of income tax expense in the period the tax arises, or through adjusting our deferred tax assets and liabilities to account for the estimated future impact of the special international tax regimes.

Recent Accounting Pronouncements

Accounting Standards Update 2016-02

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2016-02, Leases (Topic 842) which outlines a comprehensive lease accounting model and supersedes the current lease guidance. The ASU requires companies to recognize lease right-of-use assets and lease liabilities by lessees for all operating leases with lease terms greater than 12 months. It also changes the definition of a lease and expands the disclosure requirements of lease arrangements. The ASU is effective for annual periods beginning after December 15, 2018 and interim periods therein on a modified retrospective basis with early adoption permitted. We are currently evaluating the impact this guidance will have on our consolidated financial statements and believe the adoption will modify our analyses and disclosures of lease agreements considering operating leases are a significant portion of the Company’s total lease commitments.

Accounting Standards Update 2017-04

In January 2017, the FASB issued ASU No. 2017-04, Intangibles – Goodwill and Other (Topic 350), which simplifies the test for goodwill impairment by eliminating a previous requirement to calculate the implied fair value of goodwill to measure a goodwill impairment charge. The ASU is effective for annual periods beginning after December 15, 2019 with early adoption permitted. The adoption is not expected to have a material impact on our consolidated financial statements.

Accounting Standards Update 2016-18

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force). This ASU requires that the reconciliation of the beginning-of-period and end-of-period amounts shown in the statement of cash flows include cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents. The amendments in this update is applied using a retrospective transition method to each period presented. The ASU is effective for annual periods beginning after December 15, 2017. We adopted ASU 2016-18 on January 1, 2018 and have presented comparable prior period cash, cash equivalents and restricted cash balances in the consolidated statements of cash flows reflecting the retrospective impact of this ASU. See Note 3.

2. Fair Value Measurements

We measure fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The accounting standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

- Level 1—Observable inputs, such as quoted prices in active markets for identical assets or liabilities;
- Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities; therefore, requiring an entity to develop its own valuation techniques and assumptions.

Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. We review the fair value hierarchy classification on a quarterly basis. Changes in the ability to observe valuation inputs may result in a reclassification of levels for certain assets or liabilities within the fair value hierarchy.

The carrying amounts of cash equivalents, accounts and other receivables, accounts payable and accrued liabilities are considered reasonable estimates of their respective fair value because of their short-term nature.

As of March 31, 2018, we measured the fair value of our $7.0 million payment to Merck Sharpe & Dohme Corp., which is due in the first quarter of 2020, based on Level 3 inputs due to the use of unobservable inputs that cannot be corroborated by observable market data. We estimated the fair value of the liability using a discounted cash flow technique using the effective interest rate on our term loan. The liability had a fair value of $5.8 million as of March 31, 2018.

Recurring Fair Value Measurements

The following table represents the fair value hierarchy for our financial assets (cash equivalents and marketable securities) measured at fair value on a recurring basis (in thousands):

	Level 1	Level 2	Level 3	Total
March 31, 2018				
Money market funds	$ 25,923	$ -	$ -	$ 25,923
U.S. treasuries	-	49,206	-	49,206
U.S. government agency securities	-	54,644	-	54,644
Corporate debt securities	-	119,099	-	119,099
Total	$ 25,923	$ 222,949	$ -	$ 248,872

	Level 1	Level 2	Level 3	Total
December 31, 2017				
Money market funds	$ 22,543	$ -	$ -	$ 22,543
U.S. treasuries	-	45,534	-	45,534
U.S. government agency securities	-	86,820	-	86,820
Corporate debt securities	-	32,916	-	32,916
Total	$ 22,543	$ 165,270	$ -	$ 187,813

Money market funds are highly liquid investments and are actively traded. The pricing information on these investment instruments is readily available and can be independently validated as of the measurement date. This approach results in the classification of these securities as Level 1 of the fair value hierarchy.

U.S. treasuries, U.S. government agency securities and corporate debt securities are measured at fair value using Level 2 inputs. We review trading activity and pricing for these investments as of each measurement date. When sufficient quoted pricing for identical securities is not available, we use market pricing and other observable market inputs for similar securities obtained from various third party data providers. These inputs represent quoted prices for similar assets in active markets or these inputs have been derived from observable market data. This approach results in the classification of these securities as Level 2 of the fair value hierarchy.

There were no transfers between Level 1 and Level 2 during the three months ended March 31, 2018.

3. Cash, Cash Equivalents, Restricted Cash and Marketable Securities

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the condensed consolidated balance sheet that sum to the total of the same amounts shown in the condensed consolidated statements of cash flows:

	March 31, 2018	December 31, 2017
Cash and cash equivalents	$ 36,067	$ 26,584
Restricted cash	635	629
Total cash, cash equivalents and restricted cash shown in the condensed consolidated statements of cash flows	$ 36,702	$ 27,213

Due to the adoption of ASU 2016-18, we have presented below, comparable prior period cash, cash equivalents and restricted cash balances as presented in the condensed consolidated statement of cash flows:

	March 31, 2017	December 31, 2016
Cash and cash equivalents	$ 21,472	$ 24,289
Restricted cash	605	602
Total cash, cash equivalents and restricted cash shown in the condensed consolidated statements of cash flows	$ 22,077	$ 24,891

Restricted cash balances relate to certificates of deposit issued as collateral to certain letters of credit issued as security to our lease arrangements. See Note 6.

Cash, cash equivalents and marketable securities consist of the following (in thousands):

	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
March 31, 2018				
Cash and cash equivalents:				
Cash	$ 1,908	$ -	$ -	$ 1,908
Money market funds	25,923	-	-	25,923
U.S. treasuries	4,000	-	-	4,000
Corporate debt securities	4,236	-	-	4,236
Total cash and cash equivalents	36,067	-	-	36,067
Marketable securities available-for-sale:				
U.S. treasuries	45,218	-	(12)	45,206
U.S. government agency securities	54,665	1	(22)	54,644
Corporate debt securities	114,931	5	(73)	114,863
Total marketable securities available-for-sale	214,814	6	(107)	214,713
Total cash, cash equivalents and marketable securities	$ 250,881	$ 6	$ (107)	$ 250,780
December 31, 2017				
Cash and cash equivalents:				
Cash	$ 4,041	$ -	$ -	$ 4,041
Money market funds	22,543	-	-	22,543
Total cash and cash equivalents	26,584	-	-	26,584
Marketable securities available-for-sale:				
U.S. treasuries	45,559	-	(25)	45,534
U.S. government agency securities	86,860	-	(40)	86,820
Corporate debt securities	32,931	-	(15)	32,916
Total marketable securities available-for-sale	165,350	-	(80)	165,270
Total cash, cash equivalents and marketable securities	$ 191,934	$ -	$ (80)	$ 191,854

The maturities of our marketable securities available-for-sale are as follows (in thousands):

	March 31, 2018	
	Amortized Cost	Estimated Fair Value
Mature in one year or less	$ 188,963	$ 188,869
Mature after one year through two years	25,851	25,844
	$ 214,814	$ 214,713

There were no realized gains or losses from the sale of marketable securities during the three months ended March 31, 2018 and 2017.

We have classified our entire investment portfolio as available-for-sale and available for use in current operations and accordingly have classified all investments as short-term. Available-for-sale securities are carried at fair value based on inputs that are observable, either directly or indirectly, such as quoted market prices for similar securities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the securities, with unrealized gains and losses included in accumulated other comprehensive loss in stockholders' equity. Realized gains and losses and declines in value, if any, judged to be other than temporary on available-for-sale securities are included in interest income or expense. The cost of securities sold is based on the specific identification method. Management assesses whether declines in the fair value of investment securities are other than temporary. In determining whether a decline is other than temporary, management considers the following factors:

- Whether the investment has been in a continuous realized loss position for over 12 months;
- the duration to maturity of our investments;
- our intention and ability to hold the investment to maturity and if it is not more likely than not that we will be required to sell the investment before recovery of the amortized cost bases;

- the credit rating, financial condition and near-term prospects of the issuer; and
- the type of investments made.

To date, there have been no declines in fair value that have been identified as other than temporary.

4. Inventories

The following table presents inventories (in thousands):

	March 31, 2018	December 31, 2017
Work-in-process	$ -	$ 312
Finished goods	550	-
Total	$ 550	$ 312

5. Intangible Assets

Intangible assets are related to certain capitalized milestone and sublicense payments. The following table presents intangible assets (in thousands):

	March 31, 2018	December 31, 2017
Intangible assets	$ 22,273	$ 2,500
Less accumulated amortization	(3,611)	(1,194)
Total	$ 18,662	$ 1,306

We recorded $2.4 million as cost of sales – amortization of intangible assets for the three months ended March 31, 2018. See Note 7.

6. Commitments and Contingencies

We lease our facilities in Berkeley, California (“Berkeley Lease”) and Düsseldorf, Germany (“Düsseldorf Lease”) under operating leases that expire in December 2025 and March 2023, respectively. The Berkeley Lease provides for periods of escalating rent. The total cash payments over the life of the Berkeley Lease and Dusseldorf Lease are divided by the total number of months in the lease period and the average rent is charged to expense each month during the lease period.

Total rent expense related to our operating leases for the three month periods ended March 31, 2018 and 2017, was $0.7 million and $0.6 million, respectively. Deferred rent was $0.8 million and $0.6 million as of March 31, 2018 and December 31, 2017, respectively.

In February 2018, we entered into a $175.0 million term loan agreement. Borrowings under the term loan agreement in the amount of $100.2 million is payable at maturity on December 31, 2023, unless earlier prepaid. See Note 8.

In February 2018, we entered into a sublicense agreement with Merck Sharpe & Dohme Corp. Under the agreement, we are required to make future payments of $7.0 million each in both 2019 and 2020. See Note 7.

We have entered into material long-term commitments with commercial manufacturers for the supply of HEPLISAV-B and SD-101. To the extent these long-term commitments are non-cancelable, they are reflected in the table below.

Future payments under the term loan agreement, sublicense agreement, minimum payments under the non-cancelable portion of our operating leases and non-cancelable purchase commitments at March 31, 2018, are as follows (in thousands):

Years ending December 31,		
2018 (remaining)	$	13,442
2019		9,693
2020		9,754
2021		2,567
2022		2,558
Thereafter		109,816
Total	$	147,830

In addition to the non-cancelable commitments included above, we have entered into contractual arrangements that obligate us to make payments to the contractual counterparties upon the occurrence of future events. In addition, in the normal course of operations, we have entered into license and other agreements and intend to continue to seek additional rights relating to compounds or technologies in connection with our discovery, manufacturing and development programs. Under the terms of the agreements, we may be required to pay future up-front fees, milestones and royalties on net sales of products originating from the licensed technologies, if any, or other payments contingent upon the occurrence of future events that cannot reasonably be estimated.

We rely on and have entered into agreements with research institutions, contract research organizations and clinical investigators as well as clinical and commercial material manufacturers. These agreements are terminable by us upon written notice. Generally, we are liable only for actual effort expended by the organizations at any point in time during the contract through the notice period.

From time to time, we may be involved in claims, suits, and proceedings arising from the ordinary course of our business, including actions with respect to intellectual property claims, commercial claims, and other matters. Such claims, suits, and proceedings are inherently uncertain and their results cannot be predicted with certainty. Regardless of the outcome, such legal proceedings can have an adverse impact on us because of legal costs, diversion of management resources, and other factors. In addition, it is possible that a resolution of one or more such proceedings could result in substantial damages, fines, penalties or orders requiring a change in our business practices, which could in the future materially and adversely affect our financial position, financial statements, results of operations, or cash flows in a particular period.

On September 7, 2016, we entered into a Stipulation of Settlement to settle the case entitled In re Dynavax Technologies Securities Litigation filed in 2013. The settlement, which was approved by the U.S. District Court for the Northern District of California on February 6, 2017, provided for a payment of $4.1 million by us and results in a dismissal and release of all claims against all defendants, including us. The settlement was paid by our insurers in February 2017.

In conjunction with a financing arrangement with Symphony Dynamo, Inc. and Symphony Dynamo Holdings LLC (“Holdings”) in November 2009, we agreed to make contingent cash payments to Holdings equal to 50% of the first $50 million from any upfront, pre-commercialization milestone or similar payments received by us from any agreement with any third party with respect to the development and/or commercialization of cancer and hepatitis C therapies originally licensed to Symphony Dynamo, Inc., including SD-101. We have made no payments and have not recorded a liability as of March 31, 2018.

7. Collaborative Research, Development and License Agreements

AstraZeneca

Pursuant to a research collaboration and license agreement with AstraZeneca AB (“AstraZeneca”), as amended, we discovered and performed initial clinical development of AZD1419, a TLR9 agonist product candidate for the treatment of asthma. In June 2016, all of our remaining performance obligations under our agreement with AstraZeneca were completed.

Under the terms of the agreement, as amended, we are eligible to receive up to approximately $100 million in additional milestone payments, based on the achievement of certain development and regulatory objectives. Additionally, upon commercialization of AZD1419, we are eligible to receive tiered royalties ranging from the mid to high single-digits based on product sales of any products originating from the collaboration. We have the option to co-promote in the United States products arising from the collaboration, if any. AstraZeneca has the right to sublicense its rights upon our prior consent.

Absent early termination, the agreement will expire when all of AstraZeneca’s payment obligations expire. AstraZeneca has the right to terminate the agreement at any time upon prior written notice and either party may terminate the agreement early upon written notice if the other party commits an uncured material breach of the agreement.

Merck, Sharp & Dohme Corp.

In February 2018, we entered into a Sublicense Agreement (the "Sublicense Agreement") with Merck Sharpe & Dohme Corp. (the "Sublicensor"). The Sublicense Agreement grants us, under certain non-exclusive U.S. patent rights controlled by the Sublicensor which relate to recombinant production of Hepatitis B surface antigen, the right to manufacture, use, offer for sale, sell and import HEPLISAV-B, adult Hepatitis B Vaccine, to prevent hepatitis B and diseases caused by hepatitis B in the United States and includes the right to grant further sublicenses. Under the terms of the Sublicense Agreement, we are obligated to pay $21.0 million in three installments. The first installment of $7.0 million was paid in February 2018 and the remaining two payments of $7.0 million each are due in the first quarter of each of 2019 and 2020. The payments in 2019 and 2020 are classified on the condensed consolidated balance sheets as other current liabilities and other long-term liabilities, respectively. We recorded $19.8 million as an intangible asset on the condensed consolidated balance sheets, which reflects the present value of the long-term portion of the liability. See Note 5. The agreement continues in effect through April 2020, at which time the license becomes perpetual, irrevocable, fully paid-up and royalty free license.

Coley Pharmaceutical Group, Inc.

In June 2007, we entered into a license agreement with Coley Pharmaceutical Group, Inc. ("Coley"), under which Coley granted us a non-exclusive, royalty bearing license to patents, with the right to grant sublicenses for HEPLISAV-B. We met one of the regulatory milestones upon FDA approval of HEPLISAV-B in November 2017 and paid $2.5 million in January 2018 to Coley which is recorded as an intangible asset on the condensed consolidated balance sheets. See Note 5. The agreement terminated in February 2018, at which time the license became a perpetual, irrevocable, fully paid-up and royalty free license. As of March 31, 2018, the $2.5 million intangible asset has been fully amortized.

8. Long-Term Debt

On February 20, 2018, we entered into a $175.0 million term loan agreement ("Loan Agreement") with CRG Servicing LLC. The Loan Agreement provides for a $175.0 million term loan facility, $100.0 million of which was borrowed at closing ("Initial Term Loan") and, subject to the satisfaction of certain market capitalization and other borrowing conditions, up to an additional $75.0 million is available for borrowing at our option on or before July 17, 2019 (together with the Initial Term Loan, the "Term Loans"). Net proceeds from the Initial Term Loan were $99.0 million. The Term Loans under the Loan Agreement bear interest at a rate equal to 9.5% per annum. At March 31, 2018, the effective interest rate was 10.1%. At our option, until September 30, 2023, a portion of the interest payments may be paid in kind, and thereby added to the principal. In March 2018, a portion of our interest was paid in kind, which increased the principal amount of the Term Loans to $100.2 million. The Term Loans have a maturity date of December 31, 2023, unless earlier prepaid. The Term Loans will be entirely payable at maturity.

The obligations under the Loan Agreement are secured, subject to customary permitted liens and other agreed upon exceptions, by a perfected security interest in (i) all tangible and intangible assets of the Company and any future subsidiary guarantors, except for certain customary excluded property, and (ii) all of the capital stock owned by the Company and such future subsidiary guarantors (limited, in the case of the stock of certain non-U.S. subsidiaries of the Company and certain U.S. subsidiaries substantially all of whose assets consist of equity interests in non-U.S. subsidiaries, to 65% of the capital stock of such subsidiaries, subject to certain exceptions). The obligations under the Loan Agreement will be guaranteed by each of the Company's future direct and indirect subsidiaries (other than certain non-U.S. subsidiaries of the Company and certain U.S. subsidiaries substantially all of whose assets consist of equity interests in non-U.S. subsidiaries, subject to certain exceptions). The Loan Agreement contains customary covenants and requires us to comply with a $15.0 million daily minimum combined cash and investment balance covenant and an annual revenue requirement starting in 2019 for sales of HEPLISAV-B.

The Term Loans may be prepaid by us at any time. If the Term Loans are prepaid prior to the second anniversary of the initial borrowing date, we are subject to a repayment premium of up to 7.0% of the principal amount prepaid, depending on the date of prepayment.

We recorded $1.1 million of interest expense during the three months ended March 31, 2018.

9. Revenue Recognition

Our source of product revenue for three months ended March 31, 2018, consists of sales of HEPLISAV-B in the U.S. The following table summarizes balances and activity in each of the product revenue allowance and reserve categories for the three months ended March 31, 2018 (in thousands):

	Chargebacks, discounts and other fees	Returns	Total
Balance at December 31, 2017	$ -	$ -	$ -
Provision related to current period sales	73	13	86
Credit or payments made during the period	(1)	-	(1)
Balance at March 31, 2018	$ 72	$ 13	$ 85

At March 31, 2018, $66,000 of these reserves were classified as reductions of accounts receivable on the condensed consolidated balance sheets and $19,000 were classified as accrued liabilities.

10. Net Loss Per Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of common shares outstanding during the period and giving effect to all potentially dilutive common shares using the treasury-stock method. For purposes of this calculation, outstanding options and stock awards are considered to be potentially dilutive common shares and are only included in the calculation of diluted net loss per share when their effect is dilutive. Stock options and stock awards totaling approximately 8,394,000 and 5,670,000 shares of common stock as of March 31, 2018 and 2017, respectively, were excluded from the calculation of diluted net loss per share for the three months ended March 31, 2018 and 2017, because the effect of their inclusion would have been anti-dilutive. For periods in which we have a net loss and no instruments are determined to be dilutive, such as the three months ended March 31, 2018 and 2017, basic and diluted net loss per share are the same.

11. Common Stock

Common Stock Outstanding

As of March 31, 2018, there were 62,254,091 shares of our common stock outstanding.

12. Equity Plans and Stock-Based Compensation

Option activity under our stock-based compensation plans during the three months ended March 31, 2018 was as follows (in thousands except per share amounts):

	Shares Underlying Outstanding Options (in thousands)	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Balance at December 31, 2017	3,555	$ 19.56		
Options granted	1,807	16.81		
Options exercised	(25)	14.67		
Options cancelled:				
Options forfeited (unvested)	(2)	21.00		
Options cancelled (vested)	(28)	50.70		
Balance at March 31, 2018	5,307	$ 18.47	6.18	$ 15,064
Vested and expected to vest at March 31, 2018	5,030	$ 18.56	6.12	$ 14,156
Exercisable at March 31, 2018	2,462	$ 20.55	5.61	$ 4,985

Restricted stock unit activity under our stock-based compensation plans during the three months ended March 31, 2018 was as follows (in thousands except per share amounts):

	Number of Shares (In thousands)	Weighted-Average Grant-Date Fair Value
Non-vested as of December 31, 2017	2,443	$ 6.01
Granted	433	16.12
Vested	(681)	5.33
Forfeited	-	-
Non-vested as of March 31, 2018	2,195	$ 8.21

The aggregate intrinsic value of the restricted stock units outstanding as of March 31, 2018, based on our stock price on that date, was $43.6 million. Fair value of restricted stock units is determined at the date of grant using our closing stock price.

As of March 31, 2018, approximately 151,000 shares underlying stock options and approximately 14,500 restricted stock unit awards with performance-based vesting criteria were outstanding. Vesting criteria for 11,000 of the awards with performance-based vesting criteria were not probable as of March 31, 2018.

Under our stock-based compensation plans, option awards generally vest over a three or four-year period contingent upon continuous service, and expire seven to ten years from the date of grant (or earlier upon termination of continuous service). The fair value-based measurement of each option is estimated on the date of grant using the Black-Scholes option valuation model.

The fair value-based measurements and weighted-average assumptions used in the calculations of these measurements are as follows:

	Stock Options		Employee Stock Purchase Plan	
	Three Months Ended March 31,		Three Months Ended March 31,	
	2018	2017	2018	2017
Weighted-average fair value	$ 10.84	$ 4.31	$ 10.39	$ 2.34
Risk-free interest rate	2.6%	2.0%	2.1%	0.9%
Expected life (in years)	4.5	4.5	1.3	1.3
Volatility	0.8	0.9	1.1	1.0

Compensation expense is based on awards ultimately expected to vest and reflects estimated forfeitures. The components of stock-based compensation expense were (in thousands):

	Three Months Ended March 31,	
	2018	2017
Research and development	$ 2,187	$ 1,963
Selling, general and administrative	2,589	1,858
Cost of sales - product	23	-
Total	$ 4,799	$ 3,821

As of March 31, 2018, the total unrecognized compensation cost related to non-vested equity awards including all awards with time-based vesting amounted to $40.1 million, which is expected to be recognized over the remaining weighted-average vesting period of 2.2 years. Additionally, as of March 31, 2018, the total unrecognized compensation cost related to equity awards with performance-based vesting criteria amounted to $1.5 million.

Employee Stock Purchase Plan

The 2014 Employee Stock Purchase Plan, as amended, (the “Purchase Plan”) provides for the purchase of common stock by eligible employees and became effective on May 28, 2014. The purchase price per share is the lesser of (i) 85% of the fair market value of the common stock on the commencement of the offer period (generally, the sixteenth day in February or August) or (ii) 85% of the fair market value of the common stock on the exercise date, which is the last day of a purchase period (generally, the fifteenth day in February or August). For the three months ended March 31, 2018, employees have acquired 57,788 shares of our common stock under the Purchase Plan and 40,439 shares of our common stock remained available for future purchases under the Purchase Plan.

13. Restructuring

In January 2017, we implemented organizational restructuring and cost reduction plans to align around our immuno-oncology business while allowing us to advance HEPLISAV-B through the FDA review and approval process. To achieve these cost reductions, we suspended manufacturing activities, commercial preparations and other long term investment related to HEPLISAV-B and reduced our global workforce by approximately 40 percent. In the first quarter of 2017 we recorded charges of $2.8 million related to severance, other termination benefits and outplacement services. All of the $2.8 million was paid in 2017.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements that involve a number of risks and uncertainties. Our actual results could differ materially from those indicated by forward-looking statements as a result of various factors, including but not limited to, the period for which we estimate our cash resources are sufficient, the availability of additional funds, as well as those set forth under "Risk Factors" and those that may be identified from time to time in our reports and registration statements filed with the Securities and Exchange Commission.

The following discussion and analysis is intended to provide an investor with a narrative of our financial results and an evaluation of our financial condition and results of operations. This discussion should be read in conjunction with the unaudited Condensed Consolidated Financial Statements and related Notes included in Item 1 of this Quarterly Report on Form 10-Q and the Consolidated Financial Statements and related Notes and Management's Discussion and Analysis of Financial Condition and Results of Operations contained in our Annual Report on Form 10-K for the year ended December 31, 2017.

Overview

We are a fully-integrated biopharmaceutical company focused on leveraging the power of the body's innate and adaptive immune responses through toll-like receptor ("TLR") stimulation. Our first commercial product, HEPLISAV-B® (Hepatitis B Vaccine (Recombinant), Adjuvanted), was approved by the United States Food and Drug Administration ("FDA") in November 2017 for prevention of infection caused by all known subtypes of hepatitis B virus in adults age 18 years and older. We commenced commercial shipments of HEPLISAV-B in January 2018 and deployed our field sales force in late February 2018. Our development efforts are primarily focused on stimulating the innate immune response to treat cancer in combination with other immunomodulatory agents. Our lead investigational immuno-oncology products are SD-101, currently being evaluated in Phase 2 clinical studies, and DV281, in a Phase 1 safety study.

Our lead investigational immuno-oncology product is SD-101. SD-101 is currently being evaluated in a Phase 2 clinical study in melanoma and in head and neck squamous cell carcinoma. We are conducting a research and clinical program intended to assess potential efficacy of SD-101 in a range of tumors and in combination with a range of treatments, including checkpoint inhibitors and other therapies, and expect additional studies will be initiated during 2018.

Our second immuno-oncology product candidate is DV281, a novel investigational TLR9 agonist designed specifically for focused delivery to primary lung tumors and lung metastases as an inhaled aerosol. In October 2017, we announced initiation of dosing in a Phase 1b study of inhaled DV281, in combination with anti-PD-1 therapy, in patients with non-small cell lung cancer.

In addition to the research programs we are conducting and product candidates we are developing, we discovered and licensed to AstraZeneca AB ("AstraZeneca") an inhaled TLR agonist, AZD1419, which is being developed by AstraZeneca for the treatment of asthma pursuant to a collaboration and license agreement. AstraZeneca initiated a Phase 2a trial in 2016.

Our revenues have historically consisted of amounts earned from collaborations, grants and fees from services and licenses. Product revenue will depend on our ability to successfully market HEPLISAV-B and our product candidates, if they are approved. We recorded $0.2 million of net product revenue related to the sales of HEPLISAV-B for the three months ended March 31, 2018.

We expect to incur significant expenses and operating losses for the foreseeable future as we continue to invest in commercialization of HEPLISAV-B, clinical trials and other development, manufacturing and regulatory activities for our immuno-oncology product candidates and discovery research and development. Until we can generate a sufficient amount of revenue from product sales, we will need to finance our operations through strategic alliance and licensing arrangements and/or future public or private debt and equity financings. Adequate financing may not be available to us on acceptable terms, or at all. If adequate funds are not available when needed, we may need to delay, reduce the scope of or put on hold one or more programs while we seek strategic alternatives.

Our ability to raise additional capital in the equity and debt markets, should we choose to do so, is dependent on a number of factors, including, but not limited to, the market demand for our common stock, which itself is subject to a number of development and business risks and uncertainties, our creditworthiness and the uncertainty that we would be able to raise such additional capital at a price or on terms that are favorable to us. Raising additional funds through the issuance of equity or debt securities could result in dilution to our existing stockholders, increased fixed payment obligations, or both. In addition, these securities may have rights senior to those of our common stock and could include covenants that would restrict our operations.

Critical Accounting Policies and the Use of Estimates

The accompanying discussion and analysis of our financial condition and results of operations are based upon our condensed consolidated financial statements and the related disclosures, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet dates and the reported amounts of revenues and expenses for the periods presented. On an ongoing basis, we evaluate our estimates, assumptions and judgments described below that have the greatest potential impact on our condensed consolidated financial statements, including those related to revenue recognition, research and development activities and stock-based compensation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Accounting assumptions and estimates are inherently uncertain and actual results may differ materially from these estimates under different assumptions or conditions.

Revenue Recognition

On January 1, 2018, we adopted Accounting Standards Codification, ("ASC") 606, Revenue from Contracts with Customers, using the modified retrospective method applied to those contracts which were not completed as of January 1, 2018. Under the modified retrospective method, results for the reporting period beginning January 1, 2018 are presented under ASC 606, while the cumulative effect of initially applying the guidance is reflected as an adjustment to the opening balance of retained earnings at January 1, 2018. Adoption of this ASU did not have a material impact on our consolidated financial statements as there were no remaining performance obligations under our license and collaboration agreements as of the adoption date.

While results for reporting periods beginning after January 1, 2018 are presented under ASC 606, prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior period. The accounting policy for revenue recognition for periods prior to January 1, 2018 is described in Note 1 of the Notes to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2017.

Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. We only apply the five-step model to contracts when it is probable that we will collect the consideration we are entitled to in exchange for the goods or services we transfer to the customer. At contract inception, once the contract is determined to be within the scope of ASC 606, we assess the goods or services promised within each contract and determine those that are performance obligations, and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Product Revenue, Net

We sell our product to a limited number of wholesalers and specialty distributors in the U.S. (collectively, our "Customers"). Revenues from product sales are recognized when we have satisfied our performance obligation, which is the transfer of control of our product upon delivery to the Customer. The timing between the recognition of revenue for product sales and the receipt of payment is not significant. Because our standard credit terms are short-term and we expect to receive payment in less than one-year, there is no financing component on the related receivables. Overall, product revenue, net, reflects our best estimates of the amount of consideration to which we are entitled based on the terms of the contract. The amount of variable consideration is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue recognized will not occur in a future period. If our estimates differ significantly from actuals, we will record adjustments that would affect product revenue, net in the period of adjustment.

Reserves for Variable Consideration

Revenues from product sales are recorded at the net sales price, which includes estimates of variable consideration such as product returns, chargebacks, discounts and other fees that are offered within contracts between us and our Customers, health care providers, and others relating to our product sales. We estimate variable consideration using either the most likely amount method or the expected value method, depending on the type of variable consideration and what method better predicts the amount of consideration we expect to receive. We take into consideration relevant factors such as industry data, current contractual terms, available information about Customers' inventory, resale and chargeback data and forecasted customer buying and payment patterns, in estimating each variable consideration. The variable consideration is recorded at the time product sales is recognized, resulting in a reduction in product revenue and a reduction in accounts receivable (if the amount is due to the Customer) or as an accrued liability (if the amount is payable to a party other than a Customer). Variable consideration requires significant estimates, judgment and information obtained from external sources. The amount of variable consideration is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue recognized will not occur in a future period. If our estimates differ significantly from actuals, we will record adjustments that would affect product revenue, net in the period of adjustment.

Product Returns: Consistent with industry practice, we offer our Customers a limited right of return based on the product's expiration date for product that has been purchased from us. We estimate the amount of our product sales that may be returned by our Customers and record this estimate as a reduction of revenue in the period the related product revenue is recognized. We consider several factors in the estimation of potential product returns including expiration dates of the product shipped, the limited product return rights, available information about Customers' inventory, shelf life of the product and other relevant factors.

Chargebacks: Our Customers subsequently resell our product to health care providers. In addition to distribution agreements with Customers, we enter into arrangements with health care providers that provide for chargebacks and discounts with respect to the purchase of our product. Chargebacks represent the estimated obligations resulting from contractual commitments to sell product to qualified healthcare providers at prices lower than the list prices charged to Customers who directly purchase the product from us. Customers charge us for the difference between what they pay for the product and the ultimate selling price to the qualified healthcare providers. These reserves are established in the same period that the related revenue is recognized, resulting in a reduction of product revenue and accounts receivable. Chargeback amounts are generally determined at the time of resale to the qualified healthcare provider by Customers, and we issue credits for such amounts generally within a few weeks of the Customer's notification to us of the resale. Reserves for chargebacks consists of credits that we expect to issue for units that remain in the distribution channel inventories at each reporting period end that we expect will be sold to qualified healthcare providers, and chargebacks that Customers have claimed but for which we have not yet issued credit.

Trade Discounts and Allowances: We provide our Customers with discounts which include early payment incentives that are explicitly stated in our contracts, and are recorded as a reduction of revenue in the period the related product revenue is recognized.

Distribution fees: Distribution fees include fees paid to certain Customers for sales order management, data and distribution services. Distribution fees are recorded as a reduction of revenue in the period the related product revenue is recognized.

Results of Operations

Revenues

Revenues have historically consisted of amounts earned from collaborations, grants and fees from services and licenses and royalty payments. Commercial shipments of HEPLISAV-B commenced in January 2018, resulting in product revenue in the three months ended March 31, 2018.

The following is a summary of our revenues (in thousands, except for percentages):

	Three Months Ended March 31,		Increase (Decrease) from 2017 to 2018	
Revenues:	**2018**	**2017**	**$**	**%**
Product revenue, net	$ 165	$ -	$ 165	NM
Grant revenue	-	148	(148)	NM
Total revenues	$ 165	$ 148	$ 17	11%

Product revenue, net, of $0.2 million for three months ended March 31, 2018, consists of sales of HEPLISAV-B in the U.S. Revenue from product sales is recorded at the net sales price which includes estimates of product returns, chargebacks, discounts and other fees. Overall, product revenue, net, reflects our best estimates of the amount of consideration to which we are entitled based on the terms of the contract. Actual amounts of consideration ultimately received may differ from our estimates. If actual results in the future vary from our estimates, we will adjust these estimates, which would affect net product revenue and earnings in the period such variances become known. Grant revenue decreased as there was no research and development work performed under a contract with the National Institutes of Health in the three months ended March 31, 2018.

Cost of Sales - Product

Cost of sales - product of $0.2 million for the three months ended March 31, 2018, is related to certain fill, finish and overhead costs for HEPLISAV-B incurred after FDA approval. Prior to FDA approval of HEPLISAV-B, all costs related to the manufacturing of HEPLISAV-B, that could potentially be available to support the commercial launch of our products, were charged to research and development expense in the period incurred as there was no alternative future use. We expect to use inventory previously expensed to research and development over approximately the next 6 months, and accordingly we expect our cost of sales of HEPLISAV-B to increase as a percentage of net sales in future periods as we produce and then sell inventory that reflects the full cost of manufacturing the product.

Cost of Sales - Amortization of Intangible Assets

Cost of sales - amortization of intangible assets of $2.4 million for three months ended March 31, 2018 consists of amortization of the intangible asset recorded as a result of a regulatory milestone and sublicense fee to Coley Pharmaceutical Group, Inc. (“Coley”) and Merck Sharpe & Dohme Corp. (“Merck”) upon or after FDA approval of HEPLISAV-B in November 2017. At March 31, 2018, the intangible asset related to Coley has been fully-amortized. At March 31, 2018, the intangible asset related to Merck of $18.7 million has an estimated remaining useful life through the patent expiration date in April 2020.

Research and Development Expense

Research and development expense consists, primarily, of compensation and related personnel costs (which include benefits, recruitment, travel and supply costs), outside services, allocated facility costs and non-cash stock-based compensation. Outside services consist of costs associated with clinical development, preclinical discovery and development, regulatory filings and research, including fees and expenses incurred by contract research organizations, clinical study sites, and other service providers and costs of manufacturing product candidates prior to approval. Prior to FDA approval, we recorded as research and development expense costs of acquiring, developing and manufacturing HEPLISAV-B. The following is a summary of our research and development expense (in thousands, except for percentages):

	Three Months Ended March 31,		Increase (Decrease) from 2017 to 2018	
Research and Development:	**2018**	**2017**	**$**	**%**
Compensation and related personnel costs	$ 8,599	$ 8,180	$ 419	5%
Outside services	5,666	4,038	1,628	40%
Facility costs	2,513	2,164	349	16%
Non-cash stock-based compensation	2,188	1,963	225	11%
Total research and development	$ 18,966	$ 16,345	$ 2,621	16%

Compensation and related personnel costs and non-cash stock-based compensation increased due to an overall increase in headcount to support the ongoing development of SD-101 and earlier stage oncology programs and costs associated with resuming operating activities at our production facility in Dusseldorf. Outside services expense increased, primarily, due to manufacturing activities for pre-filled syringes (“PFS”) of HEPLISAV-B prior to regulatory approval of the PFS and the ongoing development of SD-101. Facility costs, which includes an overhead allocation primarily comprised of occupancy and related expenses, increased due to an overall higher facility-related costs and an increase in headcount.

We expect research and development spending to increase in 2018 in connection with the discovery, development and manufacturing of our product candidates, particularly SD-101 and DV281.

Selling, General and Administrative Expense

Selling, general and administrative expense consists primarily of compensation and related costs for our commercial support personnel, medical education professionals and personnel in executive and other administrative functions, including legal, finance and information technology; costs for outside services such as costs for sales and marketing, post-marketing studies of HEPLISAV-B, accounting, commercial development, consulting, business development, investor relations and insurance; legal costs that include corporate and patent-related expenses; allocated facility costs and non-cash stock-based compensation.

The following is a summary of our selling, general and administrative expense (in thousands, except for percentages):

	Three Months Ended March 31,		Increase (Decrease) from 2017 to 2018	
Selling, General and Administrative:	**2018**	**2017**	**$**	**%**
Compensation and related personnel costs	$ 3,548	$ 2,176	$ 1,372	63%
Outside services	9,048	1,500	7,548	503%
Legal costs	1,211	713	498	70%
Facility costs	496	225	271	120%
Non-cash stock-based compensation	2,588	1,858	730	39%
Total selling, general and administrative	$ 16,891	$ 6,472	$ 10,419	161%

Compensation and related personnel costs and non-cash stock-based compensation increased, primarily, due to an increase in employee headcount to support HEPLISAV-B commercial activities. Outside services increased due to an overall increase in HEPLISAV-B sales, marketing and commercial activities, including full-deployment of a contract sales force, post-marketing studies and consultants for commercial development services. The increase in legal costs was due to higher use of outside counsel costs in connection with the loan financing, SEC filings and patent preparation and prosecution.

We expect our selling, general and administrative expenses to increase in 2018 in support of HEPLISAV-B commercial activities and post-marketing studies, ongoing support for our other product candidates and increasing costs of operating as a public company.

Restructuring

In January 2017, we implemented organizational restructuring and cost reduction plans to align around our immuno-oncology business while allowing us to advance HEPLISAV-B through the FDA review and approval process. To achieve these cost reductions, we suspended manufacturing activities, commercial preparations and other long term investment related to HEPLISAV-B and reduced our global workforce by approximately 40 percent. In the first quarter of 2017 we recorded charges of $2.8 million related to severance, other termination benefits and outplacement services. All of the $2.8 million was paid in 2017.

Interest Income, Interest Expense and Other Income (Expense), Net

Interest income is reported net of amortization of premiums and discounts on marketable securities and realized gains and losses on investments. Interest expense includes the stated interest and accretion of discount and end of term fee related long-term debt agreement entered into in February 2018. Other (expense) income, net includes gains and losses on foreign currency transactions and disposal of property and equipment.

The following is a summary of our interest income, interest expense and other (expense) income, net (in thousands, except for percentages):

	Three Months Ended March 31,		Increase (Decrease) from 2017 to 2018	
	2018	**2017**	**$**	**%**
Interest income	$ 740	$ 145	$ 595	410%
Interest expense	$ (1,161)	$ -	$ 1,161	100%
Other (expense) income, net	$ (223)	$ 20	$ (243)	(1,215)%

Interest income for the first quarter of 2018 increased due to a higher average investment balance. Interest expense for the first quarter of 2018 increased due to the $100.0 million we borrowed on February 20, 2018 under a term loan agreement with CRG Servicing LLC. The change in other (expense) income, net is primarily due to foreign currency transactions resulting from fluctuations in the value of the Euro compared to the U.S. dollar.

Liquidity and Capital Resources

As of March 31, 2018, we had $250.8 million in cash, cash equivalents and marketable securities. Since our inception, we have relied primarily on the proceeds from public and private sales of our equity securities, borrowings, government grants and revenues from collaboration agreements to fund our operations. Our funds are currently invested in money market funds, U.S. treasuries, U.S. government agency securities and corporate debt securities.

In February 2018, we entered into a $175.0 million term loan agreement ("Loan Agreement") with CRG Servicing LLC. The Loan Agreement provides for a $175.0 million term loan facility, $100.0 million of which was borrowed at closing and, subject to the satisfaction of certain market capitalization and other borrowing conditions, up to an additional $75.0 million is available for borrowing at our option on or before July 17, 2019. The loans have a maturity date of December 31, 2023, unless earlier prepaid.

During the three months ended March 31, 2018, we used $29.9 million of cash for our operations primarily due to our net loss of $39.0 million, of which $8.2 million consisted of non-cash charges such as stock-based compensation, amortization of intangible assets, depreciation and amortization, non-cash interest expense and accretion and amortization on marketable securities. By comparison, during the three months ended March 31, 2017, we used $25.3 million of cash for our operations primarily due to a net loss of $25.3 million, of which $4.6 million consisted of non-cash charges such as stock-based compensation, depreciation and amortization and accretion and amortization on marketable securities. We also recorded charges of $2.8 million primarily related to severance, resulting from implementation of organizational restructuring and cost reduction plans in January 2017. Cash used in our operations during the first three months of 2018 increased by $4.6 million. Net cash used in operating activities is impacted by changes in our operating assets and liabilities due to timing of cash receipts and expenditures.

During the three months ended March 31, 2018, net cash used in investing activities was $59.7 million compared to $7.0 million in net cash used in investing activities for the three months ended March 31, 2017. Cash used in investing activities during the first three months of 2018 included $49.3 million of net purchases of marketable securities compared with $6.8 million of net purchases of marketable securities during the first three months of 2017. Cash used in investing activities during the first three months of 2018 also included $9.5 million of milestone and sublicense payments to Coley and Merck. Cash used in net purchases of property plant and equipment increased by $0.7 million during the first three months of 2018 compared to the same period in 2017 primarily due to cost reduction plans implemented in January 2017.

During the three months ended March 31, 2018 and 2017, net cash provided by financing activities was $98.8 million and $29.4 million, respectively. Cash provided by financing activities in the first three months of 2018 included net proceeds of $99.0 million from the Loan Agreement and $0.3 million from employee purchases of our common stock under the 2014 Employee Stock Purchase Plan ("2014 ESPP"). Cash provided by financing activities in the first three months of 2017 included net proceeds of $29.5 million from the issuance of common stock under our 2015 At Market Issuance Sales Agreement and $0.2 million from purchases of our common stock under the 2014 ESPP.

We expect to incur significant expenses and operating losses for the foreseeable future as we continue to invest in commercialization of HEPLISAV-B, clinical trials and other development, manufacturing and regulatory activities for our immuno-oncology product candidates and discovery research and development. We expect that cash used in operating activities may fluctuate in future periods as a result of a number of factors, including fluctuations in our operating results, working capital requirements and capital deployment decisions. We currently estimate that we have sufficient cash resources to meet our anticipated cash needs through at least the next 12 months based on cash and cash equivalents and marketable securities on hand as of March 31, 2018, and anticipated revenues. Until we can generate a sufficient amount of revenue from product sales, we will need to finance our operations through strategic alliance and licensing arrangements and/or future public or private debt and equity financings. Adequate financing may not be available to us on acceptable terms, or at all. If adequate funds are not available when needed, we may need to delay, reduce the scope of or put on hold one or more programs while we seek strategic alternatives.

Our ability to raise additional capital in the equity and debt markets, should we choose to do so, is dependent on a number of factors, including, but not limited to, the market demand for our common stock, which itself is subject to a number of development and business risks and uncertainties, our creditworthiness and the uncertainty that we would be able to raise such additional capital at a price or on terms that are favorable to us. Raising additional funds through the issuance of equity or debt securities could result in dilution to our existing stockholders, increased fixed payment obligations, or both. In addition, these securities may have rights senior to those of our common stock and could include covenants that would restrict our operations.

Contractual Obligations

Except as described below, during the three months ended March 31, 2018, there have been no material changes to the contractual obligations previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2017.

In February 2018, we entered into a $175.0 million term loan agreement. Principal amount due under the term loan agreement at March 31, 2018 is $100.2 million payable at maturity on December 31, 2023, unless earlier prepaid.

In February 2018, we entered into a sublicense agreement with Merck Sharpe & Dohme Corp. Under the agreement, we are required to make future payments of $7.0 million each in both 2019 and 2020.

We enter into long-term purchase commitments with commercial manufacturers for the supply of HEPLISAV-B and SD-101. To the extent these long-term commitments are non-cancelable, our total future purchase commitments at March 31, 2018 are $11.6 million.

Off-balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined by rules enacted by the Securities and Exchange Commission and, accordingly, no such arrangements are likely to have a current or future effect on our financial position.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

During the three months ended March 31, 2018, there were no material changes to our market risk disclosures as set forth in Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk" in our Annual Report on Form 10-K for the year ended December 31, 2017.

ITEM 4. CONTROLS AND PROCEDURES

(a) Evaluation of disclosure controls and procedures

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Principal Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can only provide reasonable, not absolute, assurance of achieving the desired control objectives.

Based on their evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report, our management, with participation of our Chief Executive Officer and our Chief Financial Officer, concluded that our disclosure controls and procedures are effective and were operating at the reasonable assurance level to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms.

(b) Changes in internal controls

Effective January 1, 2018, we adopted Accounting Standards Codification Topic 606, Revenue from Contracts with Customers, or Topic 606. Although the adoption of Topic 606 is not expected to have a material impact on our ongoing revenues, we implemented changes to our processes related to revenue recognition and the control activities within them. Other than changes to our internal control processes resulting from the adoption of Topic 606 as discussed above, there has been no other changes in our internal controls over financial reporting as defined in Rule 13a – 15(f) under the Exchange Act during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time in the ordinary course of business, Dynavax receives claims or allegations regarding various matters, including employment, vendor and other similar situations in the conduct of our operations.

On November 18, 2016, two substantially similar securities class action complaints were filed in the U.S. District Court for the Northern District of California against the Company and two of its executive officers, in *Soontjens v. Dynavax Technologies Corporation et. al.*, ("*Soontjens*") and *Shumake v. Dynavax Technologies Corporation et al.*, ("*Shumake*"). The *Soontjens* complaint alleges that between March 10, 2014 and November 11, 2016, the Company and certain of its executive officers violated Sections 10(b) and 20(a) of the Exchange Act and Rule 10b-5 promulgated thereunder, in connection with statements related to HEPLISAV-B. The *Shumake* complaint alleges violations of the same statutes related to the same subject, but between January 7, 2016 and November 11, 2016. The plaintiffs in both actions are seeking an unspecified amount of damages and attorneys' fees and costs. On January 17, 2017, these two actions and all related actions that subsequently may be filed in, or transferred to, the District Court were consolidated into a single case entitled *In re Dynavax Technologies Securities Litigation*. On January 31, 2017, the court appointed lead plaintiff and lead counsel. Lead plaintiff filed a consolidated amended complaint on March 17, 2017. Defendants' filed a motion to dismiss the consolidated amended complaint on May 1, 2017. On September 12, 2017, the District Court granted Defendants' motion to dismiss, but gave lead plaintiff an opportunity to amend his complaint. On October 3, 2017, plaintiff filed a Second Amended Complaint. Defendants filed a motion to dismiss the Second Amended Complaint on November 3, 2017. A hearing on Defendants' motion to dismiss was set for January 23, 2018, but the hearing was vacated by the Court on January 18, 2018. On April 24, 2018, the Court reset the hearing on Defendants' motion to dismiss for May 8, 2018.

On January 18, 2017, the Company was made aware of a derivative complaint that a purported stockholder of the Company intended to file in the Superior Court of California for the County of Alameda against certain of the Company's current executive officers and directors (the "*McDonald* Complaint"). The *McDonald* Complaint was apparently filed on February 16, 2017, although the Company was not provided a copy of it until March 15, 2017. Additionally, on January 19, 2017, another purported stockholder of the Company filed a separate derivative complaint in the Superior Court of California for the County of Alameda against the same officers and directors who were named in the *McDonald* Complaint (the "*Shumake* Complaint"). Both complaints generally allege that the defendants caused or allowed the Company to issue materially misleading statements and/or omit material information regarding HEPLISAV-B and the clinical trial related thereto and otherwise mismanaged the clinical trial related to HEPLISAV-B. The complaints seek unspecified monetary damages, including restitution from defendants, corporate governance changes, attorneys' fees and costs, and other relief. Defendants were never served with the *Shumake* Complaint. On June 23, 2017, the plaintiff voluntarily dismissed the *Shumake* Complaint without prejudice. Defendants filed a demurrer in the *McDonald* case seeking to dismiss the lawsuit on June 19, 2017. On July 26, 2017, pursuant to a stipulation between the parties, the state court stayed the *McDonald* case pending the final resolution of the 2016 securities class action, *In re Dynavax Technologies Securities Litigation*.

On December 1, 2017, the purported stockholder of the Company who filed, and then later voluntarily dismissed, the state court *Shumake* Complaint, filed a substantially similar purported stockholder derivative complaint in the U.S. District Court for the Northern District of California (the "Federal *Shumake* Action"). On February 13, 2018, pursuant to a stipulation between the parties, the District Court stayed the Federal *Shumake* Action pending the final resolution of the 2016 securities class action, *In re Dynavax Technologies Securities Litigation*.

The Company believes that it has meritorious defenses and intends to defend these lawsuits vigorously. However, the lawsuits are subject to inherent uncertainties, the actual costs may be significant, and we may not prevail. We believe we are entitled to coverage under our relevant insurance policies with respect to these lawsuits, but coverage could be denied or prove to be insufficient.

ITEM 1A. RISK FACTORS

Various statements in this Quarterly Report on Form 10-Q are forward-looking statements concerning our future efforts to obtain regulatory approval, timing of development activities, commercialize approved products, expenses, revenues, liquidity and cash needs, as well as our plans and strategies. These forward-looking statements are based on current expectations and we assume no obligation to update this information. Numerous factors could cause our actual results to differ significantly from the results described in these forward-looking statements, including the following risk factors. We have marked with an asterisk (*) those risks described below that reflect substantive changes from, or additions to, the risks described under Part 1, Item 1A "Risk Factors" included in our Annual Report on Form 10-K for the year ended December 31, 2017 that was filed with the Securities and Exchange Commission on March 8, 2018.

Risks Related to our Business and Capital Requirements

We have launched HEPLISAV-B in the United States and we have personnel experienced with marketing drug products, but Dynavax has not previously commercialized a product. While we have recently established full commercial capabilities, given that this is Dynavax's first marketed produced, there is a risk that we may not achieve and sustain commercial success for HEPLISAV-B.

We have established sales, marketing and distribution capabilities and commercialized HEPLISAV-B in the U.S. Successful commercialization of HEPLISAV-B, will require significant resources and time and, while Dynavax personnel are experienced with respect to marketing of prescription drug products, because HEPLISAV-B is the company's first marketed product, there is a risk that we may not successfully commercialize HEPLISAV-B. In addition, successful commercialization of HEPLISAV-B will require that we negotiate and enter into contracts with wholesalers, distributors, group purchasing organizations, and other parties, and that we maintain those contractual relationships. There is a risk that we may not complete or maintain all of these important contracts and thus our commercialization may not be successful. Moreover, we expect that significant resources will need to be invested in order to successfully market, sell and distribute HEPLISAV-B for use with diabetes patients. The Centers for Disease Control and Prevention ("CDC") and the CDC's Advisory Committee on Immunization Practices ("ACIP") recommend that patients with diabetes, one of our targeted patient populations, receive hepatitis B vaccinations and while the potential number of recommended vaccine adult patients is larger, we are unable to predict how many of those may receive HEPLISAV-B.

In addition to the risk with building and maintaining our own commercial capabilities and with contracting, other factors that may inhibit our efforts to successfully commercialize HEPLISAV-B include:

- whether we are able to recruit and retain adequate numbers of effective sales and marketing personnel;
- whether we are able to access key health care providers to discuss HEPLISAV-B;
- whether we can compete successfully as a new entrant in established distribution channels for vaccine products; and
- whether we will maintain sufficient funding to cover the costs and expenses associated with creating and sustaining a capable sales and marketing organization and related commercial infrastructure.

If we are not successful, we may be required to collaborate or partner with a third party pharmaceutical or biotechnology company with existing products. To the extent we determine to rely on other pharmaceutical or biotechnology companies or third party contract organizations with established sales, marketing and distribution capabilities to market HEPLISAV-B, we will need to establish and maintain collaboration arrangements, and we may not be able to enter into these arrangements on acceptable terms or for a period of time that may be required to establish HEPLISAV-B in the market. To the extent that we enter into co-promotion or other arrangements, any revenues we receive will depend upon the efforts of third parties, which may not be successful and are only partially in our control. In that event, our product revenues may be lower than if we marketed and sold our products directly with the highest priority.

If we, or our partners, if any, are not successful in setting our marketing, pricing and reimbursement strategies, recruiting and maintaining effective sales and marketing personnel or in building and maintaining the infrastructure to support commercial operations, we will have difficulty successfully commercializing HEPLISAV-B, which would adversely affect our business and financial condition. To the extent our commercialization of HEPLISAV-B is not successful and we must partner with and rely upon the efforts of other pharmaceutical or biotechnology companies with established sales, marketing and distribution systems to market HEPLISAV-B, we will need to establish and maintain partnership arrangements, and we may not be able to enter into these arrangements on acceptable terms or at all. To the extent that we enter into co-promotion or other arrangements, certain revenues we receive will depend upon the efforts of third parties, which may not be successful and are only partially in our control.

We face uncertainty regarding coverage, pricing and reimbursement and the practices of third party payors, which may make it difficult or impossible to sell our product candidates on commercially reasonable terms.

In both domestic and foreign markets, our ability to achieve profitability will depend in part on the negotiation of a favorable price and the availability of appropriate reimbursement from third party payors, in particular for HEPLISAV-B, where existing products are already marketed. In the U.S., pricing for hepatitis B vaccines is currently stable and reimbursement is favorable as private and public payors recognize the value of prophylaxis in this setting given the high costs of potential morbidity and mortality, and we have achieved coverage with most third party payors. However, there is a risk that some payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include HEPLISAV-B. Thus, there can be no assurance that HEPLISAV-B will achieve and sustain stable pricing and favorable reimbursement. Our ability to successfully obtain and retain market share and achieve and sustain profitability will be significantly dependent on the market's acceptance of a price for HEPLSIAV-B sufficient to achieve profitability, and future acceptance of such pricing.

Third party payors are increasingly challenging the price and cost-effectiveness of medical products and services, and pricing and reimbursement decisions may not allow our future products to compete effectively with existing competitive products. Because we intend to offer products, if approved, that involve new technologies and new approaches to treating disease, the willingness of third party payors to reimburse for our products is uncertain. We will have to charge a price for our products that is sufficient to enable us to recover our considerable investment in product development and our operating costs. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to achieve profitability, and such unavailability could harm our future prospects and reduce our stock price.

Also, there has been heightened governmental scrutiny recently in the U.S. over pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics. Such scrutiny has resulted in several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. At the federal level, the Trump administration's budget proposal for fiscal year 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. While any proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, and restrictions on certain product access. In some cases, such legislation and regulations have been designed to encourage importation from other countries and bulk purchasing. There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future or the effect any such initiatives may have on our business.

We are dependent on the commercial success of HEPLISAV-B and the success of our development stage products including SD-101, which depend on regulatory approval. Failure to maintain or obtain regulatory approvals could require us to discontinue operations.

The remainder of our pipeline consists of early stage oncology product candidates, and early stage development is inherently risky. Even if we have early indications of success in clinical development, in order to be able to market our products in the U.S., we must obtain approval from the FDA, and corresponding applications to foreign regulatory agencies must be approved by those agencies before we may sell the product in their respective geographic area. Obtaining FDA marketing approval and corresponding foreign applications is highly uncertain and we may fail to obtain approval. The FDA review process is extensive, lengthy, expensive and uncertain, and the FDA or foreign regulatory agencies may delay, limit or deny approval of our application for many reasons, including: whether the data from our clinical trials or the development program are satisfactory to the FDA or foreign regulatory agency; disagreement with the number, design, size, conduct or implementation of our clinical trials or proposed post-marketing study, or a conclusion that the data fails to meet statistical or clinical significance or safety requirements; acceptability of data generated at our clinical trial sites that are monitored by third party contract research organizations ("CROs"); and deficiencies in our manufacturing processes or facilities or those of our third party contract manufacturers and suppliers, if any. For example, we received Complete Response Letters from the FDA for HEPLISAV-B in 2013 and 2016 before obtaining approval in November 2017.

In February 2014, we announced our withdrawal of our Marketing Authorization Application ("MAA") for approval of HEPLISAV-B to the EMA, in part because the required time frame for response under the MAA procedure was not long enough to permit the collection of the necessary clinical data. Our ability to market HEPLISAV-B outside the United States, such as in Europe, is dependent upon our receiving regulatory approval, which can be costly and time consuming, and there is a risk that one or more regulatory bodies may require that we conduct additional clinical trials and/or take other measures which will take time and require that we incur expense. In addition, there is the risk that we may not receive approval in one or more jurisdictions.

In addition, we obtain guidance from regulatory authorities on certain aspects of our clinical development activities and seek to comply with written guidelines provided by the authorities. These discussions and written guidelines are not binding obligations on the part of the regulatory authorities and the regulatory authorities may require additional patient data or studies to be conducted. Regulatory authorities may revise or retract previous guidance during the course of a clinical trial or after completion of the trial. The authorities may also disqualify a clinical trial from consideration in support of approval of a potential product if they deem the guidelines have not been met. The FDA or foreign regulatory agencies may determine our clinical trials or other data regarding safety, efficacy or consistency of manufacture or compliance with GMP regulations are insufficient for regulatory approval.

We are subject to ongoing FDA post-marketing obligations concerning HEPLISAV-B, which may result in significant additional expense, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with HEPLISAV-B.

Our HEPLISAV-B regulatory approval is subject to certain post-marketing obligations and commitments to the FDA. We must conduct an observational comparative study of HEPLISAV-B to another Hepatitis B vaccine to assess occurrence of acute myocardial infarction; must conduct an observational surveillance study to evaluate the incidence of new onset immune-mediated diseases, herpes zoster and anaphylaxis; and must establish a pregnancy registry to provide information on outcomes following pregnancy exposure to HEPLISAV-B. These studies will require significant effort and resources, and failure to timely conduct these studies to the satisfaction of FDA could result in withdrawal of our BLA approval. The results of post-marketing studies may also result in additional warnings or precautions for the HEPLISAV-B label or expose additional safety concerns that may result in product liability and withdrawal of the product from the market, which would have a material adverse effect on our business, results of operations, financial condition and prospects.

In addition, the manufacturing processes, labelling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for HEPLISAV-B are subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs, GCPs, ICH guidelines, and GLPs. If we are not able to meet and maintain regulatory compliance, we may lose marketing approval and be required to withdraw our product. As noted in the preceding paragraph, withdrawal would have a material adverse effect on our business.

We have incurred net losses in each year since our inception and anticipate that we will continue to incur significant losses for the foreseeable future unless we can successfully commercialize HEPLISAV-B, and if we are unable to achieve and sustain profitability, the market value of our common stock will likely decline.

We have not generated any revenue from the sale of products and have incurred losses in each year since we commenced operations in 1996. Our net losses for the three months ended March 31, 2018 and 2017 were $39.0 million and $25.3 million, respectively. As of March 31, 2018, we had an accumulated deficit of $946.3 million.

With the approval of HEPLISAV-B and our investment in the launch and commercialization of this product in the U.S. in addition to our investment in our oncology product candidates, we expect to continue incurring significant expenses and increasing operating losses for the foreseeable future. Our expenses will also increase substantially as we establish and maintain commercial infrastructure while continuing to invest in the clinical development of our oncology pipeline, reinitiate and invest in manufacturing and supply chain commitments to maintain commercial supply of HEPLISAV-B and continue to hire commercial, clinical, manufacturing and operational personnel in order to build our business. Due to the numerous risks and uncertainties associated with developing and commercializing vaccine and pharmaceutical products, we are unable to predict the extent of any future losses or when, if ever, we will become profitable.

If we are unable to achieve and sustain profitability, we will need to continue to raise funds through strategic alliance and licensing arrangements or the capital markets, including debt or equity or other structured finance mechanisms, in order to sustain our business and operations. As a result of those activities, the market value of our common stock may be negatively impacted and be volatile. Adequate financing may not be available to us on acceptable terms, or at all. If adequate funds are not available when needed, we may need to delay, reduce the scope of or put on hold one or more programs while we seek strategic alternatives.

Our ability to raise additional capital in the equity and debt markets, should we choose to do so, is dependent on a number of factors, including, but not limited to, the market demand for our common stock, which itself is subject to a number of development and business risks and uncertainties, our creditworthiness and the uncertainty that we would be able to raise such additional capital at a price or on terms that are favorable to us. Raising additional funds through the issuance of equity or debt securities could result in dilution to our existing stockholders, increases fixed payment obligations, or both. In addition, these securities may have rights senior to those of our common stock and could include covenants that would restrict our operations.

Until we are able to generate significant revenues or achieve profitability through product sales, we will require substantial additional capital to finance our operations and continue development of our product candidates.

We expect to incur significant expenses and operating losses for the foreseeable future as we continue to invest in (a) commercialization of HEPLISAV-B, (b) clinical trials and other development, manufacturing and regulatory activities for our immuno-oncology product candidates and (c) discovery research and development. Until we can generate a sufficient amount of revenue, if any, we will need to finance our operations through strategic alliance and licensing arrangements and/or future public or private debt and equity financings. Adequate financing may not be available to us on acceptable terms, or at all. If adequate funds are not available when needed, we may need to delay, reduce the scope of or put on hold one or more programs while we seek strategic alternatives.

Our ability to raise additional capital in the equity and debt markets, should we choose to do so, is dependent on a number of factors, including, but not limited to, the market demand for our common stock, which itself is subject to a number of development and business risks and uncertainties, our creditworthiness and the uncertainty that we would be able to raise such additional capital at a price or on terms that are favorable to us. Raising additional funds through the issuance of equity or debt securities could result in dilution to our existing stockholders, increased fixed payment obligations, or both. In addition, these securities may have rights senior to those of our common stock and could include covenants that would restrict our operations.

The FDA may require more clinical trials for our development stage product candidates than we currently expect or are conducting before granting regulatory approval, if regulatory approval is granted at all. Our clinical trials may be extended which may lead to substantial delays in the regulatory approval process for our product candidates, which will impair our ability to generate revenues.

Our registration and commercial timelines depend on further discussions with the FDA and corresponding foreign regulatory agencies and requirements and requests they may make for additional data or completion of additional clinical trials. Any such requirements or requests could:

- adversely affect our ability to timely and successfully commercialize or market these product candidates;
- result in significant additional costs;
- potentially diminish any competitive advantages for those products;
- potentially limit the markets for those products;
- adversely affect our ability to enter into collaborations or receive milestone payments or royalties from potential collaborators;
- cause us to abandon the development of the affected product candidate; or
- limit our ability to obtain additional financing on acceptable terms, if at all.

Clinical trials for our product candidates are expensive and time consuming, may involve combinations with other agents, may take longer than we expect or may not be completed at all, and their outcomes are uncertain.

Clinical trials, including post-marketing studies, to generate sufficient data to meet FDA requirements can be expensive and time consuming.

We are currently undertaking clinical trials of SD-101 and DV281, including combination studies with other oncology agents, and expect to commence clinical trials for other product candidates in our immuno-oncology pipeline in the future. Our strategy with respect to development of SD-101 and DV281 involves combination studies with other oncology agents. While we believe that this combination agent approach increases the potential for success, these clinical trials are dependent on continuing access to the other oncology agents, and for combination studies that are pursuant to a collaboration they are contingent on agreement with our combination agent study partners regarding the use of the other agents, concurrence on a protocol and supply of clinical materials. Most of our combination agent study partners, such as Merck & Co. (“Merck”), are significantly larger than we are and are conducting various other combination studies with other immuno-oncology agents and collaborators. We are not certain these clinical trials will be successful, or that even if successful we would be able to reach agreement to conduct larger, more extensive clinical trials required to achieve regulatory approval for a combination product candidate regimen. In addition, results from smaller, earlier stage clinical studies may not be representative of larger, controlled clinical trials that would be required in order to obtain regulatory approval of a product candidate or a combination of product candidates.

Each of our clinical trials requires the investment of substantial planning, expense and time and the timing of the commencement, continuation and completion of these clinical trials may be subject to significant delays relating to various causes, including scheduling conflicts with participating clinicians and clinical institutions, difficulties in identifying and enrolling participants who meet trial eligibility criteria, failure of participants to complete the clinical trial, delay or failure to obtain Institutional Review Board ("IRB") or regulatory approval to conduct a clinical trial at a prospective site, unexpected adverse events and shortages of available drug supply. Participant enrollment is a function of many factors, including the size of the relevant population, the proximity of participants to clinical sites, the eligibility criteria for the trial, the existence of competing clinical trials and the availability of alternative or new treatments.

Failure by us or our CROs to conduct a clinical study in accordance with GCP standards and other applicable regulatory requirements could result in disqualification of the clinical trial from consideration in support of approval of a potential product.

We are responsible for conducting our clinical trials consistent with GCP standards and for oversight of our vendors to ensure that they comply with such standards. We depend on medical institutions and CROs to conduct our clinical trials in compliance with GCP. To the extent that they fail to comply with GCP standards, fail to enroll participants for our clinical trials, or are delayed for a significant time in the execution of our trials, including achieving full enrollment, we may be affected by increased costs, program delays or both, which may harm our business.

Clinical trials must be conducted in accordance with FDA or other applicable foreign government guidelines and are subject to oversight by the FDA, other foreign governmental agencies and IRBs at the medical institutions where the clinical trials are conducted. In addition, clinical trials must be conducted with supplies of our product candidates produced under GMP and other requirements in foreign countries, and may require large numbers of participants.

The FDA or other foreign governmental agencies or we ourselves could delay, suspend or halt our clinical trials of a product candidate for numerous reasons, including with respect to our product candidates and those of our partners in combination agent studies:

- deficiencies in the trial design;
- deficiencies in the conduct of the clinical trial including failure to conduct the clinical trial in accordance with regulatory requirements or clinical protocols;
- deficiencies in the clinical trial operations or trial sites resulting in the imposition of a clinical hold;
- a product candidate may have unforeseen adverse side effects, including fatalities, or a determination may be made that a clinical trial presents unacceptable health risks;
- the time required to determine whether a product candidate is effective may be longer than expected;
- fatalities or other adverse events arising during a clinical trial that may not be related to clinical trial treatments;
- a product candidate or combination study may appear to be no more effective than current therapies;
- the quality or stability of a product candidate may fail to conform to acceptable standards;
- the inability to produce or obtain sufficient quantities of a product candidate to complete the trials;
- our inability to reach agreement on acceptable terms with prospective CROs and trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- our inability to obtain IRB approval to conduct a clinical trial at a prospective site;
- the inability to obtain regulatory approval to conduct a clinical trial;
- lack of adequate funding to continue a clinical trial, including the occurrence of unforeseen costs due to enrollment delays, requirements to conduct additional trials and studies and increased expenses associated with the services of our CROs and other third parties;
- the inability to recruit and enroll individuals to participate in clinical trials for reasons including competition from other clinical trial programs for the same or similar indications; or
- the inability to retain participants who have initiated a clinical trial but may withdraw due to side effects from the therapy, lack of efficacy or personal issues, or who are lost to further follow-up.

In addition, we may experience significant setbacks in advanced clinical trials, even after promising results in earlier trials, such as unexpected adverse events that occur when our product candidates are combined with other therapies and drugs or given to larger patient populations, which often occur in later-stage clinical trials, or less favorable clinical outcomes. Moreover, clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals.

Third party organizations such as patient advocacy groups and parents of trial participants may demand additional clinical trials or continued access to drug even if our interpretation of clinical results received thus far leads us to determine that additional clinical trials or continued access are unwarranted. Any disagreement with patient advocacy groups or parents of trial participants may require management's time and attention and may result in legal proceedings being instituted against us, which could be expensive, time-consuming and distracting, and may result in delay of the program. Negative or inconclusive results or adverse medical events, including participant fatalities that may be attributable to our product candidates, during a clinical trial may necessitate that it be redesigned, repeated or terminated. Further, some of our clinical trials may be overseen by a Data Safety Monitoring Board ("DSMB"), and the DSMB may determine to delay or suspend one or more of these trials due to safety or futility findings based on events occurring during a clinical trial. Any such delay, suspension, termination or request to repeat or redesign a trial could increase our costs and prevent or significantly delay our ability to commercialize our product candidates.

HEPLISAV-B, SD-101 and most of our earlier stage programs rely on oligonucleotide TLR agonists. Serious adverse event data relating to TLR agonists may require us to reduce the scope of or discontinue our operations.

Most of our programs, including HEPLISAV-B and SD-101, incorporate TLR9 agonist CpG oligonucleotides. If any of our product candidates in clinical trials or similar products from competitors produce serious adverse event data, we may be required to delay, discontinue or modify many of our clinical trials or our clinical trial strategy. If a safety risk based on mechanism of action or the molecular structure were identified, it may hinder our ability to develop our product candidates or enter into potential collaboration or commercial arrangements. Rare diseases and a numerical imbalance in cardiac adverse events have been observed in patients in our clinical trials. If adverse event data are found to apply to our TLR agonist and/or inhibitor technology as a whole, we may be required to significantly reduce or discontinue our operations.

We rely on our facility in Düsseldorf, Germany and third parties to supply materials or perform processes necessary to manufacture our product candidates. We rely on a limited number of suppliers to produce the oligonucleotides we require for development and commercialization. Additionally, we have limited experience in manufacturing our product candidates in commercial quantities. With respect to HEPLISAV-B, while we have reinitiated manufacturing and have a substantial quantity of available product, we intend to switch to a pre-filled syringe presentation of the vaccine and our ability to meet future demand will depend on our ability to timely manufacture that presentation of HEPLISAV-B in compliance with GMP.*

We rely on our facility in Düsseldorf and third parties to perform the multiple processes involved in manufacturing our product candidates, including HEPLISAV-B, SD-101, and DV281, certain antigens, the combination of the oligonucleotide and the antigens, and formulation, fill and finish. In connection with our restructuring in January 2017, we elected to retain, but furlough, much of the workforce in Düsseldorf supporting the manufacture of rHBsAg for HEPLISAV-B and utilize the existing stockpiled inventory of HEPLISAV-B to meet expected initial demand if the product was approved. Although we have sufficient inventory of HEPLISAV-B to launch the product and we have brought back staff at our facility in Dusseldorf that had been furloughed, hired additional staff where needed and reinstated manufacturing, there can be no assurance that we can successfully manufacture sufficient additional quantities in compliance with GMP in order to meet regulatory requirements and market demand. In addition, we have obtained FDA approval of a BLA supplement to manufacture and sell a pre-filled syringe presentation of HEPLISAV-B. Our ability to meet market demand in the future is dependent upon our timely manufacture of the pre-filled syringe presentation of HEPLISAV-B in compliance with GMP.

We have also relied on a limited number of suppliers to produce oligonucleotides for clinical trials and a single supplier to produce our 1018 for HEPLISAV-B. To date, we have manufactured only small quantities of oligonucleotides ourselves for development purposes. If we were unable to maintain our existing suppliers for 1018 and SD-101, we would have to establish an alternate qualified manufacturing capability, which would result in significant additional operating costs and delays in manufacturing HEPLISAV-B, and in developing and commercializing our product candidates. We or other third parties may not be able to produce product at a cost, quantity and quality that are available from our current third-party suppliers or at all.

In countries outside of the U.S., we may not be able to comply with ongoing and comparable foreign regulations, and our manufacturing process may be subject to delays, disruptions or quality control/quality assurance problems. Noncompliance with these regulations or other problems with our manufacturing process may limit or disrupt the commercialization of HEPLISAV-B or our other product candidates and could result in significant expense.

If we receive regulatory approval for our other product candidates, we will be subject to ongoing FDA and foreign regulatory obligations and continued regulatory review.

With respect to HEPLISAV-B and our other product candidates in development, we and our third party manufacturers and suppliers are required to comply with applicable GMP regulations and other international regulatory requirements. The regulations require that our product candidates be manufactured and records maintained in a prescribed manner with respect to manufacturing, testing and quality control/quality assurance activities. Manufacturers and suppliers of key components and materials must be named in a BLA submitted to the FDA for any product candidate for which we are seeking FDA approval. Additionally, third party manufacturers and suppliers and any manufacturing facility must undergo a pre-approval inspection before we can obtain marketing authorization for any of our product candidates. Even after a manufacturer has been qualified by the FDA, the manufacturer must continue to expend time, money and effort in the area of production and quality control to ensure full compliance with GMP. Manufacturers are subject to regular, periodic inspections by the FDA following initial approval. Further, to the extent that we contract with third parties for the manufacture of our products, our ability to control third-party compliance with FDA requirements will be limited to contractual remedies and rights of inspection.

If, as a result of the FDA's inspections, it determines that the equipment, facilities, laboratories or processes do not comply with applicable FDA regulations and conditions of product approval, the FDA may not approve the product or may suspend the manufacturing operations. If the manufacturing operations of any of the suppliers for our product candidates are suspended, we may be unable to generate sufficient quantities of commercial or clinical supplies of product to meet market demand, which would harm our business. In addition, if delivery of material from our suppliers were interrupted for any reason, we might be unable to ship our approved product for commercial supply or to supply our products in development for clinical trials. Significant and costly delays can occur if the qualification of a new supplier is required.

Failure to comply with regulatory requirements could prevent or delay marketing approval or require the expenditure of money or other resources to correct. Failure to comply with applicable requirements may also result in warning letters, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, refusal of the government to renew marketing applications and criminal prosecution, any of which could be harmful to our ability to generate revenues and our stock price.

Any regulatory approvals that we receive for our product candidates are likely to contain requirements for post-marketing follow-up studies, which may be costly. Product approvals, once granted, may be modified based on data from subsequent studies or commercial use. As a result, limitations on labeling indications or marketing claims, or withdrawal from the market may be required if problems occur after approval and commercialization.

We may develop, seek regulatory approval for and market our product candidates outside the U.S., requiring a significant commitment of resources. Failure to successfully manage our international operations could result in significant unanticipated costs and delays in regulatory approval or commercialization of our product candidates.

We may seek to introduce certain of our product candidates, including HEPLISAV-B, in various markets outside the U.S. Developing, seeking regulatory approval for and marketing our product candidates outside the U.S. could impose substantial costs as well as burdens on our personnel resources in addition to potential diversion of management's attention from domestic operations. International operations are subject to risk, including:

- the difficulty of managing geographically distant operations, including recruiting and retaining qualified employees, locating adequate facilities and establishing useful business support relationships in the local community;
- compliance with varying international regulatory requirements, laws and treaties;
- securing international distribution, marketing and sales capabilities;
- adequate protection of our intellectual property rights;
- obtaining regulatory and pricing approvals at a level sufficient to justify commercialization;
- legal uncertainties and potential timing delays associated with tariffs, export licenses and other trade barriers;
- diverse tax consequences;
- the fluctuation of conversion rates between foreign currencies and the U.S. dollar; and
- regional and geopolitical risks.

We withdrew our MAA for HEPLISAV-B in Europe in 2014. We may not be able to provide sufficient data or respond to other comments to our previously filed MAA sufficient to obtain regulatory approval in Europe in a reasonable time period or at all.

Any failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in other jurisdictions. If we are unable to successfully manage our international operations, we may incur significant unanticipated costs and delays in regulatory approval or commercialization of our product candidates, which would impair our ability to generate revenues.

If any products we develop are not accepted by the market or if regulatory agencies limit our labeling indications, require labeling content that diminishes market uptake of our products or limits our marketing claims, we may be unable to generate significant revenues, if any.

Even if we obtain regulatory approval for our product candidates, such as the FDA approval of HEPLISAV-B in November 2017, and are able to commercialize them, our products may not gain market acceptance among physicians, patients, healthcare payors and the medical community.

The degree of market acceptance of HEPLISAV-B and any of our future approved products will depend upon a number of factors, including:

- the indication for which the product is approved and its approved labeling;
- the presence of other competing approved therapies;
- the potential advantages of the product over existing and future treatment methods;
- the relative convenience and ease of administration of the product;
- the strength of our sales, marketing and distribution support;
- the price and cost-effectiveness of the product; and
- sufficient third-party reimbursement and the willingness of patients to pay out-of-pocket in the absence of sufficient reimbursement by third-party payors.

The FDA or other regulatory agencies could limit the labeling indication for which our product candidates may be marketed or could otherwise limit marketing efforts for our products. If we are unable to achieve approval or successfully market any of our product candidates, or marketing efforts are restricted by regulatory limits, our ability to generate revenues could be significantly impaired.

A key part of our business strategy for products in development is to establish collaborative relationships to help fund development and commercialization of our product candidates. We may not succeed in establishing and maintaining collaborative relationships, which may significantly limit our ability to develop and commercialize our products successfully, if at all.

We may need to establish collaborative relationships to obtain domestic and/or international sales, marketing and distribution capabilities for those product candidates. Failure to obtain a collaborative relationship for HEPLISAV-B in markets outside the U.S. requiring extensive sales efforts, may significantly impair the potential for this product and we may be required to raise additional capital. The process of establishing and maintaining collaborative relationships is difficult, time-consuming and involves significant uncertainty, including:

- our partners may seek to renegotiate or terminate their relationships with us due to unsatisfactory clinical results, manufacturing issues, a change in business strategy, a change of control or other reasons;
- our shortage of capital resources may impact the willingness of companies to collaborate with us;
- our contracts for collaborative arrangements are terminable at will on written notice and may otherwise expire or terminate and we may not have alternative funding available;
- our partners may choose to pursue alternative technologies, including those of our competitors;
- we may have disputes with a partner that could lead to litigation or arbitration;
- we have limited control over the decisions of our partners and they may change the priority of our programs in a manner that would result in termination of the agreement or add significant delay in the partnered program;
- our ability to generate future payments and royalties from our partners depends upon the abilities of our partners to establish the safety and efficacy of our drug candidates, obtain regulatory approvals and successfully manufacture and achieve market acceptance of products developed from our drug candidates;
- we or our partners may fail to properly initiate, maintain or defend our intellectual property rights, where applicable, or a party may use our proprietary information in such a way as to invite litigation that could jeopardize or potentially invalidate our proprietary information or expose us to potential liability;

- our partners may not devote sufficient capital or resources towards our product candidates; and
- our partners may not comply with applicable government regulatory requirements.

If any collaborator fails to fulfill its responsibilities in a timely manner, or at all, our research, clinical development, manufacturing or commercialization efforts pursuant to that collaboration could be delayed or terminated, or it may be necessary for us to assume responsibility for expenses or activities that would otherwise have been the responsibility of our collaborator. If we are unable to establish and maintain collaborative relationships on acceptable terms or to successfully transition terminated collaborative agreements, we may have to delay or discontinue further development of one or more of our product candidates, undertake development and commercialization activities at our own expense or find alternative sources of capital.

Many of our competitors have greater financial resources and expertise than we do. If we are unable to successfully compete with existing or potential competitors as a result of these disadvantages, we may be unable to generate revenues and our business will be harmed.

We compete with pharmaceutical companies, biotechnology companies, academic institutions and research organizations, in developing and marketing therapies to prevent or treat cancer and infectious and inflammatory diseases. For example, HEPLISAV-B competes in the U.S. with established hepatitis B vaccines marketed by Merck and GlaxoSmithKline plc ("GSK") and if approved outside the U.S., with vaccines from those companies as well as several additional established pharmaceutical companies.

Oncology is also a highly competitive market, with numerous biotechnology and pharmaceutical companies developing therapies for all of the targets we are pursuing. Competitors may develop more effective, more affordable or more convenient products or may achieve earlier approval or patent protection or commercialization of their products. These competitive products may render our product candidates obsolete, change the standard of care against which our products much show safety and efficacy or limit our ability to generate revenues from our product candidates.

Existing and potential competitors may also compete with us for qualified commercial, scientific and management personnel, as well as for technology that would otherwise be advantageous to our business. Our success in developing marketable products and achieving a competitive position will depend, in part, on our ability to attract and retain qualified personnel in the near-term, particularly with respect to HEPLISAV-B commercialization. If we do not succeed in attracting new personnel and retaining and motivating existing personnel, our operations may suffer and we may be unable to obtain financing, enter into collaborative arrangements, sell our product candidates or generate revenues.

The term loan agreement we entered into in February, 2018 imposes significant operating and financial restrictions on us that may prevent us from pursuing certain business opportunities and restrict our ability to operate our business.

In February, 2018, we entered into a term loan agreement under which we may borrow up to $175 million, $100.0 million of which was borrowed at closing. Additional amounts may be borrowed only if we meet certain requirements. The agreement contains covenants that restrict our ability to take various actions, including, among other things, incur additional indebtedness, pay dividends or distributions or make certain investments, create or incur certain liens, transfer, sell, lease or dispose of assets, enter into transactions with affiliates, consummate a merger or sell or other dispose of assets. The agreement also requires us to comply with a daily minimum liquidity covenant and an annual revenue requirement based on the sales of HEPLISAV-B. The agreement specifies a number of events of default, some of which are subject to applicable grace or cure periods, including, among other things, non-payment defaults, covenant defaults, cross-defaults to other material indebtedness, bankruptcy and insolvency defaults, and non-payment of material judgments.

Our ability to comply with these covenants will likely be affected by many factors, including events beyond our control, and we may not satisfy those requirements. Our failure to comply with our obligations could result in an event of default and the acceleration of our repayment obligation at a time when we may not have the cash to comply with that obligation, which could result in a seizure of most of our assets. The restrictions contained in the agreement could also limit our ability to meet capital needs or otherwise restrict our activities and adversely affect our ability to finance our operations, enter into acquisitions or to engage in other business activities that would be in our interest.

We rely on CROs and Clinical Sites and Investigators for our clinical trials. If these third parties do not fulfill their contractual obligations or meet expected deadlines, our planned clinical trials may be delayed and we may fail to obtain the regulatory approvals necessary to commercialize our product candidates.

We rely on CROs, Clinical Sites and Investigators for our clinical trials. If these third parties do not perform their obligations or meet expected deadlines our planned clinical trials may be extended, delayed, modified or terminated. While we maintain oversight over our clinical trials and conduct regular reviews of the data, we are dependent on the processes and quality control efforts of our third party contractors to ensure that clinical trials are conducted properly and that detailed, quality records are maintained to support the results of the clinical trials that they are conducting on our behalf. Any extension, delay, modification or termination of our clinical trials or failure to ensure adequate documentation and the quality of the results in the clinical trials could delay or otherwise adversely affect our ability to commercialize our product candidates and could have a material adverse effect on our business and operations.

As we are evolving from a company primarily involved in research and development to a company increasingly involved in commercialization, we may encounter difficulties in managing our growth and expanding our operations successfully.

As our operations expand, we expect that we will also need to manage additional relationships with various collaborative partners, suppliers and other third parties. Future growth will impose significant added responsibilities on our organization, in particular on management. Our future financial performance and our ability to successfully commercialize HEPLISAV-B and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we may not be able to manage our growth efforts effectively, and hire, train and integrate additional management, administrative and sales and marketing personnel, and our failure to accomplish any of these activities could prevent us from successfully growing our company.

If we fail to comply with the extensive requirements applicable to biopharmaceutical manufacturers and marketers under the healthcare fraud and abuse, anticorruption, privacy, transparency and other laws of the jurisdictions in which we conduct our business, we may be subject to significant liability.

Our activities, and the activities of our agents, including some contracted third parties, are subject to extensive government regulation and oversight both in the U.S. and in foreign jurisdictions. Our interactions with physicians and others in a position to prescribe or purchase our products are subject to a legal regime designed to prevent healthcare fraud and abuse and off-label promotion. We also are subject to laws pertaining to transparency of transfers of value to healthcare providers; privacy and data protection; compliance with industry voluntary compliance guidelines; and prohibiting the payment of bribes. Relevant U.S. laws include:

- the federal Anti-Kickback Statute, which prohibits persons from, among other things, knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal health care programs, such as the Medicare and Medicaid programs;
- federal false claims laws, including the civil False Claims Act, and civil monetary penalty law, which prohibit individuals or entities from, among other things, knowingly presenting, or causing to be presented, claims for payment to the government or its agents that are false or fraudulent;
- the Federal Food, Drug and Cosmetic Act and governing regulations which, among other things, prohibit off-label promotion of prescription drugs;
- the federal Physician Payments Sunshine Act created under the Patient Protection and Affordable Care Act (“PPACA”) which requires certain manufacturers of drugs, devices, biologics and medical supplies to report annually to the Centers for Medicare & Medicaid Services (“CMS”), information related to payments and other transfers of value to physicians, other healthcare providers, and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members;
- the federal Health Insurance Portability and Accountability Act of 1996 (“HIPAA”), which created, among other things, new federal criminal statutes that prohibit executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and its implementing regulations, which imposes certain requirements relating to the privacy, security, and transmission of individually identifiable health information;
- the Foreign Corrupt Practices Act, which prohibits the payment of bribes to foreign government officials and requires that a company’s books and records accurately reflect the company’s transactions; and

- foreign and state law equivalents of each of the federal laws described above, such as anti-kickback and false claims laws which may apply to items or services reimbursed by state health insurance programs or any third party payor, including commercial insurers; and state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the applicable compliance guidance promulgated by the federal government.

The Office of Inspector General for the Department of Health and Human Services, the Department of Justice, states' Attorneys General and other governmental authorities actively enforce the laws and regulations discussed above. These entities also coordinate extensively with the FDA, using legal theories that connect violations of the Federal Food, Drug and Cosmetic Act (such as off-label promotion) to the eventual submission of false claims to government healthcare programs. Prosecution of such promotion cases under the federal civil False Claims Act provides the potential for private parties (qui tam relators, or "whistleblowers") to initiate cases on behalf of the government and provides for significantly higher penalties upon conviction.

In the U.S., pharmaceutical and biotechnology companies have been the target of numerous government prosecutions and investigations alleging violations of law, including claims asserting impermissible off-label promotion of pharmaceutical products, payments intended to influence the referral of federal or state health care business, submission of false claims for government reimbursement, or submission of incorrect pricing information.

Violations of any of the laws described above or any other applicable governmental regulations and other similar foreign laws may subject us, our employees or our agents to criminal and/or civil sanctions, including fines, civil monetary penalties, exclusion from participation in government health care programs (including Medicare and Medicaid), disgorgement, individual imprisonment, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws and the restriction or restructuring of our operations, any of which could adversely affect our ability to operate our business and our financial results. Additionally, whether or not we have complied with the law, an investigation into alleged unlawful conduct may cause us to incur significant expense, cause reputational damage, divert management time and attention, and otherwise adversely affect our business. While we have developed and instituted a corporate compliance program, we cannot guarantee that we, our employees, our consultants, contractors, or other agents are or will be in compliance with all applicable U.S. or foreign laws.

We expect there will continue to be federal and state laws and/or regulations, proposed and implemented, that could impact our operations and business. For example, the PPACA, among other things, imposes a significant annual fee on companies that manufacture or import branded prescription drug products. It also contains substantial provisions intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, and impose additional health policy reforms, any or all of which may affect our business. Some of the provisions of PPACA have yet to be fully implemented, and there have been legal and political challenges to certain aspects of PPACA. Since January 2017, President Trump has signed two executive orders and other directives designed to delay, circumvent, or loosen certain requirements mandated by PPACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of PPACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the PPACA have been signed into law. The Tax Cuts and Jobs Act of 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by PPACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate". Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain PPACA-mandated fees, including the so-called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. Further, the Bipartisan Budget Act of 2018, or the BBA, among other things, amends the PPACA, effective January 1, 2019, to increase from 50 percent to 70 percent the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole". Congress may consider other legislation to repeal or replace elements of PPACA. The extent to which future legislation or regulations, if any, relating to health care fraud and abuse laws and/or enforcement and other health care reform measures, may be enacted or what effect such legislation or regulation would have on our business remains uncertain.

The loss of key personnel, including our Chief Executive Officer, could delay or prevent achieving our objectives. In addition, our continued growth to support commercialization may result in difficulties in managing our growth and expanding our operations successfully.

We depend on our senior executive officers, as well as key scientific and other personnel. Our research, product development and business efforts could be adversely affected by the loss of one or more key members of our scientific or management staff, including our Chief Executive Officer. We currently have no key person insurance on any of our employees.

As our operations expand, we expect that we will need to manage additional relationships with various vendors, partners, suppliers and other third parties. Future growth will impose significant added responsibilities on members of management. Our future financial performance and our ability to successfully commercialize HEPLISAV-B and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we must be able to effectively manage our commercialization efforts, research efforts and clinical trials and hire, train and integrate additional regulatory, manufacturing, administrative, and sales and marketing personnel. We may not be able to accomplish these tasks, and our failure to accomplish any of them could prevent us from successfully growing our company and achieving profitability.

We face product liability exposure, which, if not covered by insurance, could result in significant financial liability.

While we have not experienced any product liability claims to date, the use of any of our product candidates in clinical trials and the sale of any approved products will subject us to potential product liability claims and may raise questions about a product's safety and efficacy. As a result, we could experience a delay in our ability to commercialize one or more of our product candidates or reduced sales of any approved product candidates. In addition, a product liability claim may exceed the limits of our insurance policies and exhaust our internal resources. We have obtained limited clinical trial liability and umbrella insurance coverage for our clinical trials. This coverage may not be adequate or may not continue to be available in sufficient amounts, at an acceptable cost or at all. While we have obtained product liability insurance coverage for HEPLISAV-B, there is a risk that this coverage may not be adequate or may not continue to be available in sufficient amounts, at an acceptable cost or at all. We also may not be able to obtain commercially reasonable product liability insurance for any product approved for marketing in the future. A product liability claim, product recalls or other claims, as well as any claims for uninsured liabilities or in excess of insured liabilities, would divert our management's attention from our business and could result in significant financial liability.

We are involved in legal actions that are expensive and time consuming, and, if resolved adversely, could harm our business, financial condition, or results of operations.

Securities class action lawsuits against us are pending and purported stockholder derivative complaints have been brought against us. Any negative outcome from such lawsuits could result in payments of monetary damages or fines, or adversely affect our products, and accordingly our business, financial condition, or results of operations could be materially and adversely affected.

There can be no assurance that a favorable final outcome will be obtained in these cases, and defending any lawsuit is costly and can impose a significant burden on management and employees. Any litigation to which we are a party may result in an onerous or unfavorable judgment that may not be reversed upon appeal or in payments of monetary damages or fines not covered by insurance, or we may decide to settle lawsuits on unfavorable terms, which could adversely affect our business, financial conditions, or results of operations.

The recently passed comprehensive tax reform bill could adversely affect our business and financial condition.

On December 22, 2017, President Trump signed into law new legislation that significantly revises the Internal Revenue Code of 1986, as amended. The newly enacted federal income tax law, among other things, contains significant changes to corporate taxation, including reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), limitation of the deduction for net operating losses to 80% of current year taxable income and elimination of net operating loss carrybacks, one time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, elimination of U.S. tax on foreign earnings (subject to certain important exceptions), immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifying or repealing many business deductions and credits. Notwithstanding the reduction in the corporate income tax rate, the overall impact of the new federal tax law is uncertain and our business and financial condition could be adversely affected. In addition, it is uncertain if and to what extent various states will conform to the newly enacted federal tax law.

We use hazardous materials and controlled substances in our business. Any claims or liabilities relating to improper handling, storage or disposal of these materials and substances could be time consuming and costly to resolve.

Our research and product development activities involve the controlled storage, use and disposal of hazardous and radioactive materials and biological waste, and controlled substances. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these materials, substances, and certain waste products. We believe we are currently in compliance with all government permits that are required for the storage, use and disposal of these materials and controlled substances. However, we cannot eliminate the risk of accidental contamination or injury to persons or property from these materials, or that controlled substances will be accidentally stored or used in violation of relevant federal, state and local requirements. In the event of an accident related to hazardous materials or a violation of requirements pertaining to controlled substances, we could be held liable for damages, cleanup costs or penalized with fines, and this liability could exceed the limits of our insurance policies and exhaust our internal resources. We may have to incur significant costs to comply with future environmental laws and regulations, and laws and regulations pertaining to the storage and use of controlled substances.

Significant disruptions of information technology systems or breaches of data security could adversely affect our business.*

Our business is increasingly dependent on critical, complex and interdependent information technology systems, including Internet-based systems, to support business processes as well as internal and external communications. The size and complexity of our computer systems make them potentially vulnerable to breakdown, malicious intrusion and computer viruses that may result in the impairment of key business processes.

In addition, our systems are potentially vulnerable to data security breaches--whether by employees or others--that may expose sensitive data to unauthorized persons. Effective May 25, 2018, the European Union, or EU, will implement the General Data Protection Regulation, or GDPR, a broad data protection framework that expands the scope of current EU data protection law to non-European Union entities that process, or control the processing of, the personal information of EU subjects, including clinical trial data The GDPR allows for the imposition of fines and/or corrective action on entities that improperly use or disclose the personal information of EU subjects, including through a data security breach. Accordingly, data security breaches experienced by us, our collaborators or contractors could lead to significant fines, required corrective action, loss of trade secrets or other intellectual property, or could lead to the public exposure of personally identifiable information (including sensitive personal information) of our employees, collaborators, clinical trial patients, and others. A data security breach or privacy violation that leads to disclosure or modification of or prevents access to patient information, including personally identifiable information or protected health information, could harm our reputation, compel us to comply with federal and/or state breach notification laws, subject us to mandatory corrective action, require us to verify the correctness of database contents and otherwise subject us to liability under laws and regulations that protect personal data, resulting in increased costs or loss of revenue. The GDPR will impose several requirements relating to the consent of the individuals to whom the personal data relates, the information provided to the individuals, the security and confidentiality of the personal data, data breach notification and the use of third party processors in connection with the processing of personal data. The GDPR will also impose strict rules on the transfer of personal data out of the EU to the U.S., will provide an enforcement authority and will impose large penalties for noncompliance, including the potential for fines of up to €20 million or 4% of the annual global revenues of the noncompliant company, whichever is greater. The GDPR will increase our responsibility and liability in relation to personal data that we process, including in clinical trials, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, which could divert management's attention and increase our cost of doing business. If we are unable to prevent such data security breaches or privacy violations or implement satisfactory remedial measures, our operations could be disrupted, and we may suffer loss of reputation, financial loss and other regulatory penalties because of lost or misappropriated information, including sensitive patient data. In addition, these breaches and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. Moreover, the prevalent use of mobile devices that access confidential information increases the risk of data security breaches, which could lead to the loss of confidential information, trade secrets or other intellectual property. While we have implemented security measures to protect our data security and information technology systems, such measures may not prevent such events.

Such disruptions and breaches of security could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to our Intellectual Property

We rely on licenses to intellectual property from third parties. Impairment of these licenses or our inability to maintain them would severely harm our business.

Our current research and development efforts depend in part upon our license arrangements for intellectual property owned by third parties. Our dependence on these licenses subjects us to numerous risks, such as disputes regarding the use of the licensed intellectual property and the creation and ownership of new discoveries under such license agreements. In addition, these license arrangements require us to make timely payments to maintain our licenses and typically contain diligence or milestone-based termination provisions. Our failure to meet any obligations pursuant to these agreements could allow our licensors to terminate our agreements or undertake other remedies such as converting exclusive to non-exclusive licenses if we are unable to cure or obtain waivers for such failures or amend such agreements on terms acceptable to us. In addition, our license agreements may be terminated or may expire by their terms, and we may not be able to maintain the exclusivity of these licenses. If we cannot obtain and maintain licenses that are advantageous or necessary to the development or the commercialization of our product candidates, we may be required to expend significant time and resources to develop or license similar technology or to find other alternatives to maintaining the competitive position of our products. If such alternatives are not available to us in a timely manner or on acceptable terms, we may be unable to continue development or commercialize our product candidates. In the absence of a current license, we may be required to redesign our technology so it does not infringe a third party's patents, which may not be possible or could require substantial funds and time.

If third parties successfully assert that we have infringed their patents and proprietary rights or challenge our patents and proprietary rights, we may become involved in intellectual property disputes and litigation that would be costly, time consuming and delay or prevent development or commercialization of our product candidates.

We may be exposed to future litigation by third parties based on claims that our product candidates or proprietary technologies infringe their intellectual property rights, or we may be required to enter into litigation to enforce patents issued or licensed to us or to determine the ownership, scope or validity of our or another party's proprietary rights, including a challenge as to the validity of our issued and pending claims. From time to time we are involved in various interference and other administrative proceedings related to our intellectual property which has caused us to incur certain legal expenses. If we become involved in any litigation and/or other significant interference proceedings related to our intellectual property or the intellectual property of others, we will incur substantial additional expenses and it will divert the efforts of our technical and management personnel.

GSK, a competitor of ours, is an exclusive licensee of broad patents covering methods of production of rHBsAg, a component of HEPLISAV-B. In addition, the Institut Pasteur also owns or has exclusive licenses to patents relating to aspects of production of rHBsAg in the U.S. While all of these patents have expired outside the U.S., they remain in force in the U.S. We have had negotiations with GSK to obtain a sublicense. However, there remains a risk that these negotiations may not result in an agreement, or that we may be required to agree to unfavorable terms. With our recent commercialization of HEPLISAV-B in the U.S., while these patents remain in force and until we obtain a license to these patents, GSK or its licensor or the Institut Pasteur may bring claims against us.

If we or our collaborators are unsuccessful in defending or prosecuting our issued and pending claims or in defending potential claims against our products, for example, as may arise in connection with the commercialization of HEPLISAV-B or any similar product candidate, we or our collaborator could be required to pay substantial damages or be unable to commercialize our product candidates or use our proprietary technologies without a license from such third party. A license may require the payment of substantial fees or royalties, require a grant of a cross-license to our technology or may not be available on acceptable terms, if at all. Any of these outcomes could require us to change our business strategy and could materially impact our business and operations.

If the combination of patents, trade secrets and contractual provisions that we rely on to protect our intellectual property is inadequate, the value of our product candidates will decrease.

Our success depends on our ability to:

- obtain and protect commercially valuable patents or the rights to patents both domestically and abroad;
- operate without infringing upon the proprietary rights of others; and
- prevent others from successfully challenging or infringing our proprietary rights.

We will be able to protect our proprietary rights from unauthorized use only to the extent that these rights are covered by valid and enforceable patents for the term of such patents or are otherwise effectively maintained as trade secrets. For example, the TLR agonist contained in our HEPLISAV-B product has patent protection scheduled to expire in June 2018, and while we have applied for a patent term extension which could be up to a maximum of five years, there can be no assurance of the period of protection if and until such extension is granted. We try to protect our proprietary rights by filing and prosecuting U.S. and foreign patent applications. However, in certain cases such protection may be limited, depending in part on existing patents held by third parties, which may only allow us to obtain relatively narrow patent protection. In the U.S., legal standards relating to the validity and scope of patent claims in the biopharmaceutical field can be highly uncertain, are still evolving and involve complex legal and factual questions for which important legal principles remain unresolved.

The biopharmaceutical patent environment outside the U.S. is even more uncertain. We may be particularly affected by this uncertainty since several of our product candidates may initially address market opportunities outside the U.S., where we may only be able to obtain limited patent protection.

The risks and uncertainties that we face with respect to our patents and other proprietary rights include the following:

- we may not receive an issued patent for any of our patent applications or for any patent applications that we have exclusively licensed;
- the pending patent applications we have filed or to which we have exclusive rights may take longer than we expect to result in issued patents;
- the claims of any patents that are issued may not provide meaningful protection or may not be valid or enforceable;
- we might not be able to develop additional proprietary technologies that are patentable;
- the patents licensed or issued to us or our collaborators may not provide a competitive advantage;
- patents issued to other parties may limit our intellectual property protection or harm our ability to do business;

- other parties may independently develop similar or alternative technologies or duplicate our technologies and commercialize discoveries that we attempt to patent; and
- other parties may design around technologies we have licensed, patented or developed.

We also rely on trade secret protection and confidentiality agreements to protect our interests in proprietary know-how that is not patentable and for processes for which patents are difficult to enforce. We cannot be certain that we will be able to protect our trade secrets adequately. Any disclosure of confidential data in the public domain or to third parties could allow our competitors to learn our trade secrets. If we are unable to adequately obtain or enforce proprietary rights, we may be unable to commercialize our products, enter into collaborations, generate revenues or maintain any advantage we may have with respect to existing or potential competitors.

Risks Related to an Investment in our Common Stock

Our stock price is subject to volatility, and your investment may suffer a decline in value.

The market prices for securities of biopharmaceutical companies have in the past been, and are likely to continue in the future, to be, very volatile. The market price of our common stock is subject to substantial volatility depending upon many factors, many of which are beyond our control, including:

- progress or results of any of our clinical trials or regulatory or manufacturing efforts, in particular any announcements regarding the progress or results of our planned trials and BLA filing and communications, from the FDA or other regulatory agencies;
- our ability to receive timely regulatory approval for our product candidates;
- our ability to establish and maintain collaborations for the development and commercialization of our product candidates;
- our ability to raise additional capital to fund our operations;
- the success or failure of clinical trials involving our immuno-oncology product candidates and the product candidates of third party collaborators in combination studies;
- technological innovations, new commercial products or drug discovery efforts and preclinical and clinical activities by us or our competitors;
- changes in our intellectual property portfolio or developments or disputes concerning the proprietary rights of our products or product candidates;
- our ability to obtain component materials and successfully enter into manufacturing relationships for our product candidates or establish manufacturing capacity on our own;
- our ability to establish and maintain licensing agreements for intellectual property necessary for the development of our product candidates;
- changes in government regulations, general economic conditions or industry announcements;
- issuance of new or changed securities analysts' reports or recommendations;
- actual or anticipated fluctuations in our quarterly financial and operating results; and
- the volume of trading in our common stock.

One or more of these factors could cause a substantial decline in the price of our common stock. In addition, securities class action and shareholder derivative litigation has often been brought against a company following a decline in the market price of its securities. We are currently the target of such litigation, resulting from the decline in our common stock following the disclosure in November 2016 of the FDA's 2016 complete response letter related to HEPLISAV-B. We may in the future be the target of additional such litigation. Securities and shareholder derivative litigation could result in substantial costs, and divert management's attention and resources, which could harm our business, operating results and financial condition.

The anti-takeover provisions of our certificate of incorporation, our bylaws, Delaware law and our share purchase rights plan may prevent or frustrate a change in control, even if an acquisition would be beneficial to our stockholders, which could affect our stock price adversely and prevent attempts by our stockholders to replace or remove our current management.

Provisions of our certificate of incorporation and bylaws may delay or prevent a change in control, discourage bids at a premium over the market price of our common stock and adversely affect the market price of our common stock and the voting or other rights of the holders of our common stock. These provisions include:

- authorizing our Board of Directors to issue additional preferred stock with voting rights to be determined by the Board of Directors;
- limiting the persons who can call special meetings of stockholders;
- prohibiting stockholder actions by written consent;
- creating a classified board of directors pursuant to which our directors are elected for staggered three year terms;
- providing that a supermajority vote of our stockholders is required for amendment to certain provisions of our certificate of incorporation and bylaws; and
- establishing advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

Our share purchase rights plan may have certain anti-takeover effects. Specifically, the rights issued pursuant to the plan will cause substantial dilution to a person or group that attempts to acquire the Company on terms not approved by our Board of Directors. Although the rights should not interfere with any merger or other business combination approved by the Board of Directors since the rights issued may be amended to permit such acquisition or redeemed by the Company at $0.001 per right prior to the earliest of (i) the time that a person or group has acquired beneficial ownership of 20% or more of our common stock or (ii) the final expiration date of the rights, the effect of the rights plan may deter a potential acquisition of the Company. In addition, we remain subject to the provisions of the Delaware corporation law that, in general, prohibit any business combination with a beneficial owner of 15% or more of our common stock for three years unless the holder’s acquisition of our stock was approved in advance by our Board of Directors.

We will continue to incur increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies, which could affect our operating results.

As a public company, we will continue to incur legal, accounting and other expenses associated with reporting requirements and corporate governance requirements, including requirements under the Sarbanes-Oxley Act of 2002 as well as new rules implemented by the Securities and Exchange Commission and the NASDAQ Stock Market LLC. We may need to continue to implement additional financial and accounting systems, procedures and controls to accommodate changes in our business and organization and to comply with new reporting requirements. There can be no assurance that we will be able to maintain a favorable assessment as to the adequacy of our internal control over financial reporting. If we are unable to reach an unqualified assessment, or our independent registered public accounting firm is unable to issue an unqualified attestation as to the effectiveness of our internal control over financial reporting as of the end of our fiscal year, investors could lose confidence in the reliability of our financial reporting which could harm our business and could impact the price of our common stock.

Future sales of our common stock or the perception that such sales may occur in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. As of March 31, 2018 we had 62,254,091 shares of common stock outstanding, all of which shares were eligible for sale in the public market, subject in some cases to the volume limitations and manner of sale requirements under Rule 144 of the Securities Act of 1933, as amended.

Under our universal shelf registration statement filed by us in August 2017, we may sell any combination of common stock, preferred stock, debt securities and warrants in one or more offerings, including pursuant to our 2017 At Market Sales Agreement with Cowen under which we can offer and sell our common stock from time to time up to aggregate sales proceeds of $150,000,000. As of March 31, 2018, we have $132.8 million remaining under this agreement. The sale or issuance of our securities, as well as the existence of outstanding options and shares of common stock reserved for issuance under our option and equity incentive plans also may adversely affect the terms upon which we are able to obtain additional capital through the sale of equity securities.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number	Document	Incorporated by Reference				Filed Herewith
		Exhibit Number	Filing	Filing Date	File No.	
3.1	Sixth Amended and Restated Certificate of Incorporation	3.1	S-1/A	February 5, 2004	333-109965	
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation	3.1	8-K	January 4, 2010	001-34207	
3.3	Certificate of Amendment of Amended and Restated Certificate of Incorporation	3.1	8-K	January 5, 2011	001-34207	
3.4	Certificate of Amendment of Amended and Restated Certificate of Incorporation	3.6	8-K	May 30, 2013	001-34207	
3.5	Certificate of Amendment of the Sixth Amended and Restated Certificate of Incorporation	3.1	8-K	November 10, 2014	001-34207	
3.6	Certificate of Amendment of the Sixth Amended and Restated Certificate of Incorporation	3.1	8-K	June 2, 2017	001-34207	
3.7	Certificate of Amendment of the Sixth Amended and Restated Certificate of Incorporation	3.1	8-K	July 31, 2017	001-34207	
3.8	Amended and Restated Bylaws	3.2	S-1/A	February 5, 2004	333-109965	
3.9	Form of Certificate of Designation of Series A Junior Participating Preferred Stock	3.3	8-K	November 6, 2008	000-50577	
4.1	Reference is made to Exhibits 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8 and 3.9 above					
4.2	Form of Specimen Common Stock Certificate	4.2	S-1/A	January 16, 2004	333-109965	
4.3	Rights Agreement, dated as of November 5, 2008, by and between the Company and Mellon Investor Services LLC	4.4	8-K	November 6, 2008	000-50577	
4.4	Form of Right Certificate	4.5	8-K	November 6, 2008	000-50577	
4.5	Form of Restricted Stock Unit Award Agreement under the 2004 Stock Incentive Plan	4.6	10-K	March 6, 2009	001-34207	
10.1	Dynavax Technologies Corporation Amended And Restated 2004 Non-Employee Director Equity Program And Amended And Restated 2005 Non-Employee Director Cash Compensation Program+					X
10.2	Sublicense Agreement, effective as of February 16, 2018, by and between the Company and Merck, Sharp & Dohme Corp.					X

Exhibit Number	Document	Incorporated by Reference				Filed Herewith
		Exhibit Number	Filing	Filing Date	File No.	
10.3	Term Loan Agreement, dated as of February 20, 2018 among the Company, certain Lenders party hereto and CRG Servicing LLC, as agent for the Lenders					X
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.2*	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X

EX—101.INS	XBRL Instance Document
EX—101.SCH	XBRL Taxonomy Extension Schema Document
EX—101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
EX—101.DEF	XBRL Taxonomy Extension Definition Linkbase
EX—101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
EX—101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

+ Indicates management contract, compensatory plan or arrangement

* The certifications attached as Exhibits 32.1 and 32.2 that accompany this Quarterly Report on Form 10-Q, are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of this Form 10-Q), irrespective of any general incorporation language contained in such filing.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Berkeley, State of California.

DYNAVAX TECHNOLOGIES CORPORATION

Date: May 9, 2018

By: /s/ EDDIE GRAY
Eddie Gray
Chief Executive Officer
(Principal Executive Officer)

Date: May 9, 2018

By: /s/ MICHAEL OSTRACH
Michael Ostrach
Chief Financial Officer
(Principal Financial Officer)

Date: May 9, 2018

By: /s/ DAVID JOHNSON
David Johnson
Vice President, Chief Accounting Officer
(Principal Accounting Officer)

Exhibit 10.1

DYNAVAX TECHNOLOGIES CORPORATION
AMENDED AND RESTATED 2004 NON-EMPLOYEE DIRECTOR EQUITY PROGRAM
AND
AMENDED AND RESTATED 2005 NON-EMPLOYEE DIRECTOR CASH COMPENSATION PROGRAM

EFFECTIVE April 14, 2005
AMENDED February 5, 2015
AMENDED February 1, 2018

ARTICLE I
ESTABLISHMENT AND PURPOSE OF THE PROGRAM

1.1 Establishment of Program

The Dynavax Technologies Corporation Amended and Restated 2004 Non-Employee Director Equity Program and Amended and Restated 2005 Non-Employee Director Cash Compensation Program (collectively, the "Director Program") is adopted by Dynavax Technologies Corporation (the "Company") pursuant to the Company's 2018 Equity Incentive Plan (the "2018 Plan") and pursuant to the recommendation of the independent compensation consultant to the Compensation Committee of the Board. In addition to the terms and conditions set forth below, the Director Program is subject to the provisions of the 2018 Plan, provided that the 2018 Plan is approved by the Company's stockholders at the Company's 2018 Annual Meeting of Stockholders (the "2018 Annual Meeting"). If the 2018 Plan is not approved at the 2018 Annual Meeting, the Director Program will be subject to the terms and conditions of the Company's 2011 Equity Incentive Plan (the "2011 Plan"), and any references herein to the 2018 Plan shall refer instead to the 2011 Plan.

1.2 Purpose of Program

The purpose of the Director Program is to enhance the ability of the Company to attract and retain directors who are not Employees ("Non-Employee Directors") through an equity and cash compensation program.

1.3 Effective Date of the Program

The Director Program became effective as of April 14, 2005, and was most recently amended on February 1, 2018.

ARTICLE II
DEFINITIONS

Capitalized terms in this Director Program, unless otherwise defined herein, have the meaning given to them in the 2018 Plan.

ARTICLE III
EQUITY TERMS

3.1 Date of Grant and Number of Shares

Effective April 14, 2005, a Nonstatutory Stock Option to purchase 15,000 shares of Common Stock shall be granted to each Non-Employee Director, except that a Nonstatutory Stock Option to purchase 25,000 shares of Common Stock shall be granted to the Chairman of the Board (each an "Initial Grant"), and such Initial Grant is to be made to Non-Employee Directors elected or appointed to the Board upon the date each such Non-Employee Director first becomes a Non-Employee Director.

In addition, immediately following each annual meeting of the Company's stockholders, commencing with the 2018 Annual Meeting, each Non-Employee Director who continues as a Non-Employee Director following such annual

meeting shall be granted a Nonstatutory Stock Option to purchase 15,000 shares of Common Stock (a "Subsequent Grant" and together with the "Initial Grant," the "Options"). Based on the Non-Employee Director's election date, the first Subsequent Grant shall be pro-rated as follows:

Service Period from Election Date	Option Grant Schedule
More than 10 up to 12 months	100% of grant (15,000 shares)
More than 7 months, but less than 10	75% of grant (11,250 shares)
More than 4 months, but less than 7	50% of grant (7,500 shares)
More than 1 month, but less than 4	25% of grant (3,750 shares)

Each such Subsequent Grant shall be made on the date of the annual stockholders' meeting in question.

3.2 Vesting

Each Initial Grant under the Director Program shall vest as follows: one-third (1/3rd) of the shares vest on each of the one, two and three year anniversaries of the date of grant, such that the Option will be fully exercisable three (3) years after its date of grant.

Each Subsequent Grant under the Director Program will vest and become exercisable as to all of the shares of Common Stock subject to the Option on the one-year anniversary of the grant date.

3.3 Exercise Price

The exercise price per share of Common Stock of each Initial Grant and Subsequent Grant shall be one hundred percent (100%) of the Fair Market Value per share on the date of grant.

3.4 Corporate Transaction/Change in Control

Each Option under the Director Program shall be subject to the provisions of Section 9 of the 2018 Plan relating to the exercise or termination of the Option in the event of a Corporate Transaction or a Change in Control.

3.5 Other Terms

The Board shall determine the remaining terms and conditions of the Options awarded under the Director Program.

ARTICLE IV
CASH COMPENSATION TERMS

4.1 Annual Fees

Each Non-Employee Director currently on the Board, or elected in 2012 and thereafter, shall receive an annual retainer fee of $40,000, except that the Chairman of the Board shall receive an annual retainer fee of $65,000. Such annual retainer fees will be paid in quarterly installments at the end of each fiscal quarter where such person is an active director of the board ("active director" requires attendance at 75% of the annually scheduled board meetings) and is inclusive of 4 scheduled board meetings.

4.2 [Intentionally Removed]

4.3 Committee Meeting Fees

The Chairman of the Audit Committee shall receive an annual retainer of $20,000, and each additional member of the Audit Committee shall receive an annual retainer of $10,000.

The Chairman of the Compensation Committee shall receive an annual retainer of $15,000, and each additional member of the Compensation Committee shall receive an annual retainer of $7,000.

The Chairman of the Nominating and Governance Committee shall receive an annual retainer of $10,000, and each additional member of the Nominating and Governance Committee shall receive an annual retainer of $5,000.

Such annual retainer fees will be paid quarterly at the end of each fiscal quarter where such person is an active Chairman or member of the committee and an active director.

4.4 Travel and Related Costs

Reasonable travel and related costs associated with attending Board and committee meetings shall be reimbursed. The Board member is required to submit proper documentation for reimbursement.

SUBLICENSE AGREEMENT

This Dynavax Sublicense Agreement (the "**Agreement**") is effective as of this 16th day of February, 2018, (the "**Effective Date**") and is entered into by and between MERCK, SHARP & DOHME CORP., a corporation organized and existing under the laws of New Jersey ("**Merck**"), and DYNAVAX TECHNOLOGIES CORPORATION, a corporation organized and existing under the laws of Delaware ("**Dynavax**").

RECITALS:

WHEREAS, The Regents of the University of California ("**UC**") owns certain Patent Rights (defined below) generally characterized as SYNTHESIS OF HUMAN VIRUS ANTIGENS BY YEAST;

WHEREAS, Merck and UC are parties to the License Agreement dated June 25, 1985 (the "**UC Agreement**"), pursuant to which UC has exclusively licensed to Merck the Patent Rights;

WHEREAS, Merck has the rights by virtue of the UC Agreement to grant sublicenses under the Patent Rights; and

WHEREAS, Dynavax desires to obtain a sublicense under the Patent Rights upon the terms and conditions set forth herein, and Merck desires to grant such a license.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants contained herein, the receipt and sufficiency of which are hereby acknowledged, Merck and Dynavax hereby agree as follows:

1 DEFINITIONS

Unless specifically set forth to the contrary herein, the following terms, whether used in the singular or plural, shall have the respective meanings set forth below.

1.1 **"Affiliate**" means (i) any corporation or business entity of which, now or hereafter, fifty percent (50%) or more of the securities or other ownership interests representing the equity, the voting stock or general partnership interest are owned, controlled or held, directly or indirectly, by Merck or Dynavax; or (ii) any corporation or business entity which, now or hereafter, directly or indirectly, owns, controls or holds fifty percent (50%) (or the maximum ownership interest permitted by law) or more of the securities or other ownership interests representing the equity, the voting stock or, if applicable, the general partnership interest, of Merck or Dynavax.

1.2 "**Change of Control**" means with respect to a Party: (1) the sale of all or substantially all of such Party's assets or business relating to this Agreement; (2) a merger, reorganization or consolidation involving such Party in which the voting securities of such Party outstanding immediately prior thereto cease to represent at least fifty percent (50%) of the combined voting power of the surviving entity immediately after such merger, reorganization or consolidation; or (3) a person or entity, or group of persons or entities, acting in concert acquire more than fifty percent (50%) of the voting equity securities or management control of such Party.

1.3 "**Effective Date**" shall have the meaning given such term in the preamble to this document.

1.4 "**FDA**" means the U.S. Food and Drug Administration, and any successor agency thereto.

1.5 **"Field"** means use of Licensed Products to prevent HBV infections and/or to prevent diseases caused or exacerbated by HBV infections.

1.6 **"First Commercial Sale"** means, with respect to any Licensed Product, the first sale for end use or consumption of such Licensed Product in the Territory, excluding, however, any sale or other distribution for use in a clinical trial.

1.7 "**HBV**" means any or all types of Hepatitis B virus.

1.8 "**HEPLISAV-B**" means the Dynavax proprietary product known by the generic name "hepatitis b adult vaccine," and by the branded name "HEPLISAV-B™," which is an adult vaccine that combines recombinant HBV surface antigen with the adjuvant 1018 ISS, a toll-like receptor 9 agonist, including any and all dosage forms, strengths, sizes, formulations and presentations thereof.

1.9 "**Information**" means any and all information and data, whether communicated in writing or orally or by any other method, which is provided by one Party to the other Party in connection with this Agreement.

1.10 "**Licensed Products**" means any prophylactic vaccine sold by or on behalf of Dynavax, including by its Affiliates and any other Sublicensee of Dynavax, comprising recombinant HBV surface antigen for use in the Field. For clarity, Licensed Products includes, but is not limited to, HEPLISAV-B.

1.11 "**Party**" means Merck and Dynavax, individually, and "**Parties**" means Merck and Dynavax, collectively.

1.12 "**Patent Rights**" means U.S. Patent No. 6,544,757, and any and all reissues, re-examinations or extensions thereof, and any counterpart applications, patents and reissues, re-examinations or extensions that would, but for this Agreement, be infringed by the making, using, importing, distributing, offering for sale or selling Licensed Products.

1.13 "**Sublicensee**" means any Affiliate of Dynavax or Third Party that receives a license grant, or option for license grant, as permitted under Section 2.2, either directly from Dynavax or indirectly by any other Sublicensee under the Patent Rights (such agreement, arrangement, or license herein referred to as a "**Sublicense**"), including to manufacture, have manufactured, offer for sale, sell, use or import a Licensed Product.

1.14 "**Territory**" means the United States.

1.15 **"Third Party"** means any party other than Dynavax, Merck or their respective Affiliates.

1.16 "**UC Agreement**" shall have the meaning given such term in the preamble to this document.

1.17 "**United States**" means the United States of America, including its states, territories and possessions.

2 SUBLICENSE TO DYNAVAX

2.1 **License Grant.** Subject to the terms and conditions of this Agreement, in consideration for the payments set forth in Article 4, Merck hereby grants to Dynavax a non-exclusive, royalty-free license under the Patent Rights, with a right to grant sublicenses to the extent set forth in Section 2.2, to make, have made, use, offer to sell and sell Licensed Products in the Field in the Territory and to import Licensed Product made outside of the Territory into the Territory for use, offer for sale and sale in the Territory in the Field. Notwithstanding the foregoing, the license granted in this Section 2.1 does not include the right to offer for sale or sell Licensed Products outside the United States that are manufactured inside the United States under the Patent Rights. In the event Licensed Products manufactured inside the United States under the Patent Rights are offered for sale or sold outside the United States, an amendment to this Agreement will be required.

2.2 **Sublicense.** Subject to the terms and conditions set forth herein, Merck hereby grants to Dynavax the right to grant Sublicenses (with the right to sublicense through multiple tiers) under the licenses provided in Section 2.1; provided that:

(a) Any and all such Sublicenses shall: (i) obligate such Sublicensee to abide by and be subject to all of the terms and provisions of this Agreement applicable to Dynavax; (ii) provide that, in the event of any inconsistency between the Sublicense and this Agreement, this Agreement shall control; and (iii) be written in the English language.

(b) Dynavax shall remain fully liable under this Agreement to Merck for the performance or non-performance under this Agreement and any relevant Sublicenses. Dynavax shall enforce all such Sublicenses against its Sublicensees, ensuring its Sublicensees' performance and compliance with the terms of this Agreement.

(c) Upon written request from Merck, Dynavax shall provide Merck with a true copy of any granted Sublicense(s) to Third Parties and any amendments of any such granted Sublicense(s) since prior notification to Merck of such Sublicense, redacted to comply with any confidentiality obligations of such party.

(d) If any Sublicense granting rights to the Patent Rights does not comport with the requirements of Section 2.2(a), or is otherwise inconsistent with the terms and conditions hereof, Dynavax shall promptly amend such Sublicense to make the Sublicense compliant and resubmit the same to Merck within sixty (60) days of such notification from Merck.

2.3 **No Non-Permitted Use**. Dynavax hereby covenants that it shall not, nor shall it cause, permit or enable any Sublicensee to knowingly use or practice, directly or indirectly, any Patent Rights for any purposes other than those expressly permitted by this Agreement.

2.4 **No Implied Licenses.** Except as specifically set forth in this Agreement, neither Party shall acquire any license or other intellectual property interest, by implication or otherwise, in any Information disclosed to it under this Agreement or under any patents or patent applications owned or controlled by the other Party or its Affiliates.

3 UC AGREEMENT

3.1 **Maintenance.** Merck (a) will use commercially reasonable efforts to duly perform and observe all of its obligations under the UC Agreement in all material respects; and (b) will not, without Dynavax's prior written consent, (i) amend, modify, restate, cancel, supplement or waive any provision of the UC Agreement, or (ii) exercise any right to terminate or consent to any termination of the UC Agreement, in each case ((i) and (ii)) that would reasonably be expected to materially adversely affect the rights of Dynavax under this Agreement. Merck will provide Dynavax with written notice as promptly as practicable (and in any event within ten (10) business days) after becoming aware of any written notice or claim from UC (or a successor), terminating, or providing notice of termination or notifying Merck that Merck has committed a material breach that, if not cured, would give rise to a right of termination of the UC Agreement.

4 FINANCIAL TERMS

4.1 **General.** In consideration for the licenses granted to Dynavax hereunder under the Patent Rights, and subject to the terms and conditions contained herein, Dynavax shall pay to Merck twenty-one million dollars ($21,000,000 USD) (the "**License Fee**") according to the payment schedule set forth in Section 4.2. It is understood by the Parties that the payments made in accordance with the terms and conditions set forth in Section 4.2 shall constitute the sole and complete consideration for the licenses granted hereunder.

4.2 **Payment Schedule.** Subject to the terms and conditions of this Agreement, Dynavax shall pay Merck: (a) seven million dollars ($7,000,000USD) within five (5) days following First Commercial Sale, but no later than March 31, 2018 in the event that First Commercial Sale has not occurred prior to such date; (b) seven million dollars ($7,000,000USD) within five (5) days following the first anniversary of the payment made in part (a) of this Section 4.2; and (c) seven million dollars ($7,000,000USD) within five (5) days following the second anniversary of the payment made in part (a) of this Section 4.2.

4.3 **Manner of Payment.** All payments to be made by Dynavax to Merck under this Agreement shall be made in United States dollars by wire transfer to such bank account as Merck will designate.

5 CONFIDENTIALITY AND PUBLICATION

5.1 Nondisclosure Obligation.

(a) All Information disclosed by one Party to another Party hereunder shall be maintained in confidence by the receiving Party and shall not be disclosed to any Third Party or used for any purpose except as set forth herein without the prior written consent of the disclosing Party, except to the extent that such Information:

(i) is known by the receiving Party at the time of its receipt, and not through a prior disclosure by the disclosing Party, as documented by the receiving Party's business records;

(ii) is in the public domain by use and/or publication before its receipt from the disclosing Party, or thereafter enters the public domain through no fault of the receiving Party;

(iii) is subsequently disclosed to the receiving Party by a Third Party who may lawfully do so and is not under an obligation of confidentiality to the disclosing Party;

(iv) is developed by the receiving Party independently of Information received from the disclosing Party, as documented by the receiving Party's business records;

(v) is disclosed to governmental or other regulatory agencies in order to gain or maintain approval to conduct clinical trials or to market Licensed Product, but such disclosure may be only to the extent reasonably necessary to obtain authorizations;

(vi) is required to be disclosed pursuant to a Party's agreement with its Third Party licensors, including the UC Agreement, or is deemed necessary by the receiving Party to be disclosed to sublicensees, agents, consultants, and/or other Third Parties in connection with, and only to the extent necessary for, activities permitted pursuant to this Agreement (or for such entities to determine their interest in performing such activities) in accordance with this Agreement on the condition that such Third Parties, including such Third Party licensors and sublicensees, agree to be bound by the confidentiality and non-use obligations that are substantially the same as those contained in this Agreement; or

(vii) is deemed necessary by counsel to the receiving Party to be disclosed to such Party's outside attorneys, independent accountants or financial advisors for the sole purpose of enabling such attorneys, independent accountants or financial advisors to provide advice to the receiving Party, on the condition that such attorneys, independent accountants and financial advisors agree to be bound by the confidentiality and non-use obligations that are substantially the same as those contained in this Agreement; provided, however, that the term of confidentiality for such attorneys, independent accountants and financial advisors shall be no less than ten (10) years.

Any combination of features or disclosures shall not be deemed to fall within the foregoing exclusions merely because individual features are published or available to the general public or in the rightful possession of the receiving Party unless the combination itself and principle of operation are published or available to the general public or in the rightful possession of the receiving Party.

(b) If a Party is required by judicial or administrative process to disclose Information of the another Party that is subject to the non-disclosure provisions of this Section 5.1, such Party shall promptly inform the another Party of the disclosure that is being sought in order to provide the another Party an opportunity to challenge or limit the disclosure obligations. Information that is disclosed by judicial or administrative process shall remain otherwise subject to the confidentiality and non-use provisions of this Section 5.1.

5.2 Publicity/Use of Names. Subject to the exceptions set forth in Section 5.1, no disclosure of the existence, or the terms, of this Agreement may be made by either Party, and no Party shall use the name, trademark, trade name or logo of the other Party, their Affiliates or their respective employees in any publicity, promotion, news release or disclosure relating to this Agreement or its subject matter, without the prior express written permission of the other Party, except as may be required by law.

6 REPRESENTATIONS AND WARRANTIES

6.1 Representations and Warranties by the Parties. Each of Merck and Dynavax hereby represents and warrants to the other Party that as of the Effective Date:

(a) it is duly organized and validly existing under the laws of the state or jurisdiction of its organization and has full corporate right, power and authority to enter into this Agreement and to perform its obligations hereunder; and

(b) this Agreement has been duly executed by it and is legally binding upon it, enforceable in accordance with its terms, and does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound, nor violate any material law or regulation of any court, governmental body or administrative or other agency having jurisdiction over it.

6.2 **Representations and Warranties by Merck.** As of the Effective Date, Merck represents and warrants to Dynavax that:

(a) the UC Agreement is a valid and binding obligation between UC and Merck, enforceable in accordance with its terms;

(b) it has the full right, power and authority to grant the licenses granted under Article 2 hereof; and

(c) Merck has not received any written notice from UC or any of its Affiliates that Merck has breached any provision of the UC Agreement in any material respect.

6.3 **Disclaimer of Warranties.** EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH IN SECTIONS 6.1 AND 6.2, MERCK MAKES NO REPRESENTATIONS OR GRANTS ANY WARRANTIES, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, BY STATUTE OR OTHERWISE, AND PROVIDES THE LICENSES "AS IS, WHERE IS". MERCK SPECIFICALLY DISCLAIMS ANY OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, OR EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OR QUALITY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR USE OR PURPOSE OR ANY WARRANTY AS TO THE VALIDITY OR ANY PATENTS OR THE NON-INFRINGEMENT OR ANY INTELLECTUAL PROPERTY RIGHTS.

7 INDEMNIFICATION

7.1 **Indemnification by Dynavax.** Dynavax will indemnify Merck, its Affiliates and their respective directors, officers, employees and agents, and their respective successors, heirs and assigns (collectively, "**Merck Indemnitees**"), and defend and save each of them harmless, from and against any and all losses, damages, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) (collectively, "**Losses**") in connection with any and all suits, investigations, claims or demands of Third Parties (collectively, "**Third Party Claims**") arising from or occurring as a result of: (i) the breach by Dynavax of any term of this Agreement; (ii) any negligence or willful misconduct on the part of Dynavax in performing its obligations under this Agreement; or (iii) the exercise of the licenses by Dynavax or the research, development, manufacture, use, sale or other exploitation by Dynavax or any of its Sublicensees of any Licensed Product; provided, that Dynavax will not be obligated to indemnify Merck Indemnitees for any Losses or Third Party Claims to the extent that such Losses or Third Party Claims arise as a result of a breach by Merck of its representations set forth in Sections 6.1 and 6.2.

7.2 **Indemnification by Merck.** Merck will indemnify Dynavax, its Affiliates and their respective directors, officers, employees and agents, and their respective successors, heirs and assigns (collectively, "**Dynavax Indemnitees**"), and defend and save each of them harmless, from and against any and all Losses in connection with any and all Third Party Claims arising from or occurring as a result of: (i) the breach by Merck of any of its representations or warranties under this Agreement; or (ii) any negligence or willful

misconduct on the part of Merck in performing its obligations under this Agreement; provided, that Merck will not be obligated to indemnify Dynavax Indemnitees for any Losses or Third Party Claims to the extent that (A) Dynavax is obligated to indemnify Merck Indemnitees for such Losses or Third Party Claims pursuant to Section 7.1, or (B) such Losses or Third Party Claims arise as a result of a breach by Dynavax of its representations set forth in Section 6.1.

7.3 Costs of Enforcement. All out of pocket costs and expenses (including the reasonable fees of attorney and other professionals) of enforcing any provisions of this Article 7 shall also be reimbursed by the indemnifying Party.

7.4 Conditions to Indemnification. A person or entity that intends to claim indemnification under this Article 7 (the "**Indemnitee**") shall promptly notify the indemnifying Party (the "**Indemnitor**") of any Losses in respect of which the Indemnitee intends to claim such indemnification, and the Indemnitor shall assume the defense thereof with counsel mutually satisfactory to the Indemnitee whether or not such Third Party Claim is rightfully brought; provided, however, that an Indemnitee shall have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnitor, if (a) Indemnitor does not assume the defense, or (b) if representation of such Indemnitee by the counsel retained by the Indemnitor would be inappropriate due to actual or potential differing interests between such Indemnitee and any other person represented by such counsel in such proceedings. The indemnity agreement in this Article 7 shall not apply to amounts paid in settlement of any Losses if such settlement is effected without the consent of the Indemnitor, which consent shall not be withheld or delayed unreasonably. The failure to deliver notice to the Indemnitor within a reasonable time (within twenty (20) days) after the commencement of any Third Party Claim, only if materially prejudicial to its ability to defend such Third Party Claim, shall relieve such Indemnitor any liability to the Indemnitee under this Article 7. The Indemnitee under this Article 7, its employees and agents, shall cooperate fully with the Indemnitor and its legal representatives in the investigations of any Third Party Claim covered by this indemnification.

8 TERMINATION AND EXPIRATION

8.1 Term and Expiration. This Agreement shall be effective as of the Effective Date and unless terminated earlier pursuant to Section 8.2 below, this Agreement shall continue in effect until the expiration of the payment obligations of Dynavax pursuant to Article 4. Subject to Section 8.28.2(b), upon expiration of this Agreement, Dynavax's license pursuant to Section 2.1 shall become fully paid-up, perpetual licenses.

8.2 Termination.

(a) Termination by Merck for Challenge. In the event that Dynavax or any of its Sublicensees, whether existing now or in the future: (a) commences or participates in any action or proceeding (including, without limitation, any patent opposition or re-examination proceeding), or otherwise asserts any claim, challenging or denying the validity or enforceability of any of the Patent Rights, or (b) actively assists any other person or entity in bringing or prosecuting any

action or proceeding (including, without limitation, any patent opposition or re-examination proceeding) challenging or denying the validity or enforceability of any Patent Rights or any claim thereof, then (i) Dynavax shall give notice thereof to Merck within five (5) days of taking such action and (ii) Merck will have the right, exercisable in its sole discretion, to immediately terminate this Agreement upon written notice to Dynavax. If Dynavax or any of its Sublicensees commences or participates in such an action or proceeding, and Merck decides not to terminate this Agreement, then (x) Dynavax shall pay one-half (1/2) of all reasonable costs, fees and expenses associated with such action or proceeding that are incurred by Merck, including reasonable attorneys' fees and all reasonable costs associated with administrative, judicial or other proceedings, within thirty (30) days after receiving an invoice from Merck for same and (y) Dynavax shall continue to pay the License Fee in accordance with Sections 4.1 and 4.2, even if such action or proceeding is successful.

(b) Termination of the UC Agreement. In the event that the UC Agreement is terminated, this Agreement shall automatically terminate and Dynavax's payment obligations under Article 4 and license under Section 2.1 shall also terminate.

(c) Termination for Bankruptcy or Insolvency. This Agreement may be terminated by either Party upon the filing or institution of bankruptcy, reorganization, liquidation or receivership proceedings, or upon an assignment of a substantial portion of the assets for the benefit of creditors by the other Party; provided, however, that in the event of any involuntary bankruptcy or receivership proceeding, such right to terminate will only become effective if the Party consents to the involuntary bankruptcy or receivership or such proceeding is not dismissed within ninety (90) days after the filing of such bankruptcy or receivership.

(d) Termination by Merck for Breach. Merck will have the right to terminate this Agreement in full in the event of a material breach by Dynavax of this Agreement. Notwithstanding the foregoing, any such termination under this Section 8.2(d) will not be effective if such material breach has been cured within ninety (90) days after written notice thereof is given by Merck to Dynavax specifying the nature of the alleged material breach (or, if such default cannot be cured within such ninety (90)-day period, such longer period as reasonably required to cure such material breach; provided, that Dynavax commences actions to cure such default within such ninety (90)-day period and thereafter diligently continues such actions).

9 MISCELLANEOUS

9.1 Assignment/ Change of Control. Except as provided in this Section 9.1, this Agreement may not be assigned or otherwise transferred, nor may any right or obligation hereunder be assigned or transferred, by either Party without the consent of the other Party; provided, however, that either Party may, without such consent, assign this Agreement and its rights and obligations hereunder, in whole or in part, to an Affiliate or in connection with the transfer or sale of all or substantially all of its assets related to the

subject matter of this Agreement, or in the event of its merger or consolidation or Change of Control or similar transaction. Any attempted assignment not in accordance with this Section 9.1 shall be void. Any permitted assignee shall assume all assigned obligations of its assignor under this Agreement. This Agreement, and the respective rights and obligations herein of the Parties, shall be binding upon and shall inure to the benefit of the Parties and their respective successors, heirs and permitted assigns.

9.2 **Severability.** If any one or more of the provisions contained in this Agreement is held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby, unless the absence of the invalidated provision(s) adversely affects the substantive rights of the Parties. The Parties shall in such an instance use reasonable efforts to replace the invalid, illegal or unenforceable provision(s) with valid, legal and enforceable provision(s) which, insofar as practical, implement the purposes of this Agreement.

9.3 **Notices.** All notices, requests, demands and other communications required or permitted to be given pursuant to this Agreement will be in writing and will be deemed to have been duly given upon the date of receipt if delivered by hand, recognized international overnight courier, confirmed facsimile transmission, or registered or certified mail, return receipt requested, postage prepaid to the following addresses or facsimile numbers:

If to Dynavax:
Dynavax Technologies Corporation
2929 Seventh St., Suite 100
Berkeley, CA 94710
Attention: Chief Executive Officer
Facsimile No.: 510-848-1376

With a copy to:
Dynavax Technologies Corporation
2929 Seventh St., Suite 100
Berkeley, CA 94710
Attention: General Counsel
Facsimile No.: 510-848-1376

If to Merck:
Merck Sharp & Dohme Corp.
One Merck Drive
P.O. Box 100
Whitehouse Station, NJ 08889-0100
Attention: Office of Secretary
Facsimile No.: (908) 735-1246

With a copy to:
Merck Sharp & Dohme Corp.
2000 Galloping Hill Road
K15F-495
Kenilworth, NJ 07033
Attention: Head, Office of Business Strategy, Transactions and Operations
Ref.: LKR 101829/159700
Facsimile No.: (908) 740-3731

Either Party may change its designated address and facsimile number by notice to the other Party in the manner provided in this Section 9.3.

9.4 **Applicable Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of New York without reference to any rules of conflict of laws or renvoi.

9.5 **Dispute Resolution.** The Parties shall negotiate in good faith and use reasonable efforts to settle any dispute, controversy or claim arising from or related to this Agreement or the breach thereof.

(a) If the Parties do not fully settle, and a Party wishes to pursue the matter, each such dispute, controversy or claim that is not an "Excluded Claim" shall be finally resolved by binding arbitration in accordance with the Commercial Arbitration Rules and Supplementary Procedures for Large Complex Disputes of the American Arbitration Association ("AAA"), except that, unless the Parties agree otherwise:

(1) the arbitration panel will be guided by the Parties' decision to use arbitration as a less expensive and more expeditious alternative to litigation, and shall order only such pre-hearing exchanges of information as will facilitate fair, speedy and cost-effective resolution;

(2) no interrogatories may be permitted;

(3) production of documents shall be limited to those that are relevant to the dispute;

(4)(i) the arbitration panel shall permit discovery depositions only upon good cause shown and consistent with the expedited nature of arbitration, and only from such persons who may possess information determined by the arbitrator(s) to be necessary to the determination of the matter; (ii) absent exceptional circumstances, no party may take more than four (4) discovery depositions of fact witnesses and three (3) discovery depositions of expert witnesses; and (iii) no corporate designee depositions are permitted;

(5) absent exceptional circumstances, the arbitration hearing shall take no more than five (5) days and each side shall be permitted no more than fifteen (15) hours to present its case (including conducting any cross-examination);

(6) the arbitrators may hear and decide pre-discovery and post-discovery dispositive motions;

(7) the arbitrators shall issue a written award that contains a reasoned opinion setting forth the findings of fact and conclusions upon which the award is based, including the calculation of any damages awarded;

(8) absent exceptional circumstances, the time between the service of the initial arbitration claim and the issuance of the arbitration award shall not exceed one (1) year; and

(9) the arbitrators shall take appropriate actions to prevent, remediate, and/or sanction abusive conduct or other actions that threaten to undermine the fair, speedy and cost-effective resolution of the matter.

(b) The arbitration shall be conducted by a panel of three persons with relevant experience. The arbitrators will be selected as follows: The AAA will provide the Parties with a list of no less than fifteen (15) proposed arbitrators within five (5) business days of receipt of the Notice of Arbitration. Within ten (10) business days of receiving such list, the Parties shall identify which if any of the proposed arbitrators they strike for cause. Each Party will also be entitled to two (2) peremptory challenges to the list of proposed arbitrators, which shall be identified at the same time as any strikes for cause. Within three (3) business days of receipt of any challenges, each Party shall select one (1) arbitrator from the remaining proposed arbitrators. The two Party-selected arbitrators shall within two (2) business days select the third arbitrator from the list of remaining arbitrators. The third arbitrator shall be the Lead Arbitrator. If both Parties initially select the same arbitrator, that arbitrator shall be the Lead Arbitrator. Within two (2) business days thereafter, the Parties shall then each select another arbitrator from the remaining proposed arbitrators. At no point during the selection process may any Party have direct communication with any proposed arbitrator, nor shall the Party-selected arbitrators be advised which Party selected them. All arbitrators must consent to abide by the provisions in Section 9.5(a) prior to their appointment. The place of arbitration shall be New York, New York, and all proceedings and communications shall be in English.

(c) The arbitrators shall have no power to grant interim or permanent injunctive relief. Notwithstanding anything contained in this Agreement to the contrary, each Party shall have the right to institute judicial proceedings against the other Party, or anyone acting by, through or under such other Party, in order to seek specific performance, injunction or similar equitable relief.

(d) Each Party shall bear its own costs and expenses and attorneys' fees and an equal share of the arbitrators' fees and any administrative fees of arbitration. **The arbitrators shall have no authority to award incidental, indirect or consequential damages (including lost profits) or punitive damages.**

(e) Neither a Party nor an arbitrator may disclose the existence, results or content of an arbitration (including any testimony, briefs, documents exchanged, written decisions, or other arbitration-related materials) without the prior written consent of both Parties, except to the extent required by law, or to the extent required by a Party to solicit expert advice or communicate with third parties believed to possess relevant information. Any Party seeking to confirm, modify, or vacate an award, or seeking enforcement of an award, shall, to the extent consistent with the law and ethical legal practice, request judicial relief to preserve the confidentiality of the arbitration to the greatest extent practicable.

(f) In no event shall an arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the dispute, controversy or claim would be barred by the applicable New York statute of limitations.

(g) The Parties agree that, in the event of a good faith dispute over the nature or quality of performance under this Agreement, neither Party may terminate this Agreement until final resolution of the dispute through arbitration or other judicial determination. The Parties further agree that any payments made pursuant to this Agreement pending resolution of the dispute shall be refunded if an arbitrator or court determines that such payments are not due.

(h) As used in this Section, the term "Excluded Claim" shall mean a dispute, controversy or claim that concerns (a) the validity or infringement of a patent, trademark or copyright; or (b) any antitrust, anti-monopoly or competition law or regulation, whether or not statutory.

9.6 Entire Agreement; Amendments. This Agreement contains the entire understanding of the Parties with respect to the licenses granted hereunder. Any other express or implied agreements and understandings, negotiations, writings and commitments, either oral or written, in respect to the subject matter hereto are superseded by the terms of this Agreement. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by authorized representative(s) of both Parties hereto.

9.7 Headings. The captions to the several Articles, Sections and subsections hereof are not a part of this Agreement, but are merely for convenience to assist in locating and reading the several Articles and Sections hereof.

9.8 Waiver. The waiver by either Party hereto of any right hereunder, or of any failure of the other Party to perform, or of any breach by the other Party, shall not be deemed a waiver of any other right hereunder or of any other breach by or failure of such other Party whether of a similar nature or otherwise.

9.9 Cumulative Remedies. No remedy referred to in this Agreement is intended to be exclusive, but each shall be cumulative and in addition to any other remedy referred to in this Agreement or otherwise available under law.

9.10 Waiver of Rule of Construction. Each Party has had the opportunity to consult with counsel in connection with the review, drafting and negotiation of this Agreement. Accordingly, the rule of construction that any ambiguity in this Agreement shall be construed against the drafting Party shall not apply.

9.11 Certain Conventions. Any reference in this Agreement to an Article, Section, subsection, paragraph, or clause shall be deemed to be a reference to an Article, Section, subsection, paragraph, or clause, of or to, as the case may be, this Agreement, unless otherwise indicated. Unless the context of this Agreement otherwise requires, (a) words of any gender include each other gender, (b) words such as "herein," "hereof," and "hereunder" refer to this Agreement as a whole and not merely to the particular provision in which such words appear, and (c) words using the singular shall include the plural, and vice versa.

9.12 **Business Day Requirements.** In the event that any notice or other action or omission is required to be taken by a Party under this Agreement on a day that is not a business day then such notice or other action or omission shall be deemed to be required to be taken on the next occurring business day.

9.13 **Counterparts.** This Agreement may be signed in any number of counterparts (facsimile and electronic transmission included), each of which shall be deemed an original, but all of which shall constitute one and the same instrument. After facsimile or electronic transmission, the parties agree to execute and exchange documents with original signatures.

[signature page follows]

IN WITNESS WHEREOF, the Parties, intending to be bound hereby, have caused their duly authorized representatives to execute this Agreement.

MERCK SHARP & DOHME CORP.

BY: /s/ Benjamin Thorner
Name: Benjamin Thorner
Title: SVP & Head of BD&L

Date: February 15, 2018

DYNAVAX TECHNOLOGIES CORPORATION

BY: /s/ Michael S. Ostrach
Name: Michael S. Ostrach
Title: SVP, CFO

Date: February 16, 2018

Exhibit 10.3

[EXECUTION VERSION]

TERM LOAN AGREEMENT

dated as of

February 20, 2018

among

DYNAVAX TECHNOLOGIES CORPORATION,
as Borrower,

The Subsidiary Guarantors from Time to Time Party Hereto,

The Lenders from Time to Time Party Hereto,

and

CRG SERVICING LLC,
as Administrative Agent and Collateral Agent

U.S. $175,000,000

Table of Contents

		Page
SECTION 1 DEFINITIONS		1
1.01	**Certain Defined Terms**	1
1.02	**Accounting Terms and Principles**	23
1.03	**Interpretation**	24
1.04	**Changes to GAAP**	25
SECTION 2 THE COMMITMENT		25
2.01	**Commitments**	25
2.02	**Borrowing Procedures**	25
2.03	**Fees**	25
2.04	**Use of Proceeds**	26
2.05	**Defaulting Lenders**	26
2.06	**Substitution of Lenders**	27
2.07	**Permitted Commercialization Arrangements**	28
SECTION 3 PAYMENTS OF PRINCIPAL AND INTEREST		28
3.01	**Repayment**	28
3.02	**Interest**	28
3.03	**Prepayments**	29
SECTION 4 PAYMENTS, ETC.		31
4.01	**Payments**	31
4.02	**Computations**	31
4.03	**Notices**	31
4.04	**Set-Off**	31
4.05	**Pro Rata Treatment**	32
SECTION 5 YIELD PROTECTION, ETC.		33
5.01	**Additional Costs**	33
5.02	**Illegality**	34
5.03	**Taxes**	35
SECTION 6 CONDITIONS PRECEDENT		38
6.01	**Conditions to the First Borrowing**	38
6.02	**Conditions to Subsequent Borrowing**	40
6.03	**Conditions to Each Borrowing**	40
SECTION 7 REPRESENTATIONS AND WARRANTIES		41
7.01	**Power and Authority**	41
7.02	**Authorization; Enforceability**	41
7.03	**Governmental and Other Approvals; No Conflicts**	42
7.04	**Financial Statements; Material Adverse Change.**	42
7.05	**Properties**	42
7.06	**No Actions or Proceedings**	45
7.07	**Compliance with Laws and Agreements**	46
7.08	**Taxes**	46
7.09	**Full Disclosure**	46
7.10	**Regulation**	47
7.11	**Solvency**	47

Page

7.12 Subsidiaries 47
7.13 Indebtedness and Liens 47
7.14 Material Agreements 48
7.15 Restrictive Agreements 48
7.16 Real Property 48
7.17 Pension Matters 48
7.18 Collateral; Security Interest 49
7.19 Regulatory Approvals 49
7.20 Update of Schedules 49
SECTION 8 AFFIRMATIVE COVENANTS 49
8.01 Financial Statements and Other Information 49
8.02 Notices of Material Events 51
8.03 Existence; Conduct of Business 53
8.04 Payment of Obligations 53
8.05 Insurance 53
8.06 Books and Records; Inspection Rights 54
8.07 Compliance with Laws and Other Obligations 54
8.08 Maintenance of Properties, Etc 54
8.09 Licenses 54
8.10 Action under Environmental Laws 55
8.11 Use of Proceeds 55
8.12 Certain Obligations Respecting Subsidiaries; Further Assurances 55
8.13 Termination of Non-Permitted Liens 57
8.14 Intellectual Property 58
8.15 [Reserved]. 58
8.16 Post-Closing Items 58
SECTION 9 NEGATIVE COVENANTS 58
9.01 Indebtedness 58
9.02 Liens 60
9.03 Fundamental Changes and Acquisitions 63
9.04 Lines of Business 64
9.05 Investments 64
9.06 Restricted Payments 65
9.07 Payments of Indebtedness 66
9.08 Change in Fiscal Year 67
9.09 Sales of Assets, Etc 67
9.10 Transactions with Affiliates 68
9.11 Restrictive Agreements 69
9.12 Amendments to Material Agreements; Organizational Documents 69
9.13 Operating Leases 69
9.14 Sales and Leasebacks 69
9.15 Hazardous Material 70
9.16 Accounting Changes 70
9.17 Compliance with ERISA 70
9.18 First Borrowing Account 70

Page

9.19 Foreign Cash 70
SECTION 10 FINANCIAL COVENANTS 70
10.01 Minimum Liquidity 70
10.02 Minimum Revenue 70
SECTION 11 EVENTS OF DEFAULT 71
11.01 Events of Default 71
11.02 Remedies 74
SECTION 12 ADMINISTRATIVE AGENT 75
12.01 Appointment and Duties 75
12.02 Binding Effect 76
12.03 Use of Discretion 77
12.04 Delegation of Rights and Duties 77
12.05 Reliance and Liability 77
12.06 Administrative Agent Individually 78
12.07 Lender Credit Decision 78
12.08 Expenses; Indemnities 79
12.09 Resignation of Administrative Agent 79
12.10 Release of Collateral or Guarantors 80
12.11 Additional Secured Parties 80
SECTION 13 MISCELLANEOUS 81
13.01 No Waiver 81
13.02 Notices 81
13.03 Expenses, Indemnification, Etc 81
13.04 Amendments, Etc 82
13.05 Successors and Assigns 83
13.06 Survival 85
13.07 Captions 86
13.08 Counterparts 86
13.09 Governing Law 86
13.10 Jurisdiction, Service of Process and Venue 86
13.11 Waiver of Jury Trial 86
13.12 Waiver of Immunity 87
13.13 Entire Agreement 87
13.14 Severability 87
13.15 No Fiduciary Relationship 87
13.16 Confidentiality 87
13.17 USA PATRIOT Act 87
13.18 Maximum Rate of Interest 88
13.19 Certain Waivers. 88
13.20 Tax Issues 89
13.21 Original Issue Discount 89
SECTION 14 GUARANTEE 90
14.01 The Guarantee 90
14.02 Obligations Unconditional 90
14.03 Reinstatement 91

		Page
14.04	**Subrogation**	91
14.05	**Remedies**	91
14.06	**Instrument for the Payment of Money**	91
14.07	**Continuing Guarantee**	91
14.08	**Rights of Contribution**	92
14.09	**General Limitation on Guarantee Obligations**	92

SCHEDULES AND EXHIBITS

Schedule 1	-	Commitments
Exhibit A	-	Form of Guarantee Assumption Agreement
Exhibit B	-	Form of Notice of Borrowing
Exhibit C-1	-	Form of U.S. Tax Compliance Certificate
Exhibit C-2	-	Form of U.S. Tax Compliance Certificate
Exhibit C-3	-	Form of U.S. Tax Compliance Certificate
Exhibit C-4	-	Form of U.S. Tax Compliance Certificate
Exhibit D	-	Form of Compliance Certificate
Exhibit E	-	Reserved
Exhibit F	-	Form of Landlord Consent
Exhibit G	-	Form of Subordination Agreement
Exhibit H	-	Form of Intercreditor Agreement (Permitted Priority Debt)
Exhibit I	-	Form of Non-Disturbance Agreement

TERM LOAN AGREEMENT, dated as of February 20, 2018 (this "***Agreement***"), among Dynavax Technologies Corporation, a Delaware corporation ("***Borrower***"), the Subsidiary Guarantors as from time to time party hereto, the Lenders from time to time party hereto and CRG SERVICING LLC, a Delaware limited liability company ("***CRG Servicing***"), as administrative agent and collateral agent for the Lenders (in such capacities, together with its successors and assigns, "***Administrative Agent***").

WITNESSETH:

Borrower has requested the Lenders to make term loans to Borrower, and the Lenders are prepared to make such loans on and subject to the terms and conditions hereof. Accordingly, the parties agree as follows:

SECTION 1
DEFINITIONS

1.01 Certain Defined Terms. As used herein, the following terms have the following respective meanings:

"***20% Condition***" has the meaning set forth in **Section 3.03(b)(i)(B)**.

"***Accounting Change Notice***" has the meaning set forth in **Section 1.04(a)**.

"***Act***" has the meaning set forth in **Section 13.17**.

"***Acquisition***" means any transaction, or any series of related transactions, by which any Person directly or indirectly, by means of a take-over bid, tender offer, amalgamation, merger, purchase or license of assets, or similar transaction having the same effect as any of the foregoing, (a) acquires the business or all or substantially all of the assets of any Person engaged in any business, (b) acquires control of securities of a Person engaged in a business representing more than 50% of the ordinary voting power for the election of directors or other governing body if the business affairs of such Person are managed by a board of directors or other governing body, or (c) acquires control of more than 50% of the ownership interest in any Person engaged in any business that is not managed by a board of directors or other governing body.

"***Affected Lender***" has the meaning set forth in **Section 2.06(a)**.

"***Affiliate***" means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified. For purposes of **Section 7.10(c)**, no Person shall constitute an Affiliate solely by reason of owning less than a majority of any class of voting securities of Borrower.

"***Agreement***" has the meaning set forth in the introduction hereto.

"***Anti-Corruption Laws***" means all laws, rules, and regulations of any jurisdiction applicable to any Obligor, its Subsidiaries or Affiliates from time to time concerning or relating to bribery or corruption, including the United States Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder.

"***Anti-Money Laundering Laws***" means any and all laws, statutes, regulations or obligatory government orders, decrees, ordinances or rules applicable to an Obligor or its Subsidiaries related to terrorism financing or money laundering, including any applicable provision of the Act and The Currency and Foreign Transaction Reporting Act (also known as the "Bank Secrecy Act," 31 U.S.C. §§5311-5330 and 12 U.S.C. §§ 1818(s), 1820(b) and 1951-1959).

"***Asset Sale***" has the meaning set forth in **Section 9.09**.

"***Asset Sale Net Proceeds***" means the sum of (i) aggregate amount of the cash proceeds received from any Asset Sale, net of any bona fide fees, costs and reasonable out-of-pocket expenses (including any legal, accounting and investment banking fees, brokerage and sales commissions) incurred in connection with such Asset Sale, and any taxes paid or payable in respect thereof, plus (ii) with respect to any non-cash proceeds of an Asset Sale, the fair market value of such non-cash proceeds as determined by a majority of the members of Borrower's board of directors who are disinterested in such Asset Sale transaction, minus (iii) the sum of (A) any amounts required to be repaid on account of any Indebtedness or other obligations (other than the Obligations), or required to be repaid as a result of such Asset Sale, in each case, to the extent that such Indebtedness or other obligations were secured by the assets disposed of in such Asset Sale, and (B) amounts required to be reserved in accordance with GAAP against liabilities associated with assets disposed of in such Asset Sale.

"***Assignment and Assumption***" means an assignment and assumption entered into by a Lender and an assignee of such Lender.

"***Average Market Capitalization***" means, for any period of time, the arithmetic mean of the Market Capitalizations for such period.

"***Bankruptcy Code***" means Title 11 of the United States Code entitled "Bankruptcy."

"***Benefit Plan***" means any employee benefit plan as defined in Section 3(3) of ERISA (whether governed by the laws of the United States or otherwise) to which any Obligor or Subsidiary thereof incurs or otherwise has any obligation or liability, contingent or otherwise.

"***Borrower***" has the meaning set forth in the introduction hereto.

"***Borrower Party***" has the meaning set forth in **Section 13.03(b)**.

"***Borrowing***" means a borrowing consisting of Loans made on the same day by the Lenders according to their respective Commitments (including a borrowing of a PIK Loan).

"***Borrowing Date***" means the date of a Borrowing.

"***Borrowing Notice Date***" means, (a) in the case of the first Borrowing, a date that is at least two Business Days prior to the Borrowing Date of such Borrowing and (b) in the case of any subsequent Borrowing, a date that is at least twelve (12) Business Days prior to the Borrowing Date of such Borrowing.

"***Business Day***" means a day (other than a Saturday or Sunday) on which commercial banks are not authorized or required to close in New York City.

"***Capital Lease Obligations***" means, as to any Person, the obligations of such Person to pay rent or other amounts under a lease of (or other agreement conveying the right to use) real and/or personal Property which obligations are required to be classified and accounted for as a capital lease on a balance sheet of such Person under GAAP and, for purposes of this Agreement, the amount of such obligations shall be the capitalized amount thereof, determined in accordance with GAAP.

"***Change of Control***" means:

(a) any "person" or "group" (as such terms are used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, but excluding any employee benefit plan of such person or its subsidiaries, and any person or entity acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan) becomes the "beneficial owner" (as defined in Rules 13d-3 and 13d-5 under the Securities Exchange Act of 1934, except that a person or group shall be deemed to have "beneficial ownership" of all securities that such person or group has the right to acquire, whether such right is exercisable immediately or only after the passage of time (such right, an "***option right***")), directly or indirectly, of more than 50% of the outstanding voting securities of Borrower entitled to vote for members of the board of directors or equivalent governing body of Borrower on a fully-diluted basis (and taking into account all such voting securities that such "person" or "group" has the right to acquire pursuant to any option right); or

(b) the acquisition of direct or indirect Control of Borrower by any Person or group of Persons acting jointly or otherwise in concert;

in each case, whether as a result of a tender or exchange offer, open market purchases, privately negotiated purchases or otherwise.

"***Claims***" means any claims, demands, complaints, grievances, actions, applications, suits, causes of action, orders, charges, indictments, prosecutions, information requests (brought by a public prosecutor without grand jury indictment) or other similar processes, assessments or reassessments.

"***Closing Expense Cap***" has the meaning set forth in the Fee Letter.

"***Code***" means the Internal Revenue Code of 1986, as amended from time to time, and the rules and regulations promulgated thereunder from time to time.

"***Collateral***" means the collateral provided for in the Security Documents.

"***Commitment***" means, with respect to each Lender, the obligation of such Lender to make Loans to Borrower in accordance with the terms and conditions of this Agreement, which commitment is in the amount set forth opposite such Lender's name on **Schedule 1** under the caption "Commitment", as such Schedule may be amended from time to time. The aggregate Commitments on the date hereof equal $175,000,000. For purposes of clarification, the amount of any PIK Loans shall not reduce the amount of the available Commitment.

"***Commitment Period***" means the period from and including the date hereof and through and including July 17, 2019.

"***Commodity Account***" has the meaning set forth in the Security Agreement.

"***Compliance Certificate***" has the meaning given to such term in **Section 8.01(c)**.

"***Connection Income Taxes***" means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

"***Contracts***" means contracts, licenses, leases, agreements, obligations, promises, undertakings, understandings, arrangements, documents, commitments, entitlements or engagements under which a Person has, or will have, any liability or contingent liability (in each case, whether written or oral, express or implied).

"***Control***" means, in respect of a particular Person, the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ability to exercise voting power, by contract or otherwise. "***Controlling***" and "***Controlled***" have meanings correlative thereto.

"***Controlled Foreign Corporation***" means a "controlled foreign corporation" as defined in Section 957(a) of the Code.

"***Copyright***" has the meaning set forth in the Security Agreement.

"***Cost Plus Arrangement***" means any combination of (i) any supply and service agreements between Borrower and Dynavax GmbH, (A) the terms of which are no less favorable to Borrower than those that would be obtained in a comparable arm's-length transaction with a Person not an Affiliate of Borrower, and (B) that is in form and substance consistent with past practice of Borrower, and (ii) any loans advanced by Borrower to Dynavax GmbH, which loans are freely assignable to Administrative Agent, for the benefit of the Secured Parties; *provided that* (x) the total payments by Borrower under all transactions described in the foregoing **clauses (i)** and **(ii)**, in the aggregate, during any period of four fiscal quarters shall not exceed the greater of (1) $20,000,000 (in the case of the 2018 fiscal year), $21,250,000 (in the case of the period from April 1, 2018 to, and including, March 31, 2019), $22,500,000 (in the case of the period from July 1, 2018 to, and including, June 30, 2019), $23,750,000 (in the case of the period from October 1, 2018 to, and including, September 30, 2019), or $25,000,000 (in the case of the 2019 fiscal year and any period thereafter), and (2) an amount equal to 100% of Borrower's Revenue from sales of the Product during the fiscal quarter that immediately preceded such four fiscal quarter period, (y) the total payments by Borrower under all transactions described in the foregoing **clause (i)**, in the aggregate during any calendar month shall not exceed the greater of (1) $2,000,000 and (2) an amount equal to the quotient of 100% of Borrower's Revenue from sales of the Product during the fiscal quarter that most recently ended prior to such calendar month divided by 12, and (z) the total payments by Borrower under all transactions described in the foregoing **clause (ii)** in the aggregate during any fiscal year shall not exceed the greater of (1) $5,000,000 and (2) an amount equal to 5% of Borrower's Revenue from sales of the Product during the preceding fiscal year.

"***Default***" means any Event of Default and any event that, upon the giving of notice, the lapse of time or both, would constitute an Event of Default.

"***Default Rate***" has the meaning set forth in **Section 3.02(b)**.

"***Defaulting Lender***" means, subject to **Section 2.05**, any Lender that (a) has failed to perform any of its funding obligations hereunder, including in respect of its Loans, within three (3) Business Days of the date required to be funded by it hereunder, (b) has notified Borrower or any Lender that it does not intend to comply with its funding obligations or has made a public statement to that effect with respect to its funding obligations hereunder or under other agreements in which it commits to extend credit, or (c) has, or has a direct or indirect parent company that has, (i) become the subject of an Insolvency Proceeding, (ii) had a receiver, conservator, trustee, administrator, assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or a custodian appointed for it, or (iii) taken any action in furtherance of, or indicated its consent to, approval of or acquiescence in any such proceeding or appointment; *provided* that a Lender shall not be a Defaulting Lender solely by virtue of the ownership or acquisition of any equity interest in that Lender or any direct or indirect parent company thereof by a Governmental Authority.

"***Deposit Account***" is defined in the Security Agreement.

"***Disclosure Letter***" means that certain Disclosure Letter of even date herewith to which each of the Schedules referenced herein is attached. Each reference in this Agreement to a Schedule (other than **Schedule I**) shall refer to the applicable Schedule attached to the Disclosure Letter.

"***Dollars***" and "***$***" means lawful money of the United States of America.

"***Domestic Subsidiary***" means a Subsidiary of Borrower that is a U.S. Person

"***Eligible Transferee***" means and includes a commercial bank, an insurance company, a finance company, a financial institution, any investment fund that invests in loans or any other "accredited investor" (as defined in Regulation D of the Securities Act) that is principally in the business of managing investments or holding assets for investment purposes; *provided* that the following conditions are met: (a) for any entity (other than an Affiliate of the Original Lenders) becoming a Lender on or prior to the earlier of the second Borrowing Date and July 17, 2019, such entity shall have total assets in excess of $1,000,000,000; and in each case which, through its applicable lending office, is capable of lending to Borrower without the imposition of any withholding or similar taxes, and (b) for any entity (other than an Affiliate of the Original Lenders) becoming a Lender after the earlier of the second Borrowing Date and July 17, 2019, such entity shall have sufficient funds to acquire or purchase the assigned Loans from an assigning Lender; *provided*, *however* that, as of any date, so long as no Event of Default has occurred and is continuing, "***Eligible Transferee***" shall not include (i) any natural Person, (ii) any Person that produces, markets or sells, a product in direct competition with the Product, (iii) a direct competitor of Borrower or (iv) a vulture hedge fund, as determined by the Majority Lenders. Notwithstanding the foregoing, (x) in connection with assignments by a Lender due to a forced divestiture at the request of any regulatory agency, the restrictions set forth herein shall

not apply and Eligible Transferee shall mean any Person or party, and (y) in connection with a Lender's own financing or securitization transactions, the restrictions set forth herein shall not apply and Eligible Transferee shall mean any Person or party providing such financing or formed to undertake such securitization transaction and any transferee of such Person or party (in each case, determined solely as of the applicable date of assignment); *provided* that no such sale, transfer, pledge or assignment under this clause (y) shall release such Lender from any of its obligations hereunder or substitute any such Person or party for such Lender as a party hereto until the Majority Lenders shall have received and accepted an effective assignment agreement from such Person or party in form satisfactory to the Majority Lenders executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such Eligible Transferee as the Majority Lenders reasonably shall require.

"***Environmental Law***" means any federal, state, provincial or local governmental law, rule, regulation, order, writ, judgment, injunction or decree relating to pollution or protection of the environment or the treatment, storage, disposal, release, threatened release or handling of hazardous materials, and all local laws and regulations related to environmental matters and any specific agreements entered into with any competent authorities which include commitments related to environmental matters.

"***Equity Interest***" means, with respect to any Person, any and all shares, interests, participations or other equivalents, including membership interests (however designated, whether voting or nonvoting), of equity of such Person, including, if such Person is a partnership, partnership interests (whether general or limited) and any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of property of, such partnership, but excluding debt securities convertible or exchangeable into such equity.

"***Equivalent Amount***" means, with respect to an amount denominated in one currency, the amount in another currency that could be purchased by the amount in the first currency determined by reference to the Exchange Rate at the time of determination.

"***ERISA***" means the United States Employee Retirement Income Security Act of 1974, as amended.

"***ERISA Affiliate***" means, collectively, any Obligor, Subsidiary thereof, and any Person under common control, or treated as a single employer, with any Obligor or Subsidiary thereof, within the meaning of Section 414(b), (c), (m) or (o) of the Code.

"***ERISA Event***" means with respect to any Benefit Plan, including any Title IV Plan or Multiemployer Plan: (a) a reportable event as defined in Section 4043 of ERISA with respect to a Title IV Plan, excluding, however, such events as to which the PBGC by regulation has waived the requirement of Section 4043(a) of ERISA that it be notified within 30 days of the occurrence of such event; (b) the applicability of the requirements of Section 4043(b) of ERISA with respect to a contributing sponsor, as defined in Section 4001(a)(13) of ERISA, to any Title IV Plan where an event described in paragraph (9), (10), (11), (12) or (13) of Section 4043(c) of ERISA is reasonably expected to occur with respect to such plan within the following 30 days; (c) a withdrawal by any Obligor or any ERISA Affiliate thereof from a Title IV Plan or the

termination of any Title IV Plan resulting in liability under Sections 4063 or 4064 of ERISA; (d) the withdrawal of any Obligor or any ERISA Affiliate thereof in a complete or partial withdrawal (within the meaning of Section 4203 and 4205 of ERISA) from any Multiemployer Plan if there is any potential liability therefor, or the receipt by any Obligor or any ERISA Affiliate thereof of notice from any Multiemployer Plan that it is in reorganization or insolvency pursuant to Section 4241 or 4245 of ERISA; (e) the filing of a notice of intent to terminate, the treatment of a plan amendment as a termination under Section 4041 or 4041A of ERISA, or the commencement of proceedings by the PBGC to terminate a Title IV Plan or Multiemployer Plan; (f) the imposition of liability on any Obligor or any ERISA Affiliate thereof pursuant to Sections 4062(e) or 4069 of ERISA or by reason of the application of Section 4212(c) of ERISA; (g) the failure by any Obligor or any ERISA Affiliate thereof to make any required contribution to a Plan, or the failure to meet the minimum funding standard of Section 412 of the Code with respect to any Title IV Plan (whether or not waived in accordance with Section 412(c) of the Code) or the failure to make by its due date a required installment under Section 430 of the Code with respect to any Title IV Plan or the failure to make any required contribution to a Multiemployer Plan; (h) the determination that any Title IV Plan is considered an at-risk plan or a plan in endangered to critical status within the meaning of Sections 430, 431 and 432 of the Code or Sections 303, 304 and 305 of ERISA; (i) an event or condition which might reasonably be expected to constitute grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Title IV Plan or Multiemployer Plan; (j) the imposition of any liability under Title I or Title IV of ERISA, other than PBGC premiums due but not delinquent under Section 4007 of ERISA, upon any Obligor or any ERISA Affiliate thereof; (k) an application for a funding waiver under Section 303 of ERISA or an extension of any amortization period pursuant to Section 412 of the Code with respect to any Title IV Plan; (l) the occurrence of a non-exempt prohibited transaction under Sections 406 or 407 of ERISA for which any Obligor or any Subsidiary thereof may be directly or indirectly liable; (m) a violation of the applicable requirements of Section 404 or 405 of ERISA or the exclusive benefit rule under Section 401(a) of the Code by any fiduciary or disqualified person for which any Obligor or any ERISA Affiliate thereof may be directly or indirectly liable; (n) the occurrence of an act or omission which could give rise to the imposition on any Obligor or any ERISA Affiliate thereof of fines, penalties, taxes or related charges under Chapter 43 of the Code or under Sections 409, 502(c), (i) or (1) or 4071 of ERISA; (o) the assertion of a material claim (other than routine claims for benefits) against any Plan or the assets thereof, or against any Obligor or any Subsidiary thereof in connection with any such plan; (p) receipt from the IRS of notice of the failure of any Qualified Plan to qualify under Section 401(a) of the Code, or the failure of any trust forming part of any Qualified Plan to fail to qualify for exemption from taxation under Section 501(a) of the Code; (q) the imposition of any lien (or the fulfillment of the conditions for the imposition of any lien) on any of the rights, properties or assets of any Obligor or any ERISA Affiliate thereof, in respect of any Benefit Plan pursuant to Title I or IV, including Section 302(f) or 303(k) of ERISA or to Section 401(a)(29) or 430(k) of the Code; (r) the establishment or amendment by any Obligor or any Subsidiary thereof of any “welfare plan”, as such term is defined in Section 3(1) of ERISA, that provides post-employment welfare benefits in a manner that would increase the liability of any Obligor; or (s) the failure of any insured medical Benefit Plan to satisfy the non-discrimination requirements of Section 105 of the Code.

"***ERISA Funding Rules***" means the rules regarding minimum required contributions (including any installment payment thereof) to Title IV Plans, as set forth in Sections 412, 430, 431, 432 and 436 of the Code and Sections 302, 303, 304 and 305 of ERISA.

"***Event of Default***" has the meaning set forth in **Section 11.01**.

"***Exchange Act***" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder from time to time.

"***Exchange Rate***" means the rate at which any currency (the "***Pre-Exchange Currency***") may be exchanged into another currency (the "***Post-Exchange Currency***"), as set forth on such date on the relevant Reuters screen at or about 11:00 a.m. (Central time) on such date. In the event that such rate does not appear on the Reuters screen, the "Exchange Rate" with respect to exchanging such Pre-Exchange Currency into such Post-Exchange Currency shall be determined by reference to such other publicly available service for displaying exchange rates as may be agreed upon by Borrower and Administrative Agent or, in the absence of such agreement, such Exchange Rate shall instead be determined by Administrative Agent by any reasonable method as they deem applicable to determine such rate, and such determination shall be conclusive absent manifest error.

"***Excluded Assets***" has the meaning set forth in the Security Agreement.

"***Excluded Subsidiary***" means any Subsidiary that is (i) a Controlled Foreign Corporation, (ii) any direct or indirect Subsidiary owned by a Subsidiary described in **clause (i)** or (iii) a Subsidiary substantially all of the assets of which consist of equity interests in a Subsidiary described in **clause (i)**.

"***Excluded Taxes***" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient: (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes and branch profits Taxes, in each case (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof), or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. Federal withholding Taxes that are imposed on amounts payable to such Lender to the extent that the obligation to withhold amounts is pursuant to a law in effect on the date on which (i) such Lender became a "Lender" under this Agreement (other than pursuant to an assignment request by Borrower under **Section 5.03(g)**) or (ii) such Lender changes its lending office, except in each case that, pursuant to Section 5.03, such amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) any U.S. Federal withholding Taxes imposed under FATCA, and (d) Taxes attributable to such Recipient's failure to comply with **Section 5.03(e)**.

"***FATCA***" means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not more onerous to comply with), any regulations or official interpretations thereof and any agreements entered into pursuant to Section 1471(b)(1) of the Code.

"***Federal Funds Effective Rate***" means, for any day, the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve System arranged by federal funds brokers, as published on the next succeeding Business Day by the Federal Reserve Bank of New York, or, if such rate is not so published for any day that is a Business Day, the average of the quotations for the day of such transactions received by Administrative Agent from three federal funds brokers of recognized standing selected by it.

"***Fee Letter***" means that fee letter agreement dated as of the date hereof between Borrower and Administrative Agent.

"***First Borrowing Account***" has the meaning set forth in **Section 6.01(g)(ii)(D)**.

"***First-Tier Excluded Subsidiary***" means an Excluded Subsidiary that is a direct wholly-owned Subsidiary of an Obligor.

"***Foreign Lender***" means a Lender that is not a U.S. Person.

"***Foreign Subsidiary***" means a Subsidiary of Borrower that is not a U.S. Person.

"***GAAP***" means generally accepted accounting principles in the United States of America, as in effect from time to time, set forth in the opinions and pronouncements of the Accounting Principles Board and the American Institute of Certified Public Accountants, in the statements and pronouncements of the Financial Accounting Standards Board and in such other statements by such other entity as may be in general use by significant segments of the accounting profession that are applicable to the circumstances as of the date of determination. Subject to **Section 1.02**, all references to "GAAP" shall be to GAAP applied consistently with the principles used in the preparation of the financial statements described in **Section 7.04(a)**.

"***Governmental Approval***" means any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

"***Governmental Authority***" means any nation, government, branch of power (whether executive, legislative or judicial), state, province or municipality or other political subdivision thereof and any entity exercising executive, legislative, judicial, monetary, regulatory or administrative functions of or pertaining to government, including regulatory authorities, governmental departments, agencies, commissions, bureaus, officials, ministers, courts, bodies, boards, tribunals and dispute settlement panels, and other law-, rule- or regulation-making organizations or entities of any State, territory, county, city or other political subdivision of the United States.

"***Guarantee***" of or by any Person (the "***guarantor***") means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation of any other Person (the "***primary obligor***") in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services

for the purpose of assuring the owner of such Indebtedness or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Indebtedness or obligation; *provided* that the term Guarantee shall not include (x) endorsements for collection or deposit in the ordinary course of business or (y) indemnification obligations incurred in the ordinary course of business or in connection with transactions permitted under this Agreement that are not in the nature of the foregoing **clauses (a)-(d)**. The amount of any Guarantee shall be deemed to be an amount equal to the stated or determinable amount of the related primary obligation, or portion thereof, in respect of which such Guarantee is made, or if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by the guaranteeing Person in good faith.

"***Guarantee Assumption Agreement***" means a Guarantee Assumption Agreement substantially in the form of **Exhibit A**.

"***Guaranteed Obligations***" has the meaning set forth in **Section 14.01**.

"***Hazardous Material***" means any substance, element, chemical, compound, product, solid, gas, liquid, waste, by-product, pollutant, contaminant or material which is hazardous or toxic, and includes (a) asbestos, polychlorinated biphenyls and petroleum (including crude oil or any fraction thereof) and (b) any material classified or regulated as "hazardous" or "toxic" or words of like import pursuant to an Environmental Law.

"***Hedging Agreement***" means any interest rate exchange agreement, foreign currency exchange agreement, commodity price protection agreement or other interest or currency exchange rate or commodity price hedging arrangement.

"***Indebtedness***" of any Person means, without duplication, (a) all obligations of such Person for borrowed money, (b) all obligations of such Person evidenced by bonds, debentures, notes or similar instruments, (c) all obligations of such Person under conditional sale or other title retention agreements relating to property acquired by such Person, (d) all obligations of such Person in respect of the deferred purchase price of property or services, which in accordance with GAAP would be required to be shown as a liability (excluding (x) current accounts payable (including intercompany charges) and (y) deferred revenue, in each case arising in the ordinary course of business), (e) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on property owned or acquired by such Person, whether or not the Indebtedness secured thereby has been assumed, (f) all Guarantees by such Person of Indebtedness or other obligations of others, (g) all Capital Lease Obligations of such Person, (h) the maximum amount available to be drawn in respect of letters of credit or letters of guaranty in respect of which such Person is obligated as an account party or otherwise liable (excluding letters of credit or bankers' acceptances issued in respect of trade payables), (i) net obligations under any Hedging Agreement currency swaps, forwards, futures or derivatives transactions, and (j) all obligations, contingent or otherwise, of such Person in respect of bankers' acceptances. The Indebtedness of any Person shall include the Indebtedness of any other entity (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person's ownership interest

in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor; *provided*, *however*, that the foregoing shall exclude, in each case, (A) severance, deferred compensation, pension, health and welfare retirement and equivalent benefits to current or former employees, directors or managers of such Person and its Subsidiaries, and (B) obligations in respect of non-competition agreements or similar arrangements. Notwithstanding the foregoing, equity derivatives permitted under this Agreement, and any obligations thereunder, shall not constitute Indebtedness.

"***Included Asset Sales***" has the meaning set forth in **Section 3.03(b)(i)(B)**.

"***Indemnified Party***" has the meaning set forth in **Section 13.03(b)**.

"***Indemnified Taxes***" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any Obligation and (b) to the extent not otherwise described in clause (a), Other Taxes.

"***Insolvency Proceeding***" means (a) any case, action or proceeding before any court or other Governmental Authority relating to bankruptcy, reorganization, insolvency, liquidation, receivership, dissolution, winding-up or relief of debtors, or (b) any general assignment for the benefit of creditors, composition, marshaling of assets for creditors, or other, similar arrangement for the benefit of any Person's creditors generally or any substantial portion of such Person's creditors, in each case undertaken under U.S. Federal, state or foreign law, including the Bankruptcy Code.

"***Intellectual Property***" means all Patents, Trademarks, Copyrights, and Technical Information, whether registered or not, domestic and foreign. Intellectual Property shall include all:

(a) applications or registrations relating to Patents, Trademarks or Copyrights;

(b) rights and privileges arising under applicable Laws with respect to such Intellectual Property;

(c) rights to sue for past, present or future infringements of such Intellectual Property; and

(d) rights of the same or similar effect or nature in any jurisdiction corresponding to such Intellectual Property throughout the world.

"***Intercompany Basket***" means the difference of $2,000,000 (or the Equivalent Amount in other currencies) minus (i) the amount of Indebtedness permitted in reliance on **Section 9.01(f)(iii)** minus (ii) the amount of Indebtedness permitted to be Guaranteed in reliance on **Section 9.01(g)(ii)**, minus (iii) the amount of Investments permitted in reliance on **Section 9.05(e)(iii)**, minus (iv) the amount of Asset Sales permitted under **Section 9.09(d)(iii)**).

"***Interest-Only Period***" means the period from and including the first Borrowing Date and through and including the twenty-third Payment Date following the first Borrowing Date.

"***Interest Period***" means, with respect to each Borrowing, (a) initially, the period commencing on and including the Borrowing Date thereof and ending on and excluding the next Payment Date, and, (b) thereafter, each period beginning on and including the last day of the immediately preceding Interest Period and ending on and excluding the next succeeding Payment Date.

"***Invention***" means any novel, inventive and useful art, apparatus, method, process, machine (including article or device), manufacture or composition of matter, or any novel, inventive and useful improvement in any art, method, process, machine (including article or device), manufacture or composition of matter.

"***Investment***" means, for any Person: (a) the acquisition (whether for cash, property, services or securities or otherwise) of capital stock, bonds, notes, debentures, partnership or other ownership interests or other securities of any other Person (including any "short sale" or any sale of any securities at a time when such securities are not owned by the Person entering into such sale); (b) the making of any deposit with, or advance, loan or other extension of credit to, any other Person (including the purchase of property from another Person subject to an understanding or agreement, contingent or otherwise, to resell such property to such Person), but excluding any such advance, loan or extension of credit having a term not exceeding 90 days arising in connection with the sale of inventory or supplies by such Person in the ordinary course of business; (c) the entering into of any Guarantee of, or other contingent obligation with respect to, Indebtedness or other liability of any other Person and (without duplication) any amount committed to be advanced, lent or extended to such Person; or (d) the entering into of any Hedging Agreement.

"***IRS***" means the U.S. Internal Revenue Service or any successor agency, and to the extent relevant, the U.S. Department of the Treasury.

"***Knowledge***" means, with respect to any Person, the actual knowledge of any Responsible Officer of such Person and, in the case of Borrower, so long as he or she is employed by Borrower or its Subsidiaries, the actual knowledge of Eddie Gray or Michael S. Ostrach, so long as such Person is an officer of Borrower.

"***Landlord Consent***" means a Landlord Consent substantially in the form of **Exhibit F** or otherwise satisfactory to the Administrative Agent.

"***Laws***" means, collectively, all international, foreign, federal, state, provincial, territorial, municipal and local statutes, treaties, rules, guidelines, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law.

"***Lender***" means each Person listed as a "Lender" on a signature page hereto, together with its successors, and each assignee of a Lender pursuant to **Section 13.05(b)**.

"***Lien***" means any mortgage, lien, pledge, charge or other security interest, or any lease, title retention agreement, mortgage, restriction, easement, right-of-way, option or adverse claim (of ownership or possession) or other encumbrance of any kind or character whatsoever or any preferential arrangement that has the practical effect of creating a security interest.

"***Liquidity***" means the balance of unencumbered (other than by Liens described in **Section 9.02(a)**, **9.02(c)** (*provided* that there is no event of default under the documentation governing the Permitted Priority Debt) or **9.02(j)**) cash and Permitted Cash Equivalent Investments (which for greater certainty shall not include any undrawn credit lines), in each case to the extent held in an account over which the Secured Parties have a perfected security interest.

"***Loan***" means (a) each loan advanced by a Lender pursuant to **Section 2.01** and (b) each PIK Loan deemed to have been advanced by a Lender pursuant to **Section 3.02(e)**. For purposes of clarification, any calculation of the aggregate outstanding principal amount of Loans on any date of determination shall include both the aggregate principal amount of loans advanced pursuant to **Section 2.01** and not yet repaid, and all PIK Loans deemed to have been advanced and not yet repaid, on or prior to such date of determination.

"***Loan Documents***" means, collectively, this Agreement, the Fee Letter, the Security Documents, any subordination agreement or any intercreditor agreement entered into by Administrative Agent (on behalf of the Lenders) with any other creditors of Obligors or any agent acting on behalf of such creditors, and any other present or future document, instrument, agreement or certificate executed by Obligors for the benefit of Administrative Agent or the Lenders in connection with or pursuant to this Agreement or any of the other Loan Documents, all as amended, restated, supplemented or otherwise modified.

"***Loss***" means judgments, debts, liabilities, expenses, costs, damages or losses, contingent or otherwise, whether liquidated or unliquidated, matured or unmatured, disputed or undisputed, contractual, legal or equitable, including loss of value, professional fees, including fees and disbursements of legal counsel on a full indemnity basis, and all costs incurred in investigating or pursuing any Claim or any proceeding relating to any Claim.

"***Majority Lenders***" means, at any time, Lenders having at such time in excess of 50% of the aggregate Commitments (or, if such Commitments are terminated, the outstanding principal amount of the Loans) then in effect, ignoring, in such calculation, the Commitments of and outstanding Loans owing to any Defaulting Lender.

"***Margin Stock***" means "margin stock" within the meaning of Regulations U and X.

"***Market Capitalization***" means, as of any date of determination, the product of (a) the number of shares of Borrower's common stock (other than treasury stock) publicly disclosed as outstanding in the most recent SEC filing of Borrower, and (b) the closing sale price for the regular trading session of Borrower's common stock on the NASDAQ Capital Market (or NASDAQ Global Market, NASDAQ Global Select Market or NYSE) on such date of determination.

"***Material Adverse Change***" and "***Material Adverse Effect***" mean a material adverse change in or effect on (a) the business, financial condition, results of operations, performance or Property of Borrower and its Subsidiaries taken as a whole, (b) the ability of the Obligors, taken as a whole, to perform their obligations under the Loan Documents, or (c) the legality, validity, binding effect or enforceability of the Loan Documents or the rights and remedies of Administrative Agent or any Lender under any of the Loan Documents. For the avoidance of doubt, the following events, in and of themselves, shall not constitute a Material Adverse Change or a Material Adverse Effect (it being understood, however, that the consequences of any such event might, when considered with other events, give rise to a Material Adverse Change or Material Adverse Effect): (a) a claimed or notice of breach or termination of a Permitted Commercialization Arrangement, (b) negative or equivocal clinical trial results in respect of the Product or any other product, (c) termination of any of Obligor's leases, (d) a going concern qualification in an auditor's opinion, (e) inspection results from any regulatory authority with jurisdiction over the Product that does not either (1) prevent the manufacture, marketing or sale of the Product in the United States for more than one hundred and twenty (120) consecutive calendar days, or (2) result in a withdrawal of any necessary regulatory approval of the Product in the United States, (f) any voluntary or involuntary recall, and (g) a delay in the approval of any supplemental Biologics License Application (sBLSA) with respect to the Product; provided that such delay does not extend beyond March 22, 2019.

"***Material Agreements***" means (a) the agreements which are listed in **Schedule 7.14** to the Disclosure Letter (as updated by Borrower from time to time in accordance with **Section 7.20** to list all such agreements that meet the description set forth in clauses (b) and (c) of this definition), (b) material inbound and outbound license agreements and (c) all other agreements held by the Obligors from time to time, the absence or termination of any of which would reasonably be expected to result in a Material Adverse Effect; *provided, however, that* "Material Agreements" exclude all: (i) licenses implied by the sale of a product; and (ii) paid-up licenses for commonly available software programs under which an Obligor is the licensee. "Material Agreement" means any one such agreement.

"***Material Indebtedness***" means, at any time, any Indebtedness of any Obligor, the outstanding principal amount of which, individually or in the aggregate, exceeds $5,000,000 (or the Equivalent Amount in other currencies).

"***Material Intellectual Property***" means, the Obligor Intellectual Property described in **Schedule 7.05(c)** of the Disclosure Letter and any other Obligor Intellectual Property after the date hereof the loss of which could reasonably be expected to have a Material Adverse Effect.

"***Maturity Date***" means the earlier to occur of (a) the Stated Maturity Date, and (b) the date on which the Loans are accelerated pursuant to **Section 11.02**.

"***Maximum Rate***" has the meaning set forth in **Section 13.18**.

"***Minimum Required Revenue***" has the meaning set forth in **Section in 10.02**.

"***Multiemployer Plan***" means any multiemployer plan, as defined in Section 400l(a)(3) of ERISA, to which any ERISA Affiliate incurs or otherwise has any obligation or liability, contingent or otherwise.

"***Non-Consenting Lender***" has the meaning set forth in **Section 2.06(a)**.

"***Non-Disclosure Agreement***" has the meaning set forth in **Section 13.16**.

"***Notice of Borrowing***" has the meaning set forth in **Section 2.02**.

"***Notice of Default Interest***" has the meaning set forth in **Section 3.02(b)**.

"***Obligations***" means, with respect to any Obligor, all amounts, obligations, liabilities, covenants and duties of every type and description owing by such Obligor to Administrative Agent, any Lender, any other indemnitee hereunder or any participant, arising out of, under, or in connection with, any Loan Document, whether direct or indirect (regardless of whether acquired by assignment), absolute or contingent, due or to become due, whether liquidated or not, now existing or hereafter arising and however acquired, and whether or not evidenced by any instrument or for the payment of money, including, without duplication, (a) if such Obligor is Borrower, all Loans, (b) all interest accruing under the Loan Documents, whether or not accruing after the filing of any petition in bankruptcy or after the commencement of any insolvency, reorganization or similar proceeding, and whether or not a claim for post-filing or post-petition interest is allowed in any such proceeding, and (c) all other fees, expenses (including fees, charges and disbursement of counsel), interest, commissions, charges, costs, disbursements, indemnities and reimbursement of amounts paid and other sums chargeable to such Obligor under any Loan Document.

"***Obligor Intellectual Property***" means Intellectual Property owned by or licensed to any of the Obligors.

"***Obligors***" means, collectively, Borrower and the Subsidiary Guarantors and their respective successors and permitted assigns.

"***OFAC***" means the Office of Foreign Assets Control of the United States Department of the Treasury.

"***Original Lenders***" means CRG Partners III L.P. and CRG Partners III – Parallel Fund "A" L.P.

"***Other Connection Taxes***" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"***Other Taxes***" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to **Section 5.03(g)**).

"***Participant***" has the meaning set forth in **Section 13.05(e)**.

"***Participant Register***" has the meaning set forth in **Section 13.05(f)**.

"***Patents***" has the meaning set forth in the Security Agreement.

"***Payment Date***" means each March 31, June 30, September 30, December 31 and the Maturity Date, commencing on the first such date to occur following the first Borrowing Date; *provided* that, if any such date shall occur on a day that is not a Business Day, the applicable Payment Date shall be the next preceding Business Day.

"***Payment In Full***" means that (i) the Commitments shall have expired or been terminated and (ii) all Obligations (other than inchoate indemnification obligations for which no claim has been made) shall have been paid in full indefeasibly in cash.

"***PBGC***" means the United States Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

"***Permitted Acquisition***" means any acquisition by Borrower or any of its wholly-owned Subsidiaries, whether by purchase, merger, license or otherwise, of all or substantially all of the assets of, all of the Equity Interests of, or a business line or unit or a division of, any Person; *provided* that:

(a) immediately prior to, and after giving effect thereto, no Default or Event of Default shall have occurred and be continuing or would result therefrom;

(b) all transactions in connection therewith shall be consummated, in all material respects, in accordance with all applicable Laws and in conformity with all applicable Governmental Approvals;

(c) in the case of the acquisition of all of the Equity Interests of such Person, all of the Equity Interests (except for any such securities in the nature of directors' qualifying shares required pursuant to applicable Law) acquired, or otherwise issued by such Person or any newly formed Subsidiary of Borrower in connection with such acquisition, shall be owned 100% by an Obligor or any other Subsidiary, and Borrower shall have taken, or caused to be taken, within forty-five (45) days after the date such Person becomes a Subsidiary of Borrower, each of the actions set forth in **Section 8.12**, if applicable;

(d) Borrower and its Subsidiaries shall be in compliance with the financial covenants set forth in **Section 10.01** and **Section 10.02** on a *pro forma* basis after giving effect to such acquisition; and

(e) such Person (in the case of an acquisition of Equity Interests) or assets (in the case of an acquisition of assets or a division) (i) shall be engaged or used, as the case may be, in the same, similar, related or complimentary business or lines of business in which Borrower and/or its Subsidiaries are engaged or (ii) shall have a similar, related or complementary customer base as Borrower and/or its Subsidiaries.

"***Permitted Acquisition Basket***" means the difference of an amount equal to 30% of Average Market Capitalization (measured, with respect to any particular transaction, as of the trading day immediately preceding the execution of the definitive documentation relating to such transaction), minus (i) total consideration for all such Permitted Acquisitions permitted in reliance on **Section 9.03(e)**, minus (ii) the aggregate amount of Indebtedness permitted in reliance on **Section 9.01(l)**, minus (iii) the aggregate amount of Indebtedness permitted in reliance on **Section 9.01(q)**, minus (iv) the aggregate amount of unfunded Investments permitted in reliance on **Section 9.05(p),** minus (iv) the aggregate amount of payments permitted in reliance on **Section 9.06(k)**.

"***Permitted Cash Equivalent Investments***" means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than two (2) years from the date of acquisition and (b) commercial paper rated at least P-1 by Moody's Investors Service, Inc. and A-1 by Standard & Poor's Ratings Group and corporate notes rated at least A2 by Moody's Investors Service, Inc. and A by Standard & Poor's Ratings Group, maturing no more than one (1) year after its creation.

"***Permitted Convertible Notes***" means unsecured convertible Indebtedness of Borrower:

(a) the aggregate principal amount of which at any time, when multiplied by the *per annum* cash interest rate then applicable thereto, does not exceed $12,000,000;

(b) as to which no conversion premium of or minimum transaction size applies;

(c) conversions of which may only be settled in shares of Borrower's common stock (plus cash in lieu of fractional shares), unless otherwise consented to by Lenders (which consent shall not unreasonably be withheld);

(d) in respect of which no payment of principal is required or permitted prior to the date that is twelve months after the Stated Maturity Date (other than cash payments for fractional shares upon conversion); *provided that*, in the case of any principal payment required as a result of an acceleration or mandatory prepayment event, the rights of the holders thereof to receive such principal shall be subject to Payment In Full; and

(e) that is governed by documentation containing representations, warranties, covenants and events of default no more burdensome or restrictive than those contained in the Loan Documents, as jointly determined in good faith by Borrower and the Administrative Agent, unless such terms are offered to the Lenders.

"***Permitted Commercialization Arrangement***" means such commercialization, research and development, co-marketing and other collaborative arrangements, including joint ventures, where such arrangements provide for licenses (including exclusive licenses) to Patents,

Trademarks, Copyrights or other Intellectual Property rights and assets of Borrower with Persons (including a Permitted Commercialization Arrangement Vehicle) with a primary line of business in the development, commercialization or manufacture of medical or pharmaceutical products or devices; *provided* that such licenses (a) must be bona fide arms' length transfers of the right to use such Intellectual Property that do not have the economic substance of a sale and Borrower retains legal ownership of such Intellectual Property and (b) shall constitute Material Agreements.

"***Permitted Commercialization Arrangement Vehicle***" means an entity, which may be a joint venture enterprise, engaged in the business of a Permitted Commercialization Arrangement and in which Borrower or its Subsidiaries have substantial representation in the governing body of such entity.

"***Permitted Indebtedness***" means any Indebtedness permitted under **Section 9.01**.

"***Permitted Liens***" means any Liens permitted under **Section 9.02**.

"***Permitted Priority Debt***" means Indebtedness of Borrower under one working capital revolving credit facility (including reimbursement agreements under letters of credit or bank guarantees permitted thereunder), in an amount not to exceed at any time the sum of (x) 80% of the face amount at such time of Borrower's eligible accounts receivable and (y) 50% of the value of Borrower's eligible inventory, in each case, at the time of any advance; *provided* that (a) such Indebtedness, if secured, may benefit from a first priority Lien on solely Borrower's accounts receivable, inventory, cash equivalents and cash (other than proceeds of (i) any protective advances made by Secured Parties in accordance with the Loan Documents, (ii) Intellectual Property and (iii) Collateral that does not secure such Permitted Priority Debt), but otherwise is not secured by any property, unless (x) such security interest in other property is subordinated to (and subject to a six-month standstill in favor of the holders of) the Liens securing the Obligations, and (y) the Secured Parties are the beneficiaries of a second-priority, perfected, lien on all collateral securing such Permitted Priority Debt that this clause (a) permits to serve as first-priority collateral for such Permitted Priority Debt, and (b) the holders or lenders thereof have executed and delivered to Administrative Agent an intercreditor agreement in substantially the form of **Exhibit H** (or otherwise satisfactory to the Administrative Agent) and with such changes (if any) as are reasonably satisfactory to Administrative Agent.

"***Permitted Priority Liens***" means (a) Liens permitted under **Section 9.02(c), (d), (e), (f), (g), (j), (k)**, **(n)**, **(o), (p), (q)**, **(r), (s)** and **(u)**, and (b) Liens permitted under **Section 9.02(b)**; *provided* that such Liens are also of the type described in **Section 9.02(c), (d), (e), (f), (g), (j), (k)**, **(n)**, **(o), (p), (q)**, **(r), (s)** and **(u)**.

"***Permitted Refinancing***" means, with respect to any Indebtedness, any extensions, renewals, refinancings and replacements of such Indebtedness; *provided* that such extension, renewal, refinancing or replacement (a) the principal amount of such new Indebtedness shall not exceed the outstanding principal amount of the existing Indebtedness plus accrued and unpaid interest and premiums thereon, (b) contains terms relating to outstanding principal amount, amortization, maturity, collateral (if any) and subordination (if any), and other material terms taken as a whole no less favorable in any material respect to Borrower and its Subsidiaries or the

Secured Parties than the terms of any agreement or instrument governing such existing Indebtedness (as jointly determined by Borrower and the Administrative Agent in good faith), (c) shall have an applicable interest rate which does not exceed the rate of interest of the Indebtedness being replaced by more than two percent (2.0%) *per annum*, and (d) shall not contain any new requirement to grant any lien or security or to give any guarantee that was not an existing requirement of such Indebtedness.

"***Person***" means any individual, corporation, company, voluntary association, partnership, limited liability company, joint venture, trust, unincorporated organization or Governmental Authority or other entity of whatever nature.

"***PIK Loan***" has the meaning set forth in **Section 3.02(e)**.

"***PIK Period***" means the period beginning on the first Borrowing Date through and including the earlier to occur of (a) the twenty-third Payment Date after the first Borrowing Date and (b) the date on which any Default shall have occurred (*provided* that if such Default shall have been cured or waived, the PIK Period shall resume until the earlier to occur of the next Default and the seventh Payment Date after the first Borrowing Date).

"***Plan***" means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which Borrower or any ERISA Affiliate is (or, if such plan were terminated, would under Section 4069 of ERISA be deemed to be) an "employer" as defined in Section 3(5) of ERISA.

"***Prepayment Premium***" means, if the prepayment occurs:

(A) on or prior to the first anniversary of the initial Borrowing Date, the Prepayment Premium shall be an amount equal to 7.00% of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date;

(B) after the first anniversary of the initial Borrowing Date, and on or prior to the second anniversary of the initial Borrowing Date, the Prepayment Premium shall be an amount equal to 3.00% of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date; and

(C) after the second anniversary of the initial Borrowing Date, the Prepayment Premium shall be an amount equal to 0.00% of the aggregate outstanding principal amount of the Loans being prepaid on such Redemption Date.

For the avoidance of doubt, the applicable Prepayment Premium shall be calculated pursuant to clauses (A) through (C) above for any borrowing under this Agreement based on the initial Borrowing Date. The Prepayment Premium payable upon any prepayment shall be in addition to any payments required pursuant to the Fee Letter.

"***Product***" means Heplisav-B, and each of its successors.

"***Property***" of any Person means any property or assets, or interest therein, of such Person.

"***Proportionate Share***" means, with respect to any Lender, the percentage obtained by dividing (a) the Commitment (or, if the Commitments are terminated, the outstanding principal amount of the Loans) of such Lender then in effect by (b) the sum of the Commitments (or, if the Commitments are terminated, the outstanding principal amount of the Loans) of all Lenders then in effect.

"***Qualified Plan***" means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (a) that is or was at any time maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has ever made, or was ever obligated to make, contributions, and (b) that is intended to be tax qualified under Section 401(a) of the Code.

"***Real Property Security Documents***" means the Landlord Consent and any mortgage or deed of trust or any other real property security document executed or required hereunder to be executed by any Obligor and granting a security interest in real Property owned or leased (as tenant) by any Obligor in favor of the Secured Parties.

"***Recipient***" means Administrative Agent or any Lender.

"***Redemption Date***" means, as the context may require, (i) the Payment Date on which an optional prepayment is made pursuant to **Section 3.03(a)**, (ii) the date of an Asset Sale or Change of Control in connection with which a prepayment is required pursuant to **Section 3.03(b)**, (iii) the date mandated by a Requirement of Law as described in **Section 5.02**, (iv) the date on which Loans become due and payable pursuant to **Section 11.02(a)** or **(b)**, and (v) in the event that Loans become due and payable prior to the Stated Maturity Date for any reason not related to the foregoing **clauses (i)** through **(iv)**, the date on which a prepayment is due.

"***Redemption Price***" means amount equal to the aggregate principal amount of the Loans being prepaid plus the applicable Prepayment Premium plus any accrued but unpaid interest and any fees then due and owing (including any fees payable pursuant to the Fee Letter).

"***Register***" has the meaning set forth in **Section 13.05(d)**.

"***Regulation T***" means Regulation T of the Board of Governors of the Federal Reserve System, as amended.

"***Regulation U***" means Regulation U of the Board of Governors of the Federal Reserve System, as amended.

"***Regulation X***" means Regulation X of the Board of Governors of the Federal Reserve System, as amended.

"***Regulatory Approvals***" means any registrations, licenses, authorizations, permits or approvals issued by any Governmental Authority and applications or submissions related to any of the foregoing.

"***Related Person***" means, with respect to any Person, such Person's Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors and representatives of such Person and of such Person's Affiliates.

"***Requirement of Law***" means, as to any Person, any statute, law, treaty, rule or regulation or determination, order, injunction or judgment of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its Properties or revenues.

"***Responsible Officer***" of any Person means each of the president, chief executive officer and chief financial officer of such Person.

"***Restricted Payment***" means any dividend or other distribution (whether in cash, securities or other property) with respect to any Equity Interest of Borrower or any of its Subsidiaries, or any payment (whether in cash, securities or other property), including any sinking fund or similar deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any such shares of capital stock of Borrower or any of its Subsidiaries or any option, warrant or other right to acquire any such shares of capital stock of Borrower or any of its Subsidiaries.

"***Restrictive Agreement***" has the meaning set forth in **Section 7.15**.

"***Revenue***" of a Person means all net revenue properly recognized under GAAP, consistently applied.

"***Sanctioned Jurisdiction***" means any country or territory to the extent that such country or territory is the subject of any Sanction.

"***Sanctioned Person***" means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by OFAC, the U.S. Department of State, the United Nations Security Council, the European Union, Her Majesty's Treasury, or other relevant sanctions authority, (b) any Person operating, organized or resident in a Sanctioned Jurisdiction or (c) any Person owned or Controlled by any such person or Persons described in clauses (a) and (b).

"***Sanctions***" means any international economic sanction administered or enforced by the United States Government (including OFAC), the United Nations Security Council, the European Union, Her Majesty's Treasury or other relevant sanctions authority.

"***SEC***" means Securities and Exchange Commission.

"***Secured Parties***" means the Lenders, Administrative Agent, each other Indemnified Party and any other holder of any Obligation.

"***Security Agreement***" means the Security Agreement, dated as of the date hereof, among the Obligors and Administrative Agent, granting a security interest in the Obligors' personal Property in favor of the Secured Parties.

"***Security Documents***" means, collectively, the Security Agreement, each Short-Form IP Security Agreement, each Real Property Security Document, and each other security document, control agreement or financing statement to which an Obligor is a party or otherwise relating to an Obligor which creates or perfects Liens in favor of the Secured Parties.

"***Securities Account***" has the meaning set forth in the Security Agreement.

"***Securities Act***" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder from time to time.

"***Short-Form IP Security Agreements***" means short-form copyright, patent or trademark (as the case may be) security agreements, entered into by one or more Obligors in favor of Administrative Agent, for the benefit of the Secured Parties, each in form and substance satisfactory to Administrative Agent (and as amended, modified or replaced from time to time).

"***Solvent***" means, with respect to any Person at any time, that (a) the present fair saleable value of the Property of such Person is greater than the total amount of liabilities (including contingent liabilities) of such Person, (b) the present fair saleable value of the Property of such Person is not less than the amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured, and (c) such Person has not incurred and does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person's ability to pay as such debts and liabilities mature.

"***Stated Maturity Date***" means the twenty-fourth Payment Date following the first Borrowing Date.

"***Subsidiary***" means, with respect to any Person (the "***parent***") at any date, any corporation, limited liability company, partnership, association or other entity (a) of which securities or other ownership interests representing more than 50% of the equity or more than 50% of the ordinary voting power or, in the case of a partnership, more than 50% of the general partnership interests are, as of such date, owned, controlled or held by the parent or one or more subsidiaries of the parent or by the parent and one or more subsidiaries of the parent or (b) except as otherwise expressly waived in writing by the Administrative Agent, that is, as of such date, otherwise Controlled by the parent or one or more subsidiaries of the parent or by the parent and one or more subsidiaries of the parent. Unless the context requires otherwise, "Subsidiary" refers to a Subsidiary of Borrower.

"***Subsidiary Guarantors***" means each of the Subsidiaries of Borrower identified under the caption "SUBSIDIARY GUARANTORS" on the signature pages hereto and each Subsidiary of Borrower that becomes, or is required to become, a "Subsidiary Guarantor" after the date hereof pursuant to **Section 8.12(a)** or **(b)**.

"***Substitute Lender***" has the meaning set forth in **Section 2.06(a)**.

"***Tax Affiliate***" means (a) Borrower and its Subsidiaries, (b) each other Obligor and (c) any Affiliate of an Obligor with which such Obligor files or is eligible to file consolidated, combined or unitary Tax returns.

"***Tax Returns***" has the meaning set forth in **Section 7.08**.

"***Taxes***" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

"***Technical Information***" means all trade secrets and other proprietary or confidential information of a scientific, technical, or business nature in any form or medium, standards and specifications, conceptions, ideas, innovations, discoveries, Invention disclosures, all documented research, developmental, demonstration or engineering work and all other information, data, plans, specifications, reports, summaries, experimental data, manuals, models, samples, know-how, technical information, systems, methodologies, computer programs, information technology and any other information.

"***Title IV Plan***" means an employee benefit plan (as defined in Section 3(3) of ERISA) other than a Multiemployer Plan (i) that is or was at any time maintained or sponsored by any Obligor or any ERISA Affiliate thereof or to which any Obligor or any ERISA Affiliate thereof has ever made, or was obligated to make, contributions, and (ii) that is or was subject to Section 412 of the Code, Section 302 of ERISA or Title IV of ERISA.

"***Trademarks***" is defined in the Security Agreement.

"***Transactions***" means the execution, delivery and performance by each Obligor of this Agreement and the other Loan Documents to which such Obligor is a party and the Borrowings (and the use of proceeds of the Loans).

"***U.S. Person***" means a "United States Person" within the meaning of Section 7701(a)(30) of the Code.

"***U.S. Tax Compliance Certificate***" has the meaning set forth in **Section 5.03(e)(ii)(B)(3)**.

"***Withdrawal Liability***" means, at any time, any liability incurred (whether or not assessed) by any ERISA Affiliate and not yet satisfied or paid in full at such time with respect to any Multiemployer Plan pursuant to Section 4201 of ERISA.

"***Withholding Agent***" means any Obligor and Administrative Agent.

1.02 Accounting Terms and Principles. All accounting determinations required to be made pursuant hereto shall, unless expressly otherwise provided herein, be made in accordance with GAAP; *provided that* for purposes of determining compliance with any covenant in Section 9 or the existence of any Default or Event of Default under Section 11, in determining whether a lease is required to be accounted for as a capital lease or an operating lease, such determination shall be made based on GAAP as in effect on the date of this Agreement; *provided*, *further*, that all terms of an accounting or financial nature (including the definitions of Capital Lease Obligations and Indebtedness) shall be construed without giving effect to (i) the effects of Accounting Standards Codification 815—Derivatives and Hedging and related interpretations to the extent such effects would otherwise increase or decrease an amount of indebtedness for any

purpose as a result of accounting for any embedded derivatives created by the terms of such indebtedness, (ii) any election under Accounting Standards Codification 825-10-25 (previously referred to as Statement of Financial Accounting Standards 159) (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any Indebtedness or other liabilities of the Borrower or any Subsidiary at "fair value," as defined therein and (iii) any treatment of Indebtedness in respect of convertible debt instruments under Accounting Standards Codification 470-20 (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any such Indebtedness in a reduced or bifurcated manner as described therein, and such Indebtedness shall at all times be valued at the full stated principal amount thereof. All components of financial calculations made to determine compliance with this Agreement, including **Section 10**, shall be adjusted to include or exclude, as the case may be, without duplication, such components of such calculations attributable to any Acquisition consummated after the first day of the applicable period of determination and prior to the end of such period, as if such Acquisition had occurred on the first day of the applicable period, as determined in good faith by Borrower based on assumptions expressed therein and that were reasonable based on the information available to Borrower at the time of preparation of the Compliance Certificate setting forth such calculations.

1.03 Interpretation. For all purposes of this Agreement, except as otherwise expressly provided herein or unless the context otherwise requires, (a) the terms defined in this Agreement include the plural as well as the singular and vice versa; (b) words importing gender include all genders; (c) any reference to a Section, Annex, Schedule or Exhibit refers to a Section of, or Annex, Schedule or Exhibit to, this Agreement; (d) any reference to "this Agreement" refers to this Agreement, including all Annexes, Schedules and Exhibits hereto, and the words herein, hereof, hereto and hereunder and words of similar import refer to this Agreement and its Annexes, Schedules and Exhibits as a whole and not to any particular Section, Annex, Schedule, Exhibit or any other subdivision; (e) references to days, months and years refer to calendar days, months and years, respectively; (f) all references herein to "include" or "including" shall be deemed to be followed by the words "without limitation"; (g) the word "from" when used in connection with a period of time means "from and including" and the word "until" means "to but not including"; and (h) accounting terms not specifically defined herein shall be construed in accordance with GAAP (except for the term "property" , which shall be interpreted as broadly as possible, including, in any case, cash, securities, other assets, rights under contractual obligations and permits and any right or interest in any property, except where otherwise noted). Unless otherwise expressly provided herein, references to organizational documents, agreements (including the Loan Documents) and other contractual instruments shall be deemed to include all permitted subsequent amendments, restatements, extensions, supplements and other modifications thereto.

1.04 **Changes to GAAP**. Subject to **Section 1.02**, if, after the date hereof, any change occurs in GAAP or in the application thereof and such change would cause any amount required to be determined for the purposes of the covenants to be maintained or calculated pursuant to **SECTION 8**, **SECTION 9** or **SECTION 10** to be materially different than the amount that would be determined prior to such change, then:

(a) Borrower will provide a detailed notice of such change (an "***Accounting Change Notice***") to Administrative Agent within 30 days of a Responsible Officer's knowledge of such change;

(b) either Borrower or the Majority Lenders may indicate within 90 days following the date of the Accounting Change Notice that they wish to revise the method of calculating such financial covenants or amend any such amount, in which case the parties will in good faith attempt to agree upon a revised method for calculating the financial covenants;

(c) until Borrower and the Majority Lenders have reached agreement on such revisions, (i) such financial covenants or amounts will be determined without giving effect to such change and (ii) all financial statements, Compliance Certificates and similar documents provided hereunder shall be provided together with a reconciliation between the calculations and amounts set forth therein before and after giving effect to such change in GAAP;

(d) if no party elects to revise the method of calculating the financial covenants or amounts, then the financial covenants or amounts will not be revised and will be determined in accordance with GAAP without giving effect to such change; and

(e) any Event of Default arising as a result of such change which is cured by operation of this **Section 1.04** shall be deemed to be of no effect *ab initio*.

SECTION 2
THE COMMITMENT

2.01 **Commitments**. Each Lender agrees severally, on and subject to the terms and conditions of this Agreement (including **SECTION 6**), to make up to two term loans (*provided* that PIK Loans shall be deemed not to constitute "term loans" for purposes of this **Section 2.01**) to Borrower, each on a Business Day during the Commitment Period in Dollars in an aggregate principal amount for such Lender not to exceed such Lender's unfunded Commitment; *provided*, *however*, that no Lender shall be obligated to make a Loan in excess of such Lender's Proportionate Share of the applicable amount of any Borrowing set forth in **Section 6** (if any) other than PIK Loans. Amounts of Loans repaid may not be reborrowed.

2.02 **Borrowing Procedures**. Subject to the terms and conditions of this Agreement (including **SECTION 6**), each Borrowing (other than a Borrowing of PIK Loans) shall be made on written notice in the form of **Exhibit B** given by Borrower to Administrative Agent not later than 11:00 a.m. (Central time) on the Borrowing Notice Date (a "***Notice of Borrowing***").

2.03 **Fees**. Borrower shall pay to Administrative Agent and/or the Lenders, as applicable, such fees as described in the Fee Letter.

2.04 Use of Proceeds. Borrower shall use the proceeds of the Loans for general working capital purposes and general corporate purposes and to pay fees, costs and expenses incurred in connection with the Transactions; *provided* that the Lenders shall have no responsibility as to the use of any proceeds of Loans.

2.05 Defaulting Lenders.

(a) **Adjustments**. Notwithstanding anything to the contrary contained in this Agreement, if any Lender becomes a Defaulting Lender, then, until such time as that Lender is no longer a Defaulting Lender, to the extent permitted by applicable law:

(i) **Waivers and Amendments**. Such Defaulting Lender's right to approve or disapprove any amendment, waiver or consent with respect to this Agreement shall be restricted as set forth in **Section 13.04**.

(ii) **Reallocation of Payments**. Any payment of principal, interest, fees or other amounts received by the Lenders for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to **SECTION 11** or otherwise), shall be applied at such time or times as follows: first, as Borrower may request (so long as no Default exists), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement; second, if so determined by the Majority Lenders and Borrower, to be held in a non-interest bearing deposit account and released in order to satisfy obligations of such Defaulting Lender to fund Loans under this Agreement; third, to the payment of any amounts owing to the Lenders as a result of any judgment of a court of competent jurisdiction obtained by any Lender against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; fourth, so long as no Default exists, to the payment of any amounts owing to Borrower as a result of any judgment of a court of competent jurisdiction obtained by Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; and fifth, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; *provided* that if (A) such payment is a payment of the principal amount of any Loans in respect of which such Defaulting Lender has not fully funded its appropriate share and (B) such Loans were made at a time when the conditions set forth in **SECTION 6** were satisfied or waived, such payment shall be applied solely to pay the Loans of all non-Defaulting Lenders on a *pro rata* basis prior to being applied to the payment of any Loans of such Defaulting Lender. Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender pursuant to this **Section 2.05(a)(ii)** shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto.

(b) **Defaulting Lender Cure**. If Borrower and the Majority Lenders agree in writing in their sole discretion that a Defaulting Lender should no longer be deemed to be a Defaulting Lender, that Lender will, to the extent applicable, purchase that portion of outstanding Loans of the other Lenders or take such other actions as necessary to cause the Loans to be held on a *pro rata* basis by the Lenders in accordance with their Proportionate Share, whereupon that Lender will cease to be a Defaulting Lender; *provided* that no adjustments will be made retroactively with respect to fees accrued or payments made by or on behalf of Borrower while that Lender was a Defaulting Lender; and *provided further* that, except to the extent otherwise expressly agreed by the affected parties, no change hereunder from Defaulting Lender to Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender.

2.06 Substitution of Lenders.

(a) **Substitution Right**. If any Lender (an "***Affected Lender***"), (i) becomes a Defaulting Lender or (ii) does not consent to any amendment, waiver or consent to any Loan Document for which the consent of the Majority Lenders is obtained but that requires the consent of other Lenders (a "***Non-Consenting Lender***"), then (x) Borrower may elect to pay in full such Affected Lender with respect to all Obligations due to such Affected Lender or (y) either Borrower or Administrative Agent shall identify any willing Lender or Affiliate of any Lender or Eligible Transferee (in each case, a "***Substitute Lender***") to substitute for such Affected Lender; *provided* that any substitution of a Non-Consenting Lender shall occur only with the consent of Administrative Agent.

(b) **Procedure**. To substitute such Affected Lender or pay in full all Obligations owed to such Affected Lender, Borrower shall deliver a notice to such Affected Lender. The effectiveness of such payment or substitution shall be subject to the delivery by Borrower (or, as may be applicable in the case of a substitution, by the Substitute Lender) of (i) payment for the account of such Affected Lender, of, to the extent accrued through, and outstanding on, the effective date for such payment or substitution, all Obligations owing to such Affected Lender (which for the avoidance of doubt, shall not include any Prepayment Premium) and (ii) in the case of a substitution, an Assignment and Assumption executed by the Substitute Lender, which shall thereunder, among other things, agree to be bound by the terms of the Loan Documents; *provided, however*, that if the Affected Lender does not execute such Assignment and Assumption within ten (10) Business Days of delivery of the notice required hereunder, such Affected Lender shall be deemed to have executed such Assignment and Assumption.

(c) **Effectiveness**. Upon satisfaction of the conditions set forth in **Sections 2.06(a)** and **(b)**, Administrative Agent shall record such substitution or payment in the Register, whereupon (i) in the case of any payment in full of an Affected Lender, such Affected Lender's Commitments shall be terminated and (ii) in the case of any substitution of an Affected Lender, (A) such Affected Lender shall sell and be relieved of, and the Substitute Lender shall purchase and assume, all rights and claims of such Affected Lender under the Loan Documents, except that the Affected Lender shall retain such rights under the Loan Documents in respect of matters occurring prior to such assignment that expressly provide that they survive the repayment of the Obligations and the termination of the Commitments, (B) such Affected Lender shall no longer constitute a "Lender" hereunder and such Substitute Lender shall become a "Lender" hereunder and (C) such Affected Lender shall execute and deliver an Assignment and Assumption to evidence such substitution; *provided, however*, that the failure of any Affected Lender to execute any such Assignment and Assumption shall not render such sale and purchase (or the corresponding assignment) invalid.

(d) **Non-Disturbance Agreements.** Lenders agree not to unreasonably (considering Administrative Agent's and Lenders' rights, remedies and Lien priority) withhold consent in entering into a mutually acceptable non-disturbance agreement in connection with any exclusive license of Intellectual Property not prohibited by this Agreement.

2.07 Permitted Commercialization Arrangements. Lenders each understand and agree that Borrower and its Subsidiaries will have the right, at Borrower's sole discretion, to enter into Permitted Commercialization Arrangements that will, in the reasonable opinion of Borrower's Board of Directors, support the business and operations of Borrower and permit Borrower to repay the Obligations hereunder. Lenders further agree to cooperate reasonably (considering Administrative Agent's and Lenders' rights, remedies and Lien priority) with Borrower in implementing such Permitted Commercialization Arrangements, which cooperation will include entering into Non-Disturbance Agreements or other similar agreements substantially in the form attached as **Exhibit I** hereto with such modifications thereto as shall be reasonably requested by Borrower and the counterparties thereto unless such modifications are materially adverse to the Administrative Agent's and Lenders' rights, remedies and Lien priority.

SECTION 3
PAYMENTS OF PRINCIPAL AND INTEREST

3.01 Repayment.

(a) **Repayment**. During the Interest-Only Period, no scheduled payments of principal of the Loans shall be due. Borrower agrees to repay to the Lenders the outstanding principal amount of the Loans on the Stated Maturity Date.

3.02 Interest.

(a) **Interest Generally**. Subject to **Section 3.02(e)**, Borrower agrees to pay to the Lenders interest on the unpaid principal amount of the Loans and the amount of all other outstanding Obligations, in the case of the Loans, for the period from the applicable Borrowing Date and, in the case of any other Obligation, from the date such other Obligation is due and payable, in each case, until paid in full, at a rate *per annum* equal to 9.50%.

(b) **Default Interest**. Notwithstanding the foregoing, if an Event of Default has occurred and is continuing, as of the earlier of (i) the date on which the Administrative Agent delivers to Borrower a written notice pursuant to this **Section 3.02(b)** (such notice, a "***Notice of Default Interest***") that the Loan shall bear interest at the Default Rate because an Event of Default has occurred and is continuing, and (ii) if Borrower shall have failed to deliver notice pursuant to **Section 8.02(a)** of such Event of Default or upon the occurrence of an Event of Default under **Sections 11.01(i), (j) or (k)**, the date on which such Event of Default occurred, and during the continuance of any Event of Default, the interest payable pursuant to **Section 3.02(a)** shall increase by 4.00% *per annum* (such aggregate increased rate, the "***Default Rate***"). Notwithstanding any other provision herein (including **Section 3.02(e)**), if interest is required to be paid at the Default Rate, it shall be paid entirely in cash.

(c) **Interest Payment Dates**. Subject to **Section 3.02(e)**, accrued interest on the Loans shall be payable in arrears on each Payment Date with respect to the most recently completed Interest Period in cash, and upon the payment or prepayment of the Loans (on the principal amount being so paid or prepaid).

(d) **Redemption Price.** For the avoidance of doubt, in the event any Loans shall become due and payable for any reason, interest pursuant to **Sections 3.02(a)** and **(b)** shall accrue on the Redemption Price for such Loans from and after the date such Redemption Price is due and payable until paid in full.

(e) **Paid In-Kind Interest**. Notwithstanding **Section 3.02(a)**, at any time during the PIK Period, Borrower may elect to pay the interest on the outstanding principal amount of the Loans payable pursuant to **Section 3.01** as follows: (i) only 7.50% of the 9.50% *per annum* interest in cash and (ii) 2.00% of the 9.50% *per annum* interest as compounded interest, added to the aggregate principal amount of the Loans (the amount of any such compounded interest being a "***PIK Loan***"). The principal amount of each PIK Loan shall accrue interest in accordance with the provisions of this Agreement applicable to the Loans.

3.03 Prepayments.

(a) **Optional Prepayments**. Upon prior written notice to Administrative Agent delivered pursuant to **Section 4.03** , Borrower shall have the right to optionally prepay in whole or in part the outstanding principal amount of the Loans on any Business Day for the Redemption Price. No partial prepayment shall be made under this **Section 3.03(a)** in connection with any event described in **Section 3.03(b)**.

(b) **Mandatory Prepayments.**

(i) **Asset Sales**.

(A) In the event and on each occasion that any Asset Sale Net Proceeds are received by or on behalf of Borrower or any of its Subsidiaries in respect of (1) the sale or other disposition of all or substantially all of the consolidated assets of the Borrower and its Subsidiaries to any Person other than a Wholly Owned Subsidiary Guarantor, or (2) the sale or other disposition of all or substantially all of (x) the rights to the Product, or (y) the assets related to the business of the Product, Borrower shall, in each case, prepay the Loans in an amount equal to the entire amount of the Asset Sale Net Proceeds of such Asset Sale, plus any accrued but unpaid interest and any fees (including any fees payable pursuant to the Fee Letter) then due and owing.

(B) In the event and on each occasion that any Asset Sale Net Proceeds are received by or on behalf of Borrower or any of its Subsidiaries in respect of any Asset Sale or series of Asset Sales (other than any Asset Sale described in the foregoing **subsection (A)** or permitted in reliance on any of **Sections 9.09(a)**, **(b)**, **(c)**, **(d)**, **(f), (g)**, **(i)**, **(j)**, **(k)** and **(l)**) (the Asset Sales subject to this **subsection (B)**, the "***Included Asset Sales***") in which the aggregate fair market value of the Property sold or otherwise disposed of in such Included Asset Sale or series of Included Asset Sales, plus the aggregate fair market value of the Property sold or otherwise disposed of pursuant to all prior Included Asset Sales since the initial Borrowing Date, equals an amount that exceeds 20% of Borrower's Market Capitalization (the "***20% Condition***") on the date of the most recent Included Asset Sale subject to this **subsection (B)**, Borrower shall, in each case, prepay the Loans in an amount equal to the entire amount of the Asset Sale Net Proceeds for such Included Asset Sale or series of Included Asset Sales that exceeds the 20% Condition (excluding, for the avoidance of doubt, (x) any Asset Sale Net Proceeds received in any Included Asset Sale or series of Included Asset Sales prior to exceeding the 20% Condition

and (y) any Asset Sale Net Proceeds received from any Included Asset Sale or series of Included Asset Sales at any time after the 20% Condition has no longer been exceeded up until the 20% Condition is subsequently exceeded again with respect to any subsequent Included Asset Sale or series of Included Asset Sales), plus any accrued but unpaid interest and any fees (including any fees payable pursuant to the Fee Letter) then due and owing.

(C) Borrower shall immediately provide notice of any Asset Sale under clause (A) or (B) above to the Administrative Agent and make such prepayment not later than five (5) Business Days after the consummation of such Asset Sale (or such later date as may be agreed to by the Administrative Agent); *provided that*, if any Asset Sale Net Proceeds shall be paid periodically rather than in a single lump sum, such prepayment need not be made as a single lump sum, but shall be made periodically, not later than five (5) Business Days after Borrower's receipt of each periodic payment (or such later date as may be agreed to by the Administrative Agent).

(ii) The amount of any prepayment pursuant to **Section 3.03(b)(i)** shall be credited in the following order:

(A) first, in reduction of Borrower's obligation to pay any unpaid interest and any fees then due and owing;

(B) second, in reduction of Borrower's obligation to pay any Claims or Losses referred to in **Section 13.03** then due and owing;

(C) third, in reduction of Borrower's obligation to pay any amounts due and owing on account of the unpaid principal amount of the Loans;

(D) fourth, in reduction of any other Obligation then due and owing; and

(E) fifth, to Borrower or such other Persons as may lawfully be entitled to or directed by Borrower to receive the remainder.

(iii) **Change of Control**. In the event of a Change of Control, Borrower shall immediately provide notice of such Change of Control to Administrative Agent and, if within ten (10) days (or such later date as may be agreed to by the Administrative Agent) of receipt of such notice Majority Lenders or Administrative Agent advise Borrower in writing that the Majority Lenders require a prepayment pursuant to this **Section 3.03(b)(iii)**, Borrower shall prepay the aggregate outstanding principal amount of the Loans in an amount equal to the Redemption Price applicable on the date of such Change of Control and pay any fees payable pursuant to the Fee Letter.

SECTION 4
PAYMENTS, ETC.

4.01 Payments.

(a) **Payments Generally**. Each payment of principal, interest and other amounts to be made by the Obligors under this Agreement or any other Loan Document shall be made in Dollars, in immediately available funds, without deduction, set off or counterclaim, to an account to be designated by Administrative Agent by notice to Borrower, not later than 4:00 p.m. (Central time) on the date on which such payment shall become due (each such payment made after such time on such due date to be deemed to have been made on the next succeeding Business Day).

(b) **Application of Payments**. Each Obligor shall, at the time of making each payment under this Agreement or any other Loan Document, specify to Administrative Agent the amounts payable by such Obligor hereunder to which such payment is to be applied (and in the event that Obligors fail to so specify, or if an Event of Default has occurred and is continuing, the Lenders may apply such payment in the manner they determine to be appropriate).

(c) **Non-Business Days**. If the due date of any payment under this Agreement (other than of principal of or interest on the Loans) would otherwise fall on a day that is not a Business Day, such date shall be extended to the next succeeding Business Day, and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension.

4.02 Computations. All computations of interest and fees hereunder shall be computed on the basis of a year of 360 days and actual days elapsed during the period for which payable.

4.03 Notices. Each notice of optional prepayment shall be effective only if received by Administrative Agent not later than 4:00 p.m. (Central time) three (3) Business Days prior to the date of prepayment. Each notice of optional prepayment shall specify the amount to be prepaid and the date of prepayment and may be conditioned upon the effectiveness of other financings or one or more other events specified therein, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied.

4.04 Set-Off.

(a) **Set-Off Generally**. Upon the occurrence and during the continuance of any Event of Default, each of Administrative Agent, each Lender and each of their Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by law, to set off and apply any and all deposits (general or special, time or demand, provisional or final) at any time held and other indebtedness at any time owing by Administrative Agent, any Lender and any of their Affiliates to or for the credit or the account of any Obligor against any and all of the Obligations, whether or not such Person shall have made any demand and although such obligations may be unmatured. Administrative Agent and each Lender agree promptly to notify Borrower after any such set-off and application; *provided* that the failure to give such notice shall not affect the validity of such set-off and application. The rights of Administrative Agent, each Lender and each of their Affiliates under this **Section 4.04** are in addition to other rights and remedies (including other rights of set-off) that such Persons may have.

(b) **Exercise of Rights Not Required**. Nothing contained herein shall require Administrative Agent, any Lender or any of their respective Affiliates to exercise any such right or shall affect the right of such Person to exercise, and retain the benefits of exercising, any such right with respect to any other indebtedness or obligation of any Obligor.

4.05 Pro Rata Treatment.

(a) Unless Administrative Agent shall have been notified in writing by any Lender prior to the proposed date of any Borrowing that such Lender will not make the amount that would constitute its share of such Borrowing available to Administrative Agent, Administrative Agent may assume that such Lender has made such amount available to Administrative Agent on such date in accordance with **SECTION 2**, and Administrative Agent may, in reliance upon such assumption, make available to Borrower a corresponding amount. If such amount is not in fact made available to Administrative Agent by the required time on the applicable Borrowing Date therefor, such Lender and Borrower severally agree to pay to Administrative Agent forthwith, on demand, such corresponding amount with interest thereon, for each day from and including the date on which such amount is made available to Borrower but excluding the date of payment to Administrative Agent, at a rate equal to the greater of (A) the Federal Funds Effective Rate and (B) a rate reasonably determined by Administrative Agent in accordance with banking industry rules on interbank compensation. If Borrower and such Lender shall pay such interest to Administrative Agent for the same or an overlapping period, Administrative Agent shall promptly remit to Borrower the amount of such interest paid by Borrower for such period. If such Lender pays its share of the applicable borrowing to Administrative Agent, then the amount so paid shall constitute such Lender's Loan included in such borrowing. Any payment by Borrower shall be without prejudice to any claim Borrower may have against a Lender that shall have failed to make such payment to Administrative Agent.

(b) Unless Administrative Agent shall have received notice from Borrower prior to the date on which any payment is due to Administrative Agent for the account of the Lenders hereunder that Borrower will not make such payment, Administrative Agent may assume that Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Lenders the amount due. In such event, if Borrower has not in fact made such payment, then each of the Lenders severally agrees to repay to Administrative Agent forthwith on demand the amount so distributed to such Lender, with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to Administrative Agent, at the greater of the Federal Funds Effective Rate and a rate determined by Administrative Agent in accordance with banking industry rules on interbank compensation. Nothing herein shall be deemed to limit the rights of Administrative Agent or any Lender against any Obligor.

(c) If any Lender shall obtain any payment (whether voluntary, involuntary, through the exercise of any right of set-off, or otherwise) on account of the principal of or interest on any Loan made by it or other obligations hereunder, as applicable (other than pursuant to a provision hereof providing for non-pro rata treatment), in excess of its Proportionate Share, of such payment on account of the Loans, such Lender shall (i) notify Administrative Agent of the receipt of such payment, and (ii) within five (5) Business Days of such receipt purchase (for cash at face value) from the other Lenders, as applicable (directly or through Administrative Agent),

without recourse, such participations in the Loans made by them or make such other adjustments as shall be equitable, as shall be necessary to cause such purchasing Lender to share the excess payment ratably with each of the other Lenders in accordance with their respective Proportionate Shares, as applicable; *provided*, *however*, that (A) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, without interest and (B) the provisions of this paragraph shall not be construed to apply to (x) any payment made by Borrower pursuant to and in accordance with the express terms of this Agreement (including the application of funds arising from the existence of a Defaulting Lender) or (y) any payment obtained by a Lender as consideration for the assignment or sale of a participation in any of its Loans to any assignee or participant, other than to Borrower or any of its Affiliates (as to which the provisions of this paragraph shall apply). Borrower agrees that any Lender so purchasing a participation from another Lender pursuant to this **Section 4.05(c)** may exercise all its rights of payment (including the right of set-off) with respect to such participation as fully as if such Lender were the direct creditor of Borrower in the amount of such participation. No documentation other than notices and the like referred to in this **Section 4.05(c)** shall be required to implement the terms of this **Section 4.05(c)**. Administrative Agent shall keep records (which shall be conclusive and binding in the absence of manifest error) of participations purchased pursuant to this **Section 4.05(c)** and shall in each case notify the Lenders following any such purchase. Borrower consents on behalf of itself and each other Obligor to the foregoing and agrees, to the extent it may effectively do so under applicable law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against each Obligor rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of each Obligor in the amount of such participation.

SECTION 5
YIELD PROTECTION, ETC.

5.01 Additional Costs.

(a) **Change in Requirements of Law Generally**. If, on or after the date hereof, the adoption of any Requirement of Law, or any change in any Requirement of Law, or any change in the interpretation or administration thereof by any court or other Governmental Authority charged with the interpretation or administration thereof, or compliance by any of the Lenders (or its lending office) with any request or directive (whether or not having the force of law) of any such Governmental Authority, shall impose, modify or deem applicable any reserve (including any such requirement imposed by the Board of Governors of the Federal Reserve System), special deposit, contribution, insurance assessment or similar requirement, in each case that becomes effective after the date hereof, against assets of, deposits with or for the account of, or credit extended by, a Lender (or its lending office) or shall impose on a Lender (or its lending office) any other condition affecting the Loans or the Commitment, and the result of any of the foregoing is to increase the cost to such Lender of making or maintaining the Loans, or to reduce the amount of any sum received or receivable by such Lender under this Agreement or any other Loan Document, by an amount deemed by such Lender to be material (other than (i) Indemnified Taxes, (ii) Taxes described in **clauses (b)** through **(d)** of the definition of "Excluded Taxes" and (iii) Connection Income Taxes), then Borrower shall pay to such Lender on demand such additional amount or amounts as will compensate such Lender for such increased cost or reduction.

(b) **Change in Capital Requirements**. If a Lender shall have determined that, on or after the date hereof, the adoption of any Requirement of Law regarding capital adequacy, or any change therein, or any change in the interpretation or administration thereof by any Governmental Authority charged with the interpretation or administration thereof, or any request or directive regarding capital adequacy (whether or not having the force of law) of any such Governmental Authority, in each case that becomes effective after the date hereof, has or would have the effect of reducing the rate of return on capital of a Lender (or its parent) as a consequence of a Lender's obligations hereunder or the Loans to a level below that which a Lender (or its parent) could have achieved but for such adoption, change, request or directive by an amount reasonably deemed by it to be material, then Borrower shall pay to such Lender on demand such additional amount or amounts as will compensate such Lender (or its parent) for such reduction.

(c) **Notification by Lender**. Each Lender (directly or through Administrative Agent) will promptly notify Borrower of any event of which it has knowledge, occurring after the date hereof, which will entitle such Lender to compensation pursuant to this **Section 5.01**. Before giving any such notice pursuant to this **Section 5.01(c)** such Lender shall designate a different lending office if such designation (x) will, in the reasonable judgment of such Lender, avoid the need for, or reduce the amount of, such compensation and (y) will not, in the reasonable judgment of such Lender, be materially disadvantageous to such Lender. A certificate of the Lender claiming compensation under this **Section 5.01**, setting forth the additional amount or amounts to be paid to it hereunder, shall be conclusive and binding on Borrower in the absence of manifest error.

(d) Notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to constitute a change in Requirements of Law for all purposes of this **Section 5.01**, regardless of the date enacted, adopted or issued.

5.02 Illegality. Notwithstanding any other provision of this Agreement, in the event that on or after the date hereof the adoption of or any change in any Requirement of Law or in the interpretation or application thereof by any competent Governmental Authority shall make it unlawful for a Lender or its lending office to make or maintain the Loans (and, in the opinion of such Lender, the designation of a different lending office would either not avoid such unlawfulness or would be disadvantageous to such Lender), then such Lender shall promptly notify Borrower thereof following which (a) the Lender's Commitment shall be suspended until such time as such Lender may again make and maintain the Loans hereunder and (b) if such Requirement of Law shall so mandate, the Loans shall be prepaid by Borrower on or before such date as shall be mandated by such Requirement of Law in an amount equal to the Redemption Price applicable on the date of such prepayment.

5.03 Taxes.

(a) **Payments Free of Taxes**. Any and all payments by or on account of any Obligation shall be made without deduction or withholding for any Taxes, except as required by applicable law. If any applicable law (as determined in the good faith discretion of an applicable Withholding Agent) requires the deduction or withholding of any Tax from any such payment by a Withholding Agent, then the

applicable Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable law and, if such Tax is an Indemnified Tax, then the sum payable by the applicable Obligor shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this **SECTION 5)** the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(b) **Payment of Other Taxes by Borrower**. The Obligors shall timely pay to the relevant Governmental Authority in accordance with applicable law, or at the option of each Lender, timely reimburse it for, Other Taxes.

(c) **Evidence of Payments**. As soon as practicable after any payment of Taxes by any Obligor to a Governmental Authority pursuant to this **SECTION 5**, such Obligor shall deliver to Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment.

(d) **Indemnification**. The Obligors shall jointly and severally reimburse and indemnify each Recipient, within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this **SECTION 5**) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority; *provided* that Borrower shall not be required to indemnify a Recipient pursuant to this **Section 5.03(d)** to the extent that such Recipient fails to notify Borrower of its intent to make a claim for indemnification under this Section within 180 days after a claim is asserted in writing by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to Borrower by a Lender shall be conclusive absent manifest error.

(e) **Status of Lenders**.

(i) Any Lender that is entitled to an exemption from, or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to Borrower and Administrative Agent, at the time or times reasonably requested by Borrower, such properly completed and executed documentation reasonably requested by Borrower or Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender shall deliver to Borrower and Administrative Agent such other documentation prescribed by applicable law as reasonably requested by Borrower or Administrative Agent as will enable Borrower or Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in **Section 5.03(e)(ii)(A)**, **(B) or (D)**) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that Borrower is a U.S. Person:

(A) any Lender that is a U.S. Person shall deliver to Borrower and Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower), executed originals of IRS Form W-9 (or successor form) certifying that such Lender is exempt from U.S. Federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and Administrative Agent (in such number of copies as shall be requested) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (or successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (or successor form) establishing an exemption from, or reduction of, U.S. Federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) executed originals of IRS Form W-8ECI (or successor form);

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of **Exhibit C-1** to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of the applicable Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code (a "***U.S. Tax Compliance Certificate***") and (y) executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (or successor form); or

(4) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY (or successor form), accompanied by IRS Form W-8ECI (or successor form), IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (or successor form), a U.S. Tax Compliance Certificate substantially in the form of **Exhibit C-2** or **Exhibit C-3**, IRS Form W-9 (or successor form), and/or other certification documents from each beneficial owner, as applicable; *provided* that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of **Exhibit C-4** on behalf of each such direct and indirect partner.

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower), executed originals of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. Federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit Borrower to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. Federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to Borrower and Administrative Agent at the time or times prescribed by law (and at such time or times as reasonably requested by Borrower or Administrative Agent) such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by Borrower or Administrative Agent as may be necessary for Borrower and Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

(iii) Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, such Lender shall update such form or certification or promptly notify Borrower in writing of its legal inability to do so.

(f) **Treatment of Certain Refunds**. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this **SECTION 5** (including by the payment of additional amounts pursuant to this **SECTION 5**), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this **SECTION 5** with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (plus any penalties, interest or other charges imposed by the relevant

Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this **Section 5.03(f)**, in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this **Section 5.03(f)** the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Taxes subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This **Section 5.03(f)** shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(g) **Mitigation Obligations**. If Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or to any Governmental Authority for the account of any Lender pursuant to **Section 5.01** or this **Section 5.03**, then such Lender shall (at the request of Borrower) use commercially reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign and delegate its rights and obligations hereunder to another of its offices, branches or Affiliates if, in the sole reasonable judgment of such Lender, such designation or assignment and delegation would (i) eliminate or reduce amounts payable pursuant to **Section 5.01** or this **Section 5.03**, as the case may be, in the future, (ii) not subject such Lender to any unreimbursed cost or expense and (iii) not otherwise be disadvantageous to such Lender. Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment and delegation.

SECTION 6
CONDITIONS PRECEDENT

6.01 Conditions to the First Borrowing. The obligation of each Lender to make a Loan as part of the first Borrowing shall not become effective until the following conditions precedent shall have been satisfied or waived in writing by the Lenders:

(a) **Borrowing Date**. Such Borrowing shall be made on the date hereof.

(b) **Amount of First Borrowing**. The amount of such Borrowing shall equal $100,000,000.

(c) **Terms of Material Agreements, Etc**. Lenders shall be reasonably satisfied with the terms and conditions of all of the Obligors' Material Agreements.

(d) **No Law Restraining Transactions**. No applicable law or regulation shall restrain, prevent or, in the reasonable judgment of the Lenders, impose materially adverse conditions upon the Transactions.

(e) **Payment of Fees**. Lenders shall be satisfied with the arrangements to deduct the fees set forth in the Fee Letter (including the financing fee required pursuant to the Fee Letter) from the proceeds advanced.

(f) **Lien Searches**. Lenders shall be satisfied with Lien searches regarding Borrower and its Subsidiaries made prior to such Borrowing.

(g) **Documentary Deliveries**. The Lenders shall have received the following documents, each of which shall be in form and substance reasonably satisfactory to the Lenders:

(i) **Agreement**. This Agreement duly executed and delivered by Borrower and each of the other parties hereto.

(ii) **Security Documents**.

(A) The Security Agreement, duly executed and delivered by each of the Obligors.

(B) Each of the Short-Form IP Security Agreements, duly executed and delivered by the applicable Obligor.

(C) Original share certificates or other documents or evidence of title with regard to all Equity Interests owned by the Obligors (to the extent that such Equity Interests are certificated), together with share transfer documents, undated and executed in blank.

(D) A duly executed control agreement in favor of Administrative Agent for the benefit of the Secured Parties for the Deposit Account into which the first Borrowing will be funded (the "***First Borrowing Account***").

(E) Evidence of filing of UCC-1 financing statements against each Obligor in its jurisdiction of formation or incorporation, as the case may be.

(F) Evidence of filing of each of the Short-Form IP Security Agreements in the United States Patent and Trademark Office or the United States Copyright office, as applicable.

(G) Without limitation, all other documents and instruments reasonably required to perfect the Secured Parties' Lien on, and security interest in, the Collateral required to be delivered on or prior to such Borrowing Date shall have been duly executed and delivered and be in proper form for filing, and shall create in favor of the Secured Parties, a perfected Lien on, and security interest in, the Collateral, subject to no Liens other than Permitted Liens.

(iii) **Fee Letter**. The Fee Letter duly executed and delivered by Borrower and Administrative Agent.

(iv) **Approvals**. Certified copies of all material licenses, consents, authorizations and approvals of, and notices to and filings and registrations with, any Governmental Authority (including all foreign exchange approvals), and of all third-party consents and approvals, necessary in connection with the making and performance by the Obligors of the Loan Documents and the Transactions.

(v) **Corporate Documents**. Certified copies of the constitutive documents of each Obligor (if publicly available in such Obligor's jurisdiction of formation) and of resolutions of the Board of Directors (or shareholders, if applicable) of each Obligor authorizing the making and performance by it of the Loan Documents to which it is a party.

(vi) **Incumbency Certificate**. A certificate of each Obligor as to the authority, incumbency and specimen signatures of the persons who have executed the Loan Documents and any other documents in connection herewith on behalf of the Obligors.

(vii) **Officer's Certificate**. A certificate, dated such Borrowing Date and signed by the Chief Executive Officer, President, a Vice President or a financial officer of Borrower, confirming compliance with the conditions set forth in **Section 6.03**.

(viii) **Opinions of Counsel**. A favorable opinion, dated such Borrowing Date, of counsel to each Obligor in form acceptable to the Lenders and their counsel.

(ix) **Insurance**. Certificates of insurance evidencing the existence of all insurance required to be maintained by the Borrower pursuant to **Section 8.05** and the designation of Administrative Agent as the lender's loss payees or additional named insured, as the case may be, thereunder.

6.02 Conditions to Subsequent Borrowing. The obligation of each Lender to make a Loan as part of a subsequent Borrowing is subject to the following conditions precedent (*provided* that PIK Loans shall be deemed not to constitute a Loan for purposes of this **Section 6.02**), which shall have been satisfied or waived in writing by the Lenders.

(a) **Borrowing Date**. Such Borrowing shall occur no later than July 17, 2019.

(b) **Amount of Borrowing**. The amount of such Borrowing shall not exceed $75,000,000 (and, if less than $75,000,000, shall be in an increment of $25,000,000).

(c) **Borrowing Milestone**. Market Capitalization shall be at least $300,000,000 for each of the sixty consecutive days prior to the Borrowing Notice Date for such Borrowing.

6.03 Conditions to Each Borrowing. The obligation of each Lender to make a Loan as part of any Borrowing (including the first Borrowing) is also subject to satisfaction of the following further conditions precedent on the applicable Borrowing Date (*provided* that PIK Loans shall be deemed not to constitute a Loan for purposes of this **Section 6.03**), which shall have been satisfied or waived in writing by the Lenders:

(a) **Commitment Period**. Except in the case of any PIK Loan, such Borrowing Date shall occur during the Commitment Period.

(b) **No Default; Representations and Warranties**. Both immediately prior to the making of such Loan and after giving effect thereto and to the intended use thereof:

(i) no Default shall have occurred and be continuing or would result from such proposed Loan or the application of the proceeds thereof;

(ii) the representations and warranties in **SECTION 7** shall be (A) in the case of representations qualified by "materiality", "material adverse effect" or similar language, true and correct in all respects and (B) in the case of all other representations and warranties, true and correct in all material respects, in each case, on and as of the Borrowing Date, and immediately after giving effect to the application of the proceeds of the Borrowing, with the same force and effect as if made on and as of such date (except that the representation regarding representations and warranties that refer to a specific earlier date shall be that they were true and correct on such earlier date); and

(iii) no Material Adverse Effect has occurred or is reasonably likely to occur after giving effect to such proposed Borrowing.

(c) **Notice of Borrowing**. Except in the case of any PIK Loan, Administrative Agent shall have received a Notice of Borrowing as and when required pursuant to **Section 2.02**.

(d) **Financing Fee.** Except in the case of any PIK Loan, Administrative Agent shall have received, for the account of each Lender, the fees payable pursuant to the Fee Letter.

Each Borrowing shall constitute a certification by Borrower to the effect that the conditions set forth in this **Section 6.03** have been fulfilled as of the applicable Borrowing Date.

SECTION 7
REPRESENTATIONS AND WARRANTIES

Each Obligor represents and warrants to Administrative Agent and the Lenders that:

7.01 Power and Authority. Each of Borrower and its Subsidiaries (a) is a duly organized and validly existing under the laws of its jurisdiction of organization, (b) has all requisite corporate or other equivalent power, and has all material governmental licenses, authorizations, consents and approvals necessary to own its assets and carry on its business as now being or as proposed to be conducted except to the extent that failure to have the same could not reasonably be expected to have a Material Adverse Effect, (c) is qualified to do business and is in good standing in all jurisdictions in which the nature of the business conducted by it makes such qualification necessary and where failure so to qualify could (either individually or in the aggregate) not reasonably be expected to have a Material Adverse Effect, and (d) has full power, authority and legal right to make and perform each of the Loan Documents to which it is a party and, in the case of Borrower, to borrow the Loans hereunder.

7.02 Authorization; Enforceability. The Transactions to which an Obligor is a party are within such Obligor's corporate or equivalent powers and have been duly authorized by all necessary corporate or equivalent action and, if required, by all necessary shareholder action by such Obligor. This Agreement has been duly executed and delivered by each Obligor and constitutes, and each of the other Loan Documents to which it is a party when executed and delivered by such Obligor will constitute, a legal, valid and binding obligation of such Obligor, enforceable against each Obligor in accordance with its terms, except as such enforceability may be limited by (a) bankruptcy, insolvency, reorganization, moratorium or similar laws of general applicability affecting the enforcement of creditors' rights and (b) the application of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

7.03 Governmental and Other Approvals; No Conflicts. The Transactions (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority or any third party, except for (i) such as have been obtained or made and are in full force and effect and (ii) filings and recordings in respect of the Liens created pursuant to the Security Documents, (b) will not violate any applicable law or regulation or the charter, bylaws or other organizational documents of Borrower and its Subsidiaries, (c) will not violate any order of any applicable Governmental Authority other than any such violations that, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect, (d) will not violate or result in a default under any material indenture, agreement or other instrument relating to Indebtedness of Borrower and its Subsidiaries binding upon Borrower and its Subsidiaries or assets, or give rise to a right thereunder to require any payment to be made by any such Person, and (e) will not result in the creation or imposition of any Lien (other than Permitted Liens) on any asset of Borrower and its Subsidiaries.

7.04 Financial Statements; Material Adverse Change.

(a) **Financial Statements**. Borrower has heretofore furnished to the Lenders certain financial statements as provided for in **Section 8.01**. Such financial statements present fairly, in all material respects, the financial position and results of operations and cash flows of Borrower and its Subsidiaries as of such dates and for such periods in accordance with GAAP, subject to year-end audit adjustments and the absence of footnotes in the case of the previously-delivered statements of the type described in **Section 8.01(a)**. Neither Borrower nor any of its Subsidiaries has any material contingent liabilities or unusual forward or long-term commitments not disclosed in the aforementioned financial statements (including the notes thereto), other than payables arising in the ordinary course of business.

(b) **No Material Adverse Change**. Since December 31, 2016, there has been no Material Adverse Change.

7.05 Properties.

(a) **Property Generally**. Each Obligor has good and marketable title to, or valid leasehold interests in, all its real and personal Property (excluding Intellectual Property) material to its business, subject only to Permitted Liens and except for minor defects in title that do not interfere with its ability to conduct its business as currently conducted or to utilize such properties for their intended purposes.

(b) **Intellectual Property**. The Obligors represent and warrant to the Lenders as follows, as of the date hereof, each Borrowing Notice Date and each Borrowing Date:

(i) **Schedule 7.05(b)(i)** of the Disclosure Letter (as amended from time to time by Borrower in accordance with **Section 7.20**) contains:

(A) a complete and accurate list of all currently outstanding applied for or registered Patents, owned by any Obligor, including the jurisdiction and patent number;

(B) a complete and accurate list of all currently outstanding applied for or registered Trademarks, owned by any Obligor, including the jurisdiction, trademark application or registration number and the application or registration date; and

(C) a complete and accurate list of all currently outstanding applied for or registered Copyrights, owned by any Obligor;

(ii) Except as set forth in **Schedule 7.05(b)(ii)** of the Disclosure Letter, applicable Obligor is the beneficial owner of all right, title and interest in and to and has the full right to use its Obligor Intellectual Property purported to be owned by such Obligor with good title, free and clear of any Liens other than Permitted Liens. Without limiting the foregoing, and except as set forth in **Schedule 7.05(b)(ii)** of the Disclosure Letter:

(A) other than with respect to the Material Agreements, or as permitted by **Section 9.09**, the Obligors have not transferred ownership of Material Intellectual Property, in whole or in part, to any other Person who is not an Obligor;

(B) other than (i) the Material Agreements, (ii) customary restrictions in in-bound licenses of Intellectual Property, consulting, material transfer and non-disclosure agreements, or (iii) as would have been or is permitted by **Section 9.09**, there are no judgments, covenants not to sue, licenses, Liens (other than Permitted Liens), Claims, or other written agreements relating to the Material Intellectual Property, including any development, submission, services, research, license or support agreements, which bind, obligate or otherwise restrict the Obligors;

(C) the use of any of the Obligor Intellectual Property, to any Obligor's Knowledge, does not breach, violate, infringe or interfere with or constitute a misappropriation of any valid rights arising under any Intellectual Property of any other Person;

(D) there are no pending or, to any Obligor's Knowledge, threatened in writing Claims against the Obligors asserted by any other Person relating to the Obligor Intellectual Property, including any Claims of adverse ownership, invalidity, infringement, misappropriation, violation or other opposition to or conflict with such Intellectual Property; no Obligor has received any written notice from any Person that any Obligor business, the use of the Obligor Intellectual Property, or the manufacture, use or sale of any product or the performance of any service by any Obligor infringes upon, violates or constitutes a misappropriation of, or may infringe upon, violate or constitute a misappropriation of any other Intellectual Property of any other Person;

(E) no Obligor has any Knowledge that Material Intellectual Property is being infringed, violated or misappropriated by any other Person. Without limiting the foregoing, no Obligor has put any other Person on notice of actual or potential infringement, violation or misappropriation of any of the Obligor Intellectual Property; no Obligor has initiated the enforcement of any Claim with respect to any of the material Obligor Intellectual Property;

(F) all relevant current and former employees and contractors of each Obligor, who as part of their day-do-day activities created or developed material Obligor Intellectual Property, have executed written confidentiality and invention assignment Contracts with such Obligor that irrevocably assign to such Obligor or its designee all of their rights to any Inventions relating to any Obligor's business made by such employee or contractor in the course of employment or performance of services for any Obligor to the extent permitted by applicable Laws;

(G) to the Knowledge of the Obligors, the Obligor Intellectual Property is all the Intellectual Property necessary for the operation of Obligors' business as it is currently conducted or as currently contemplated to be conducted;

(H) each Obligor has taken reasonable precautions to protect the secrecy, confidentiality and value of its material Obligor Intellectual Property consisting of trade secrets and confidential information;

(I) each Obligor has delivered or made available to Administrative Agent accurate and complete copies of all Material Agreements relating to the Obligor Intellectual Property;

(J) there are no pending or, to the Knowledge of any of the Obligors, threatened in writing Claims against the Obligors asserted by any other Person relating to the Material Agreements, including any Claims of breach or default under such Material Agreements;

(iii) With respect to the Obligor Intellectual Property owned by an Obligor consisting of Patents, except as set forth in **Schedule 7.05(b)(ii)** of the Disclosure Letter, and without limiting the representations and warranties in **Section 7.05(b)(ii)**:

(A) each of the issued claims in such Patents, to Obligors' Knowledge, is valid and enforceable;

(B) the inventors of such Patents have executed written Contracts with an Obligor or its predecessor-in-interest that irrevocably assign to an Obligor or predecessor-in-interest all of their rights to any of the Inventions claimed in such Patents to the extent permitted by applicable law;

(C) none of the Patents, or the Inventions claimed in them, have been dedicated to the public except as a result of intentional decisions made by the applicable Obligor;

(D) to any Obligor's Knowledge, all prior art material to such Patents was disclosed to the respective patent offices during prosecution of such Patents to the extent required by applicable law or regulation;

(E) subsequent to the issuance of such Patents, neither any Obligor nor its predecessors in interest have filed any disclaimer or filed any other voluntary reduction in the scope of the Inventions claimed in such Patents, except in the ordinary course of prosecution of such Patents;

(F) no allowable or allowed claims of such Patents, to any Obligor's Knowledge, is subject to any interference, re-examination, *inter partes* review, post grant review or opposition proceedings, nor are the Obligors aware of any basis for any such interference, re- examination, *inter partes* review, post grant review or opposition proceedings;

(G) no such Patents, to any Obligor's Knowledge, have ever been finally adjudicated to be invalid, unpatentable or unenforceable for any reason in any administrative, arbitration, judicial or other proceeding, and, with the exception of publicly available documents in the applicable Patent Office recorded with respect to any Patents, no Obligor has received any notice asserting that such Patents are invalid, unpatentable or unenforceable; if any of such Patents is terminally disclaimed to another patent or patent application, all patents and patent applications subject to such terminal disclaimer are included in the Collateral;

(H) no Obligor has received an opinion, whether preliminary in nature or qualified in any manner, which concludes that a challenge to the validity or enforceability of any of such Patents is more likely than not to succeed;

(I) no Obligor has any Knowledge that any Obligor or any prior owner of such Patents or their respective agents or representatives have engaged in any conduct, or omitted to perform any necessary act, the result of which would invalidate or render unpatentable or unenforceable any such Patents; and

(J) all maintenance fees, annuities, and the like due or payable on the Patents have been timely paid or the failure to so pay was the result of an intentional decision by the applicable Obligor or would not reasonably be expected to result in a Material Adverse Change.

(iv) the foregoing representations together with any disclosures made in any schedule and the Disclosure Letter, when read together, do not contain any untrue statement of material fact or omit to state any material fact necessary to make such representation not misleading to a prospective Lender seeking full information as to the Obligor Intellectual Property and the Obligors' business.

(c) **Material Intellectual Property**. **Schedule 7.05(c)** of the Disclosure Letter (as amended from time to time by Borrower in accordance with **Section 7.20**) contains an accurate list of the Obligor Intellectual Property that is material to any Obligor's business, with an indication as to whether the applicable Obligor owns or has an exclusive or non-exclusive license to such Obligor Intellectual Property.

7.06 No Actions or Proceedings.

(a) **Litigation**. There is no litigation, investigation or proceeding pending or, to any Obligor's Knowledge, threatened in writing with respect to Borrower and its Subsidiaries by or before any Governmental Authority or arbitrator (i) that either individually or in the aggregate could reasonably be expected to have a Material Adverse Effect, except as specified in **Schedule 7.06** of the Disclosure Letter or (ii) that involves this Agreement or the Transactions.

(b) **Environmental Matters**. The operations and Property of Borrower and its Subsidiaries comply with all applicable Environmental Laws, except to the extent the failure to so comply (either individually or in the aggregate) could not reasonably be expected to have a Material Adverse Effect.

(c) **Labor Matters**. Borrower and its Subsidiaries have not engaged in unfair labor practices that could reasonably be expected to result in a Material Adverse Effect and there are no material labor actions or disputes involving the employees of Borrower or its Subsidiaries that could reasonably be expected to result in a Material Adverse Effect.

7.07 Compliance with Laws and Agreements. Each of the Obligors is in compliance with all laws, regulations and orders of any Governmental Authority applicable to it or its property and all indentures, agreements and other instruments binding upon it or its property, except where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. No Default has occurred and is continuing.

7.08 Taxes. All federal, state, local and foreign income and franchise and other material Tax returns, reports and statements (collectively, the "***Tax Returns***") required to be filed by any Tax Affiliate have been timely filed with the appropriate Governmental Authorities, all such Tax Returns are true, correct and complete in all material respects, and all income and other material Taxes have been timely paid (except for those (i) contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves are maintained on the books of the appropriate Tax Affiliate in accordance with GAAP (ii) not timely paid with respect of amounts due in excess of $100,000 and listed on **Schedule 7.08** to the Disclosure Letter). No Tax Return is under audit or examination by any Governmental Authority and no notice of any material audit or examination or any assertion of any claim for Taxes has been given or made by any Governmental Authority. Proper and accurate amounts have been withheld by each Tax Affiliate from their respective employees for all periods in full and complete compliance with the Tax, social security and unemployment withholding provisions of applicable Laws and such withholdings have been timely paid to the respective Governmental Authorities. No Tax Affiliate has participated in a "listed transaction" within the meaning of Treasury Regulation Section 1.6011-4(b)(2).

7.09 Full Disclosure. Obligors have disclosed to Administrative Agent and the Lenders all Material Agreements to which any Obligor is party, and all other matters to any Obligor's Knowledge, that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Effect. None of the reports, financial statements, certificates or other information furnished by or on behalf of any Obligor to Administrative Agent or any Lender in connection with the negotiation of this Agreement and the other Loan Documents or delivered hereunder or thereunder (as modified or supplemented by other information so furnished) contains any material misstatement of material fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were

made, not misleading; *provided* that, with respect to projected financial information, Borrower represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time (it being understood that such projected financial information is not to be viewed as facts, and that no assurances can be given that any particular projections will be realized and that actual results during the period or periods covered by any such projections may differ from the projected results and such differences may be material).

7.10 Regulation.

(a) **Investment Company Act**. Neither Borrower nor any of its Subsidiaries is an "investment company" as defined in, or subject to regulation under, the Investment Company Act of 1940.

(b) **Margin Stock**. Neither Borrower nor any of its Subsidiaries is engaged principally, or as one of its important activities, in the business of extending credit for the purpose, whether immediate, incidental or ultimate, of buying or carrying Margin Stock, and no part of the proceeds of the Loans will be used to buy or carry any Margin Stock in violation of Regulation T, U or X.

(c) **OFAC; Sanctions, Etc.** Neither Borrower nor any of its Subsidiaries or, to the knowledge of any Obligor, any director or officer or Affiliate of Borrower or any of its Subsidiaries (i) is currently the subject of any Sanctions or is a Sanctioned Person, (ii) is located (or has its assets located), organized or residing in any Sanctioned Jurisdiction, (iii) is or has been (within the previous five (5) years) engaged in any impermissible transaction with any Person who is now or was then the subject of Sanctions or who is located, organized or residing in any Sanctioned Jurisdiction, (iv) directly or indirectly derives revenues from investments in, or transactions with, Sanctioned Persons, (v) has taken any action, directly or indirectly, that would result in a violation by such Persons of any Anti-Corruption Laws, or (vi) has violated any Anti-Money Laundering Laws. No Loan, nor the proceeds from any Loan, has been or will be used, directly or indirectly, to lend, contribute or provide to, or has been or will be otherwise made available to fund, any impermissible activity or business of any Person located, organized or residing in any Sanctioned Jurisdiction or who is the subject of any Sanctions, or in any other manner that will result in any violation by any Person (including the Lender and its Affiliates) of Sanctions or otherwise in violation of any Anti-Corruption Laws or Anti-Money Laundering Laws. Each of Borrower and its Subsidiaries has implemented and maintains in effect policies and procedures designed to promote compliance by Borrower and its Subsidiaries and their respective directors, officers, employees, agents and Related Persons with the Anti-Corruption Laws.

7.11 Solvency. Each Obligor is and, immediately after giving effect to the Borrowing and the use of proceeds thereof will be, Solvent.

7.12 Subsidiaries. Set forth on **Schedule 7.12** of the Disclosure Letter is a complete and correct list of all Subsidiaries as of the date hereof. Each such Subsidiary is duly organized and validly existing under the jurisdiction of its organization shown in said **Schedule 7.12** of the Disclosure Letter, and the percentage ownership by Borrower of each such Subsidiary is as shown in said **Schedule 7.12** of the Disclosure Letter.

7.13 Indebtedness and Liens. Set forth on **Schedule 7.13(a)** of the Disclosure Letter is a complete and correct list of all Indebtedness, of the types described in **clauses (a)**, **(b)**, **(e)**, **(f)**, **(g)**, **(h)**, **(i)** and **(j)** of the definition thereof, of each Obligor in excess of $50,000 individually outstanding as of the date hereof, and does not fail to list Indebtedness of the Obligors in excess of $200,000 in the aggregate. **Schedule 7.13(b)** of the Disclosure Letter is a true and complete list of all Liens affirmatively granted by Borrower and other Obligors with respect to their respective Property and outstanding as of the date hereof.

7.14 Material Agreements. Set forth on **Schedule 7.14** to the Disclosure Letter (as amended from time to time by Borrower in accordance with **Section 7.20**) is a complete and correct list of (i) each Material Agreement and (ii) each agreement creating or evidencing any Material Indebtedness. No Obligor is in material default under any Material Agreement or agreement creating or evidencing any Material Indebtedness. Except as otherwise disclosed on **Schedule 7.14** of the Disclosure Letter, all material vendor purchase agreements and provider contracts of the Obligors are in full force and effect without material modification from the form in which the same were disclosed to Administrative Agent and the Lenders.

7.15 Restrictive Agreements. None of the Obligors is party to any indenture, agreement, instrument or other written arrangement that prohibits, restricts or imposes any condition upon (a) the ability of Borrower or any Subsidiary to create, incur or permit to exist any Lien upon any of its property or assets (other than (x) customary provisions in contracts (including leases and in-bound licenses of Intellectual Property) restricting the assignment thereof, (y) restrictions or conditions imposed by any agreement governing secured Permitted Indebtedness permitted under **Section 9.01(h)**, to the extent that such restrictions or conditions apply only to the property or assets securing such Indebtedness), and (z) as such may apply to the interest of any Obligor in a Permitted Commercialization Arrangement Vehicle (*provided that*, if the Equity Interests in a Permitted Commercialization Arrangement Vehicle are not subject to a perfected Lien securing the Obligations, such Equity Interests must be wholly-owned by a special purpose entity, all of the Equity Interests in which are subject to a perfected Lien securing the Obligations), or (b) the ability of any Subsidiary to pay dividends or other distributions with respect to any shares of its capital stock or to make or repay loans or advances to Borrower or any other Subsidiary or to Guarantee Indebtedness of Borrower or any other Subsidiary (each, a "***Restrictive Agreement***"), except (i) those listed on **Schedule 7.15** of the Disclosure Letter or otherwise permitted under **Section 9.11**, (ii) restrictions and conditions imposed by law or by this Agreement, and (iii) customary restrictions and conditions contained in agreements relating to the sale of a Subsidiary or assets pending such sale; *provided* that such restrictions and conditions apply only to the Subsidiary or assets that are to be sold and such sale is permitted hereunder, and (iv) any stockholder agreement, charter, by laws or other organizational documents of Borrower or any Subsidiary as in effect on the date hereof.

7.16 Real Property.

(a) **Generally**. Neither Borrower nor any of its Subsidiaries owns or leases (as tenant thereof) any real property, except as described on **Schedule 7.16** of the Disclosure Letter (as amended from time to time by Borrower in accordance with **Section 7.20**).

7.17 Pension Matters. **Schedule 7.17** of the Disclosure Letter sets forth, as of the date hereof, a complete and correct list of, and that separately identifies, (a) all Title IV Plans and (b) all Multiemployer Plans. Except as could not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, (x) each Benefit Plan is in compliance with applicable provisions of ERISA, the Code and other Requirements of Law, (y) there are no existing or pending (or to the Knowledge of any Obligor or Subsidiary thereof, threatened) claims (other than routine claims for benefits in the normal course), sanctions, actions, lawsuits or other proceedings or investigation involving any Benefit Plan to which any Obligor or Subsidiary thereof incurs or otherwise has or could have an obligation or any liability or Claim and (z) no ERISA Event is reasonably expected to occur. Borrower and each of its ERISA Affiliates has met all applicable requirements under the ERISA Funding Rules with respect to each Title IV Plan, and no waiver of the minimum funding standards under the ERISA Funding Rules has been applied for or obtained. As of the most recent valuation date for any Title IV Plan, the funding target attainment percentage (as defined in Section 430(d)(2) of the Code) is at least 60%, and neither Borrower nor any of its ERISA Affiliates knows of any facts or circumstances that could reasonably be expected to cause the funding target attainment percentage to fall below 60% as of the most recent valuation date. As of the date hereof, no ERISA Event has occurred in connection with which obligations and liabilities (contingent or otherwise) remain outstanding. No ERISA Affiliate would have any Withdrawal Liability as a result of a complete withdrawal from any Multiemployer Plan on the date this representation is made.

7.18 Collateral; Security Interest. Each Security Document is effective to create in favor of the Secured Parties a legal, valid and enforceable security interest in the Collateral subject thereto and each such security interest is perfected to the extent required by (and has the priority required by) the applicable Security Document. The Security Documents collectively are effective to create in favor of the Secured Parties a legal, valid and enforceable security interest in the Collateral, which security interests are first-priority (subject only to Permitted Priority Liens) to the extent required by the applicable Security Document.

7.19 Regulatory Approvals. Borrower and its Subsidiaries hold, and will continue to hold, either directly or through licensees and agents, all material Regulatory Approvals necessary or required for Borrower and its Subsidiaries to conduct their operations and business in the manner currently conducted.

7.20 Update of Schedules. Each of **Schedules 7.05(b)(i)**, **7.05(c)**, **7.14** and **7.16** of the Disclosure Letter may be updated by Borrower from time to time in order to ensure the continued accuracy of such Schedule as of any upcoming date on which representations and warranties are made incorporating the information contained on such Schedule. Such update may be accomplished by Borrower providing to Administrative Agent, in writing (including by electronic means), a revised version of such Schedule in accordance with the provisions of **Section 13.02**. Each such updated Schedule shall be effective immediately upon the receipt thereof by Administrative Agent.

SECTION 8
AFFIRMATIVE COVENANTS

Each Obligor covenants and agrees with Administrative Agent and the Lenders that, until Payment In Full:

8.01 Financial Statements and Other Information. Borrower will furnish to Administrative Agent:

(a) within five (5) Business Days following the date Borrower files its Quarterly Report after the end of the first three fiscal quarters of each fiscal year of Borrower on Form 10-Q with the SEC (or, if Borrower is not subject to the periodic reporting requirements of the Exchange Act, within sixty (60) days of the first three fiscal quarters or ninety (90) days of the end of the fourth fiscal quarter), the consolidated balance sheet of the Borrower and its Subsidiaries as of the end of such quarter, and the related consolidated statements of income, shareholders' equity and cash flows of Borrower and its Subsidiaries for such quarter and the portion of the fiscal year through the end of such quarter, prepared in accordance with GAAP consistently applied, all in reasonable detail and setting forth in comparative form the figures for the corresponding period in the preceding fiscal year, together with a certificate (which may be included in the Compliance Certificate) of a Responsible Officer of Borrower stating that such financial statements fairly present in all material respects the financial condition of Borrower and its Subsidiaries as at such date and the results of operations of Borrower and its Subsidiaries for the period ended on such date and have been prepared in accordance with GAAP consistently applied, subject to changes resulting from normal, year-end audit adjustments and except for the absence of notes; *provided that*, so long as Borrower is subject to the public reporting requirements of the Exchange Act, Borrower's filing of a Quarterly Report on Form 10-Q with the SEC shall be deemed to satisfy the requirements of this **Section 8.01(a)** on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(b) within five (5) Business Days following the date Borrower files an Annual Report on Form 10-K with the SEC (or, if Borrower is not subject to the periodic reporting requirements of the Exchange Act, within one hundred eighty (180) days of the end of each fiscal year), the consolidated balance sheet of Borrower and its Subsidiaries as of the end of such fiscal year, and the related consolidated statements of income, shareholders' equity and cash flows of Borrower and its Subsidiaries for such fiscal year, prepared in accordance with GAAP consistently applied, all in reasonable detail and setting forth in comparative form the figures for the previous fiscal year, accompanied by a report and opinion thereon of Ernst & Young LLP or another firm of independent certified public accountants of recognized national standing acceptable to the Lenders, which report and opinion shall be prepared in accordance with generally accepted auditing standards; *provided that*, so long as Borrower is subject to the public reporting requirements of the Exchange Act, Borrower's filing of an Annual Report on Form 10-K with the SEC shall be deemed to satisfy the requirements of this **Section 8.01(b)** on the date on which such report is first available via the SEC's EDGAR system or a successor system related thereto;

(c) together with the financial statements required pursuant to **Sections 8.01(a)** and **(b)**, a compliance certificate of a Responsible Officer as of the end of the applicable accounting period (which delivery may, unless a Lender requests executed originals, be by electronic

communication including fax or email and shall be deemed to be an original authentic counterpart thereof for all purposes) in the form of **Exhibit D** (a "***Compliance Certificate***") including details of any material issues that are raised by auditors;

(d) within ninety (90) days following the end of each fiscal year of Borrower, a consolidated financial forecast for Borrower and its Subsidiaries for the following two (2) fiscal years (provided that if projections for a longer period are provided to the board of directors of Borrower, such projections shall be provided to Administrative Agent), including forecasted consolidated balance sheets and consolidated statements of income and cash flows of Borrower and its Subsidiaries;

(e) promptly, and in any event within five (5) Business Days after receipt thereof by a Responsible Officer of Borrower, copies of each notice or other correspondence received from any securities regulator or exchange to the authority of which Borrower may become subject from time to time concerning any investigation or possible investigation or other inquiry by such agency regarding financial or other operational results of such Obligor;

(f) promptly following Administrative Agent's request, the information regarding insurance maintained by the Obligors and their respective Subsidiaries as required under **Section 8.05**; and

(g) promptly following Administrative Agent's request at any time, reasonably satisfactory evidence of Borrower's compliance with **Section 10.01**.

8.02 Notices of Material Events. Borrower will furnish to Administrative Agent written notice of the following promptly after a Responsible Officer first learns of the existence of:

(a) the occurrence of any Default;

(b) notice of the occurrence of any event with respect to an Obligor's property or assets resulting in a Loss, to the extent not covered by insurance, aggregating $5,000,000 (or the Equivalent Amount in other currencies) or more;

(c) (A) any proposed acquisition of stock, assets or property by any Obligor that would reasonably be expected to result in environmental liability under Environmental Laws that could reasonably be expected to have a Material Adverse Effect, and (B)(1) spillage, leakage, discharge, disposal, leaching, migration or release of any Hazardous Material required to be reported by Borrower or any of its Subsidiaries to any Governmental Authority under applicable Environmental Laws and if such spillage, leakage, discharge, disposal, leaching, migration or release could reasonably be expected to have a Material Adverse Effect, and (2) all actions, suits, claims, notices of violation, hearings, investigations or proceedings pending, or to any Obligor's Knowledge, threatened in writing against Borrower or any of its Subsidiaries or with respect to the ownership, use, maintenance and operation of their respective businesses, operations or properties, relating to Environmental Laws or Hazardous Material, in each case which could reasonably be expected to have a Material Adverse Effect;

(d) the assertion in writing of any environmental Claim by any Person against, or with respect to the activities of, Borrower or any of its Subsidiaries and any alleged violation of or non-compliance with any Environmental Laws or any permits, licenses or authorizations which could reasonably be expected to involve damages in excess of $10,000,000 other than any environmental proceeding or alleged violation that could not reasonably be expected (either individually or in the aggregate) have a Material Adverse Effect;

(e) the filing or commencement of any action, suit or proceeding by or before any arbitrator or Governmental Authority against or directly affecting Borrower or any of its Affiliates that could reasonably be expected to result in a Material Adverse Effect;

(f) (i) on or prior to any filing by any ERISA Affiliate of any notice of intent to terminate any Title IV Plan, a copy of such notice and (ii) promptly, and in any event within ten days, after any Responsible Officer of any ERISA Affiliate knows or has reason to know that a request for a minimum funding waiver under Section 412 of the Code has been filed with respect to any Title IV Plan or Multiemployer Plan, a notice (which may be made by telephone if promptly confirmed in writing) describing such waiver request and any action that any ERISA Affiliate proposes to take with respect thereto, together with a copy of any notice filed with the PBGC or the IRS pertaining thereto;

(g) (i) the termination of any Material Agreement other than upon its scheduled termination date; (ii) the receipt by Borrower or any of its Subsidiaries from a counterparty asserting a default by Borrower or any of its Subsidiaries under any Material Agreement where such alleged default, if accurate would permit such counterparty to terminate such Material Agreement; (iii) the entering into of any new Material Agreement by an Obligor; or (iv) any material amendment to a Material Agreement in any manner adverse to the Lenders; *provided that* for so long as Borrower is subject to the public reporting requirements of the Exchange Act, items (i), (iii) and (iv) shall be deemed to be furnished in writing pursuant to this Section 8.02(g) on the date on which such information is first available via the SEC's EDGAR system or any successor thereto (*provided, however, that*, if Borrower redacts any part of such agreement or other document that it files with the SEC, then Borrower shall, prior to or concurrently with filing such agreement or document with the SEC, deliver to Administrative Agent a completely unredacted version of such agreement or document);

(h) the reports and notices as required by the Security Documents;

(i) within 30 days of the date thereof, or, if earlier, on the date of delivery of any financial statements pursuant to **Section 8.01**, notice of any material change in accounting policies or financial reporting practices by the Obligors (which requirement will be deemed satisfied by the description thereof in a Form 10-K, Form 10-Q or Form 8-K filed with the SEC);

(j) promptly after the occurrence thereof, notice of any labor controversy resulting in or reasonably expected to result in any strike, work stoppage, boycott, shutdown or other material labor disruption against or involving an Obligor, in each case which could reasonably be expected to result in a Material Adverse Effect;

(k) a material licensing agreement or arrangement entered into by Borrower or any Subsidiary in connection with any infringement or alleged infringement of the Intellectual Property of another Person;

(l) any other development that results in, or could reasonably be expected to result in, a Material Adverse Effect;

(m) concurrently with the delivery of financial statements under **Section 8.01(b)**, the creation or other acquisition of any Intellectual Property by any Obligor after the date hereof and during such prior fiscal year which is registered or becomes registered or the subject of an application for registration with the U.S. Copyright Office or the U.S. Patent and Trademark Office, as applicable, or with any other equivalent foreign Governmental Authority;

(n) any change to any Obligor's ownership of Deposit Accounts, Securities Accounts and Commodity Accounts, by delivering to Administrative Agent an updated Schedule 7 to the Security Agreement setting forth a complete and correct list of all such accounts as of the date of such change; or

(o) such other information respecting the operations, properties, business or condition (financial or otherwise) of the Obligors (including with respect to the Collateral) as Administrative Agent may from time to time reasonably request in writing.

Each notice delivered under this **Section 8.02** shall be accompanied by a statement of a financial officer or other executive officer of Borrower setting forth in reasonable detail the event or development requiring such notice and any action taken or proposed to be taken with respect thereto, if any.

8.03 Existence; Conduct of Business. Such Obligor will, and will cause each of its Subsidiaries to, do or cause to be done all things necessary to preserve, renew and keep in full force and effect its legal existence and, except where the failure to do so could not reasonably be expected to have a Material Adverse Effect, the rights, licenses, permits, privileges and franchises material to the conduct of its business; *provided* that the foregoing shall not prohibit any merger, amalgamation, consolidation, liquidation or dissolution permitted under **Section 9.03**.

8.04 Payment of Obligations. Such Obligor will, and will cause each of its Subsidiaries to, pay and discharge its obligations, including (i) all income and other material Taxes, fees, assessments and governmental charges or levies imposed upon it or upon its properties or assets prior to the date on which penalties attach thereto, and all lawful claims for labor, materials and supplies which, if unpaid, might become a Lien upon any properties or assets of Borrower or any Subsidiary, except to the extent such Taxes, fees, assessments or governmental charges or levies, or such claims are being contested in good faith by appropriate proceedings and are adequately reserved against in accordance with GAAP; and (ii) all lawful claims which, if unpaid, would by law become a Lien upon its property not constituting a Permitted Lien, except to the extent such claims are being contested in good faith by appropriate proceedings and are adequately reserved against to the extent required by GAAP.

8.05 Insurance. Borrower will, and will cause each of its Subsidiaries to, maintain insurance with financially sound and reputable insurance companies in such amounts and against such risks as are customarily maintained by companies engaged in the same or similar businesses operating in the same or similar locations. Upon the written request of Administrative Agent or the Majority Lenders, Borrower shall use commercially reasonable efforts to furnish Administrative Agent from time to time with full information as to the insurance carried by it and, if so requested, copies of all such insurance policies. Borrower also shall use commercially reasonable efforts to furnish to Administrative Agent from time to time upon the written request of Administrative Agent or the Majority Lenders a certificate from Borrower's insurance broker or other insurance specialist stating that all premiums then due on the policies relating to insurance on the Collateral have been paid, that such policies are in full force and effect. Borrower shall use commercially reasonable efforts to ensure, or cause others to ensure, that all insurance policies required under this **Section 8.05** shall provide that they shall not be terminated or cancelled nor shall any such policy be materially changed in a manner adverse to Borrower without at least thirty (30) days' (ten (10) days' for nonpayment of premium) prior written notice to Borrower and Administrative Agent. Receipt of notice of termination or cancellation of any such insurance policies or material reduction of coverages or amounts thereunder shall entitle the Secured Parties, after thirty (30) days have passed since receipt of such notice and Borrower has taken no renewal action, to renew any such policies, cause the coverages and amounts thereof to be maintained at levels required pursuant to the first sentence of this **Section 8.05** or otherwise to obtain similar insurance in place of such policies, in each case at the expense of Borrower , which expense shall constitute "Obligations" (payable within fifteen (15) Business Days of request therefor).

8.06 Books and Records; Inspection Rights.

(a) Such Obligor will, and will cause each of its Subsidiaries to, keep proper books of record and account in which full, true and correct entries are made of all dealings and transactions in relation to its business and activities.

(b) Such Obligor will, and will cause each of its Subsidiaries to, permit any representatives designated by Administrative Agent, upon reasonable prior notice, to visit and inspect its properties, to examine and make extracts from its books and records, to inspect its facilities and to discuss its affairs, finances and condition with its officers and independent accountants, all at such reasonable times (but not more often than once per year unless an Event of Default has occurred and is continuing) as Administrative Agent may request. The Obligors shall pay all documented out-of-pocket costs of all such inspections.

8.07 Compliance with Laws and Other Obligations. Such Obligor will, and will cause each of its Subsidiaries to, (i) comply in all material respects with all laws, rules, regulations and orders of any Governmental Authority applicable to it or its property (including Environmental Laws) and (ii) comply in all material respects with all terms of Indebtedness and all other Material Agreements, except in each case where the failure to do so, individually or in the aggregate could not reasonably be expected to result in a Material Adverse Effect.

8.08 Maintenance of Properties, Etc.

(a) Such Obligor shall, and shall cause each of its Subsidiaries to, maintain and preserve all of its properties material to its business in good working order and condition, ordinary wear and tear and damage from casualty or condemnation excepted.

8.09 Licenses. Such Obligor shall, and shall cause each of its Subsidiaries to, obtain and maintain all licenses, authorizations, consents, filings, exemptions, registrations and other Governmental Approvals necessary in connection with the execution, delivery and performance by such Obligor of the Loan Documents, the consummation of the Transactions or the operation and conduct of its business and ownership of its properties, except where the failure to do so could not reasonably be expected to have a Material Adverse Effect.

8.10 Action under Environmental Laws. Such Obligor shall, and shall cause each of its Subsidiaries to, upon becoming aware of the presence of any Hazardous Materials or the existence of any environmental liability under applicable Environmental Laws with respect to their respective businesses, operations or properties, take all actions, at their cost and expense, as shall be necessary or advisable to investigate and clean up the condition of their respective businesses, operations or properties, including all required removal, containment and remedial actions, and restore their respective businesses, operations or properties to a condition in compliance with applicable Environmental Laws, except where the failure to do so could not reasonably be expected to have a Material Adverse Effect.

8.11 Use of Proceeds. The proceeds of the Loans will be used only as provided in **Section 2.04**. No part of the proceeds of the Loans will be used, whether directly or indirectly, for any purpose that entails a violation of any of the Regulations of the Board of Governors of the Federal Reserve System, including Regulations T, U and X.

8.12 Certain Obligations Respecting Subsidiaries; Further Assurances.

(a) **Subsidiary Guarantors**. Such Obligor will take such action, and will cause each of its Subsidiaries to take such action, from time to time as shall be necessary to ensure that all Subsidiaries (other than any Excluded Subsidiary), are "Subsidiary Guarantors" hereunder. Without limiting the generality of the foregoing, in the event that Borrower or any of its Subsidiaries shall form or acquire any new Subsidiary (other than any new Excluded Subsidiary), such Obligor and its Subsidiaries will within forty-five (45) days of such formation or acquisition (or such longer period as may be agreed to by the Administrative Agent):

(i) cause such new Subsidiary to become a "Subsidiary Guarantor" hereunder, and a "Grantor" under the Security Agreement, pursuant to a Guarantee Assumption Agreement;

(ii) take such action or cause such Subsidiary to take such action (including delivering any shares of stock together with undated transfer powers executed in blank) as shall be necessary to create and perfect valid and enforceable first priority (subject to Permitted Priority Liens) Liens on substantially all of the property of such new Subsidiary (other than Excluded Assets) as collateral security for the obligations of such new Subsidiary hereunder;

(iii) to the extent that the parent of such Subsidiary is not a party to the Security Agreement or has not otherwise pledged Equity Interests in its Subsidiaries in accordance with the terms of the Security Agreement and this Agreement, cause the parent of such Subsidiary to execute and deliver a pledge agreement in favor of the Secured Parties in respect of all outstanding issued shares of such Subsidiary; and

(iv) deliver such proof of corporate action, incumbency of officers and other documents with respect to such Subsidiary as is consistent with those delivered by each Obligor pursuant to **Section 6.01** or as Administrative Agent or the Majority Lenders shall have requested.

(b) **Excluded Subsidiaries**.

(i) In the event that, at any time, Excluded Subsidiaries have, in the aggregate, (A) total revenues constituting ten percent (10%) or more of the total Revenues of Borrower and its Subsidiaries on a consolidated basis, or (B) total assets constituting ten percent (10%) or more of the total assets of Borrower and its Subsidiaries on a consolidated basis, promptly (and, in any event, within thirty days after such time) (or such longer time as consented to by the Administrative Agent) Obligors shall cause one or more of such Excluded Subsidiaries to become Subsidiary Guarantors in the manner set forth in **Section 8.12(a)**, such that, after such Subsidiaries become Subsidiary Guarantors, the non-guarantor Excluded Subsidiaries in the aggregate shall cease to have revenues or assets, as applicable, that meet the thresholds set forth in **clauses (A)** and **(B)** above; *provided* that no Excluded Subsidiary shall be required to become a Subsidiary Guarantor if doing so would result in material adverse tax consequences for Borrower and its Subsidiaries, taken as a whole. For the purposes of this section, the determination of whether a "material adverse tax consequence" shall be deemed to result from such Foreign Subsidiary becoming a Subsidiary Guarantor shall be made by the Majority Lenders in their sole reasonable discretion, following consultation with Borrower, taking into consideration and weighing, among others, the following relevant factors: (i) the magnitude of an increase in Borrower's tax liability or a reduction in Borrower's net operating loss carryforward, taken as a whole; (ii) the amount of revenues generated by or assets accumulated at such Foreign Subsidiary compared with those generated by or accumulated at the Obligors; (iii) whether the Loans are over- or under-collateralized; (iv) the financial performance of the Borrower and its Subsidiaries, taken as a whole, and the Obligors' ability to perform the Obligations at such time; and (v) the cost to the Borrower and its Subsidiaries balanced against the practical benefit to the Lenders.

(ii) With respect to each First-Tier Excluded Subsidiary that is not a Subsidiary Guarantor, such Obligor shall grant a security interest and Lien in sixty-five percent (65%) of each class of voting Equity Interest and 100% of all other Equity Interests in such First-Tier Excluded Subsidiary in favor of the Secured Parties as Collateral for the Obligations. Without limiting the generality of the foregoing, in the event that any Obligor shall form or acquire any new Subsidiary that is a First-Tier Excluded Subsidiary, such Obligor will promptly and in any event within thirty days of the formation or acquisition of such Subsidiary (or such longer time as consented to by Administrative Agent in writing) grant a security interest and Lien in 65% of each class of voting Equity Interests and 100% of all other Equity Interests of such Subsidiary in favor of the Secured Parties as Collateral for the Obligations, including

entering into any necessary local law security documents and delivery of certificated securities issued by such First-Tier Excluded Subsidiary as required by this Agreement or the Security Agreement (provided that in the case of a First-Tier Excluded Subsidiary that is a Subsidiary Guarantor, such Obligor shall grant a security interest and Lien in 100% of the Equity Interests of such Subsidiary in favor of the Secured Parties as Collateral for the Obligations). Notwithstanding any provision of this Agreement or any other Loan Document to the contrary, no local law documents shall be required where such First-Tier Excluded Subsidiary has, in the aggregate, (A) total revenues constituting less than 10% of the total Revenues of Borrower and its Subsidiaries on a consolidated basis, and (B) total assets constituting less than 10% of the total assets of Borrower and its Subsidiaries on a consolidated basis.

(iii) Notwithstanding the foregoing, Dynavax GmbH shall not be required to become a Subsidiary Guarantor or a lien grantor pursuant to this **Section 8.12(b)** or any of the Loan Documents.

(c) **Further Assurances**. Such Obligor will, and will cause each of its Subsidiaries to, take such action from time to time as shall reasonably be requested in writing by Administrative Agent or the Majority Lenders to effectuate the purposes and objectives of this Agreement.

Without limiting the generality of the foregoing, each Obligor will, and will cause each Person that is required to be a Subsidiary Guarantor to, take such action from time to time (including executing and delivering such assignments, security agreements, control agreements and other instruments) as shall be reasonably requested by Administrative Agent or the Majority Lenders in writing to create, in favor of the Secured Parties, perfected security interests and Liens in substantially all of the property of such Obligor (other than Excluded Assets) as collateral security for the Obligations; *provided* that (i) any such security interest or Lien shall be subject to the relevant requirements of, and limitations set forth in, the Security Documents, (ii) no actions in any jurisdiction outside the United States shall be required in order to create any security interests in immaterial assets, including immaterial Intellectual Property; (iii) no actions in any jurisdiction outside the United States shall be required where the cost of obtaining or perfecting a security interest in such assets exceeds the practical benefit to the Lenders afforded thereby, as reasonably determined by Majority Lenders (in consultation with the Obligors); (iv) any such foreign guarantees and foreign security will not be required for thirty days if (or to the extent) (A) it is limited by applicable corporate benefit, maintenance of capital, "thin capitalization" rules and financial assistance restrictions or (B) if the same would violate the fiduciary duties of a Subsidiary's directors or contravene any legal prohibition or regulatory condition or it is generally accepted (taking into account market practice in respect of the giving of guarantees and security for financial obligations in the relevant jurisdiction) that it would result in a material risk of personal or criminal liability on the part of any officer or director of a Subsidiary; (v) no Obligor shall have any obligation to enter into any agreement governed by the laws of a jurisdiction outside the United States with respect to any (x) work-in-process inventory located outside of the United States or (y) other collateral located outside of the United States with a fair market value (1) less than or equal to $6,000,000 in the aggregate or (2) less than or equal to 10% of the total assets of the Obligors; (vi) no Obligor shall have any obligation to perfect a security interest in any letter of credit rights, other than the filing of a UCC financing statement; (vii) notwithstanding anything to the contrary in any Loan Document, no Obligor shall be required to pay more than $60,000 in aggregate for the costs of perfecting any security interest or lien in any Intellectual Property in any jurisdiction outside of the United States (for purposes of clarification, such cap does not apply to enforcement); and (viii) no Obligor shall have any obligation to deliver any leasehold mortgages with regards to leased property used exclusively as office space and/or research laboratory space.

8.13 Termination of Non-Permitted Liens. If any Responsible Officer of Borrower or any of its Subsidiaries has (or reasonably should have) knowledge of, or shall be notified by Administrative Agent or any Lender of the existence of, any outstanding Lien against any Property of Borrower or any of its Subsidiaries, which Lien is not a Permitted Lien, the applicable Obligor shall (i) use its best efforts to promptly terminate or cause the termination of

any such Lien encumbering assets with an aggregate fair market value in excess of $100,000, and (ii) use commercially reasonable efforts to promptly terminate or cause the termination of any such Lien encumbering assets with an aggregate fair market value of $100,000 or less.

8.14 **Intellectual Property**. In the event that the Obligors acquire Obligor Intellectual Property during the term of this Agreement, then the provisions of this Agreement shall automatically apply thereto and any such Obligor Intellectual Property (other than Excluded Assets) shall automatically constitute part of the Collateral under the Security Documents, without further action by any party, in each case from and after the date of such acquisition (except that any representations or warranties of any Obligor shall apply to any such Obligor Intellectual Property only from and after the date, if any, subsequent to such acquisition that such representations and warranties are brought down or made anew as provided herein).

8.15 [**Reserved**].

8.16 **Post-Closing Items**.

(a) Borrower shall use commercially reasonable efforts to cause the applicable landlord to execute and deliver to Administrative Agent, not later than sixty (60) days after the first Borrowing Date, a Landlord Consent for each of its leased locations existing on the date hereof.

(b) Borrower shall use commercially reasonable efforts to execute and deliver to Administrative Agent, not later than sixty (60) days after the first Borrowing Date, such duly executed Intellectual Property security agreements as the Lenders may require with respect to foreign Intellectual Property registered in the United Kingdom and Germany.

(c) Borrower shall deliver to Administrative Agent, not later than sixty (60) days after the first Borrowing Date, duly executed control agreements for the benefit of the Secured Parties for all Deposit Accounts, Securities Accounts and Commodity Accounts owned by the Obligors in the United States (other than Excluded Accounts (as defined in the Security Agreement)).

SECTION 9
NEGATIVE COVENANTS

Each Obligor covenants and agrees with Administrative Agent and the Lenders that, until Payment In Full:

9.01 **Indebtedness**. Such Obligor will not, and will not permit any of its Subsidiaries to, create, incur, assume or permit to exist any Indebtedness, whether directly or indirectly, except:

(a) the Obligations;

(b) Indebtedness existing on the date hereof and set forth in **Part II** of **Schedule 7.13(a)** of the Disclosure Letter;

(c) Permitted Priority Debt;

(d) accounts payable to trade creditors for goods and services and current operating liabilities (not the result of the borrowing of money) incurred in the ordinary course of Borrower's or such Subsidiary's business in accordance with customary terms and paid within the specified time, unless contested in good faith by appropriate proceedings and reserved for in accordance with GAAP;

(e) Indebtedness consisting of guarantees resulting from endorsement of negotiable instruments for collection by any Obligor in the ordinary course of business;

(f) (i) Indebtedness of any Obligor to any other Obligor, (ii) Indebtedness of a Subsidiary that is not an Obligor to any other Subsidiary that is not an Obligor, and (iii) Indebtedness of a Subsidiary that is not an Obligor owing to an Obligor, in an aggregate principal amount at any time outstanding that does not cause the Intercompany Basket to be exceeded; *provided* that any notes or other instruments evidencing Indebtedness described in this clause (iii) are pledged to Administrative Agent for the benefit of the Lenders;

(g) (i) Guarantees by any Obligor of Indebtedness of any other Obligor, (ii) unsecured Guarantees by any Obligor of Indebtedness of a Subsidiary that is not an Obligor in an aggregate principal amount at any time outstanding that does not cause the Intercompany Basket to be exceeded, and (iii) Guarantees by any Subsidiary that is not an Obligor of Indebtedness of any other Subsidiary that is not an Obligor;

(h) Indebtedness of Borrower or any of its Subsidiaries incurred to finance the acquisition, construction or improvement of any fixed or capital assets (and related software), including capital lease obligations and any Indebtedness assumed in connection with the acquisition of any such assets or secured by a Lien on any such assets prior to the acquisition thereof; *provided* that (i) if secured, the collateral therefor consists solely of the assets being financed (together with additions, accessions and improvements thereto), the products and proceeds thereof and books and records related thereto, and (ii) the aggregate outstanding principal amount of such Indebtedness does not exceed $2,500,000 (or the Equivalent Amount in other currencies) at any time;

(i) Permitted Convertible Notes;

(j) Deposits or advances received from customers in the ordinary course of business;

(k) Indebtedness up to an aggregate principal amount of $1,750,000 with respect to letters of credit issued solely to support any lease of real property entered into in the ordinary course of business;

(l) Indebtedness of any Person that becomes a Subsidiary after the date hereof; *provided that* (i) such Indebtedness exists at the time such Person becomes a Subsidiary and is not created in contemplation of or in connection with such Person becoming a Subsidiary, and (ii) the aggregate principal amount of Indebtedness permitted in reliance on this clause (m) for all such new Subsidiaries does not cause the Permitted Acquisition Basket to be exceeded;

(m) Indebtedness incurred in connection with corporate credit cards in an aggregate principal amount at any time outstanding not to exceed $2,000,000 and secured by cash and/or cash equivalents;

(n) Hedging Agreements entered into in the ordinary course of Borrower's financial planning solely to hedge currency, interest rate or commodity price risks (and not for speculative purposes);

(o) unsecured Indebtedness in an aggregate principal amount at any time outstanding not to exceed $1,000,000;

(p) Indebtedness incurred in connection with the financing of insurance premiums in the ordinary course of business;

(q) unsecured Indebtedness of Borrower or any Subsidiary in respect of earn-out, purchase price adjustment or similar obligations in connection with a Permitted Acquisition; *provided that* the aggregate principal amount of all such Indebtedness under this clause (r) shall not cause the Permitted Acquisition Basket to be exceeded;

(r) Indebtedness arising from the honoring by a bank or other financial institution of a check, draft of similar instrument drawn against insufficient funds in the ordinary course of business; *provided that* such Indebtedness is extinguished within two (2) Business Days of notice to Borrower or the relevant Subsidiary of its incurrence;

(s) Indebtedness incurred in the ordinary course of business arising in connection with any automated clearinghouse transfers of funds or other payment processing service;

(t) Indebtedness (other than Indebtedness of a type described in clauses **(a), (b), (c), (d), (f), (h), (i), (j)** or **(l)** of the definition of Indebtedness) that may be deemed to exist pursuant to any guarantees, warranty or contractual service obligations, performance, surety, statutory, appeal, bid, prepayment guarantee, payment (other than payment of Indebtedness) or completion of performance guarantees or similar obligations incurred in the ordinary course of business;

(u) in the case of Dynavax GmbH, the Cost Plus Arrangement; and

(v) Indebtedness approved in advance in writing by the Majority Lenders.

9.02 Liens. Such Obligor will not, and will not permit any of its Subsidiaries to, create, incur, assume or permit to exist any Lien on any property or asset now owned or hereafter acquired by it, or assign or sell any income or revenues (including accounts receivable) or rights in respect of any thereof, except:

(a) Liens securing the Obligations;

(b) any Lien on any property or asset of Borrower or any of its Subsidiaries existing on the date hereof and set forth in **Part II** of **Schedule 7.13(b)** of the Disclosure Letter; *provided* that (i) no such Lien shall extend to any other property or asset of Borrower or any of its Subsidiaries and (ii) any such Lien shall secure only those obligations which it secures on the date hereof and extensions, renewals and replacements thereof that do not increase the outstanding principal amount thereof;

(c) Liens described in the definition of "Permitted Priority Debt";

(d) Liens securing Indebtedness permitted under **Section 9.01(h)** or **(m)**; *provided* that such Liens are restricted solely to the collateral described in **Section 9.01(h)** or **(m)**, as applicable;

(e) Liens imposed by law which were incurred in the ordinary course of business, including (but not limited to) carriers', warehousemen's, landlord's and mechanics' liens, liens relating to leasehold improvements and other similar liens arising in the ordinary course of business and which (x) do not in the aggregate materially detract from the value of the Property subject thereto or materially impair the use thereof in the operations of the business of such Person or (y) are being contested in good faith by appropriate proceedings, which proceedings have the effect of preventing the forfeiture or sale of the Property subject to such liens and for which adequate reserves have been made if required in accordance with GAAP;

(f) pledges or deposits made in the ordinary course of business in connection with and to secure payment of workers' compensation, unemployment insurance or other similar social security legislation;

(g) Liens securing Taxes, assessments and other governmental charges, the payment of which is not yet due or thereafter is payable without any interest or penalty, or is being contested in good faith by appropriate proceedings promptly initiated and diligently conducted and for which such reserve or other appropriate provisions, if any, as shall be required by GAAP shall have been made;

(h) servitudes, easements, rights of way, restrictions and other similar encumbrances on real Property imposed by applicable Laws and encumbrances consisting of zoning or building restrictions, easements, licenses, restrictions on the use of property or minor imperfections in title thereto which, in the aggregate, are not material, and which do not in any case materially detract from the value of the property subject thereto or interfere with the ordinary conduct of the business of any of the Obligors;

(i) with respect to any real Property, (i) (A) such defects or encroachments as might be revealed by an up-to-date survey of such real Property; (B) the reservations, limitations, provisos and conditions expressed in the original grant, deed or patent of such property by the original owner of such real Property pursuant to applicable Laws; and (C) rights of expropriation, access or user or any similar right conferred or reserved by or in applicable Laws, which, in the aggregate for (A), (B) and (C), are not material, and which do not in any case materially detract from the value of the property subject thereto or interfere with the ordinary conduct of the business of any of the Obligors, and (ii) leases or subleases granted in the ordinary course of business;

(j) Bankers liens, rights of setoff and similar Liens incurred on deposits made in the ordinary course of business;

(k) deposits to secure the performance of bids, trade contracts, operating leases, statutory obligations, surety and appeal bonds (other than bonds related to judgments or litigation), performance bonds and other obligations of a like nature (including by means of a letter of credit supporting the same), in each case in the ordinary course of business;

(l) judgment Liens in respect of judgments that do not constitute an Event of Default under **Section 11.01(m)**;

(m) leases, licenses, subleases or sublicenses in each case, granted to others in the ordinary course of business (excluding exclusive licenses relating to Intellectual Property) that do not (i) have an adverse impact in any material respect on the business of Borrower and its Subsidiaries, taken as a whole, or (ii) secure any Indebtedness;

(n) Liens (i) in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods in the ordinary course of business or (ii) on specific items of inventory or other goods and proceeds of any Person securing such Person's obligations in respect of bankers' acceptances or letters of credit issued or created for the account of such Person to facilitate the purchase, shipment or storage of such inventory or other goods in the ordinary course of business;

(o) Liens arising out of conditional sale, title retention, consignment or similar arrangements for sale of goods entered into by Borrower or any of its Subsidiaries in the ordinary course of business permitted by this Agreement;

(p) Liens encumbering reasonable and customary initial deposits and margin deposits and similar Liens attaching to commodity trading accounts or other brokerage accounts incurred in the ordinary course of business and not for speculative purposes; provided that the amount of the obligations secured thereby does not exceed $100,000;

(q) Liens solely on any cash earnest money deposits made by Borrower or any of its Subsidiaries in connection with any letter of intent or purchase agreement permitted hereunder;

(r) Liens existing on property at the time of its acquisition or existing on the property of any Person at the time such Person becomes a direct or indirect Subsidiary of Borrower, in each case after the date hereof and the replacement, modification, extension or renewal of any Lien permitted by this clause upon or in the same property previously subject thereto in connection with the replacement, modification, extension or renewal of the Indebtedness secured thereby; *provided* that (A) such Lien was not created in contemplation of such acquisition or such Person becoming a Subsidiary, (B) such Lien does not extend to or cover any other assets or property (other than (1) the proceeds or products thereof, (2) after-acquired property that is affixed or incorporated into the property covered by such Lien, (3) any other Permitted Lien and (4) after-acquired property subject to a Lien securing Indebtedness and other obligations incurred prior to such time and which Indebtedness and other obligations are permitted hereunder that require, pursuant to their terms at such time, a pledge of after-acquired property, it being understood that such requirement shall not be permitted to apply to any property to which such requirement would not have applied but for such acquisition), and (C) any Indebtedness secured thereby is permitted under **Section 9.01**;

(s) Liens on insurance policies and the proceeds thereof securing the financing of the premiums with respect thereto;

(t) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business;

(u) licenses of any Product or Intellectual Property that are permitted under **Section 9.09**; and

(v) other Liens securing liabilities, but not Indebtedness, with an aggregate principal amount not to exceed $50,000 at any time outstanding;

provided that no Lien otherwise permitted under any of the foregoing **Sections 9.02(b)** through **(v)** shall apply to any Material Intellectual Property.

9.03 Fundamental Changes and Acquisitions. Such Obligor will not, and will not permit any of its Subsidiaries to, (i) consummate any transaction of merger, amalgamation or consolidation (ii) liquidate, wind up or dissolve itself (or suffer any liquidation or dissolution), or (iii) make any Acquisition, except:

(a) Investments permitted under **Section 9.05**;

(b) (i) the merger, amalgamation or consolidation of any Subsidiary with or into any Obligor; *provided* that the surviving entity is an Obligor, or (ii) the merger, amalgamation or consolidation of any Subsidiary that is not a Subsidiary Guarantor with or into any other Subsidiary that is not a Subsidiary Guarantor;

(c) the sale, lease, transfer or other disposition by any Subsidiary that is directly or indirectly wholly-owned by Borrower of any or all of such Subsidiary’s property (upon voluntary liquidation or otherwise) either (i) to any Obligor or (ii) if such Subsidiary is not a Subsidiary Guarantor, to another Subsidiary of Borrower that is not a Subsidiary Guarantor;

(d) the sale, transfer or other disposition of the capital stock of any Subsidiary that is directly or indirectly wholly-owned by Borrower either (i) to any Obligor or (ii) if such Subsidiary is not a Subsidiary Guarantor, to another Subsidiary of Borrower that is not a Subsidiary Guarantor;

(e) Permitted Acquisitions for total consideration in an aggregate amount for all such Permitted Acquisitions not exceeding 30% of Average Market Capitalization (measured, with respect to any particular Permitted Acquisition, as of the trading day immediately preceding the execution of the definitive documentation relating to such Permitted Acquisition); and

(f) Borrower and its Subsidiaries may enter into Permitted Commercialization Arrangements.

9.04 Lines of Business. Such Obligor will not, and will not permit any of its Subsidiaries to, engage to any material extent in any business other than the business engaged in on the date hereof by Borrower or any Subsidiary or a business reasonably related thereto or constituting a reasonable extension thereof.

9.05 Investments. Such Obligor will not, and will not permit any of its Subsidiaries to, make, directly or indirectly, or permit to remain outstanding any Investments except:

(a) Investments outstanding on the date hereof and identified in **Schedule 9.05** of the Disclosure Letter;

(b) deposit accounts with banks;

(c) extensions of credit in the nature of accounts receivable or notes receivable arising from the sales of goods or services in the ordinary course of business and prepaid royalties or prepaid services arising in the ordinary course of business;

(d) Permitted Cash Equivalent Investments;

(e) (i) Investments by any Obligor in any other Obligor (for greater certainty, Borrower shall not be permitted to have any direct or indirect Subsidiaries that are not wholly-owned Subsidiaries, except as otherwise expressly waived in writing by the Administrative Agent), (ii) Investments by Subsidiaries that are not Subsidiary Guarantors in Borrower or any other Subsidiary, and (iii) Investments by any Obligor in any Subsidiary that is not a Subsidiary Guarantor in an aggregate amount at any time outstanding that does not cause the Intercompany Basket to be exceeded;

(f) Hedging Agreements permitted under **Section 9.01(n)**;

(g) Investments consisting of security deposits with utilities and other like Persons made in the ordinary course of business;

(h) (i) employee loans, advances and guarantees in accordance with Borrower's usual and customary practices with respect thereto (if permitted by applicable law) which in the aggregate shall not exceed $500,000 outstanding at any time (or the Equivalent Amount in other currencies), and (ii) non-cash loans to employees, officers or directors relating to the purchase of Equity Interests of Borrower pursuant to employee stock purchase plans or agreements approved by Borrower's Board of Directors;

(i) Investments received in connection with any Insolvency Proceedings in respect of any customers, suppliers or clients and in settlement of delinquent obligations of, and other disputes with, customers, suppliers or clients;

(j) Investments permitted under **Section 9.03**;

(k) Investments (excluding non-exclusive licenses of Intellectual Property and licenses of Intellectual Property that are exclusive to jurisdictions outside the United States only) as part of a Permitted Commercialization Arrangement, provided that the value of the cash and

tangible property components of such Investment (valued at cost) shall not at any time exceed $2,000,000 in the aggregate at any time outstanding for all such Permitted Commercialization Arrangements taken together;

(l) non-cash Investments in joint ventures or strategic alliances in the ordinary course of Borrower's business consisting of non-exclusive licensing of technology, the development of technology or the providing of technical support;

(m) Investments in an aggregate amount not to exceed $1,000,000 in any fiscal year of Borrower;

(n) Investments received in connection with Asset Sales permitted by **Section 9.09(h)**;

(o) Guarantees of commercial obligations of Subsidiaries (not constituting Indebtedness) in the ordinary course of business not prohibited hereby;

(p) Investments of a Person existing at the time such Person becomes a Subsidiary of, Borrower or merges with, Borrower or any Subsidiary; *provided that* (i) such Investments were not made in contemplation of such Person becoming a Subsidiary or such merger, in an aggregate amount not to exceed $2,500,000 at any time, and (ii) the amount of such Investments shall not cause the Permitted Acquisition Basket to be exceeded; and

(q) in the case of Borrower, the Cost Plus Arrangement.

9.06 Restricted Payments. Such Obligor will not, and will not permit any of its Subsidiaries to, declare or make, or agree to pay or make, directly or indirectly, any Restricted Payment, except:

(a) Borrower may declare and pay dividends with respect to its capital stock payable solely in additional shares of its capital stock;

(b) any Subsidiary that is a wholly-owned direct or indirect Subsidiary of Borrower may declare and pay dividends ratably with respect to its Equity Interests;

(c) Borrower may make cash payments in lieu of fractional shares in connection with the exercise of warrants, options, or other securities, convertible or exchangeable for Equity Interests of the Borrower;

(d) Borrower may honor any conversion requests in respect of any Permitted Convertible Notes (i) into Equity Interests of Borrower (plus cash in lieu of fractional shares) pursuant to the terms of such Permitted Convertible Notes and (ii) subject to consent of the Majority Lenders (which consent shall not unreasonably be withheld), into cash or a combination of cash and Equity Interests of Borrower pursuant to the terms of such Permitted Convertible Notes;

(e) Borrower may purchase, redeem, retire, or otherwise acquire shares of its capital stock or other Equity Interests with the proceeds received from a substantially concurrent issue of new shares of its capital stock or other Equity Interests;

(f) Borrower may make Restricted Payments pursuant to and in accordance with restricted stock agreements, stock option plans or other benefit plans for management, directors, employees or consultants of Borrower and its Subsidiaries; *provided that* all such Restricted Payments made in cash shall be limited to an aggregate amount of $1,000,000 in any fiscal year of Borrower and (ii) all such Restricted Payments shall be approved by at least a majority of the members of Borrower's board of directors (and if Borrower is no longer a public company, by all members of Borrower's board of directors who are disinterested directors);

(g) Borrower may issue its Equity Interests upon the exercise of warrants or options to purchase Equity Interests of Borrower;

(h) Borrower may distribute rights pursuant to a stockholder rights plan or redeem such rights for no or nominal consideration; *provided* that, such redemption is in accordance with the terms of such plan;

(i) Borrower may make Restricted Payments in connection with the retention of Equity Interests in payment of withholding taxes in connection with equity-based compensation plans;

(j) (i) a Restricted Payment by any Obligor to any other Obligor and (ii) a Restricted Payment by any Subsidiary that is not a Subsidiary Guarantor to Borrower or any other Subsidiary;

(k) Borrower or any Subsidiary may make payments or distributions to dissenting stockholders pursuant to applicable law in connection with any Permitted Acquisition; *provided that* the payment of such amounts does not cause the Permitted Acquisition Basket to be exceeded; and

(l) Borrower may make payments or distributions payable solely in shares of its capital stock.

9.07 Payments of Indebtedness. Such Obligor will not, and will not permit (without the consent of the Administrative Agent in its sole discretion) any of its Subsidiaries to, make any payments in respect of any Indebtedness of the type described in **clause (a)**, **(b)**, **(e)** or **(f)** (excluding, in the case of **clause (f)**, Guarantees of obligations that do not constitute Indebtedness) of the definition thereof, other than (i) payments of the Obligations, (ii) scheduled payments of Indebtedness permitted under the terms of any subordination to the Obligations, (iii) repayment of intercompany Indebtedness permitted in reliance upon **Section 9.01(f)**, (iv) payments, prepayments, refinancings, renewals, extensions or exchanges of any Indebtedness permitted in reliance upon **Section 9.01(g)**, **(h)**, **(l)** or **(m)**, and (v) (A) conversion or exchange of any Permitted Convertible Notes into or for (i) Equity Interests (plus cash in lieu of fractional shares) or (ii) subject to consent of the Majority Lenders (which consent shall not unreasonably be withheld), cash or a combination of cash and Equity Interests, (B) payments and prepayments of any Permitted Convertible Notes made solely with the proceeds of Equity Interests, (C)

Permitted Refinancings of Permitted Convertible Notes, and (D) the payment of interest, out of pocket expenses, and indemnities (provided that none of such consists of disguised principal or fees) in respect of any Permitted Convertible Notes, in each case, pursuant to the terms thereof.

9.08 Change in Fiscal Year. Such Obligor will not, and will not permit any of its Subsidiaries to, change the last day of its fiscal year from that in effect on the date hereof, except to change the fiscal year of a Subsidiary acquired in connection with an Acquisition to conform its fiscal year to that of Borrower.

9.09 Sales of Assets, Etc. Such Obligor will not, and will not permit any of its Subsidiaries to, sell, lease, exclusively license (in terms of geography or field of use), transfer, or otherwise dispose of any of its Property (including accounts receivable and capital stock of Subsidiaries) to any Person in one transaction or series of transactions (any thereof, an "***Asset Sale***"), except:

(a) transfers of cash in the ordinary course of its business for equivalent value;

(b) sales of inventory in the ordinary course of its business on ordinary business terms;

(c) development and other collaborative arrangements where such arrangements provide for the licenses or disclosure of Patents, Trademarks, Copyrights or other Intellectual Property rights in the ordinary course of business and consistent with general market practices where such license requires periodic payments based on per unit sales of a product over a period of time; *provided* that each such license does not effect a legal transfer of title to such Intellectual Property rights and that each such license must be a true license as opposed to a license that is a sales transaction in substance;

(d) (i) transfers of Property by any Subsidiary to any Obligor, (ii) transfers of Property by any Obligor to any other Obligor, (iii) transfers of Property, by any Obligor to a Subsidiary that is not a Subsidiary Guarantor, the aggregate fair market value of which does not cause the Intercompany Basket to be exceeded, and (iv) transfers of Property by any Subsidiary that is not an Obligor to any other Subsidiary that is not an Obligor;

(e) any transaction or disposition permitted under **Section 9.02**, **9.03**, **9.05** or **9.06**; and

(f) (i) licenses entered into in the ordinary course of business of Intellectual Property or other property owned by Borrower or any Subsidiary which may only be exclusive with respective to geographical location outside the United States, (ii) licenses entered into in the ordinary course of business of Intellectual Property or other property (excluding Intellectual Property or other property relating to the Product) owned by Borrower or any Subsidiary, and (iii) any license (whether or not exclusive) of all or any portion of the oncology business of Borrower and its Subsidiaries, including any assets reasonably related thereto; *provided* that, in the case of each of the foregoing **clauses (i)** through **(iii)**, such license does not effect a legal transfer of title to such Intellectual Property rights and that each such license must be a true license as opposed to a license that is a sales transaction in substance;

(g) non-exclusive licenses of Intellectual Property entered into in the ordinary course of business;

(h) any other Asset Sale, the Asset Sale Proceeds of which are applied as required under **Section 3.03(b)(ii)**;

(i) dispositions of any Property that is surplus, obsolete or worn out or no longer used or useful in the Business;

(j) Asset Sales resulting from any casualty or other insured damage to, or any taking under power of eminent domain or by condemnation or similar proceeding of, any property or assets of Borrower or any Subsidiary, provided that, the proceeds thereof are promptly (and in any event not to exceed one hundred eighty (180) days) applied to replace such assets;

(k) the abandonment or other disposition of Obligor Intellectual Property that is no longer useful or material to the conduct of the business of Borrower and its Subsidiaries as determined by Borrower in its reasonable business judgment;

(l) dispositions consisting of the sale, transfer, assignment or other disposition of unpaid and overdue accounts receivable in connection with the collection, compromise or settlement thereof in the ordinary course of business and not as part of a financing transaction; and

(m) the disposition of other property in an aggregate amount not to exceed $1,000,000.

9.10 Transactions with Affiliates. Such Obligor will not, and will not permit (without the consent of the Administrative Agent in its sole discretion) any of its Subsidiaries to, sell, lease, license or otherwise transfer any assets to, or purchase, lease, license or otherwise acquire any assets from, or otherwise engage in any other transactions with, any of its Affiliates, except:

(a) transactions between or among Obligors;

(b) any transaction permitted under **Section 9.01**, **9.03**, **9.05**, **9.06**, **9.07** or **9.09** and any transaction the nature of which is not regulated by other provisions of this **Section 9**;

(c) customary compensation and indemnification of, and other employment arrangements with, directors, officers and employees of Borrower or any Subsidiary in the ordinary course of business,

(d) Borrower may issue Equity Interests to Affiliates in exchange for cash; *provided* that the terms thereof are no less favorable (including the amount of cash received by Borrower) to Borrower than those that would be obtained in a comparable arm's-length transaction with a Person not an Affiliate of Borrower; and

(e) the transactions set forth on **Schedule 9.10** of the Disclosure Letter.

9.11 Restrictive Agreements. Such Obligor will not, and will not permit any of its Subsidiaries to, directly or indirectly, enter into, incur or be a party to any Restrictive Agreement; *provided* that the foregoing shall not apply to (a) restrictions and conditions imposed by law or by the Loan Documents and (b) Restrictive Agreements listed on **Schedule 7.15** of the Disclosure Letter, (c) customary restrictions and conditions contained in agreements relating to the sale of a Subsidiary or assets pending such sale, *provided* that, such restrictions and conditions apply only to the Subsidiary or asset that is to be sold and such sale is permitted hereunder, and (d) customary net worth provisions or similar financial maintenance provisions contained in any agreement entered into by a Subsidiary.

9.12 Amendments to Material Agreements; Organizational Documents. Such Obligor will not, and will not permit any of its Subsidiaries to, (i) enter into any material amendment to or material modification of any Material Agreement in a manner that could be materially adverse to the interests of Administrative Agent or Lenders (considering their respective rights, remedies and Lien priority under the Loan Documents), or (ii) terminate any Material Agreement (other than (x) any agreement with respect to Material Indebtedness, (y) upon the scheduled termination date of such agreement or (z) upon the termination or transfer of such an agreement that relates to an asset transferred pursuant to a transaction permitted under **Section 9.03** or **9.09**) unless within ninety days (or such longer period as may be agreed by the Administrative Agent) replaced with another agreement that, viewed as a whole, is on as good or better terms for Borrower or such Subsidiary. Such Obligor will not, and will not permit any of its Subsidiaries to, enter into any amendment to or modification of its organizational documents in a manner that could be materially adverse to Administrative Agent's or Lenders' rights, remedies and Lien priority under the Loan Documents.

9.13 Operating Leases.

(a) Borrower will not, and will not permit any of its Subsidiaries to, make any expenditures in respect of operating leases, except for:

(i) real estate operating leases;

(ii) operating leases between Borrower and any of its wholly-owned Subsidiaries or between any of Borrower's wholly-owned Subsidiaries; and

(iii) other operating leases that would not obligate the Borrower and its Subsidiaries, on a consolidated basis, to make payments exceeding $1,250,000 (or the Equivalent Amount in other currencies) in any fiscal year (calculated exclusive of operating leases described in **clauses (i)** and **(ii)** above).

9.14 Sales and Leasebacks. Except as disclosed on **Schedule 9.14** of the Disclosure Letter, such Obligor will not, and will not permit any of its Subsidiaries to, become liable, directly or indirectly, with respect to any lease, whether an operating lease or a Capital Lease Obligation, of any property (whether real, personal, or mixed), whether now owned or hereafter acquired, (i) which Borrower or such Subsidiary has sold or transferred or is to sell or transfer to any other Person and (ii) which Borrower or such Subsidiary intends to use for substantially the same purposes as property which has been or is to be sold or transferred.

9.15 Hazardous Material. Such Obligor will not, and will not permit any of its Subsidiaries to, use, generate, manufacture, install, treat, release, store or dispose of any Hazardous Material, except in compliance with all applicable Environmental Laws or where the failure to comply could not reasonably be expected to result in a Material Adverse Change.

9.16 Accounting Changes. Such Obligor will not, and will not permit any of its Subsidiaries to, make any significant change in accounting treatment or reporting practices, except as required or permitted by GAAP.

9.17 Compliance with ERISA. No ERISA Affiliate shall cause or suffer to exist (a) any event that could result in the imposition of a Lien with respect to any Title IV Plan or Multiemployer Plan or (b) any other ERISA Event that would, in the aggregate, have a Material Adverse Effect. No Obligor or Subsidiary thereof shall cause or suffer to exist any event that could result in the imposition of a Lien with respect to any Benefit Plan that would reasonably be expected to have a Material Adverse Effect.

9.18 First Borrowing Account. Without the prior written consent of Administrative Agent, Borrower shall not transfer any property out of the First Borrowing Account into a Deposit Account, Securities Account or Commodity Account that is not the subject of a first priority lien that has been perfected by the entry into a control agreement.

9.19 Non-controlled Cash. Foreign Subsidiaries, shall not, at any time, hold more than $4,000,000 (or its Equivalent Amount in other currencies) in cash in deposit accounts or securities accounts that are not subject to Control Agreements. Such amount shall be measured in the aggregate for all Foreign Subsidiaries.

SECTION 10
FINANCIAL COVENANTS

10.01 Minimum Liquidity. Borrower shall maintain at the end of each day Liquidity in an amount which shall exceed the greater of (i) $15,000,000 and (ii) to the extent Borrower has incurred Permitted Priority Debt, the minimum cash balance, if any, required of Borrower by Borrower's Permitted Priority Debt creditors.

10.02 Minimum Revenue. Obligors shall have annual consolidated Revenue from sales of the Product (for each respective calendar year, the "***Minimum Required Revenue***"):

(a) during the twelve month period beginning on January 1, 2019, of at least $30,000,000;

(b) during the twelve month period beginning on January 1, 2020, of at least $50,000,000;

(c) during the twelve month period beginning on January 1, 2021, of at least $75,000,000;

(d) during the twelve month period beginning on January 1, 2022, of at least $100,000,000.

(e) during the twelve month period beginning on January 1, 2023, of at least $150,000,000.

SECTION 11
EVENTS OF DEFAULT

11.01 Events of Default. Each of the following events shall constitute an "***Event of Default***":

(a) Borrower shall fail to pay any principal of any Loan when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise;

(b) any Obligor shall fail to pay any Obligation (other than an amount referred to in **Section 11.01(a)**) when and as the same shall become due and payable, and such failure shall continue unremedied for a period of three (3) Business Days;

(c) any representation or warranty made or deemed made by or on behalf of Borrower or any of its Subsidiaries in or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof, or in any report, certificate, financial statement or other document furnished pursuant to or in connection with this Agreement or any other Loan Document or any amendment or modification hereof or thereof, shall: (i) prove to have been incorrect when made or deemed made to the extent that such representation or warranty contains any materiality or Material Adverse Effect qualifier; or (ii) prove to have been incorrect in any material respect when made or deemed made to the extent that such representation or warranty does not otherwise contain any materiality or Material Adverse Effect qualifier;

(d) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in **Section 8.02** (and such failure continues unremedied for five (5) days), **8.03** (with respect to Borrower's existence), **8.11**, **8.12(b)**, **8.14**, **8.16**, **SECTION 9** or **SECTION 10**;

(e) any Obligor shall fail to observe or perform any covenant, condition or agreement contained in this Agreement (other than those specified in **Section 11.01(a)**, **(b)**, **(c)** or **11.01(d)**) or any other Loan Document, and, if such failure shall continue unremedied for a period of thirty (30) or more days after a Responsible Officer of Borrower has actual knowledge or reasonably should have known of such failure;

(f) Borrower or any of its Subsidiaries shall fail to make any payment (whether of principal or interest and regardless of amount) in respect of any Material Indebtedness, when and as the same shall become due and payable after giving effect to any applicable grace or cure period as originally provided by the terms of such Indebtedness;

(g) (i) any material breach of, or "event of default" or similar event by any Obligor under, any Material Agreement shall occur, which could give the counterparty to such Material Agreement the right to terminate such Material Agreement pursuant to the terms thereof, and (ii) since such breach, event of default or similar event, (x) any applicable grace period shall have expired, (y) 180 days shall have passed, and (z) Lenders have not agreed in writing to waive the resulting Event of Default (which waiver shall not unreasonably be withheld);

(h) (i) any material breach of, or "event of default" or similar event under, the documentation governing any Material Indebtedness shall occur, and any applicable grace period shall have expired, or (ii) any event or condition occurs (A) that results in any Material Indebtedness becoming due prior to its scheduled maturity or (B) that enables or permits (with or without the giving of notice, the lapse of time or both) the holder or holders of such Material Indebtedness or any trustee or agent on its or their behalf to cause such Material Indebtedness to become due, or to require the prepayment, repurchase, redemption or defeasance thereof, prior to its scheduled maturity; *provided* that this **Section 11.01(h)** shall not apply to secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the property or assets securing such Material Indebtedness or the conversion of any Permitted Convertible Notes in accordance with their terms.

(i) any Obligor:

(i) becomes insolvent, or generally does not or becomes unable to pay its debts or meet its liabilities as the same become due, or admits in writing its inability to pay its debts generally, or declares any general moratorium on its indebtedness, or proposes a compromise or arrangement or deed of company arrangement between it and any class of its creditors;

(ii) commits an act of bankruptcy or makes an assignment of its property for the general benefit of its creditors or makes a proposal (or files a notice of its intention to do so);

(iii) voluntarily institutes any proceeding seeking to adjudicate it an insolvent, or seeking liquidation, dissolution, winding-up, reorganization, compromise, arrangement, adjustment, protection, moratorium, relief, stay of proceedings of creditors generally (or any class of creditors), or composition of it or its debts or any other relief, under any federal, provincial or foreign Law now or hereafter in effect relating to bankruptcy, winding-up, insolvency, reorganization, receivership, plans of arrangement or relief or protection of debtors or at common law or in equity, or files an answer admitting the material allegations of a petition filed against it in any such proceeding;

(iv) applies for the appointment of, or the taking of possession by, a receiver, interim receiver, receiver/manager, sequestrator, conservator, custodian, administrator, trustee, liquidator, voluntary administrator, receiver and manager or other similar official for it or any substantial part of its property; or

(v) takes any action, corporate or otherwise, to approve, effect, consent to or authorize any of the actions described in this **Section 11.01(i)** or **(j)**, or otherwise acts in furtherance thereof or fails to act in a timely and appropriate manner in defense thereof;

(j) any voluntary petition is filed, application made or other proceeding instituted against or in respect of Borrower or any Subsidiary (and not removed, dismissed or stayed for a period of sixty (60) days):

(i) seeking to adjudicate it an insolvent;

(ii) seeking a receiving order against it;

(iii) seeking liquidation, dissolution, winding-up, reorganization, compromise, arrangement, adjustment, protection, moratorium, relief, stay of proceedings of creditors generally (or any class of creditors), deed of company arrangement or composition of it or its debts or any other relief under any federal, provincial or foreign law now or hereafter in effect relating to bankruptcy, winding-up, insolvency, reorganization, receivership, plans of arrangement or relief or protection of debtors or at common law or in equity; or

(iv) seeking the entry of an order for relief or the appointment of, or the taking of possession by, a receiver, interim receiver, receiver/manager, sequestrator, conservator, custodian, administrator, trustee, liquidator, voluntary administrator, receiver and manager or other similar official for it or any substantial part of its property;

and such petition, application or proceeding continues undismissed, or unstayed and in effect, for a period of thirty (30) days after the institution thereof; *provided* that if an order, decree or judgment is granted or entered (whether or not entered or subject to appeal) against Borrower or such Subsidiary thereunder in the interim, such grace period will cease to apply; *provided further* that if Borrower or such Subsidiary files an answer admitting the material allegations of a petition filed against it in any such proceeding, such grace period will cease to apply;

(k) any other event occurs which, under the laws of any applicable jurisdiction, has an effect equivalent to any of the events referred to in either of **Section 11.01(i)** or **(j)**;

(l) (i) one or more judgments or settlements for the payment of money in an aggregate amount in excess of $5,000,000 (or the Equivalent Amount in other currencies) (to the extent not covered by independent third party insurance as to which the insurer has been notified of the potential claim and does not dispute coverage) shall be rendered against or entered into by any Obligor or any combination thereof, and (ii) (A) the same shall remain undischarged or unsatisfied in accordance with its terms for a period of sixty (60) consecutive days during which execution shall not be effectively stayed, or (B) any action shall be legally taken by a judgment or settlement creditor to attach or levy upon any assets of any Obligor to enforce any such judgment or settlement;

(m) (i) an ERISA Event shall have occurred that, in the opinion of the Lenders, when taken together with all other ERISA Events that have occurred, could reasonably be expected to result in liability of Borrower and its Subsidiaries in an aggregate amount exceeding (i) $1,000,000 in any year or (ii) $5,000,000 for all periods until repayment of all Obligations;

(n) a Change of Control shall have occurred;

(o) a Material Adverse Change shall have occurred;

(p) (i) any Lien created by any of the Security Documents over Collateral with a fair market value that individually or in the aggregate exceeds $250,000 shall at any time not constitute a valid and perfected Lien on the applicable Collateral in favor of the Secured Parties, free and clear of all other Liens (other than Permitted Liens) to the extent required by the Security Documents, (ii) except for expiration in accordance with its terms, any of the Security Documents or any Guarantee of any of the Obligations (including that contained in **SECTION 14**) shall for whatever reason cease to be in full force and effect, or (iii) any of the Security Documents or any Guarantee of any of the Obligations (including that contained in **SECTION 14**), or the enforceability thereof, shall be repudiated or contested by any Obligor;

(q) any injunction, whether temporary or permanent, shall be rendered against any Obligor by any Governmental Authority that prevents the Obligors from selling or manufacturing the Product or its commercially available successors, or any of their other material and commercially available products, in the United States for more than sixty (60) consecutive calendar days; and

(r) either Borrower's common stock (the "***Common Stock***") ceases to be listed or quoted on any Permitted Exchange, or there is an announcement by any such exchange on which the Common Stock is trading that the Common Stock will no longer be listed or admitted for trading and, in either case, will not be immediately relisted or readmitted for trading on any Permitted Exchange (where "***Permitted Exchange***" means any of The New York Stock Exchange, The NASDAQ Global Select Market and The NASDAQ Global Market (or any of their respective successors)).

11.02 Remedies. (a) Upon the occurrence of any Event of Default, then, and in every such event (other than an Event of Default described in **Section 11.01(i)**, **(j)** or **(k)**), and at any time thereafter during the continuance of such event, the Majority Lenders may, by notice to Borrower, take either or both of the following actions, at the same or different times: (i) terminate the Commitments, and thereupon the Commitments shall terminate immediately, and (ii) declare the Loans then outstanding to be due and payable in whole (or in part, in which case any principal not so declared to be due and payable may thereafter be declared to be due and payable), and thereupon the principal of the Loans so declared to be due and payable, together with accrued interest thereon and all fees and other Obligations (including fees specified in the Fee Letter), shall become due and payable immediately (in the case of the Loans, at the Redemption Price therefor), without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Obligor.

(b) Upon the occurrence of any Event of Default described in **Section 11.01(i)**, **(j)** or **(k)**, the Commitments shall automatically terminate and the principal of the Loans then outstanding, together with accrued interest thereon and all fees and other Obligations, shall automatically become due and payable immediately (in the case of the Loans, at the Redemption Price therefor), without presentment, demand, protest or other notice of any kind, all of which are hereby waived by each Obligor.

(c) **Prepayment Premium and Redemption Price**. (i) For the avoidance of doubt, the Prepayment Premium (as a component of the Redemption Price) shall be due and payable whenever so stated in this Agreement, or by any applicable operation of law, regardless of the circumstances causing any related acceleration or payment prior to the Stated Maturity Date, including any Event of Default or other failure to comply with the terms of this Agreement, whether or not notice thereof has been given, or any acceleration by, through, or on account of any bankruptcy filing.

(ii) For the avoidance of doubt, the Prepayment Premium (as a component of the Redemption Price) and the fees specified in the Fee Letter that are payable upon the repayment of the Loans shall be due and payable at any time the Loans become due and payable prior to the Stated Maturity Date for any reason, whether due to acceleration pursuant to the terms of this Agreement (in which case it shall be due immediately, upon the giving of notice to

Borrower in accordance with **Section 11.02(a)**, or automatically, in accordance with **Section 11.02(b)**), by operation of law or otherwise (including where bankruptcy filings or the exercise of any bankruptcy right or power, whether in any plan of reorganization or otherwise, results or would result in a payment, discharge, modification or other treatment of the Loans or Loan Documents that would otherwise evade, avoid, or otherwise disappoint the expectations of Lenders in receiving the full benefit of their bargained-for Prepayment Premium or Redemption Price as provided herein). The Obligors and Lenders acknowledge and agree that any Prepayment Premium and the fees specified in the Fee Letter due and payable in accordance with the Loan Documents shall not constitute unmatured interest, whether under section 502(b)(3) of the Bankruptcy Code or otherwise, but instead is reasonably calculated to ensure that the Lenders receive the benefit of their bargain under the terms of this Agreement.

(iii) Each Obligor acknowledges and agrees that the Lenders shall be entitled to recover the full amount of the Redemption Price and the fees specified in the Fee Letter in each and every circumstance such amount is due pursuant to or in connection with this Agreement and the Fee Letter, including in the case of any Obligor's bankruptcy filing, so that the Lenders shall receive the benefit of their bargain hereunder and otherwise receive full recovery as agreed under every possible circumstance, and Borrower hereby waives, to the extent permitted by applicable law, any defense to payment, whether such defense may be based in public policy, ambiguity, or otherwise. Each Obligor further acknowledges and agrees, and waives, to the extent permitted by applicable law, any argument to the contrary, that payment of such amounts does not constitute a penalty or an otherwise unenforceable or invalid obligation. Any damages that the Lenders may suffer or incur resulting from or arising in connection with any breach hereof or thereof by Borrower shall constitute secured obligations owing to the Lenders.

SECTION 12
ADMINISTRATIVE AGENT

12.01 Appointment and Duties. (a) **Appointment of Administrative Agent**. Each Lender hereby irrevocably appoints CRG Servicing (together with any successor Administrative Agent pursuant to **Section 12.09**) as Administrative Agent hereunder and authorizes Administrative Agent to (i) execute and deliver the Loan Documents and accept delivery thereof on its behalf from any Obligor or any of its Subsidiaries, (ii) take such action on its behalf and to exercise all rights, powers and remedies and perform the duties as are expressly delegated to Administrative Agent under such Loan Documents, (iii) act as agent of such Lender for purposes of acquiring, holding, enforcing and perfecting all Liens granted by the Obligors on the Collateral to secure any of the Obligations and (iv) exercise such powers as are reasonably incidental thereto.

(b) **Duties as Collateral and Disbursing Agent**. Without limiting the generality of **Section 12.01(a)**, Administrative Agent shall have the sole and exclusive right and authority (to the exclusion of the Lenders), and is hereby authorized, to (i) act as the disbursing and collecting agent for the Lenders with respect to all payments and collections arising in connection with the Loan Documents (including in any proceeding described in **Section 11.01(i)**, **(j)** or **(k)** or any other bankruptcy, insolvency or similar proceeding), and each Person making any payment in connection with any Loan Document to any Secured Party is hereby authorized to make such

payment to Administrative Agent, (ii) file and prove claims and file other documents necessary or desirable to allow the claims of the Secured Parties with respect to any Obligation in any proceeding described in **Section 11.01(i)**, **(j)** or **(k)** or any other bankruptcy, insolvency or similar proceeding (but not to vote, consent or otherwise act on behalf of such Secured Party), (iii) act as collateral agent for each Secured Party for purposes of acquiring, holding, enforcing and perfecting all Liens created by the Loan Documents and all other purposes stated therein, (iv) manage, supervise and otherwise deal with the Collateral, (v) take such other action as is necessary or desirable to maintain the perfection and priority of the Liens created or purported to be created by the Loan Documents, (vi) except as may be otherwise specified in any Loan Document, exercise all remedies given to Administrative Agent and the other Secured Parties with respect to the Collateral, whether under the Loan Documents, applicable Requirements of Law or otherwise, (vii) enter into intercreditor agreements with respect to Permitted Priority Debt or any other subordination agreement or intercreditor agreement with respect to Indebtedness of an Obligor, (viii) enter into non-disturbance agreements and similar agreements and (ix) execute any amendment, consent or waiver under the Loan Documents on behalf of any Lender that has consented in writing to such amendment, consent or waiver; *provided, however,* that Administrative Agent hereby appoints, authorizes and directs each Lender to act as collateral sub-agent for Administrative Agent and the Secured Parties for purposes of the perfection of all Liens with respect to the Collateral, including any deposit account maintained by an Obligor with, and cash and Permitted Cash Equivalent Investments held by, such Lender, and may further authorize and direct any Lender to take further actions as collateral sub-agents for purposes of enforcing such Liens or otherwise to transfer the Collateral subject thereto to Administrative Agent, and each Lender hereby agrees to take such further actions to the extent, and only to the extent, so authorized and directed.

(c) **Limited Duties**. Under the Loan Documents, Administrative Agent (i) is acting solely on behalf of the Lenders (except to the limited extent provided in **Section 12.11**), with duties that are entirely administrative in nature, notwithstanding the use of the defined term "Administrative Agent", the terms "agent", "administrative agent" and "collateral agent" and similar terms in any Loan Document to refer to Administrative Agent, which terms are used for title purposes only, (ii) is not assuming any obligation under any Loan Document other than as expressly set forth therein or any role as agent, fiduciary or trustee of or for any Lender or any other Secured Party and (iii) shall have no implied functions, responsibilities, duties, obligations or other liabilities under any Loan Document, and each Lender hereby waives and agrees not to assert any claim against Administrative Agent based on the roles, duties and legal relationships expressly disclaimed in the foregoing **clauses (i)** through **(iii)**.

12.02 Binding Effect. Each Lender agrees that (i) any action taken by Administrative Agent or the Majority Lenders (or, if expressly required hereby, a greater proportion of the Lenders) in accordance with the provisions of the Loan Documents, (ii) any action taken by Administrative Agent in reliance upon the instructions of the Majority Lenders (or, where so required, such greater proportion) and (iii) the exercise by Administrative Agent or the Majority Lenders (or, where so required, such greater proportion) of the powers set forth herein or therein, together with such other powers as are reasonably incidental thereto, shall be authorized and binding upon all of the Secured Parties.

12.03 Use of Discretion. (a) **No Action without Instructions**. Administrative Agent shall not be required to exercise any discretion or take, or to omit to take, any action, including with respect to enforcement or collection, except any action it is required to take or omit to take (i) under any Loan Document or (ii) pursuant to instructions from the Majority Lenders (or, where expressly required by the terms of this Agreement, a greater proportion of the Lenders).

(b) **Right Not to Follow Certain Instructions**. Notwithstanding **Section 12.03(a)**, Administrative Agent shall not be required to take, or to omit to take, any action (i) unless, upon demand, Administrative Agent receives an indemnification satisfactory to it from the Lenders (or, to the extent applicable and acceptable to Administrative Agent, any other Secured Party) against all liabilities that, by reason of such action or omission, may be imposed on, incurred by or asserted against Administrative Agent or any Related Person thereof or (ii) that is, in the opinion of Administrative Agent or its counsel, contrary to any Loan Document or applicable Requirement of Law.

12.04 Delegation of Rights and Duties. Administrative Agent may, upon any term or condition it specifies, delegate or exercise any of its rights, powers and remedies under, and delegate or perform any of its duties or any other action with respect to, any Loan Document by or through or to any trustee, co-agent, sub-agent, employee, attorney-in-fact and any other Person (including any other Secured Party). Any such Person shall benefit from this **SECTION 12** to the extent provided by Administrative Agent. Administrative Agent shall not be responsible for the negligence or misconduct of any sub-agent except to the extent that a court of competent jurisdiction determines in a final and nonappealable judgment that Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agent.

12.05 Reliance and Liability. (a) Administrative Agent may, without incurring any liability hereunder, (i) consult with any of its Related Persons and, whether or not selected by it, any other advisors, accountants and other experts (including advisors to, and accountants and experts engaged by, any Obligor) and (ii) rely and act upon any document and information and any telephone message or conversation, in each case believed by it to be genuine and transmitted, signed or otherwise authenticated by the appropriate parties.

(b) None of Administrative Agent and its Related Persons shall be liable for any action taken or omitted to be taken by any of them under or in connection with any Loan Document, and each Lender and each Obligor hereby waives and shall not assert any right, claim or cause of action based thereon, except to the extent of liabilities resulting primarily from the gross negligence or willful misconduct of Administrative Agent or, as the case may be, such Related Person (each as determined in a final, non-appealable judgment by a court of competent jurisdiction) in connection with the duties expressly set forth herein. Without limiting the foregoing, Administrative Agent:

(i) shall not be responsible or otherwise incur liability for any action or omission taken in reliance upon the instructions of the Majority Lenders or for the actions or omissions of any of its Related Persons selected with reasonable care (other than employees, officers and directors of Administrative Agent, when acting on behalf of Administrative Agent);

(ii) shall not be responsible to any Secured Party for the due execution, legality, validity, enforceability, effectiveness, genuineness, sufficiency or value of, or the attachment, perfection or priority of any Lien created or purported to be created under or in connection with, any Loan Document;

(iii) makes no warranty or representation, and shall not be responsible, to any Secured Party for any statement, document, information, representation or warranty made or furnished by or on behalf of any Related Person, in or in connection with any Loan Document or any transaction contemplated therein, whether or not transmitted by Administrative Agent, including as to completeness, accuracy, scope or adequacy thereof, or for the scope, nature or results of any due diligence performed by Administrative Agent in connection with the Loan Documents; and

(iv) shall not have any duty to ascertain or to inquire as to the performance or observance of any provision of any Loan Document, whether any condition set forth in any Loan Document is satisfied or waived, as to the financial condition of any Obligor or as to the existence or continuation or possible occurrence or continuation of any Default or Event of Default and shall not be deemed to have notice or knowledge of such occurrence or continuation unless it has received a notice from Borrower or any Lender describing such Default or Event of Default clearly labeled "notice of default" (in which case Administrative Agent shall promptly give notice of such receipt to all Lenders);

and, for each of the items set forth in **clauses (i) through (iv)** above, each Lender and each Obligor hereby waives and agrees not to assert any right, claim or cause of action it might have against Administrative Agent based thereon.

12.06 Administrative Agent Individually. Administrative Agent and its Affiliates may make loans and other extensions of credit to, acquire Equity Interests of, engage in any kind of business with, any Obligor or Affiliate thereof as though it were not acting Administrative Agent and may receive separate fees and other payments therefor. To the extent Administrative Agent or any of its Affiliates makes any Loan or otherwise becomes a Lender hereunder, it shall have and may exercise the same rights and powers hereunder and shall be subject to the same obligations and liabilities as any other Lender and the terms "Lender", "Majority Lender", and any similar terms shall, except where otherwise expressly provided in any Loan Document, include Administrative Agent or such Affiliate, as the case may be, in its individual capacity as Lender or as one of the Majority Lenders, respectively.

12.07 Lender Credit Decision. Each Lender acknowledges that it shall, independently and without reliance upon Administrative Agent, any Lender or any of their Related Persons or upon any document solely or in part because such document was transmitted by Administrative Agent or any of its Related Persons, conduct its own independent investigation of the financial condition and affairs of each Obligor and make and continue to make its own credit decisions in connection with entering into, and taking or not taking any action under, any Loan Document or with respect to any transaction contemplated in any Loan Document, in each case based on such documents and information as it shall deem appropriate.

12.08 Expenses; Indemnities. (a) Each Lender agrees to reimburse Administrative Agent and each of its Related Persons (to the extent not reimbursed by any Obligor) promptly upon demand for such Lender's Proportionate Share of any costs and expenses (including fees, charges and disbursements of financial, legal and other advisors and Other Taxes paid in the name of, or on behalf of, any Obligor) that may be incurred by Administrative Agent or any of its Related Persons in connection with the preparation, syndication, execution, delivery, administration, modification, consent, waiver or enforcement (whether through negotiations, through any work-out, bankruptcy, restructuring or other legal or other proceeding or otherwise) of, or legal advice in respect of its rights or responsibilities under, any Loan Document.

(b) Each Lender further agrees to indemnify Administrative Agent and each of its Related Persons (to the extent not reimbursed by any Obligor), from and against such Lender's aggregate Proportionate Share of the liabilities (including Taxes, interests and penalties imposed for not properly withholding or backup withholding on payments made to on or for the account of any Lender) that may be imposed on, incurred by or asserted against Administrative Agent or any of its Related Persons in any matter relating to or arising out of, in connection with or as a result of any Loan Document, any Related Document or any other act, event or transaction related, contemplated in or attendant to any such document, or, in each case, any action taken or omitted to be taken by Administrative Agent or any of its Related Persons under or with respect to any of the foregoing; *provided, however,* that no Lender shall be liable to Administrative Agent or any of its Related Persons to the extent such liability is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from such Administrative Agent's or such Related Person's gross negligence or willful misconduct.

12.09 Resignation of Administrative Agent. (a) Administrative Agent may resign at any time by delivering notice of such resignation to the Lenders and Borrower, effective on the date set forth in such notice or, if not such date is set forth therein, upon the date such notice shall be effective. If Administrative Agent delivers any such notice, the Majority Lenders shall have the right to appoint a successor Administrative Agent. If, within 30 days after the retiring Administrative Agent having given notice of resignation, no successor Administrative Agent has been appointed by the Majority Lenders that has accepted such appointment, then the retiring Administrative Agent may, on behalf of the Lenders, appoint a successor Administrative Agent from among the Lenders. Each appointment under this **Section 12.09(a)** shall be subject to the prior consent of Borrower, which may not be unreasonably withheld but shall not be required during the continuance of an Event of Default.

(b) Effective immediately upon its resignation, (i) the retiring Administrative Agent shall be discharged from its duties and obligations under the Loan Documents, (ii) the Lenders shall assume and perform all of the duties of Administrative Agent until a successor Administrative Agent shall have accepted a valid appointment hereunder, (iii) the retiring Administrative Agent and its Related Persons shall no longer have the benefit of any provision of any Loan Document other than with respect to any actions taken or omitted to be taken while such retiring Administrative Agent was, or because such Administrative Agent had been, validly acting as Administrative Agent under the Loan Documents and (iv) subject to its rights under **Section 12.03**, the retiring Administrative Agent shall take such action as may be reasonably necessary to assign to the successor Administrative Agent its rights as Administrative Agent under the Loan Documents. Effective immediately upon its acceptance of a valid appointment as

Administrative Agent, a successor Administrative Agent shall succeed to, and become vested with, all the rights, powers, privileges and duties of the retiring Administrative Agent under the Loan Documents.

12.10 Release of Collateral or Guarantors. Each Lender hereby consents to the release and hereby directs Administrative Agent to release (or, in the case of **Section 12.10(b)(ii)**, release or subordinate) the following:

(a) any Subsidiary of Borrower from its guaranty of any Obligation of any Obligor if all of the Equity Interests in such Subsidiary owned by any Obligor or any of its Subsidiaries are disposed of in an Asset Sale permitted under the Loan Documents (including pursuant to a waiver or consent), to the extent that, after giving effect to such Asset Sale, such Subsidiary would not be required to guaranty any Obligations pursuant to **Section 8.12**; and

(b) any Lien held by Administrative Agent for the benefit of the Secured Parties against (i) any Collateral that is disposed of by an Obligor in an Asset Sale permitted by the Loan Documents (including pursuant to a valid waiver or consent), to the extent all Liens required to be granted in such Collateral pursuant to **Section 8.12** after giving effect to such Asset Sale have been granted, (ii) any property subject to a Lien described in **Section 9.02(d)** and (iii) all of the Collateral and all Obligors, upon (A) termination of the Commitments, (B) payment and satisfaction in full of all Loans and all other Obligations that Administrative Agent has been notified in writing are then due and payable, (C) deposit of cash collateral with respect to all contingent Obligations, in amounts and on terms and conditions and with parties satisfactory to the Majority Lenders and each Indemnitee that is owed such Obligations and (D) to the extent requested by Administrative Agent, receipt by the Secured Parties of liability releases from the Obligors each in form and substance acceptable to Administrative Agent.

Each Lender hereby directs Administrative Agent, and Administrative Agent hereby agrees, upon receipt of reasonable advance notice from Borrower, to execute and deliver or file such documents and to perform other actions reasonably necessary to release the guaranties and Liens when and as directed in this **Section 12.10**.

12.11 Additional Secured Parties. The benefit of the provisions of the Loan Documents directly relating to the Collateral or any Lien granted thereunder shall extend to and be available to any Secured Party that is not a Lender as long as, by accepting such benefits, such Secured Party agrees, as among Administrative Agent and all other Secured Parties, that such Secured Party is bound by (and, if requested by Administrative Agent, shall confirm such agreement in a writing in form and substance acceptable to Administrative Agent) this **SECTION 12** and the decisions and actions of Administrative Agent and the Majority Lenders (or, where expressly required by the terms of this Agreement, a greater proportion of the Lenders) to the same extent a Lender is bound; *provided*, *however*, that, notwithstanding the foregoing, (a) such Secured Party shall be bound by **Section 12.08** only to the extent of liabilities, costs and expenses with respect to or otherwise relating to the Collateral held for the benefit of such Secured Party, in which case the obligations of such Secured Party thereunder shall not be limited by any concept of Proportionate Share or similar concept, (b) each of Administrative Agent and each Lender shall be entitled to act at its sole discretion, without regard to the interest of such Secured Party, regardless of whether any Obligation to such

Secured Party thereafter remains outstanding, is deprived of the benefit of the Collateral, becomes unsecured or is otherwise affected or put in jeopardy thereby, and without any duty or liability to such Secured Party or any such Obligation and (c) such Secured Party shall not have any right to be notified of, consent to, direct, require or be heard with respect to, any action taken or omitted in respect of the Collateral or under any Loan Document.

SECTION 13
MISCELLANEOUS

13.01 **No Waiver**. No failure on the part of Administrative Agent or any Lender to exercise and no delay in exercising, and no course of dealing with respect to, any right, power or privilege under any Loan Document shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege under any Loan Document preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The remedies provided herein are cumulative and not exclusive of any remedies provided by law.

13.02 **Notices**. All notices, requests, instructions, directions and other communications provided for herein (including any modifications of, or waivers, requests or consents under, this Agreement) shall be given or made in writing (including by telecopy) delivered, if to Borrower, another Obligor, Administrative Agent or any Lender, to its address specified on the signature pages hereto or its Guarantee Assumption Agreement, as the case may be, or at such other address as shall be designated by such party in a notice to the other parties. Except as otherwise provided in this Agreement, all such communications shall be deemed to have been duly given upon receipt of a legible copy thereof, in each case given or addressed as aforesaid. All such communications provided for herein by telecopy shall be confirmed in writing promptly after the delivery of such communication (it being understood that non-receipt of written confirmation of such communication shall not invalidate such communication). Notwithstanding anything to the contrary in this Agreement, all notices, documents, certificates and other deliverables to the Lenders by any Obligor may be made solely to the Administrative Agent and the Administrative Agent shall promptly deliver such notices, documents, certificates and other deliverables to the other Lenders hereunder.

13.03 **Expenses, Indemnification, Etc**.

(a) **Expenses**. Borrower agrees to pay or reimburse (i) Administrative Agent and the Lenders for all of their reasonable and documented out-of-pocket costs and expenses (including the reasonable and documented fees and expenses of Reed Smith LLP, special counsel to Administrative Agent and the Lenders, and any sales, goods and services or other similar Taxes applicable thereto, and printing, reproduction, document delivery, communication and travel costs) in connection with (x) the negotiation, preparation, execution and delivery of this Agreement and the other Loan Documents and the making of the Loans (exclusive of post-closing costs), (y) post-closing costs and (z) the negotiation or preparation of any modification, supplement or waiver of any of the terms of this Agreement or any of the other Loan Documents (whether or not consummated) and (ii) Administrative Agent and the Lenders for all of their out-of-pocket costs and expenses (including the fees and expenses of legal counsel) in connection with any enforcement or collection proceedings resulting from the occurrence of an Event of Default; *provided*, *however*, that Borrower shall not be required to pay or reimburse any amounts pursuant to **Section 13.03(a)(i)(x)** in excess of the Closing Expense Cap.

(b) **Indemnification**. Borrower hereby indemnifies Administrative Agent, each Lender, their respective Affiliates, and their respective directors, officers, employees, attorneys, agents, advisors and controlling parties (each, an "***Indemnified Party***") from and against, and agrees to hold them harmless against, any and all Claims and Losses of any kind (including reasonable and documented fees and disbursements of counsel), joint or several, that may be incurred by or asserted or awarded against any Indemnified Party, in each case arising out of or in connection with or relating to any investigation, litigation or proceeding or the preparation of any defense with respect thereto arising out of or in connection with or relating to this Agreement or any of the other Loan Documents or the transactions contemplated hereby or thereby or any use made or proposed to be made with the proceeds of the Loans, whether or not such investigation, litigation or proceeding is brought by Borrower, any of its shareholders or creditors, an Indemnified Party or any other Person, or an Indemnified Party is otherwise a party thereto, and whether or not any of the conditions precedent set forth in **SECTION 6** are satisfied or the other transactions contemplated by this Agreement are consummated, except to the extent such Claim or Loss is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from such Indemnified Party's gross negligence or willful misconduct (*provided that*, in the case of any of the foregoing arising from any dispute among Indemnified Parties not involving any action of any Obligor, Indemnified Parties shall not seek, and Borrower shall not be required to provide, indemnification under this **Section 13.03(b)** for any portion of such Claims or Losses in excess of those that Indemnified Parties reasonably determine is related to the transactions between Obligors and Indemnified Parties). No Obligor shall assert any claim against any Indemnified Party, on any theory of liability, for consequential, indirect, special or punitive damages arising out of or otherwise relating to this Agreement or any of the other Loan Documents or any of the transactions contemplated hereby or thereby or the actual or proposed use of the proceeds of the Loans. Borrower, its Subsidiaries and Affiliates and their respective directors, officers, employees, attorneys, agents, advisors and controlling parties are each sometimes referred to in this Agreement as a "***Borrower Party***." No Lender shall assert any claim against any Borrower Party, on any theory of liability, for consequential, indirect, special or punitive damages arising out of or otherwise relating to this Agreement or any of the other Loan Documents or any of the transactions contemplated hereby or thereby or the actual or proposed use of the proceeds of the Loans.

13.04 Amendments, Etc. Except as otherwise expressly provided in this Agreement, any provision of this Agreement may be modified or supplemented only by an instrument in writing signed in one or more counterparts by Borrower and the Majority Lenders (or Administrative Agent on behalf of such Majority Lenders); *provided however,* that:

(a) the consent of all of the Lenders shall be required to:

(i) amend, modify, discharge, terminate or waive any of the terms of this Agreement if such amendment, modification, discharge, termination or waiver would increase the amount of the Loans, reduce the fees payable hereunder, reduce interest rates or other amounts payable with respect to the Loans, extend any date fixed for payment of principal, interest or other amounts payable relating to the Loans or extend the repayment dates of the Loans;

(ii) amend the provisions of **SECTION 6**;

(iii) amend, modify, discharge, terminate or waive any Security Document if the effect is to release a material part of the Collateral subject thereto other than pursuant to the terms hereof or thereof; or

(iv) amend this **Section 13.04**; and

(b) no amendment, waiver or consent shall affect the rights or duties under any Loan Document of, or any payment to, Administrative Agent (or otherwise modify any provision of **SECTION 12** or the application thereof) unless in writing and signed by Administrative Agent in addition to any signature otherwise required.

Notwithstanding anything to the contrary herein, a Defaulting Lender shall not have any right to approve or disapprove any amendment, waiver or consent hereunder (and any amendment, waiver or consent which by its terms requires the consent of all Lenders or each affected Lender may be effected with the consent of the applicable Lenders other than Defaulting Lenders), except that (x) the Commitment of any Defaulting Lender may not be increased or extended without the consent of such Lender and (y) any waiver, amendment or modification requiring the consent of all Lenders or each affected Lender that by its terms affects any Defaulting Lender more adversely than other affected Lenders shall require the consent of such Defaulting Lender.

13.05 Successors and Assigns.

(a) **General**. The provisions of this Agreement and the other Loan Documents shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that Borrower may not assign or otherwise transfer any of its rights or obligations hereunder or under any of the other Loan Documents without the prior written consent of the Lenders. Any of the Lenders may assign or otherwise transfer any of their rights or obligations hereunder or under any of the other Loan Documents to an assignee (i) in accordance with the provisions of **Section 13.05(b)**, (ii) by way of participation in accordance with the provisions of **Section 13.05(e)** or (iii) by way of pledge or assignment of a security interest subject to the restrictions of **Section 13.05(g)**. An assigning Lender shall notify Borrower in writing within five (5) Business Days of assignment of the name and contact information of any such assignee (other than any assignee that is an Affiliate of a Lender). Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants to the extent provided in **Section 13.05(e)** and, to the extent expressly contemplated hereby, the Indemnified Parties) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) **Assignments by Lenders**. Any of the Lenders may at any time assign to one or more Eligible Transferees (or, if an Event of Default has occurred and is continuing, to any Person) all or a portion of their rights and obligations under this Agreement (including all or a portion of the Commitment and the Loans at the time owing to it); *provided*, *however,* that no such assignment shall be made to Borrower, an Affiliate of Borrower, or any employees or directors of Borrower at any time. Subject to the recording thereof by Administrative Agent pursuant to **Section 13.05(d)**, from and after the effective date specified in each Assignment and Assumption, the assignee thereunder shall be a party to this Agreement and, to the extent of the

interest assigned by such Assignment and Assumption, have the rights and obligations of the Lenders under this Agreement and the other Loan Documents, and correspondingly the assigning Lender shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of a Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto) and the other Loan Documents but shall continue to be entitled to the benefits of **SECTION 5** and **Section 13.03**. Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this **Section 13.05(b)** shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with **Section 13.05(e)**.

(c) **Amendments to Loan Documents**. Each of Administrative Agent, the Lenders and the Obligors agrees to enter into such amendments to the Loan Documents, and such additional Security Documents and other instruments and agreements, in each case in form and substance reasonably acceptable to Administrative Agent, the Lenders and the Obligors, as shall reasonably be necessary to implement and give effect to any assignment made under this **Section 13.05**.

(d) **Register**. Administrative Agent, acting solely for this purpose as an agent of Borrower, shall maintain at one of its offices a register for the recordation of the name and address of any assignee of the Lenders and the Commitment and outstanding principal amount of the Loans owing thereto (the "***Register***"). The entries in the Register shall be conclusive, absent manifest error, and Borrower shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as the "Lender" hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by Borrower, at any reasonable time and from time to time upon reasonable prior notice.

(e) **Participations**. Any of the Lenders may at any time, without the consent of, or notice to, Borrower, sell participations to any Person (other than a natural person (or a holding company, investment vehicle or trust for, or owned and operated for the primary benefit of, a natural Person) or Borrower or any of Borrower's Affiliates or Subsidiaries) (each, a "***Participant***") in all or a portion of such Lender's rights and/or obligations under this Agreement (including all or a portion of the Commitment and/or the Loans owing to it); *provided* that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations, (iii) Borrower shall continue to deal solely and directly with the Lenders in connection therewith and (iv) such Participant will not be a Lender within the meaning of this Agreement.

Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; *provided* that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver that would (i) increase or extend the term of such Lender's Commitment, (ii) extend the date fixed for the payment of principal of or interest on the Loans or any portion of any fee hereunder payable to the Participant, (iii) reduce the amount of any such payment of principal, or (iv) reduce the rate at which interest is payable thereon to a level below the rate at which the Participant is entitled to receive such interest.

Subject to **Section 13.05(f)**, Borrower agrees that each Participant shall be entitled to the benefits of **Section 5**) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to **Section 13.05(b)**; *provided*, *further* that nothing in the foregoing shall change Borrower's right to continue to deal solely and directly with the applicable Lender in connection with the participation. Each Lender that sells a participation agrees, at the Borrower's request, to use reasonable efforts to cooperate with the Borrower to effectuate the provisions of **Section 5.03(g)** with respect to any Participant. To the extent permitted by law, each Participant also shall be entitled to the benefits of **Section 4.04(a)** as though it were the Lender. Each participation sold by a Lender shall be issued and maintained at all times in "registered form" as that term is defined in Section 5f.103-1(c) of the United States Treasury Regulations.

(f) **Limitations on Rights of Participants**. A Participant shall not be entitled to receive any greater payment under **Section 5.01** or **5.03** than a Lender would have been entitled to receive with respect to the participation sold to such Participant. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "***Participant Register***"); *provided* that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitment, loan, letter of credit or other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letters of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(g) **Certain Pledges**. The Lenders may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement and any other Loan Document to secure obligations of the Lenders, including any pledge or assignment to secure obligations to a Federal Reserve Bank; *provided* that no such pledge or assignment shall release the Lenders from any of their obligations hereunder or substitute any such pledgee or assignee for the Lenders as a party hereto.

13.06 Survival. The obligations of the Obligors under **Sections 5.01**, **5.02, 5.03, 13.03, 13.05, 13.09, 13.10, 13.11, 13.12, 13.13, 13.14, 13.20** and **SECTION 14** (solely to the extent guaranteeing any of the obligations under the foregoing Sections) shall survive the repayment of the Obligations and the termination of the Commitment and, in the case of the Lenders' assignment of any interest in the Commitment or the Loans hereunder, shall survive, in the case of any event or circumstance that occurred prior to the effective date of such assignment, the making of such assignment, notwithstanding that the Lenders may cease to be "Lenders" hereunder. In addition, each representation and warranty made, or deemed to be made by a Notice of Borrowing, herein or pursuant hereto shall survive the making of such representation and warranty.

13.07 Captions. The table of contents and captions and section headings appearing herein are included solely for convenience of reference and are not intended to affect the interpretation of any provision of this Agreement.

13.08 Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument and any of the parties hereto may execute this Agreement by signing any such counterpart.

13.09 Governing Law. This Agreement and the rights and obligations of the parties hereunder shall be governed by, and construed in accordance with, the law of the State of New York, without regard to principles of conflicts of laws that would result in the application of the laws of any other jurisdiction; *provided* that Section 5-1401 of the New York General Obligations Law shall apply.

13.10 Jurisdiction, Service of Process and Venue.

(a) **Submission to Jurisdiction**. Each Obligor agrees that any suit, action or proceeding with respect to this Agreement or any other Loan Document to which it is a party or any judgment entered by any court in respect thereof may be brought initially in the federal or state courts in Houston, Texas or in the courts of its own corporate domicile and irrevocably submits to the non-exclusive jurisdiction of each such court for the purpose of any such suit, action, proceeding or judgment. This **Section 13.10(a)** is for the benefit of Administrative Agent and the Lenders only and, as a result, neither Administrative Agent nor any Lender shall be prevented from taking proceedings in any other courts with jurisdiction. To the extent allowed by applicable Laws, Administrative Agent and the Lenders may take concurrent proceedings in any number of jurisdictions.

(b) **Alternative Process**. Nothing herein shall in any way be deemed to limit the ability of Administrative Agent or the Lenders to serve any such process or summonses in any other manner permitted by applicable law.

(c) **Waiver of Venue, Etc**. Each Obligor irrevocably waives to the fullest extent permitted by law any objection that it may now or hereafter have to the laying of the venue of any suit, action or proceeding arising out of or relating to this Agreement or any other Loan Document and hereby further irrevocably waives to the fullest extent permitted by law any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum. A final judgment (in respect of which time for all appeals has elapsed) in any such suit, action or proceeding shall be conclusive and may be enforced in any court to the jurisdiction of which such Obligor is or may be subject, by suit upon judgment.

13.11 Waiver of Jury Trial. EACH OBLIGOR AND EACH LENDER HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE OTHER LOAN DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY.

13.12 Waiver of Immunity. To the extent that any Obligor may be or become entitled to claim for itself or its Property or revenues any immunity on the ground of sovereignty or the like from suit, court jurisdiction, attachment prior to judgment, attachment in aid of execution of a judgment or execution of a judgment, and to the extent that in any such jurisdiction there may be attributed such an immunity (whether or not claimed), such Obligor hereby irrevocably agrees not to claim and hereby irrevocably waives such immunity with respect to its obligations under this Agreement and the other Loan Documents.

13.13 Entire Agreement. This Agreement and the other Loan Documents constitute the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. EACH OBLIGOR ACKNOWLEDGES, REPRESENTS AND WARRANTS THAT IN DECIDING TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS OR IN TAKING OR NOT TAKING ANY ACTION HEREUNDER OR THEREUNDER, IT HAS NOT RELIED, AND WILL NOT RELY, ON ANY STATEMENT, REPRESENTATION, WARRANTY, COVENANT, AGREEMENT OR UNDERSTANDING, WHETHER WRITTEN OR ORAL, OF OR WITH ADMINISTRATIVE AGENT OR THE LENDERS OTHER THAN THOSE EXPRESSLY SET FORTH IN THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS.

13.14 Severability. If any provision hereof is found by a court to be invalid or unenforceable, to the fullest extent permitted by applicable law the parties agree that such invalidity or unenforceability shall not impair the validity or enforceability of any other provision hereof.

13.15 No Fiduciary Relationship. Each Obligor acknowledges that Administrative Agent and the Lenders have no fiduciary relationship with, or fiduciary duty to, Borrower arising out of or in connection with this Agreement or the other Loan Documents, and the relationship between the Lenders and Borrower is solely that of creditor and debtor. This Agreement and the other Loan Documents do not create a joint venture among the parties.

13.16 Confidentiality. Administrative Agent and the Lenders agree to maintain the confidentiality of the Confidential Information (as defined in the Non-Disclosure Agreement) in accordance with the terms of that certain confidentiality agreement dated January 16, 2018 between Borrower and CR Group (the "***Non-Disclosure Agreement***"). Any new Lender that becomes party to this Agreement hereby agrees to be bound by the terms of the Non-Disclosure Agreement. The parties to this Agreement shall prepare a mutually agreeable press release announcing the completion of this transaction on the first Borrowing Date.

13.17 USA PATRIOT Act. Administrative Agent and the Lenders hereby notify the Obligors that pursuant to the requirements of the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the "***Act***") or any Anti-Money Laundering Laws, they are required to obtain, verify and record information that identifies such Obligor, which information includes the name and address of such Obligor and other information that will allow such Lender to identify such Obligor in accordance with the Act or other Anti-Money Laundering Laws.

13.18 Maximum Rate of Interest. Notwithstanding anything to the contrary contained in any Loan Document, the interest paid or agreed to be paid under the Loan Documents shall not exceed the maximum rate of non-usurious interest permitted by applicable Law (in each case, the "***Maximum Rate***"). If the Lenders shall receive interest in an amount that exceeds the Maximum Rate, the excess interest shall be applied to the principal of the Loans, and not to the payment of interest, or, if the excessive interest exceeds such unpaid principal, the amount exceeding the unpaid balance shall be refunded to the applicable Obligor. In determining whether the interest contracted for, charged, or received by the Lenders exceeds the Maximum Rate, the Lenders may, to the extent permitted by applicable Law, (a) characterize any payment that is not principal as an expense, fee, or premium rather than interest, (b) exclude voluntary prepayments and the effects thereof, (c) amortize, prorate, allocate, and spread in equal or unequal parts the total amount of interest throughout the contemplated term of the Indebtedness and other obligations of any Obligor hereunder, or (d) allocate interest between portions of such Indebtedness and other obligations under the Loan Documents to the end that no such portion shall bear interest at a rate greater than that permitted by applicable Law.

13.19 Certain Waivers.

(a) **Real Property Security Waivers**.

(i) Each Obligor acknowledges that all or any portion of the Obligations may now or hereafter be secured by a Lien or Liens upon real property evidenced by certain documents including deeds of trust and assignments of rents. The Secured Parties may, pursuant to the terms of said real property security documents and applicable law, foreclose under all or any portion of one or more of said Liens by means of judicial or nonjudicial sale or sales. Each Obligor agrees that the Secured Parties may exercise whatever rights and remedies they may have with respect to said real property security, all without affecting the liability of any Obligor under the Loan Documents, except to the extent the Secured Parties realize payment by such action or proceeding. No election to proceed in one form of action or against any party, or on any obligation shall constitute a waiver of any Secured Party's rights to proceed in any other form of action or against any Obligor or any other Person, or diminish the liability of any Obligor, or affect the right of the Secured Parties to proceed against any Obligor for any deficiency, except to the extent the Secured Parties realize payment by such action, notwithstanding the effect of such action upon any Obligor's rights of subrogation, reimbursement or indemnity, if any, against Obligor or any other Person.

(ii) To the extent permitted under applicable law, each Obligor hereby waives any rights and defenses that are or may become available to such Obligor by reason of Sections 2787 to 2855, inclusive, of the California Civil Code.

(iii) To the extent permitted under applicable law, each Obligor hereby waives all rights and defenses that such Obligor may have because the Obligations are or may be secured by real property. This means, among other things:

(A) the Secured Parties may collect from any Obligor without first foreclosing on any real or personal property collateral pledged by any other Obligor;

(B) If the Secured Parties foreclose on any real property collateral pledged by any Obligor:

(1) The amount of the Loans may be reduced only by the price for which that collateral is sold at the foreclosure sale, even if the collateral is worth more than the sale price; and

(2) the Secured Parties may collect from each Obligor even if the Secured Parties, by foreclosing on the real property collateral, have destroyed any right that such Obligor may have to collect from any other Obligor.

(3) To the extent permitted under applicable law, this is an unconditional and irrevocable waiver of any rights and defenses each Obligor may have because the Obligations are or may be secured by real property. These rights and defenses include, but are not limited to, any rights or defenses based upon Section 580a, 580b, 580d or 726 of the California Code of Civil Procedure.

(iv) To the extent permitted under applicable law, each Obligor waives all rights and defenses arising out of an election of remedies by the Secured Parties, even though that election of remedies, such as a nonjudicial foreclosure with respect to security for a guaranteed obligation, has destroyed such Obligor's rights of subrogation and reimbursement against the principal by the operation of Section 580d of the California Code of Civil Procedure or otherwise.

(b) **Waiver of Marshaling**. WITHOUT LIMITING THE FOREGOING IN ANY WAY, EACH OBLIGOR HEREBY IRREVOCABLY WAIVES AND RELEASES, TO THE EXTENT PERMITTED BY LAW, ANY AND ALL RIGHTS IT MAY HAVE AT ANY TIME (WHETHER ARISING DIRECTLY OR INDIRECTLY, BY OPERATION OF LAW, CONTRACT OR OTHERWISE) TO REQUIRE THE MARSHALING OF ANY ASSETS OF ANY OBLIGOR, WHICH RIGHT OF MARSHALING MIGHT OTHERWISE ARISE FROM ANY PAYMENTS MADE OR OBLIGATIONS PERFORMED.

13.20 Tax Issues. The parties hereto agree (a) that any contingency associated with the loans is described in Treasury Regulations Section 1.1272-1(c) and/or Treasury Regulations Section 1.1275-2(h), and therefore no Loan is governed by the rules set out in Treasury Regulations Section 1.1275-4, (b) except for a Lender described in Sections 871(h)(3) or 881(c)(3) of the Code, absent a Change in a Requirement of Law, all interest on the Loans is "portfolio interest" within the meaning of Sections 871(h) or 881(c) of the Code, and therefore is exempt from withholding tax under Sections 1441(c)(9) or 1442(a) of the Code, and (c) to adhere to this Section 13.20 for federal income and any other applicable tax purposes and not to take any action or file any Tax Return, report or declaration inconsistent herewith.

13.21 Original Issue Discount. For purposes of Sections 1272, 1273 and 1275 of the Code, each Loan is being issued with original issue discount; please contact Michael Ostrach, Chief Financial Officer, 2929 Seventh Street, Suite 100, Berkeley, California 94710, telephone: 212-297-0020 to obtain information regarding the issue price, the amount of original issue discount and the yield to maturity.

SECTION 14
GUARANTEE

14.01 The Guarantee. The Subsidiary Guarantors hereby jointly and severally guarantee to the Secured Parties and their respective successors and assigns the prompt payment in full when due (whether at stated maturity, by acceleration or otherwise) of the principal of and interest on the Loans and all fees and other amounts from time to time owing to the Secured Parties by Borrower under this Agreement or under any other Loan Document and by any other Obligor under any of the Loan Documents, in each case strictly in accordance with the terms thereof (such obligations being herein collectively called the "***Guaranteed Obligations***"). The Subsidiary Guarantors hereby further jointly and severally agree that if Borrower shall fail to pay in full when due (whether at stated maturity, by acceleration or otherwise) any of the Guaranteed Obligations, the Subsidiary Guarantors will promptly pay the same, without any demand or notice whatsoever, and that in the case of any extension of time of payment or renewal of any of the Guaranteed Obligations, the same will be promptly paid in full when due (whether at extended maturity, by acceleration or otherwise) in accordance with the terms of such extension or renewal.

14.02 Obligations Unconditional. The obligations of the Subsidiary Guarantors under **Section 14.01** are absolute and unconditional, joint and several, irrespective of the value, genuineness, validity, regularity or enforceability of the obligations of Borrower under this Agreement or any other agreement or instrument referred to herein, or any substitution, release or exchange of any other guarantee of or security for any of the Guaranteed Obligations, and, to the fullest extent permitted by applicable law, irrespective of any other circumstance whatsoever that might otherwise constitute a legal or equitable discharge or defense of a surety or guarantor, it being the intent of this **Section 14.02** that the obligations of the Subsidiary Guarantors hereunder shall be absolute and unconditional, joint and several, under any and all circumstances. Without limiting the generality of the foregoing, it is agreed that the occurrence of any one or more of the following shall not alter or impair the liability of the Subsidiary Guarantors hereunder, which shall remain absolute and unconditional as described above:

(a) at any time or from time to time, without notice to the Subsidiary Guarantors, the time for any performance of or compliance with any of the Guaranteed Obligations shall be extended, or such performance or compliance shall be waived;

(b) any of the acts mentioned in any of the provisions of this Agreement or any other agreement or instrument referred to herein shall be done or omitted;

(c) the maturity of any of the Guaranteed Obligations shall be accelerated, or any of the Guaranteed Obligations shall be modified, supplemented or amended in any respect, or any right under this Agreement or any other agreement or instrument referred to herein shall be waived or any other guarantee of any of the Guaranteed Obligations or any security therefor shall be released or exchanged in whole or in part or otherwise dealt with; or

(d) any lien or security interest granted to, or in favor of, the Secured Parties as security for any of the Guaranteed Obligations shall fail to be perfected.

The Subsidiary Guarantors hereby expressly waive diligence, presentment, demand of payment, protest and all notices whatsoever, and any requirement that any Secured Party exhaust any right, power or remedy or proceed against Borrower under this Agreement or any other agreement or instrument referred to herein, or against any other Person under any other guarantee of, or security for, any of the Guaranteed Obligations.

14.03 Reinstatement. The obligations of the Subsidiary Guarantors under this **SECTION 14** shall be automatically reinstated if and to the extent that for any reason any payment by or on behalf of Borrower in respect of the Guaranteed Obligations is rescinded or must be otherwise restored by any holder of any of the Guaranteed Obligations, whether as a result of any proceedings in bankruptcy or reorganization or otherwise, and the Subsidiary Guarantors jointly and severally agree that they will indemnify the Secured Parties on demand for all reasonable costs and expenses (including fees of counsel) incurred by the Lenders in connection with such rescission or restoration, including any such costs and expenses incurred in defending against any claim alleging that such payment constituted a preference, fraudulent transfer or similar payment under any bankruptcy, insolvency or similar law.

14.04 Subrogation. The Subsidiary Guarantors hereby jointly and severally agree that until the payment and satisfaction in full of all Guaranteed Obligations and the expiration and termination of the Commitments under this Agreement, they shall not exercise any right or remedy arising by reason of any performance by them of their guarantee in **Section 14.01**, whether by subrogation or otherwise, against Borrower or any other guarantor of any of the Guaranteed Obligations or any security for any of the Guaranteed Obligations.

14.05 Remedies. The Subsidiary Guarantors jointly and severally agree that, as between the Subsidiary Guarantors and the Secured Parties, the obligations of Borrower under this Agreement and under the other Loan Documents may be declared to be forthwith due and payable as provided in **SECTION 11** (and shall be deemed to have become automatically due and payable in the circumstances provided in **SECTION 11**) for purposes of **Section 14.01** notwithstanding any stay, injunction or other prohibition preventing such declaration (or such obligations from becoming automatically due and payable) as against Borrower and that, in the event of such declaration (or such obligations being deemed to have become automatically due and payable), such obligations (whether or not due and payable by Borrower) shall forthwith become due and payable by the Subsidiary Guarantors for purposes of **Section 14.01**.

14.06 Instrument for the Payment of Money. Each Subsidiary Guarantor hereby acknowledges that the guarantee in this **SECTION 14** constitutes an instrument for the payment of money, and consents and agrees that the Secured Parties, at their sole option, in the event of a dispute by such Subsidiary Guarantor in the payment of any moneys due hereunder, shall have the right to proceed by motion for summary judgment in lieu of complaint pursuant to N.Y. Civ. Prac. L&R § 3213.

14.07 Continuing Guarantee. The guarantee in this **SECTION 14** is a continuing guarantee, and shall apply to all Guaranteed Obligations whenever arising.

14.08 Rights of Contribution. The Subsidiary Guarantors hereby agree, as between themselves, that if any Subsidiary Guarantor shall become an Excess Funding Guarantor (as defined below) by reason of the payment by such Subsidiary Guarantor of any Guaranteed Obligations, each other Subsidiary Guarantor shall, on demand of such Excess Funding Guarantor (but subject to the next sentence), pay to such Excess Funding Guarantor an amount equal to such Subsidiary Guarantor's Pro Rata Share (as defined below and determined, for this purpose, without reference to the properties, debts and liabilities of such Excess Funding Guarantor) of the Excess Payment (as defined below) in respect of such Guaranteed Obligations. The payment obligation of a Subsidiary Guarantor to any Excess Funding Guarantor under this **Section 14.08** shall be subordinate and subject in right of payment to the prior payment in full of the obligations of such Subsidiary Guarantor under the other provisions of this **SECTION 14** and such Excess Funding Guarantor shall not exercise any right or remedy with respect to such excess until payment and satisfaction in full of all of such obligations.

For purposes of this **Section 14.08**, (i) "***Excess Funding Guarantor***" means, in respect of any Guaranteed Obligations, a Subsidiary Guarantor that has paid an amount in excess of its Pro Rata Share of such Guaranteed Obligations, (ii) "***Excess Payment***" means, in respect of any Guaranteed Obligations, the amount paid by an Excess Funding Guarantor in excess of its Pro Rata Share of such Guaranteed Obligations and (iii) "***Pro Rata Share***" means, for any Subsidiary Guarantor, the ratio (expressed as a percentage) of (x) the amount by which the aggregate present fair saleable value of all properties of such Subsidiary Guarantor (excluding any shares of stock of any other Subsidiary Guarantor) exceeds the amount of all the debts and liabilities of such Subsidiary Guarantor (including contingent, subordinated, unmatured and unliquidated liabilities, but excluding the obligations of such Subsidiary Guarantor hereunder and any obligations of any other Subsidiary Guarantor that have been Guaranteed by such Subsidiary Guarantor) to (y) the amount by which the aggregate fair saleable value of all properties of all of the Subsidiary Guarantors exceeds the amount of all the debts and liabilities (including contingent, subordinated, unmatured and unliquidated liabilities, but excluding the obligations of Borrower and the Subsidiary Guarantors hereunder and under the other Loan Documents) of all of the Subsidiary Guarantors, determined (A) with respect to any Subsidiary Guarantor that is a party hereto on the first Borrowing Date, as of such Borrowing Date, and (B) with respect to any other Subsidiary Guarantor, as of the date such Subsidiary Guarantor becomes a Subsidiary Guarantor hereunder.

14.09 General Limitation on Guarantee Obligations. In any action or proceeding involving any provincial, territorial or state corporate law, or any state or federal bankruptcy, insolvency, reorganization or other law affecting the rights of creditors generally, if the obligations of any Subsidiary Guarantor under **Section 14.01** would otherwise, taking into account the provisions of **Section 14.08**, be held or determined to be void, invalid or unenforceable, or subordinated to the claims of any other creditors, on account of the amount of its liability under **Section 14.01**, then, notwithstanding any other provision hereof to the contrary, the amount of such liability shall, without any further action by such Subsidiary Guarantor, any Secured Party or any other Person, be automatically limited and reduced to the highest amount that is valid and enforceable and not subordinated to the claims of other creditors as determined in such action or proceeding.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered as of the day and year first above written.

BORROWER:

DYNAVAX TECHNOLOGIES CORPORATION

By /s/ Michael S. Ostrach
Name: Michael S. Ostrach
Title: Chief Financial Officer

Address for Notices:
2929 Seventh Street, Suite 100
Berkeley, California 94710
Attn: [_____]
Tel.: [_____]
Fax: [_____]
Email: [_____]

SUBSIDIARY GUARANTORS:

[INSERT NAME OF SUBSIDIARY]

By _____
Name:
Title:

Address for Notices:
[_____]
[_____]
[_____]
Attn: [_____]
Tel.: [_____]
Fax: [_____]
Email: [_____]

ADMINISTRATIVE AGENT:

CRG SERVICING LLC

By /s/ Andrei Dorenbaum
Name: Andrei Dorenbaum
Title: Authorized Signatory

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

LENDERS:

CRG PARTNERS III L.P.
By CRG PARTNERS III GP L.P., its General Partner
By CRG PARTNERS III GP LLC, its General Partner

By /s/Andrei Dorenbaum
Name: Andrei Dorenbaum
Title: Authorized Signatory

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

CRG PARTNERS III – PARALLEL FUND "A" L.P.
By CRG PARTNERS III – PARALLEL FUND "A" GP L.P., its General Partner
By CRG PARTNERS III – PARALLEL FUND "A" GP LLC, its General Partner

By /s/ Andrei Dorenbaum
Name: Andrei Dorenbaum
Title: Authorized Signatory

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

Schedule 1
to Term Loan Agreement

COMMITMENTS

Lender	Commitment	Proportionate Share
CRG Partners III L.P.	$117,824,355.64	67.328203223%
CRG Partners III – Parallel Fund "A" L.P.	$57,175,644.36	32.671796777%
TOTAL	**$175,000,000**	**100%**

FORM OF GUARANTEE ASSUMPTION AGREEMENT

GUARANTEE ASSUMPTION AGREEMENT dated as of [DATE] (this "***Agreement***") by [NAME OF ADDITIONAL SUBSIDIARY GUARANTOR], a [___] [___] (the "***Additional Subsidiary Guarantor***"), in favor of CRG SERVICING LLC, as administrative agent and collateral agent (the "***Administrative Agent***") for the benefit of the Secured Parties under that certain Term Loan Agreement, dated as of February 20, 2018 (as amended, restated, supplemented or otherwise modified, renewed, refinanced or replaced, the "***Loan Agreement***"), among Dynavax Technologies Corporation, a Delaware corporation ("***Borrower***"), Administrative Agent, the lenders from time to time party thereto and the Subsidiary Guarantors from time to time party thereto. The terms defined in the Loan Agreement are herein used as therein defined.

Pursuant to **Section 8.12(a)** of the Loan Agreement, the Additional Subsidiary Guarantor hereby agrees to become a "Subsidiary Guarantor" for all purposes of the Loan Agreement, and a "Grantor" for all purposes of the Security Agreement. Without limiting the foregoing, the Additional Subsidiary Guarantor hereby, jointly and severally with the other Subsidiary Guarantors, guarantees to the Lenders and their successors and assigns the prompt payment in full when due (whether at stated maturity, by acceleration or otherwise) of all Guaranteed Obligations (as defined in **Section 14.01** of the Loan Agreement) in the same manner and to the same extent as is provided in **SECTION 14** of the Loan Agreement. In addition, as of the date hereof, the Additional Subsidiary Guarantor hereby makes the representations and warranties set forth in **Sections 7.01**, **7.02**, **7.03**, **7.05(a)**, **7.06**, **7.07**, **7.08** and **7.18** of the Loan Agreement, and in **SECTION 2** of the Security Agreement, with respect to itself and its obligations under this Agreement and the other Loan Documents, as if each reference in such Sections to the Loan Documents included reference to this Agreement, such representations and warranties to be made as of the date hereof.

IN WITNESS WHEREOF, the Additional Subsidiary Guarantor has caused this Agreement to be duly executed and delivered as of the day and year first above written.

[ADDITIONAL SUBSIDIARY GUARANTOR]

By _____
Name:
Title:

Exhibit B
to Term Loan Agreement

FORM OF NOTICE OF BORROWING

Date : [_____]

To: CRG Servicing LLC and the Lenders referred to below
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting

Re: Borrowing under Term Loan Agreement

Ladies and Gentlemen:

The undersigned, Dynavax Technologies Corporation, a Delaware corporation ("***Borrower***"), refers to the Term Loan Agreement, dated as of February 20, 2018 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among Borrower, CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, the "***Administrative Agent***"), and the lenders from time to time party thereto and the subsidiary guarantors from time to time party thereto. The terms defined in the Loan Agreement are herein used as therein defined.

Borrower hereby gives you notice irrevocably, pursuant to **Section 2.02** of the Loan Agreement, of the borrowing of the Loan specified herein:

1. The proposed Borrowing Date is [_____].

2. The amount of the proposed Borrowing is $[_____].

3. The payment instructions with respect to the funds to be made available to Borrower are as follows:

Bank name: [_____]
Bank Address: [_____]
Routing Number: [_____]
Account Number: [_____]
Swift Code: [_____]

Borrower hereby certifies that the following statements are true on the date hereof, and will be true on the date of the proposed borrowing of the Loan, before and after giving effect thereto and to the application of the proceeds therefrom:

(a) the representations and warranties made by Borrower in **SECTION 7** of the Loan Agreement shall be (A) in the case of representations qualified by "materiality", "material adverse effect" or similar language, true and correct in all respects and (B) in the case of all other

representations and warranties, true and correct in all material respects, in each case on and as of the Borrowing Date and immediately after giving effect to the application of the proceeds of the Borrowing with the same force and effect as if made on and as of such date (except that the representation regarding representations and warranties that refer to a specific earlier date shall be that they were true on such earlier date);

(b) on and as of the Borrowing Date, there shall have occurred no Material Adverse Change since [_____]; and

(c) no Default has occurred or is continuing on and as of the Borrowing Date.

IN WITNESS WHEREOF, Borrower has caused this Notice of Borrowing to be duly executed and delivered as of the day and year first above written.

BORROWER:

DYNAVAX TECHNOLOGIES CORPORATION

By _____
Name:
Title:

Exhibit C-1
to Term Loan Agreement

FORM OF U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is made to the Term Loan Agreement, dated as of February 20, 2018 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among Dynavax Technologies Corporation, a Delaware corporation ("***Borrower***"), CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, the "***Administrative Agent***"), and the lenders and the subsidiary guarantors from time to time party thereto. [_____] (the "***Foreign Lender***") is providing this certificate pursuant to **Section 5.03(e)(ii)(B)** of the Loan Agreement. The Foreign Lender hereby represents and warrants that:

1. The Foreign Lender is the sole record and beneficial owner of the Loans in respect of which it is providing this certificate;

2. The Foreign Lender is not a "bank" for purposes of Section 881(c)(3)(A) of the Internal Revenue Code of 1986, as amended (the "***Code***"). In this regard, the Foreign Lender further represents and warrants that:

(a) The Foreign Lender is not subject to regulatory or other legal requirements as a bank in any jurisdiction; and

(b) The Foreign Lender has not been treated as a bank for purposes of any tax, securities law or other filing or submission made to any Governmental Authority, any application made to a rating agency or qualification for any exemption from tax, securities law or other legal requirements;

3. The Foreign Lender is not a 10-percent shareholder of Borrower within the meaning of Section 881(c)(3)(B) of the Code; and

4. The Foreign Lender is not a controlled foreign corporation receiving interest from a related person within the meaning of Section 881(c)(3)(C) of the Code.

The undersigned has provided to Borrower (directly or through Administrative Agent) a certificate of its non-U.S. Person status on IRS Form W-8BEN or W-8BEN-E, as applicable. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform Borrower and Administrative Agent, and (2) the undersigned shall have at all times furnished Borrower and Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[Signature follows]

IN WITNESS WHEREOF, the undersigned has caused this certificate to be duly executed and delivered as of the date indicated below.

[NAME OF NON-U.S. LENDER]

By _____
Name:
Title:

Date: _____

FORM OF U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is made to the Term Loan Agreement, dated as of February 20, 2018 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among Dynavax Technologies Corporation, a Delaware corporation ("***Borrower***"), CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, the "***Administrative Agent***"), and the lenders and the subsidiary guarantors from time to time party thereto. [_____] (the "***Foreign Participant***") is providing this certificate pursuant to **Section 5.03(e)(ii)(B)** of the Loan Agreement. The Foreign Participant hereby represents and warrants that:

1. The Foreign Participant is the sole record and beneficial owner of the participation in respect of which it is providing this certificate;

2. The Foreign Participant is not a "bank" for purposes of Section 881(c)(3)(A) of the Internal Revenue Code of 1986, as amended (the "***Code***"). In this regard, the Foreign Participant further represents and warrants that:

(a) The Foreign Participant is not subject to regulatory or other legal requirements as a bank in any jurisdiction; and

(b) The Foreign Participant has not been treated as a bank for purposes of any tax, securities law or other filing or submission made to any Governmental Authority, any application made to a rating agency or qualification for any exemption from tax, securities law or other legal requirements;

3. The Foreign Participant is not a 10-percent shareholder of Borrower within the meaning of Section 881(c)(3)(B) of the Code; and

4. The Foreign Participant is not a controlled foreign corporation receiving interest from a related person within the meaning of Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or W-8BEN-E, as applicable. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform Borrower and Administrative Agent, and (2) the undersigned shall have at all times furnished Borrower and Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[Signature follows]

IN WITNESS WHEREOF, the undersigned has caused this certificate to be duly executed and delivered as of the date indicated below.

[NAME OF NON-U.S. PARTICIPANT]

By _____
Name:
Title:

Date: _____

Exhibit C-3
to Term Loan Agreement

FORM OF U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is made to the Term Loan Agreement, dated as of February 20, 2018 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among Dynavax Technologies Corporation, a Delaware corporation ("***Borrower***"), CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, the "***Administrative Agent***"), and the lenders and the subsidiary guarantors from time to time party thereto. [_____] (the "***Foreign Participant***") is providing this certificate pursuant to **Section 5.03(e)(ii)(B)** of the Loan Agreement. The Foreign Participant hereby represents and warrants that:

1. The Foreign Participant is the sole record owner of the participation in respect of which it is providing this certificate;

2. The Foreign Participant's direct or indirect partners/members are the sole beneficial owners of the participation in respect of which it is providing this certificate;

3. Neither the Foreign Participant nor its direct or indirect partners/members is a "bank" for purposes of Section 881(c)(3)(A) of the Internal Revenue Code of 1986, as amended (the "***Code***"). In this regard, the Foreign Participant further represents and warrants that:

(a) neither the Foreign Participant nor its direct or indirect partners/members is subject to regulatory or other legal requirements as a bank in any jurisdiction; and

(b) neither the Foreign Participant nor its direct or indirect partners/members has been treated as a bank for purposes of any tax, securities law or other filing or submission made to any Governmental Authority, any application made to a rating agency or qualification for any exemption from tax, securities law or other legal requirements;

4. Neither the Foreign Participant nor its direct or indirect partners/members is a 10-percent shareholder of Borrower within the meaning of Section 881(c)(3)(B) of the Code; and

5. Neither the Foreign Participant nor its direct or indirect partners/members is a controlled foreign corporation receiving interest from a related person within the meaning of Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms for each of its partners/members that is claiming the portfolio interest exemption : (i) an IRS Form W-8BEN or W-8BEN-E, as applicable, or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-8BEN-E, as applicable, from each such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform Borrower and Administrative

Agent, and (2) the undersigned shall have at all times furnished Borrower and Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[Signature follows]

IN WITNESS WHEREOF, the undersigned has caused this certificate to be duly executed and delivered as of the date indicated below.

[NAME OF NON-U.S. PARTICIPANT]

By _____
Name:
Title:

Date: _____

Exhibit C-4
to Term Loan Agreement

FORM OF U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is made to the Term Loan Agreement, dated as of February 20, 2018 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among Dynavax Technologies Corporation, a Delaware corporation ("***Borrower***"), CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, the "***Administrative Agent***"), and the lenders and the subsidiary guarantors from time to time party thereto. [_____] (the "***Foreign Lender***") is providing this certificate pursuant to **Section 5.03(e)(ii)(B)** of the Loan Agreement. The Foreign Lender hereby represents and warrants that:

1. The Foreign Lender is the sole record owner of the Loans in respect of which it is providing this certificate;

2. The Foreign Lender's direct or indirect partners/members are the sole beneficial owners of the Loans in respect of which it is providing this certificate;

3. Neither the Foreign Lender nor its direct or indirect partners/members is a "bank" for purposes of Section 881(c)(3)(A) of the Internal Revenue Code of 1986, as amended (the "***Code***"). In this regard, the Foreign Lender further represents and warrants that:

(a) neither the Foreign Lender nor its direct or indirect partners/members is subject to regulatory or other legal requirements as a bank in any jurisdiction; and

(b) neither the Foreign Lender nor its direct or indirect partners/members has been treated as a bank for purposes of any tax, securities law or other filing or submission made to any Governmental Authority, any application made to a rating agency or qualification for any exemption from tax, securities law or other legal requirements;

4. Neither the Foreign Lender nor its direct or indirect partners/members is a 10-percent shareholder of Borrower within the meaning of Section 881(c)(3)(B) of the Code; and

5. Neither the Foreign Lender nor its direct or indirect partners/members is a controlled foreign corporation receiving interest from a related person within the meaning of Section 881(c)(3)(C) of the Code.

The undersigned has provided to Borrower (directly or through Administrative Agent) an IRS Form W-8IMY accompanied by one of the following forms for each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or W-8BEN-E, as applicable, or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or W-8BEN-E, as applicable, from each such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform

Borrower and Administrative Agent, and (2) the undersigned shall have at all times furnished Borrower and Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

[Signature follows]

IN WITNESS WHEREOF, the undersigned has caused this certificate to be duly executed and delivered as of the date indicated below.

[NAME OF NON-U.S. LENDER]

By _____
Name:
Title:

Date: _____

FORM OF COMPLIANCE CERTIFICATE

[DATE]

This certificate is delivered pursuant to **Section 8.01(c)** of, and in connection with the consummation of the transactions contemplated in, the Term Loan Agreement, dated as of February 20, 2018 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among Dynavax Technologies Corporation, a Delaware corporation ("***Borrower***"), CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, the "***Administrative Agent***"), and the lenders and the subsidiary guarantors from time to time party thereto. Capitalized terms used herein and not otherwise defined herein are used herein as defined in the Loan Agreement.

The undersigned, a duly authorized Responsible Officer of Borrower having the name and title set forth below under his signature, hereby certifies, on behalf of Borrower for the benefit of the Secured Parties and pursuant to **Section 8.01(c)** of the Loan Agreement that such Responsible Officer of Borrower is familiar with the Loan Agreement and that, in accordance with each of the following sections of the Loan Agreement, each of the following is true on the date hereof, both before and after giving effect to any Loan to be made on or before the date hereof:

In accordance with Section **8.01**[**(a)/(b)**] of the Loan Agreement, attached hereto as **Annex A** are the financial statements for the [fiscal quarter/fiscal year] ended [_____] required to be delivered pursuant to **Section 8.01**[**(a)/(b)**] of the Loan Agreement. Such financial statements fairly present in all material respects the financial condition of Borrower and its Subsidiaries as at such date and the results of operations of Borrower and its Subsidiaries for the period ended on such date and have been prepared in accordance with GAAP consistently applied[, subject to changes resulting from normal, year-end audit adjustments and except for the absence of notes][1] [without any "going concern" or like qualification or exception or any qualification or exception as to the scope of the audit.][2]

Attached hereto as **Annex B** are the calculations used to determine compliance with each financial covenant contained in **SECTION 10** of the Loan Agreement.

No Default or Event of Default is continuing as of the date hereof[, except as provided for on **Annex C** attached hereto, with respect to each of which Borrower proposes to take the actions set forth on **Annex C**].

[1] Insert language in brackets only for quarterly certifications.
[2] Insert language in brackets only for annual certifications.

IN WITNESS WHEREOF, the undersigned has executed this certificate on the date first written above.

DYNAVAX TECHNOLOGIES CORPORATION

By _____
Name:
Title:

Exhibit D-2

164703839 v7

Annex A to Compliance Certificate

FINANCIAL STATEMENTS

[see attached]

Exhibit D-3

CALCULATIONS OF FINANCIAL COVENANT COMPLIANCE

I.	**Section 10.01: Minimum Liquidity**	
A.	Lowest amount of unencumbered (other than by Liens described in **Section 9.02(a)**, **9.02(c)** (*provided* that there is no event of default under the documentation governing the Permitted Priority Debt) or **9.02(j)**) cash and Permitted Cash Equivalent Investments (which for greater certainty shall not include any undrawn credit lines), in each case, to the extent held in an account over which the Lenders have a perfected security interest, on any day during the reporting period:	$_____
B.	The greater of:	$_____
	(1) $15,000,000 and	
	(2) to the extent Borrower has incurred Permitted Priority Debt, the minimum cash balance required of Borrower by Borrower's Permitted Priority Debt creditors	
	Is Line I.A greater than Line I.B?:	*Yes: In compliance; No: Not in compliance*
II.	**Section 10.02(a)-(e): Minimum Revenue—Subsequent Periods**	
A.	Revenue during the twelve month period beginning on January 1, 2019	$_____
	[Is line II.A equal to or greater than $30,000,000?	*Yes: In compliance; No: Not in compliance][3]*
B.	Revenue during the twelve month period beginning on January 1, 2020	$_____
	[Is line II.B equal to or greater than $50,000,000?	*Yes: In compliance; No: Not in compliance][4]*
C.	Revenue during the twelve month period beginning on January 1, 2021	$_____
	[Is line II.C equal to or greater than $75,000,000?	*Yes: In compliance; No: Not in compliance][5]*
D.	Revenue during the twelve month period beginning on January 1, 2022	$_____

3 Include bracketed entry only on the Compliance Certificate to be delivered within 90 days of the end of 2019 pursuant to Section 8.01(c) of the Loan Agreement.

4 Include bracketed entry only on the Compliance Certificate to be delivered within 90 days of the end of 2020 pursuant to Section 8.01(c) of the Loan Agreement.

5 Include bracketed entry only on the Compliance Certificate to be delivered within 90 days of the end of 2021 pursuant to Section 8.01(c) of the Loan Agreement.

	[Is line II.D equal to or greater than $100,000,000?	*Yes: In compliance; No: Not in compliance]*[6]
E.	Revenue during the twelve month period beginning on January 1, 2023	$_____
	[Is line II.E equal to or greater than $150,000,000?	*Yes: In compliance; No: Not in compliance]*[7]

6 Include bracketed entry only on the Compliance Certificate to be delivered within 90 days of the end of 2022 pursuant to Section 8.01(c) of the Loan Agreement.

7 Include bracketed entry only on the Compliance Certificate to be delivered within 90 days of the end of 2023 pursuant to Section 8.01(c) of the Loan Agreement.

Exhibit F
to Term Loan Agreement

FORM OF LANDLORD CONSENT

THIS LANDLORD CONSENT (the "***Agreement***") is made and entered into as of February 20, 2018 by and among CRG Servicing LLC, as administrative agent and collateral agent for the "Secured Parties" as defined in the Loan Agreement referred to below (in such capacities, "***Administrative Agent***"), [INSERT NAME OF BORROWER or GUARANTOR], a [Delaware] [corporation] ("***Debtor***"), and [INSERT NAME OF LANDLORD], a [Delaware] [limited liability company] ("***Landlord***").

WHEREAS, Debtor has entered into a Term Loan Agreement, dated as of February 20, 2018 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "***Loan Agreement***"), among Dynavax Technologies Corporation, a Delaware corporation, as borrower, Administrative Agent, the lenders from time to time party thereto and the subsidiary guarantors from time to time party thereto, pursuant to which the Secured Parties have been granted a security interest in all of Debtor's personal property, including, but not limited to, inventory, equipment and trade fixtures (hereinafter "***Personal Property***"); and

WHEREAS, Landlord is the owner of the real property located at [_____] (the "***Premises***"); and

WHEREAS, Landlord and Debtor have entered into that certain Lease dated [_____][, as amended by [_____] dated [_____]] ([collectively,] the "***Lease***"); and

WHEREAS, certain of the Personal Property has or may become affixed to or be located on, wholly or in part, the Premises.

NOW, THEREFORE, in consideration of any loans or other financial accommodation extended by the Secured Parties to Debtor at any time, and other good and valuable consideration, the parties agree as follows:

1. Landlord subordinates to Administrative Agent (for the benefit of the Secured Parties) all security interests or other interests or rights Landlord may now or hereafter have in, or to any of the Personal Property, whether for rent or otherwise, while Debtor is indebted to the Secured Parties.

2. The Personal Property may be installed in or located on the Premises and is not and shall not be deemed a fixture or part of the real estate and shall at all times be considered personal property.

3. Upon reasonable prior notice to each of the Landlord and Debtor, Administrative Agent or its representatives may enter upon the Premises during normal business hours to inspect the Personal Property (but not more often than once per year unless an Event of Default has occurred and is continuing).

4. Upon the occurrence and during the continuance of an Event of Default under the Agreements, Administrative Agent or its representatives, at Administrative Agent's option, upon written notice delivered to Landlord not less than ten (10) business days in advance, may enter the Premises during normal business hours for the purpose of repossessing, removing or otherwise dealing with said Personal Property; *provided* that neither Administrative Agent nor Secured Parties shall be permitted to operate the business of Debtor on the Premises or sell, auction or otherwise dispose of any Personal Property at the Premises or advertise any of the foregoing; and such license shall continue, from the date Administrative Agent enters the Premises for as long as Administrative Agent reasonably deems necessary but not to exceed a period of ninety (90) days. During the period Administrative Agent occupies the Premises, it shall pay to Landlord the rent provided under the Lease relating to the Premises, prorated on a per diem basis to be determined on a thirty (30) day month, without incurring any other obligations of Debtor.

5. Administrative Agent shall pay to Landlord any costs for damage to the Premises or the building in which the Premises is located in removing or otherwise dealing with said Personal Property pursuant to paragraph 4 above, and shall indemnify and hold harmless Landlord from and against (i) all claims, disputes and expenses, including reasonable attorneys' fees, suffered or incurred by Landlord arising from Administrative Agent's exercise of any of its rights hereunder, and (ii) any injury to third persons, caused by actions of Administrative Agent pursuant to this consent.

6. Landlord agrees to give notice to Administrative Agent in writing by certified mail, facsimile or email of Landlord's intent to exercise its remedies in response to any default by Debtor of any of the provisions of the Lease, to:

CRG Servicing LLC
1000 Main Street, Suite 2500
Houston, TX 77002
Attention: Portfolio Reporting
Fax: 713.209.7351
Email: notices@crglp.com

7. Landlord shall have no obligation to preserve or protect the Personal Property or take any action in connection therewith, and Administrative Agent waives all claims they may now or hereafter have against Landlord in connection with the Personal Property.

8. This consent shall terminate and be of no further force or effect upon the earlier of (i) the date on which all indebtedness secured by the Personal Property indefeasibly is paid in full in cash and (ii) the date on which the Lease is terminated or expires.

9. Nothing contained herein shall be construed to amend the Lease, and the Lease remains unchanged and in full force and effect.

This consent shall be construed and interpreted in accordance with and governed by the laws of the State of [_____].

This consent may not be changed or terminated orally and is binding upon and shall inure to the benefit of Landlord, Administrative Agent, Secured Parties and Debtor and the heirs, personal representatives, successors and assigns of Landlord, Administrative Agent, Secured Parties and Debtor.

[Signature Page follows]

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first above written.

LANDLORD:

[_____]

By _____
Name:
Title:

ADMINISTRATIVE AGENT:

CRG SERVICING LLC

By _____
Name:
Title:

Address for Notices:

1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

Acknowledged and Agreed:
[INSERT NAME OF BORROWER OR GUARANTOR]

By _____
Name:
Title:

Exhibit G
to Term Loan Agreement

FORM OF SUBORDINATION AGREEMENT

This Subordination Agreement is made as of [_____] (this "***Agreement***") among CRG Servicing LLC, a Delaware limited liability company ("***Senior Agent***"), and [_____], a [_____] [corporation] ("***Subordinated Creditor***").

RECITALS:

A. Dynavax Technologies Corporation, a Delaware corporation ("***Borrower***"), will, as of the date hereof, issue in favor of Subordinated Creditor the Subordinated Note (as defined below)[, and grant a security interest in the Subordinated Collateral (as defined below) in favor of Subordinated Creditor].

B. Senior Creditors, Borrower and certain of its subsidiaries have entered into the Senior Loan Agreement (as defined below), and Senior Agent, Borrower and certain of its subsidiaries have entered into the Senior Security Agreement (as defined below) under which Borrower and such subsidiaries have granted a security interest in the Collateral (as defined below) in favor of the Senior Creditors as security for the payment of Borrower's obligations under the Senior Loan Agreement.

C. To induce the Lenders under and as defined in the Senior Loan Agreement referred to below to make and maintain the credit extensions to Borrower under the Senior Loan Agreement, Subordinated Creditor is willing to subordinate the Subordinated Debt (as defined below) to the Senior Debt (as defined below)[, and all liens securing the Subordinated Debt to the Senior Creditors' liens on and security interests in the Collateral] on the terms and conditions herein set forth.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Definitions. As used herein, the following terms have the following meanings:

"***Bankruptcy Code***" means title 11 of the United States Code, 11 U.S.C. §§ 101 *et seq*.

"***Collateral***" has the meaning set forth in the Senior Security Agreement.

"***Enforcement Action***" means, with respect to any indebtedness, obligation (contingent or otherwise) or Collateral at any time held by any lender or noteholder, (i) commencing, by judicial or non-judicial means, the enforcement of, or otherwise attempting to enforce, such indebtedness, obligation or Collateral of any of the default remedies under any of the applicable agreements or documents of such lender or noteholder, the UCC or other applicable law (other than the mere issuance of a notice of default or notice of the right by such lender or noteholder to seek specific performance with respect to any covenants in favor of such lender or noteholder), (ii) repossessing, selling, leasing or otherwise disposing of all or any part of such Collateral, including without limitation causing any attachment of, levy upon, execution against, foreclosure

upon or the taking of other action against or institution of other proceedings with respect to any Collateral, or exercising account debtor or obligor notification or collection rights with respect to all or any portion thereof, or attempting or agreeing to do so, (iii) appropriating, setting off or applying to such lender or noteholder's claim any part or all of such Collateral or other property in the possession of, or coming into the possession of, such lender or noteholder or its agent, trustee or bailee, (iv) asserting any claim or interest in any insurance with respect to such indebtedness, obligation or Collateral, (v) instituting or commencing, or joining with any Person in commencing, any action or proceeding with respect to any of the foregoing rights or remedies (including any action of foreclosure, enforcement, collection or execution and any Insolvency Event involving any Obligor), (vi) exercising any rights under any lockbox agreement, account control agreement, landlord waiver or bailee's letter or similar agreement or arrangement to which the Subordinated Creditor is a party, (vii) [causing or compelling the pledge or delivery of Subordinated Collateral], or (viii) otherwise enforcing, or attempting to enforce, any other rights or remedies under or with respect to any such indebtedness, obligation or Collateral.

"***Insolvency Event***" means that any Obligor or any of its subsidiaries shall have (i) applied for, consented to or acquiesced in the appointment of a trustee, receiver or other custodian for it or any of its property, or (ii) made a general assignment for the benefit of creditors or similar arrangement in respect of such Obligor's or subsidiary's creditors generally or any substantial portion thereof, or (iii) permitted, consented to, or suffered to exist the appointment of a trustee, receiver or other custodian for it or for a substantial part of its property, or (iv) commenced any case, action or proceeding before any court or other governmental agency or authority relating to bankruptcy, reorganization, insolvency, debt arrangement or relief or other case, action or proceeding under any bankruptcy or insolvency law, or any dissolution, winding up or liquidation case, action or proceeding, including without limitation any case under the Bankruptcy Code, in respect of it, or (v) (A) permitted, consented to, or suffered to exist the commencement of any case, action or proceeding before any court or other governmental agency or authority relating to bankruptcy, reorganization, insolvency, debt arrangement or relief or other case, action or proceeding under any bankruptcy or insolvency law, or any dissolution, winding up or liquidation case, action or proceeding, including without limitation any case under the Bankruptcy Code, in respect of it, or (B) any such case, action or proceeding shall have resulted in the entry of an order for relief or shall have remained for sixty (60) days undismissed.

"***Obligor***" has the meaning set forth in the Senior Loan Agreement.

"***Person***" has the meaning set forth in the Senior Loan Agreement.

"***Senior Creditors***" means Senior Agent and the Lenders under and as defined in the Senior Loan Agreement.

"***Senior Debt***" means the Obligations (as defined in the Senior Loan Agreement).

"***Senior Discharge Date***" means the first date on which all of the Senior Debt (other than contingent indemnification obligations has been paid indefeasibly in full in cash and all commitments of Senior Lenders under the Senior Loan Documents have been terminated.

"***Senior Loan Agreement***" means that certain Term Loan Agreement, dated as of February 20, 2018, by and among Borrower, the subsidiary guarantors from time to time party thereto, and the Senior Creditors, as amended, restated, supplemented or otherwise modified from time to time.

"***Senior Loan Documents***" means, collectively, the Loan Documents (as defined in the Senior Loan Agreement), in each case as amended, restated, supplemented or otherwise modified from time to time.

"***Senior Security Agreement***" means that certain Security Agreement, dated as of [_____], among Borrower, the other Obligors party thereto, and Senior Agent, as amended, restated, supplemented or otherwise modified from time to time.

["***Subordinated Collateral***" means any property or assets that may at any time be or become subject to a lien or security interest in favor of the Subordinated Creditor pursuant to the Subordinated Collateral Documents or otherwise, and all products and proceeds of any of the foregoing.]

["***Subordinated Collateral Documents***" means, collectively, each security agreement, deed of trust, mortgage, pledge agreement and any other agreement pursuant to which any Obligor or any other Person provides a lien on or security interest in its assets in favor of the Subordinated Creditor, and all financing statements, fixture filings, patent, trademark and copyright filings, assignments, acknowledgments and other filings, documents and agreements made or delivered pursuant thereto.]

"***Subordinated Debt***" means and includes all obligations, liabilities and indebtedness of Borrower owed to Subordinated Creditor, whether direct or indirect, absolute or contingent, due or to become due, or now existing or hereafter incurred, including without limitation, principal, premium (if any), interest, fees, charges, expenses, costs, professional fees and expenses, and reimbursement obligations.

"***Subordinated Debt Documents***" means, collectively, the Subordinated Note and each other loan document or agreement entered into by Borrower in connection with the Subordinated Note or any other Subordinated Debt[, including without limitation each Subordinated Collateral Document], as amended, restated, supplemented or otherwise modified from time to time.

"***Subordinated Note***" means that certain $[_____] subordinated promissory note, dated [_____], issued by Borrower to Subordinated Creditor, as amended, restated, supplemented or otherwise modified from time to time.

"***UCC***" means the Uniform Commercial Code of any applicable jurisdiction and, if the applicable jurisdiction shall not have any Uniform Commercial Code, the Uniform Commercial Code as in effect in the State of New York.

2. **Liens** (a) Subordinated Creditor represents and warrants that [8][the Subordinated Debt is unsecured. Subordinated Creditor agrees that it will not request or accept any security interest in any Collateral to secure the Subordinated Debt; *provided* that, should Subordinated Creditor obtain a lien or security interest on any asset or Collateral to secure all or any portion of the Subordinated Debt for any reason (which action shall be in violation of this Agreement), notwithstanding the respective dates of attachment and perfection of the security interests in the Collateral in favor of the Senior Creditors or Subordinated Creditor, or any contrary provision of the UCC, or any applicable law or decision to the contrary, or the provisions of the Senior Loan Documents or the Subordinated Debt Documents, and irrespective of whether Subordinated Creditor or the Senior Creditors hold possession of any or all part of the Collateral, all now existing or hereafter arising security interests in the Collateral in favor of Subordinated Creditor in respect of the Subordinated Debt Documents shall at all times be subordinate to the security interest in such Collateral in favor of the Senior Creditors in respect of the Senior Loan Documents.] [all liens and security interests, if any, now or hereafter existing that secure the Subordinated Debt, are hereby subordinated and junior in all respects to the liens and security interests now or hereafter existing securing the Senior Debt, regardless of the time, manner or order of attachment or perfection of any such liens and security interests, the time or order of filing of financing statements, the acquisition of purchase money or other liens or security interests, the time of giving or failure to give notice of the acquisition or expected acquisition of purchase money or other liens or security interests, or any other circumstances whatsoever.]

(b) Subordinated Creditor acknowledges that the Senior Creditors have been granted liens upon the Collateral [(including the Subordinated Collateral)], and Subordinated Creditor hereby consents thereto and to the incurrence of the Senior Debt.

(c) Until the Senior Discharge Date, in the event of any private or public sale or other disposition of all or any portion of the Collateral, Subordinated Creditor agrees that such Collateral shall be sold or otherwise disposed of free and clear of any liens in favor of Subordinated Creditor. Subordinated Creditor agrees that any such sale or disposition of Collateral shall not require any consent from Subordinated Creditor, and Subordinated Creditor hereby waives any right it may have to object to such sale or disposition.

(d) [Subordinated Creditor agrees that it will not request or accept any guaranty of the Subordinated Debt.]

(e) [Each of the Senior Creditors and Subordinated Creditor agrees to hold all collateral in which a lien may be perfected by possession or control ("***Possessory Collateral***") in its possession, custody, or control (or in the possession, custody, or control of agents or bailees for any such party) as agent for the other solely for the purpose of perfecting the security interest granted to each in such Possessory Collateral subject to the terms and conditions of this Agreement. Neither any Senior Creditor nor Subordinated Creditor shall have any obligation whatsoever to the other to assure that any Possessory Collateral is genuine or owned by any Obligor or any other Person or to preserve its rights or benefits or those of any Person. The

duties or responsibilities of the Senior Creditors and Subordinated Creditor under this **Section 2(e)** are and shall be limited solely to holding or maintaining control of the Possessory Collateral as agent for the others for purposes of perfecting the lien or security interest held by such others. The Senior Creditors are not and shall not be deemed to be a fiduciary of any kind for Subordinated Creditor or any other Person.]

3. Payment Subordination (a) Notwithstanding the terms of the Subordinated Debt Documents, until the Senior Discharge Date, (i) all payments and distributions of any kind or character, whether in cash, property or securities, in respect of the Subordinated Debt are subordinated in right and time of payment to all payments in respect of the Senior Debt, and (ii) Subordinated Creditor will not demand, sue for or receive from Borrower (and Borrower will not pay) any part of the Subordinated Debt, whether by payment, prepayment, distribution, setoff, or otherwise, or accelerate the Subordinated Debt.

(b) Subordinated Creditor must deliver to the Senior Agent in the form received (except for endorsement or assignment by Subordinated Creditor) any payment, distribution, security or proceeds it receives on the Subordinated Debt other than according to this Agreement.

4. Subordination of Remedies. Until the Senior Discharge Date, and whether or not any Insolvency Event has occurred, Subordinated Creditor will not accelerate the maturity of all or any portion of the Subordinated Debt, enforce, attempt to enforce, or exercise any right or remedy with respect to any Collateral [(including the Subordinated Collateral)] or the Subordinated Debt, or take any other Enforcement Action with respect to the Subordinated Debt [or the Subordinated Collateral].

5. Payments Over. All payments and distributions of any kind, whether in cash, property or securities, in respect of the Subordinated Debt to which Subordinated Creditor would be entitled if the Subordinated Debt were not subordinated pursuant to this Agreement, shall be paid to the Senior Creditors in respect of the Senior Debt, regardless of whether such Senior Debt, or any portion thereof, is reduced, expunged, disallowed, subordinated or recharacterized. Notwithstanding the foregoing, if any payment or distribution of any kind, whether in cash, property or securities, shall be received by Subordinated Creditor on account of the Subordinated Debt [or the Subordinated Collateral] before Senior Discharge Date (whether or not expressly characterized as such), then such payment or distribution shall be segregated by Subordinated Creditor and held in trust for, and shall be promptly paid over to, the Senior Creditors in the same form as received, with any necessary endorsements or as a court of competent jurisdiction may otherwise direct, in respect of the Senior Debt, regardless of whether such Senior Debt, or any portion thereof, is reduced, expunged, disallowed, subordinated or recharacterized. Subordinated Creditor irrevocably appoints the Senior Agent as Subordinated Creditor's attorney-in-fact, and grants to the Senior Creditors a power of attorney with full power of substitution (which power of attorney is coupled with an interest), in the name of Subordinated Creditor or in the name of the Senior Agent, for the use and benefit of the Senior Creditors, without notice to Subordinated Creditor, to make any such endorsements. This **Section 5** shall be enforceable even if the Senior Creditors' liens on the Collateral are alleged, determined, or held to constitute fraudulent transfers (whether constructive or actual), preferential transfers, or otherwise avoided or voidable, set aside, recharacterized or equitably subordinated.

6. Insolvency Proceedings (a) This Agreement is intended to constitute and shall be deemed to constitute a "subordination agreement" within the meaning of Section 510(a) of the Bankruptcy Code and is intended to be and shall be interpreted to be enforceable to the maximum extent permitted pursuant to applicable nonbankruptcy law. All references to Borrower or any other Obligor shall include Borrower or such Obligor as debtor and debtor-in-possession and any receiver or trustee for Borrower or any other Obligor (as the case may be) in connection with any case under the Bankruptcy Code or in connection with any other Insolvency Event.

(b) Without limiting the generality of the other provisions of this Agreement, until the Senior Discharge Date, without the express written consent of the Senior Agent, Subordinated Creditor shall not institute or commence (nor shall it join with or support any third party instituting, commencing, opposing, objecting or contesting, as the case may be, or otherwise suffer to exist), any Insolvency Event involving Borrower or any other Obligor.

(c) The Senior Creditors shall have the right to enforce rights, exercise remedies (including set-off and the right to credit bid its debt) and make determinations regarding the release, disposition, or restrictions with respect to the Collateral without any consultation with or consent of Subordinated Creditor.

(d) Subordinated Creditor will not, and hereby waives any right to bring, join in, or otherwise support or take any action to (i) contest the validity, legality, enforceability, perfection, priority or avoidability of any of the Senior Debt, any of the Senior Loan Documents or any security interests and/or liens of the Senior Creditors on or in any property or assets of Borrower or any other Obligor, including without limitation, the Collateral; (ii) interfere with or in any manner oppose or support any other Person in opposing any foreclosure on or other disposition of any Collateral by the Senior Creditors in accordance with applicable law, or otherwise to contest, protest, object to or interfere with the manner in which the Senior Creditors may seek to enforce the Liens on any Collateral; (iii) provide a debtor-in-possession facility (including on a priming basis) to Borrower or any other Obligor, under Section 362, 363 or 364 of the Bankruptcy Code or any other applicable law, without the consent, in their sole discretion, of the Senior Creditors; or (iv) exercise any rights against the Senior Creditors or the Collateral under Section 506(c) of the Bankruptcy Code. [Subordinated Creditor hereby waives any and all rights it may have as a junior lien creditor or otherwise to contest, protest, object to or interfere with the manner in which any Senior Creditor seeks to enforce its liens on or security interests in any Collateral.]

(e) Subordinated Creditor will not, and hereby waives any right to, oppose, contest, object to, join in, or otherwise support any opposition to or objection with respect to, (i) any request or motion of the Senior Creditors seeking, pursuant to Section 362(d) of the Bankruptcy Code or otherwise, the modification, lifting or vacating of the automatic stay of Section 362(a) of the Bankruptcy Code or from any other stay in connection with any Insolvency Event or seeking adequate protection of the Senior Creditors' interests in the Collateral or with respect to the Senior Debt (whether under Sections 362, 363, and/or 364 of the Bankruptcy Code or other applicable law), and, until Senior Discharge Date, Subordinated Creditor agrees that it shall not seek relief from such automatic stay without the prior written consent of the Senior Agent;

(ii) any debtor-in-possession financing (including on a priming basis) or use of cash collateral (as defined in Section 363(a) of the Bankruptcy Code or other applicable law) arrangement by Borrower, whether from the Senior Creditors or any other third party under Section 362, 363 or 364 of the Bankruptcy Code or any other applicable law, if the Senior Creditors, in their sole discretion, consent to such debtor-in-possession financing or cash collateral arrangement, and Subordinated Creditor shall not request adequate protection (whether under Sections 362, 363, and/or 364 of the Bankruptcy Code or other applicable law) or any other relief in connection therewith; (iii) any sale or other disposition of the Collateral or substantially all of the assets of Borrower or any other Obligor (include any such sale free and clear of liens or other claims) under Section 363 of the Bankruptcy Code or other applicable law if the Senior Creditors, in their sole discretion, consent to such sale or disposition; (vii) the Senior Creditors' exercise or enforcement of its right to make an election under Section 1111(b) of the Bankruptcy Code, and Subordinated Creditor hereby waives any claim it may hereafter have against the Senior Creditors arising out of such election; (viii) the Senior Creditors' exercise or enforcement of its right to credit bid any or all of its debt claims against Borrower or any other Obligor, including, without limitation, the Senior Debt; or (ix) any plan of reorganization or liquidation if the Senior Creditors, in their sole discretion, consent to, vote in favor of, or otherwise do not oppose such plan of reorganization or liquidation, and, in furtherance thereof, Subordinated Creditor hereby grants to the Senior Creditors the right to vote Subordinated Creditor's claim or claims (as such term is defined in the Bankruptcy Code) arising on account of or in connection with the Subordinated Debt, as Subordinated Creditor's agent, with respect to any plan of reorganization or liquidation to which Subordinated Creditor may be entitled to vote in any bankruptcy or liquidation proceeding or in connection with any other Insolvency Event of Borrower or any other Obligor.

7. Distributions of Proceeds of Collateral. All realizations upon any Collateral pursuant to or in connection with an Enforcement Action, an Insolvency Event or otherwise shall be paid or delivered to the Senior Agent in respect of the Senior Debt until the Senior Discharge Date before any payment may be made to Subordinated Creditor.

8. Release of Liens. In the event of any private or public sale or other disposition, by or with the consent of the Senior Agent, of all or any portion of the Collateral, Subordinated Creditor agrees that such sale or disposition shall be free and clear of any liens Subordinated Creditor may have on such Collateral[, and, if the sale or other disposition includes any pledged equity interests in any Obligor, if the Subordinated Collateral includes any such any pledged equity interests, the Subordinated Creditor further agrees to release the entities whose pledged equity interests are sold from all Subordinated Debt]. Subordinated Creditor agrees that, in connection with any such sale or other disposition, (i) the Senior Creditors are authorized to file any and all UCC and other applicable lien releases and/or terminations in respect of any liens held by Subordinated Creditor in connection with such a sale or other disposition, and (ii) it shall execute any and all lien releases or other documents reasonably requested by the Senior Agent in connection therewith. In furtherance of the foregoing, Subordinated Creditor hereby appoints the Senior Agent as its attorney-in-fact, with full authority in the place and stead of Subordinated Creditor and full power of substitution and in the name of Subordinated Creditor or otherwise, to execute and deliver any document or instrument which Subordinated Creditor is required to deliver pursuant to this **Section 8**, such appointment being coupled with an interest and

irrevocable. Subordinated Creditor agrees that the Senior Creditors may release or refrain from enforcing their security interest in any Collateral, or permit the use or consumption of such Collateral by Borrower free of any Subordinated Creditor security interest, without incurring any liability to Subordinated Creditor.

9. Attorney-In-Fact. Until the Senior Discharge Date, Subordinated Creditor irrevocably appoints the Senior Agent as its attorney-in-fact, with power of attorney with power of substitution, in Subordinated Creditor's name or in any Senior Creditor's name, for the Senior Creditors' use and benefit without notice to Subordinated Creditor, to do the following during an Insolvency Event:

(a) file any claims in respect of the Subordinated Debt on behalf of Subordinated Creditor if Subordinated Creditor does not do so at least 30 days before the time to file claims expires; and

(b) vote Subordinated Creditor's claim or claims (as such term is defined in the Bankruptcy Code) arising on account of or in connection with the Subordinated Debt, as Subordinated Creditor's agent, with respect to any plan of reorganization or liquidation to which Subordinated Creditor may be entitled to vote in any bankruptcy or liquidation proceeding or in connection with any other Insolvency Event of Borrower or any other Obligor.

Such power of attorney is irrevocable and coupled with an interest.

10. Legend; Amendment of Debt (a) Subordinated Creditor will immediately put a legend on or otherwise indicate on the Subordinated Note that the Subordinated Note is subject to this Agreement.

(b) Until the Senior Discharge Date, Subordinated Creditor shall not, without prior written consent of the Senior Agent, agree to any amendment, modification or waiver of any provision of the Subordinated Debt Documents, if the effect of such amendment, modification or waiver is to: (i) terminate or impair the subordination of the Subordinated Debt in favor of the Senior Creditors; (ii) increase the interest rate on the Subordinated Debt or change (to earlier dates) the dates upon which principal, interest and other sums are due under the Subordinated Note; (iii) alter the redemption, prepayment or subordination provisions of the Subordinated Debt; (iv) impose on Borrower or any other Obligor any new or additional prepayment charges, premiums, reimbursement obligations, reimbursable costs or expenses, fees or other payment obligations; (v) alter the representations, warranties, covenants, events of default, remedies and other provisions in a manner which would make such provisions materially more onerous, restrictive or burdensome to Borrower or any other Obligor; (vi) [9][grant a lien or security interest in favor of any holder of the Subordinated Debt on any asset or Collateral to secure all or any portion of the Subordinated Debt][terminate or impair the subordination of any security interest or lien securing the Subordinated Debt in favor of the Senior Creditors]; or (vii) otherwise increase the obligations, liabilities and indebtedness in respect of the Subordinated Debt or confer additional rights upon Subordinated Creditor, which individually or in the aggregate would be materially adverse to Borrower, any other Obligor or the Senior Creditors. Any such amendment, modification or waiver made in violation of this **Section 10(b)** shall be void.

(c) At any time without notice to Subordinated Creditor, the Senior Creditors may take such action with respect to the Senior Debt as the Senior Creditors, in their sole discretion, may deem appropriate, including, without limitation, terminating advances, increasing the principal, extending the time of payment, increasing interest rates, renewing, compromising or otherwise amending any documents affecting the Senior Debt and any Collateral securing the Senior Debt, and enforcing or failing to enforce any rights against Borrower or any other person. No action or inaction will impair or otherwise affect any Senior Creditor's rights under this Agreement.

11. Certain Waivers (a) Subordinated Creditor hereby (i) waives any and all notice of the incurrence of the Senior Debt or any part thereof; (ii) waives any and all rights it may have to require the Senior Creditors to marshal assets, to exercise rights or remedies in a particular manner, to forbear from exercising such rights and remedies in any particular manner or order, or to claim the benefit of any appraisal, valuation or other similar right that may otherwise be available under applicable law, regardless of whether any action or failure to act by or on behalf of the Senior Creditors is adverse to the interest of Subordinated Creditor; (iii) agrees that the Senior Creditors shall have no liability to Subordinated Creditor, and Subordinated Creditor hereby waives any claim against the Senior Creditors arising out of any and all actions not in breach of this Agreement which the Senior Creditors may take or permit or omit to take with respect to the Senior Loan Documents (including any failure to perfect or obtain perfected security interests in the Collateral), the collection of the Senior Debt or the foreclosure upon, or sale, liquidation or other disposition of, any Collateral; and (iv) agrees that the Senior Creditors have no duty, express or implied, fiduciary or otherwise, to them in respect of the maintenance or preservation of the Collateral, the Senior Debt or otherwise. Without limiting the foregoing, Subordinated Creditor agrees that the Senior Creditors shall have no duty or obligation to maximize the return to any class of creditors holding indebtedness of any type (whether Senior Debt or Subordinated Debt), notwithstanding that the order and timing of any realization, sale, disposition or liquidation of the Collateral may affect the amount of proceeds actually received by such class of creditors from such realization, sale, disposition or liquidation.

(b) Subordinated Creditor confirms that this Agreement shall govern as between the Senior Creditors and the Subordinated Creditor irrespective of: (i) any lack of validity or enforceability of any Senior Loan Document or any Subordinated Debt Document; (ii) the occurrence of any Insolvency Event in respect of any Obligor; (iii) whether the Senior Debt, or the liens or security interests securing the Senior Debt, shall be held to be unperfected, deficient, invalid, void, voidable, voided, unenforceable, subordinated, reduced, discharged or are set aside by a court of competent jurisdiction, including pursuant or in connection with any Insolvency Event; (iv) any change in the time, manner or place of payment of, or in any other terms of, all or any of the Senior Debt or the Subordinated Debt, or any amendment or waiver or other modification, including any increase in the amount thereof, whether by course of conduct or otherwise, of the terms of any Senior Loan Document or any Subordinated Debt Document or any guarantee thereof; or (v) any other circumstances which otherwise might constitute a defense available to, or a discharge of, any Obligor in respect of the Senior Debt or the Subordinated Debt.

12. **Representations and Warranties**. Subordinated Creditor represents and warrants to the Senior Creditors that:

(a) all action on the part of Subordinated Creditor, its officers, directors, partners, members and shareholders, as applicable, necessary for the authorization of this Agreement and the performance of all obligations of Subordinated Creditor hereunder has been taken;

(b) this Agreement constitutes the legal, valid and binding obligation of Subordinated Creditor, enforceable against Subordinated Creditor in accordance with its terms;

(c) the execution, delivery and performance of and compliance with this Agreement by Subordinated Creditor will not (i) result in any material violation or default of any term of any of Subordinated Creditor's charter, formation or other organizational documents (such as Articles or Certificate of Incorporation, bylaws, partnership agreement, operating agreement, etc.) or (ii) violate any material applicable law, rule or regulation; and

(d) Subordinated Creditor has not previously assigned any interest in the Subordinated Debt[or any Subordinated Collateral], and no Person other than the Subordinated Creditor owns an interest in the Subordinated Debt[or Subordinated Collateral].

13. **Term; Reinstatement**. This Agreement shall remain in full force and effect until the Senior Discharge Date, notwithstanding the occurrence of an Insolvency Event. If, after the Senior Discharge Date, the Senior Creditors must disgorge any payments made on the Senior Debt for any reason (including, without limitation, in connection with the bankruptcy of Borrower or in connection with any other Insolvency Event), this Agreement and the relative rights and priorities provided in it, will be reinstated as to all disgorged payments as though such payments had not been made, and Subordinated Creditor will immediately pay the Senior Agent all payments received in respect of the Subordinated Debt to the extent such payments or retention thereof would have been prohibited under this Agreement.

14. **Successors and Assigns**. This Agreement binds Subordinated Creditor, its successors or assigns, and benefits the Senior Creditors' successors or assigns. This Agreement is for Subordinated Creditor's and the Senior Creditors' benefit and not for the benefit of Borrower or any other party. Subordinated Creditor shall not sell, assign, pledge, dispose of or otherwise transfer all or any portion of the Subordinated Debt or any related document or any interest in any Collateral therefor unless prior to the consummation of any such action, the transferee thereof shall execute and deliver to the Senior Agent an agreement of such transferee to be bound hereby, or an agreement substantially identical to this Agreement providing for the continued subjection of the Subordinated Debt, the interests of the transferee in the Collateral and the remedies of the transferee with respect thereto as provided herein with respect to Subordinated Creditor and for the continued effectiveness of all of the other rights of the Senior Creditors arising under this Agreement, in each case in form satisfactory to the Senior Creditors. Any such sale, assignment, pledge, disposition or transfer not made in compliance with the terms of this **Section 14** shall be void.

15. **Further Assurances**. Subordinated Creditor hereby agrees to execute such documents and/or take such further action as the Senior Agent may at any time or times reasonably request in order to carry out the provisions and intent of this Agreement, including, without limitation, ratifications and confirmations of this Agreement from time to time hereafter, as and when requested by the Senior Agent.

16. **Counterparts**. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument. Executed counterparts may be delivered by facsimile.

17. **Governing Law; Waiver of Jury Trial** (a) This Agreement and the rights and obligations of the parties hereunder shall be governed by, and construed in accordance with, the law of the State of New York, without regard to principles of conflicts of laws that would result in the application of the laws of any other jurisdiction; *provided* that Section 5-1401 of the New York General Obligations Law shall apply.

(b) EACH PARTY HERETO WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREIN.

18. **Entire Agreement; Waivers and Amendments**. This Agreement represents the entire agreement with respect to the subject matter hereof, and supersedes all prior negotiations, agreements and commitments. The Senior Creditors and Subordinated Creditor are not relying on any representations by the other creditor party or Borrower in entering into this Agreement, and each of the Senior Creditors and Subordinated Creditor has kept and will continue to keep itself fully apprised of the financial and other condition of Borrower. No amendment, modification, supplement, termination, consent or waiver of or to any provision of this Agreement, nor any consent to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the Senior Agent and Subordinated Creditor. Any waiver of any provision of this Agreement, or any consent to any departure from the terms of any provision of this Agreement, shall be effective only in the specific instance and for the specific purpose for which given.

19. **No Waiver**. No failure or delay on the part of any Senior Creditor or Subordinated Creditor in the exercise of any power, right, remedy or privilege under this Agreement shall impair such power, right, remedy or privilege or shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude any other or further exercise of any other power, right or privilege. The rights and remedies under this Agreement are cumulative and not exclusive of any rights, remedies, powers and privileges that may otherwise be available to any Senior Creditor.

20. **Legal Fees**. In the event of any legal action to enforce the rights of a party under this Agreement, the party prevailing in such action shall be entitled, in addition to such other relief as may be granted, all reasonable, invoiced and out-of-pocket costs and expenses, including reasonable attorneys' fees, incurred in such action.

21. **Severability**. Any provision of this Agreement which is illegal, invalid, prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent such illegality, invalidity, prohibition or unenforceability without invalidating or impairing the remaining provisions hereof or affecting the validity or enforceability of such provision in any other jurisdiction.

22. **Notices**. All notices, demands, instructions and other communications required or permitted to be given to or made upon any party hereto shall be in writing and shall be delivered or sent by first-class mail, postage prepaid, or by overnight courier or messenger service or by facsimile or electronic mail, message confirmed, and shall be deemed to be effective for purposes of this Agreement on the day that delivery is made or refused. Unless otherwise specified in a notice mailed or delivered in accordance with the foregoing sentence, notices, demands, instructions and other communications in writing shall be given to or made upon the respective parties hereto at their respective addresses and facsimile numbers indicated on the signature pages hereto.

23. **No Third-Party Beneficiaries; Other Benefits**. The terms and provisions of this Agreement are intended solely for the benefit of each party hereto and their respective successors and permitted assigns, and the parties do not intend to confer third party beneficiary rights upon any other person. Subordinated Creditor understands that there may be various agreements between the Senior Creditors and Borrower or the other Obligors evidencing and governing the Senior Debt, and Subordinated Creditor acknowledges and agrees that such agreements are not intended to confer any benefits on Subordinated Creditor and that the Senior Creditors shall have no obligation to Subordinated Creditor or any other Person to exercise any rights, enforce any remedies, or take any actions which may be available to it under such agreements.

[Signature pages follow]

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first above written.

SUBORDINATED CREDITOR:

[_____]

By _____
Name:
Title:

Address for Notices:

SENIOR AGENT (on behalf of the SENIOR CREDITORS):

CRG SERVICING LLC

By _____
Name:
Title:

Address for Notices:

1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

DYNAVAX TECHNOLOGIES CORPORATION

By _____
Name:
Title:

Address for Notices:

2929 Seventh Street, Suite 100
Berkeley, California 94710
Attn: [_____]
Tel.: [_____]
Fax: [_____]
Email: [_____]

Exhibit H
to Term Loan Agreement

FORM OF INTERCREDITOR AGREEMENT

This Intercreditor Agreement, dated as of [_____] (this "***Agreement***"), is made between CRG Servicing LLC, a Delaware limited liability company, as Administrative Agent, and [INSERT NAME OF A/R LENDER], a [_____] ("***[A/R Lender]***").

RECITALS

A. Dynavax Technologies Corporation, a Delaware corporation ("***Borrower***"), has entered into the A/R Facility Agreement (as defined below) with [A/R Lender], which, along with any other obligations owing to [A/R Lender] by Borrower, is secured by certain property of Borrower [and the other Obligors (as defined below)].

B. Borrower [has][and the other Obligors have] entered into that certain Term Loan Agreement, dated as of February 20, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "***CRG Credit Agreement***"), with certain lenders and CRG Servicing LLC, a Delaware limited liability company, as administrative agent and collateral agent for such lenders (in such capacities and together with its successors and assigns, "***CRG Agent***"), which is secured by certain property of Borrower [and the other Obligors].

C. To induce each of [A/R Lender] and the lenders under the CRG Credit Agreement to make and maintain the credit extensions under the A/R Facility Agreement and the CRG Credit Agreement, respectively, each of [A/R Lender] and CRG Agent, on behalf of the "Secured Parties" (as defined in the CRG Credit Agreement, the "***CRG Creditors***"; CRG Creditors, collectively with [A/R Lender], "***Creditors***" and each individually, a "***Creditor***"), is willing to enter into this Agreement to, among other things, subordinate certain of its liens on the terms and conditions herein set forth.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Definitions. As used herein, the following terms have the following meanings:

"***A/R Facility Agreement***" means that certain [Credit Agreement], dated as of [_____], between [A/R Lender] and Borrower, as the same may be amended, restated, supplemented or otherwise modified from time to time.

"***A/R Facility Documents***" means the A/R Facility Agreement and all [Loan Documents], each as defined in the A/R Facility Agreement.

"***A/R Facility Senior Collateral***" means (i) [8][Borrower's] accounts arising from the sale or lease of inventory or the provision of services, excluding IP/Equipment Accounts (collectively, "***Inventory/Service Accounts***"), (ii) [Borrower's] inventory, (iii) to the extent evidencing, governing, or securing [Borrower's] Inventory/Service Accounts or inventory, [Borrower's] payment intangibles, chattel paper, instruments and documents, (iv) to the extent held in a segregated deposit account that does not contain other cash, cash proceeds of [Borrower's] Inventory/Service Accounts and inventory, and (v) proceeds of insurance policies covering [Borrower's] Inventory/Service Accounts and inventory received with respect to such accounts and inventory; *provided* that, for purposes of clarification, notwithstanding the foregoing, in no event shall "A/R Facility Senior Collateral" include any right, title or interest of any Obligor in (A) any Intellectual Property or any licenses thereof, (B) any accounts or proceeds arising from the sale, transfer, licensing or other disposition of any Intellectual Property or licenses, or from the sale, transfer, lease or other disposition of equipment (collectively, "***IP/Equipment Accounts***"), (C) equipment, (D) to the extent evidencing, governing, securing or otherwise related to equipment, any general intangibles, chattel paper, instruments or documents or (E) proceeds of equipment or proceeds of insurance policies with respect to equipment.

"***Bankruptcy Code***" means the federal bankruptcy law of the United States as from time to time in effect, currently as Title 11 of the United States Code. Section references to current sections of the Bankruptcy Code shall refer to comparable sections of any revised version thereof if section numbering is changed.

"***Claim***" means, (i) in the case of [A/R Lender], any and all present and future "claims" (used in its broadest sense, as contemplated by and defined in Section 101(5) of the Bankruptcy Code, but without regard to whether such claim would be disallowed under the Bankruptcy Code) of [A/R Lender] now or hereafter arising or existing under or relating to the A/R Facility Documents (with the portion of [A/R Lender]'s Claim at any time consisting of the aggregate principal amount of indebtedness under the A/R Facility Documents not to exceed the lesser of $[_____] and 80% of the face amount at such time of [Borrower's] eligible (as provided in the A/R Facility Agreement as of the date hereof) Inventory/Service Accounts, whether joint, several, or joint and several, whether fixed or indeterminate, due or not yet due, contingent or non-contingent, matured or unmatured, liquidated or unliquidated, or disputed or undisputed, whether under a guaranty or a letter of credit, and whether arising under contract, in tort, by law, or otherwise, any interest or fees thereon (including interest or fees that accrue after the filing of a petition by or against any Obligor under the Bankruptcy Code, irrespective of whether allowable under the Bankruptcy Code), any costs of Enforcement Actions, including reasonable attorneys' fees and costs, and any prepayment or termination fees, and (ii) in the case of CRG Creditors, any and all present and future "claims" (used in its broadest sense, as contemplated by and defined in Section 101(5) of the Bankruptcy Code, but without regard to whether such claim would be disallowed under the Bankruptcy Code) of CRG Creditors now or hereafter arising or existing under or relating to the CRG Documents, whether joint, several, or joint and several, whether fixed or indeterminate, due or not yet due, contingent or non-contingent, matured or unmatured, liquidated or unliquidated, or disputed or undisputed, whether under a guaranty or a

8 See definition of "Permitted Priority Debt" and conform to parties who are permitted in that definition to be pledgers of liens securing Permitted Priority Debt.

letter of credit, and whether arising under contract, in tort, by law, or otherwise, any interest or fees thereon (including interest or fees that accrue after the filing of a petition by or against any Obligor under the Bankruptcy Code, irrespective of whether allowable under the Bankruptcy Code), any costs of Enforcement Actions, including reasonable attorneys' fees and costs, and any prepayment or termination fees.

"***Collateral***" means all real or personal property of any Obligor in which any Creditor now or hereafter has a security interest.

"***Common Collateral***" means all Collateral in which both [A/R Lender] and CRG Agent have a security interest.

"***CRG Documents***" means all documentation related to the CRG Credit Agreement and all Loan Documents (as defined in the CRG Credit Agreement), including security or pledge agreements and all other related agreements.

"***CRG Senior Collateral***" means all Collateral in which CRG Agent has a security interest, other than the A/R Facility Senior Collateral, including, for the avoidance of doubt and without limitation, any additional Collateral in which CRG Agent may have a security interest following the commencement of or in connection with any Insolvency Proceeding, including without limitation Collateral subject to any CRG Agent security interests, superpriority claims, or other rights arising under Sections 507(b) and 552 of the Bankruptcy Code.

"***Credit Documents***" means, collectively, the CRG Documents and the A/R Facility Documents.

"***Enforcement Action***" means, with respect to any Creditor and with respect to any Claim of such Creditor or any item of Collateral in which such Creditor has or claims a security interest, lien, or right of offset, (i) any action, whether judicial or nonjudicial, to repossess, collect, offset, recoup, give notification to third parties with respect to, sell, dispose of, foreclose upon, give notice of sale, disposition, or foreclosure with respect to, or obtain equitable or injunctive relief with respect to, such Claim or Collateral, (ii) any action in connection with any Insolvency Proceeding to protect, defend, enforce or assert rights with respect to such Claim or Collateral, including without limitation filing and defending any proof of claim, opposing or joining in the opposition of any sale of assets or confirmation of a plan of reorganization, or opposing or joining in the opposition of any proposed debtor-in-possession loan or use of cash collateral, and (iii) the filing of, or the joining in the filing of, an involuntary bankruptcy or insolvency proceeding against any Obligor.

"***Intellectual Property***" means, collectively, all copyrights, copyright registrations and applications for copyright registrations, including all renewals and extensions thereof, all rights to recover for past, present or future infringements thereof and all other rights whatsoever accruing thereunder or pertaining thereto (collectively, "***Copyrights***"), all patents and patent applications, including the inventions and improvements described and claimed therein together with the reissues, divisions, continuations, renewals, extensions and continuations in part thereof, all damages and payments for past or future infringements thereof and rights to sue therefor, and all rights corresponding thereto throughout the world and all income, royalties, damages and

payments now or hereafter due and/or payable under or with respect thereto (collectively, "***Patents***"), and all trade names, trademarks and service marks, logos, trademark and service mark registrations, and applications for trademark and service mark registrations, including all renewals of trademark and service mark registrations, all rights to recover for all past, present and future infringements thereof and all rights to sue therefor, and all rights corresponding thereto throughout the world (collectively, "***Trademarks***"), together, in each case, with the product lines and goodwill of the business connected with the use of, and symbolized by, each such trade name, trademark and service mark, together with (a) all inventions, processes, production methods, proprietary information, know-how and trade secrets; (b) all licenses or user or other agreements granted to any Obligor with respect to any of the foregoing, in each case whether now or hereafter owned or used; (c) all information, customer lists, identification of suppliers, data, plans, blueprints, specifications, designs, drawings, recorded knowledge, surveys, engineering reports, test reports, manuals, materials standards, processing standards, performance standards, catalogs, computer and automatic machinery software and programs; (d) all field repair data, sales data and other information relating to sales or service of products now or hereafter manufactured; (e) all accounting information and all media in which or on which any information or knowledge or data or records may be recorded or stored and all computer programs used for the compilation or printout of such information, knowledge, records or data; (f) all licenses, consents, permits, variances, certifications and approvals of governmental agencies now or hereafter held by any Obligor; and (g) all causes of action, claims and warranties now or hereafter owned or acquired by any Obligor in respect of any of the items listed above.

"***Junior Collateral***" means, (i) in the case of [A/R Lender], all Common Collateral consisting of CRG Senior Collateral and (ii) in the case of CRG Creditors, all Common Collateral consisting of A/R Facility Senior Collateral.

"***Obligor***" means Borrower, each subsidiary thereof and each other person or entity that provides a guaranty of, or collateral for, any Claim of any Creditor.

"***Proceeds Sweep Period***" means the period beginning on the later to occur of (i) the occurrence of an event of default under any Creditor's Credit Documents and (ii) receipt by the other Creditor of written notice from such Creditor of such event of default, and ending on the date on which such event of default shall have been waived in writing by the Creditor issuing such notice.

"***Senior Collateral***" means, (i) in the case of [A/R Lender], all A/R Facility Senior Collateral and (ii) in the case of CRG Creditors, all CRG Senior Collateral.

"***UCC***" means the Uniform Commercial Code of any applicable jurisdiction and, if the applicable jurisdiction shall not have any Uniform Commercial Code, the Uniform Commercial Code as in effect in the State of New York. The following terms have the meanings given to them in the applicable UCC: "account", "chattel paper", "commodity account", "deposit account", "document", "equipment", "general intangible", "instrument", "inventory", "proceeds" and "securities account".

2. Lien Subordination (a) Notwithstanding the respective dates of attachment or perfection of the security interests of CRG Creditors and the security interests of [A/R Lender], or any contrary provision of the UCC, or any applicable law or decision, or the provisions of the Credit Documents, and irrespective of whether [A/R Lender] or any CRG Creditor holds possession of all or any part of the Collateral, (i) all now existing and hereafter arising security interests of [A/R Lender] in any A/R Facility Senior Collateral shall at all times be senior to the security interests of CRG Creditors in such A/R Facility Senior Collateral, and (ii) all now existing and hereafter arising security interests of CRG Creditors in any CRG Senior Collateral shall at all times be senior to any interests, including the security interests of [A/R Lender] in such CRG Senior Collateral. Notwithstanding the foregoing, [A/R Lender] agrees and acknowledges that it shall not receive, and [neither Borrower nor any Obligor shall grant][Borrower shall not grant], any security interest to [A/R Lender] in the CRG Senior Collateral.

(b) Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors:

(i) acknowledges and consents to (A) [Borrower][each Obligor] granting to the other Creditor a security interest in the Common Collateral of such other Creditor, (B) the other Creditor filing any and all financing statements and other documents as reasonably deemed necessary by the other Creditor in order to perfect its security interest in its Common Collateral, and (C) [Borrower's][each Obligor's] entry into the Credit Documents to which the other Creditor is a party.

(ii) acknowledges, agrees and covenants, notwithstanding Section 2(c) but subject to Section 5, that it shall not contest, challenge or dispute the validity, attachment, perfection, priority or enforceability of the other Creditor's security interest in the Common Collateral, or the validity, priority or enforceability of the other Creditor's Claim. For the avoidance of doubt and notwithstanding anything in this Agreement to the contrary, [A/R Lender] shall not file or join in any motion or pleading in connection with any Insolvency Proceeding or take any other action seeking to recharacterize any Intellectual Property, the proceeds thereof, or any other CRG Senior Collateral or proceeds thereof as A/R Facility Senior Collateral.

(c) Subject to **Section 2(b)(ii)**, the priorities provided for herein with respect to security interests and liens are applicable only to the extent that such security interests and liens are enforceable, perfected and have not been avoided; if a security interest or lien is judicially determined to be unenforceable or unperfected or is judicially avoided with respect to one or more Claims or any part thereof, the priorities provided for herein shall not be available to such security interest or lien to the extent that it is avoided or determined to be unenforceable

. Nothing in this **Section 2(c)** affects the operation of any turnover of payment provisions hereof, or of any other agreements among any of the parties hereto.

3. Distribution of Proceeds of Common Collateral. (a) During each Proceeds Sweep Period, all proceeds including proceeds of any sale, exchange, collection, or other disposition of:

(i) A/R Facility Senior Collateral shall be distributed first, to [A/R Lender], in an amount up to the amount of [A/R Lender]'s Claim; then, to CRG Agent, in an amount up to the amount of CRG Creditors' Claim;

(ii) CRG Senior Collateral shall be distributed first, to CRG Agent, in an amount up to the amount of CRG Creditors' Claim; then, to [A/R Lender], in an amount up to the amount of [A/R Lender]'s Claim.

(b) In the event that, notwithstanding **Section 3(a)**, any Creditor shall during any Proceeds Sweep Period receive any payment, distribution, security or proceeds constituting its Junior Collateral prior to the indefeasible payment in full of the other set of Creditors' Claims and termination of all commitments of the other set of Creditors under their Credit Documents, such Creditor shall hold in trust, for such other Creditor, such payment, distribution, security or proceeds, and shall deliver to such other Creditor, in the form received (with any necessary endorsements or as a court of competent jurisdiction may otherwise direct) such payment, distribution, security or proceeds for application to the other set of Creditors' Claims in accordance with **Section 3(a)**.

(c) At all times other than during a Proceeds Sweep Period, all proceeds including proceeds of any sale, exchange, collection, or other disposition of Collateral shall be distributed or applied, as applicable, in accordance with the CRG Documents and the A/R Facility Documents.

(d) Except as expressly set forth herein, nothing in this **Section 3** shall obligate any Creditor (i) to sell, exchange, collect or otherwise dispose of Collateral at any time, or (ii) to take any action in violation of any stay imposed in connection with any Insolvency Proceeding, including without limitation the automatic stay in Section 362(a) of the Bankruptcy Code, nor shall any Creditor have any liability to the other arising from or in connection with such Creditor's failure to take such action.

4. Subordination of Remedies. Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors (such Person for purposes of this **Section 4**, the "***Junior Creditor***"), agrees, subject to **Section 5**, that, (i) unless and until all Claims of the other set of Creditors (for purposes of this **Section 4**, the "***Senior Creditor***") have been indefeasibly paid in full and all commitments of the Senior Creditor under its Credit Documents have been terminated, or (ii) until the expiration of a period of 180 days from the date of notice of default under the Senior Creditor's Credit Documents given by the Senior Creditor to the Junior Creditor, whichever is earlier, and whether or not any Insolvency Proceeding has been commenced by or against any Obligor, the Junior Creditor shall not, without the prior written consent of the Senior Creditor, enforce, or attempt to enforce, any rights or remedies under or with respect to any of such Junior Creditor's Junior Collateral, including causing or compelling the pledge or delivery of such Junior Collateral, any attachment of, levy upon, execution against, foreclosure upon or the taking of other action against or institution of other proceedings with respect to any such Junior Collateral, notifying

any account debtors of any Obligor, asserting any claim or interest in any insurance with respect to such Junior Collateral, or exercising any rights under any lockbox agreement, account control agreement, landlord waiver or bailee's letter or similar agreement or arrangement with respect to such Junior Collateral, or institute or commence, or join with any person or entity in commencing, any action or proceeding with respect to such rights or remedies (including any action of foreclosure, enforcement, collection or execution and any Insolvency Proceeding involving any Obligor), except that notwithstanding the foregoing, at all times, including during a Proceeds Sweep Period, the Junior Creditor shall be able to exercise its rights under a lockbox agreement or an account control agreement with respect to any deposit account, securities account or commodity account constituting Collateral, including its rights to freeze such account or exercise any rights of offset; *provided* that any distribution or withdrawal from such account shall be applied in accordance with **Section 3(a)**.

5. Insolvency Proceedings

(a) **Rights Continue**. In the event of any Obligor's insolvency, reorganization or any case, action or proceeding, commenced by or against such Obligor, under any bankruptcy or insolvency law or laws relating to the relief of debtors, including, without limitation, any voluntary or involuntary bankruptcy (including any case commenced under the Bankruptcy Code), insolvency, receivership, liquidation, dissolution, winding-up or other similar statutory or common law proceeding or arrangement involving any Obligor, the readjustment of its liabilities, any assignment for the benefit of its creditors, or any marshalling of its assets or liabilities (each, an "***Insolvency Proceeding***"), (i) this Agreement shall remain in full force and effect in accordance with Section 510(a) of the United States Bankruptcy Code, and (ii) the Collateral shall include, without limitation, all Collateral arising during or after any such Insolvency Proceeding (which Collateral shall be subject to the priorities set forth in this Agreement).

(b) **Proof of Claim, Sales and Plans**. At any meeting of creditors or in the event of any Insolvency Proceeding, each Creditor shall retain the right to vote, file a proof of claim and otherwise act with respect to its Claims (including the right to vote to accept or reject any plan of partial or complete liquidation, reorganization, arrangement, composition, or extension (a "***Plan***")); *provided* that (i) no Creditor shall initiate, prosecute or participate in any claim or action in such Insolvency Proceeding directly or indirectly challenging the enforceability, validity, perfection or priority of the other set of Creditors' Claims, this Agreement, the Credit Documents, or any liens securing the other set of Creditors' Claims; and (ii) no Creditor shall propose any Plan or file or join in any motion or pleading in support of any motion or Plan or exercise any other voting rights unless such Plan provides for the treatment of the Creditors' claims in accordance with the terms of **Section 5(g)** and otherwise consistent with the terms of this Agreement, or that would otherwise impair the timely repayment of the other set of Creditors' Claims in accordance with its terms or impair or impede any rights of the other set of Creditors.

(c) **Finance and Sale Issues** (i) If any Obligor shall be subject to any Insolvency Proceeding and a Creditor shall desire to permit the use by such Obligor of cash collateral (as defined in Section 363(a) of the Bankruptcy Code, "***Cash Collateral***") constituting such Creditor's Senior Collateral or to permit any Obligor to obtain financing (including on a priming

basis with respect to such Creditor's Senior Collateral), whether from such Creditor or any other third party under Section 362, 363 or 364 of the Bankruptcy Code or any other applicable law (each, a "***Post-Petition Financing***"), then the other set of Creditors shall not oppose or raise any objection to or contest (or join with or support any third party opposing, objecting to or contesting), such use of Cash Collateral or Post-Petition Financing and shall not request adequate protection or any other relief in connection therewith (except as specifically permitted under **Section 5(e)**); *provided, however,* that, notwithstanding the foregoing, each Creditor shall be entitled to oppose, raise objection to, or contest (or join with or support any third party opposing, objecting to, or contesting) any such use of Cash Collateral or Post-Petition Financing if such proposed use of Cash Collateral or Post-Petition Financing would result in any liens on such Creditor's Senior Collateral to be subordinated to or *pari passu* with such Cash Collateral or Post-Petition Financing.

(ii) Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, agrees that it shall raise no objection to, and shall not oppose or contest (or join with or support any third party opposing, objecting to or contesting), a sale, revesting or other disposition of any Collateral constituting its Junior Collateral free and clear of its liens or other Claims, whether under Sections 363 or 1141 of the Bankruptcy Code or other applicable law, if the other set of Creditors has consented to such sale or disposition of such assets; *provided, however,* that, notwithstanding the foregoing and for the avoidance of doubt, any Creditor shall be entitled to oppose, raise objection to, or contest (or join with or support any third party opposing, objecting to, or contesting) any sale, revesting or other disposition of any Collateral constituting its Senior Collateral free and clear of its liens or other Claims.

(d) **Relief from the Automatic Stay**. Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, agrees that, until the other set of Creditors' Claims have been indefeasibly paid in full, such Creditor shall not seek relief, pursuant to Section 362(d) of the Bankruptcy Code or otherwise, from the automatic stay of Section 362(a) of the Bankruptcy Code or from any other stay in any Insolvency Proceeding in respect of its Junior Collateral without the prior written consent of such other Creditor.

(e) **Adequate Protection**. [A/R Lender] agrees that it shall not:

(i) oppose, object to or contest (or join with or support any third party opposing, objecting to or contesting) (A) any request by CRG Agent for adequate protection in any Insolvency Proceeding (or any granting of such request), or (B) any objection by CRG Agent to any motion, relief, action or proceeding based on such Senior Creditor claiming a lack of adequate protection; or

(ii) seek or accept any form of adequate protection under any of Sections 362, 363 and/or 364 of the Bankruptcy Code with respect to the Collateral, except to the extent that, in the sole discretion of CRG Agent, the receipt by [A/R Lender] of any such adequate protection would not reduce (or would not have the effect of reducing) or adversely affect the adequate protection that CRG Creditors otherwise would be entitled to receive, it being understood that, in any event, (y) no adequate protection shall be requested or accepted by [A/R Lender] unless CRG Agent is satisfied in its sole discretion with the adequate protection afforded to CRG

Creditors, and (z) any such adequate protection is in the form of a replacement lien on the Obligors' assets, which lien shall be subordinated to the liens securing CRG Creditors' Claims (including any replacement liens granted in respect of CRG Creditors' Claims) and any Post-Petition Financing (and all obligations relating thereto) on the same basis as the other liens securing [A/R Lender]'s Claims are so subordinated to the liens securing CRG Creditors' Claims as set forth in this Agreement.

(f) **Post-Petition Interest**. Each Creditor shall not oppose or seek to challenge any claim by the other set of Creditors for allowance in any Insolvency Proceeding of Claims consisting of post-petition interest, fees or expenses; *provided* that the treatment of such Claims are consistent with the Creditors' relative priorities set forth in this Agreement.

(g) **Separate Class**. Without limiting anything to the contrary contained herein or in the Credit Documents, each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, acknowledges and agrees that (i) the grants of liens pursuant to the CRG Documents and the A/R Facility Documents constitute two separate and distinct grants of liens, and (ii) because of, among other things, their differing rights in the Collateral, each set of Creditors' Claims are fundamentally different from the other's Claims and must be separately classified in any Plan proposed or adopted in an Insolvency Proceeding. To further effectuate the intent of the parties as provided in the immediately preceding sentence, if it is held that the respective Claims of the Creditors in respect of the Collateral constitute only one secured claim (rather than separate classes of senior and junior secured claims), then each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, acknowledges and agrees (x) that all distributions shall be made as if there were separate classes of senior and junior secured claims against the Obligors in respect of the Collateral, and (y) to turn over to the other Creditor amounts otherwise received or receivable by it in the manner described in **Section 3(b)** to the extent necessary to effectuate the intent of this sentence.

(h) **Waiver**. Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, waives any claim it may hereafter have against the other set of Creditors arising out of the election by such other set of Creditors of the application to the claims of such other set of Creditors of Section 1111(b)(2) of the Bankruptcy Code, and/or out of any Cash Collateral or Post-Petition Financing arrangement or out of any grant of a lien in connection with the Collateral in any Insolvency Proceeding.

6. Notice of Default. Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, shall give to the other prompt written notice of the occurrence of any default or event of default (which has not been promptly waived or cured) under any of its Credit Documents of which it has knowledge (and any subsequent cure or waiver thereof) and shall, simultaneously with giving any notice of default or acceleration to Borrower, provide to such other Creditor a copy of such notice of default. [A/R Lender] acknowledges and agrees that any event of default under the A/R Facility Documents shall be deemed to be an event of default under the CRG Documents. For the avoidance of doubt, nothing in this **Section 6** shall obligate any Creditor to provide any notice in violation of any stay imposed in connection with any Insolvency Proceeding, including without limitation the automatic stay in Section 362(a) of the Bankruptcy

Code, nor shall any Creditor have any liability to the other arising from or in connection with such Creditor's failure to take such action.

7. Release of Liens. In the event of any private or public sale or other disposition, by or with the consent of [A/R Lender] and CRG Agent, on behalf of CRG Creditors (such Person, for purposes of this **Section 7**, the "***Senior Creditor***"), of all or any portion of such set of Creditors' Senior Collateral, CRG Agent, on behalf of CRG Creditors, and [A/R Lender], respectively (for purposes of this **Section 7**, the "***Junior Creditor***"), agrees that such sale or disposition shall be free and clear of such Junior Creditor's liens; *provided* that such sale or disposition is made in accordance with the UCC or applicable provisions of the Bankruptcy Code, including without limitation Sections 363(f) or 1141(c) of the Bankruptcy Code. The Junior Creditor agrees that, in connection with any such sale or other disposition, (i) the Senior Creditor is authorized to file any and all UCC and other applicable lien releases and/or terminations in respect of the liens held by the Junior Creditor in connection with such a sale or other disposition, and (ii) it shall execute any and all lien releases or other documents reasonably requested by the Senior Creditor in connection therewith.

8. Attorney-In-Fact. Until the CRG Creditors' Claims have been fully paid in cash and the CRG Creditors' arrangements to lend any funds to the Obligors have been terminated, [A/R Lender] irrevocably appoints CRG Agent as [A/R Lender]'s attorney-in-fact, and grants to CRG Agent a power of attorney with full power of substitution (which power of attorney is coupled with an interest), in the name of [A/R Lender] or in the name of CRG Agent, for the use and benefit of CRG Agent, without notice to [A/R Lender], to perform at CRG Agent's option the following acts in any bankruptcy, insolvency or similar proceeding involving Borrower:

(a) To file the appropriate claim or claims in respect of the [A/R Lender] Claims on behalf of [A/R Lender] if [A/R Lender] does not do so prior to 30 days before the expiration of the time to file claims in such proceeding and if CRG Agent elects, in its sole discretion, to file such claim or claims; and

(b) To accept or reject any plan of reorganization or arrangement on behalf of [A/R Lender] and to otherwise vote [A/R Lender]'s claims in respect of any [A/R Lender] Claim in any manner that CRG Agent deems appropriate for the enforcement of its rights hereunder.

9. Agent for Perfection. [A/R Lender] acknowledges that applicable provisions of the UCC may require, in order to properly perfect CRG Creditors' security interest in the Common Collateral securing the CRG Creditors' Claims, that CRG Agent possess certain of such Common Collateral, and may require the execution of control agreements in favor of CRG Agent concerning such Common Collateral. In order to help ensure that CRG Creditors' security interest in such Common Collateral is properly perfected (but subject to and without waiving the other provisions of this Agreement), [A/R Lender] agrees to hold both for itself and, solely for the purposes of perfection and without incurring any duties or obligations to CRG Creditors as a result thereof or with respect thereto, for the benefit of CRG Creditors, any such Common Collateral, and agrees that CRG Creditors' lien in such Common Collateral shall be deemed perfected in accordance with applicable law.

10. Credit Documents (a) Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, represents and warrants that it has provided to the other true, correct and complete copies of all Credit Documents which relate to its credit agreement. At any time and from time to time, without notice to the other set of Creditors, each Creditor may take such actions with respect to its Claims as such Creditor, in its sole discretion, may deem appropriate, including, without limitation, terminating advances under its Credit Documents, increasing the principal amount, extending the time of payment, increasing applicable interest to the default rate, renewing, compromising or otherwise amending the terms of any documents affecting its Claims and any Collateral therefor, and enforcing or failing to enforce any rights against Borrower or any other person, and no such action or inaction described in this sentence shall impair or otherwise affect such Creditor's rights hereunder; *provided*, *however*, that (i) no Creditor shall take any action that is inconsistent with the provisions of this Agreement, and (ii) [A/R Lender] shall not increase the portion of [A/R Lender]'s Claim consisting of principal to an amount in excess of $[_____] without the prior written consent of CRG Agent. Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, waives the benefits, if any, of any statutory or common law rule that may permit a subordinating creditor to assert any defenses of a surety or guarantor, or that may give the subordinating creditor the right to require a senior creditor to marshal assets, and each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, agrees that it shall not assert any such defenses or rights.

(b) Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, agrees that any other Creditor may release or refrain from enforcing its security interest in the Collateral, or permit the use or consumption of such Collateral by any Obligor free of the other Creditor's security interest, without incurring any liability to any other Creditor.

11. Waiver of Right to Require Marshaling. Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, expressly waives any right that it otherwise might have to require any other Creditor to marshal assets or to resort to Collateral in any particular order or manner, whether provided for by common law or statute. No Creditor shall be required to enforce any guaranty or any security interest or lien given by any person or entity as a condition precedent or concurrent to the taking of any Enforcement Action with respect to the Collateral.

12. Representations and Warranties. Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, represents and warrants to the other that:

(a) all action on the part of such Creditor, its officers, directors, partners, members and shareholders, as applicable, necessary for the authorization of this Agreement and the performance of all obligations of such Creditor hereunder has been taken;

(b) this Agreement constitutes the legal, valid and binding obligation of such Creditor, enforceable against such Creditor in accordance with its terms;

(c) the execution, delivery and performance of and compliance with this Agreement by such Creditor will not (i) result in any material violation or default of any term of any of such Creditor's charter, formation or other organizational documents (such as Articles or Certificate of Incorporation, bylaws, partnership agreement, operating agreement, etc.) or (ii) violate any material applicable law, rule or regulation.

13. **Disgorgement** (a) If, at any time after payment in full of the [A/R Lender] Claims any payments of the [A/R Lender] Claims must be disgorged by [A/R Lender] for any reason (including, without limitation, any Insolvency Proceeding), this Agreement and the relative rights and priorities set forth herein shall be reinstated as to all such disgorged payments as though such payments had not been made and CRG Creditors shall immediately pay over to [A/R Lender] all money or funds received or retained by CRG Creditors with respect to the CRG Creditors' Claims to the extent that such receipt or retention would have been prohibited hereunder.

(b) If, at any time after payment in full of the CRG Creditors' Claims any payments of the CRG Creditors' Claims must be disgorged by any CRG Creditor for any reason (including, without limitation, any Insolvency Proceeding), this Agreement and the relative rights and priorities set forth herein shall be reinstated as to all such disgorged payments as though such payments had not been made and [A/R Lender] shall immediately pay over to CRG Agent all money or funds received or retained by [A/R Lender] with respect to the [A/R Lender] Claims to the extent that such receipt or retention would have been prohibited hereunder

.

14. **Successors and Assigns**. This Agreement shall bind any successors or assignees of each Creditor. This Agreement shall remain effective until all Claims are indefeasibly paid or otherwise satisfied in full and [A/R Lender] and the CRG Creditors have no commitment to extend credit under the Credit Documents. This Agreement is solely for the benefit of the Creditors and not for the benefit of Borrower or any other party. Each Creditor shall not sell, assign, pledge, dispose of or otherwise transfer all or any portion of its Claims or any of its Credit Documents or any interest in any Common Collateral unless, prior to the consummation of any such action, the transferee thereof shall execute and deliver to the other set of Creditors an agreement of such transferee to be bound hereby, or an agreement substantially identical to this Agreement providing for the continued subjection of such Claims, the interests of the transferee in the Collateral and the remedies of the transferee with respect thereto as provided herein with respect to the transferring Creditor and for the continued effectiveness of all of the other rights of the other Creditor arising under this Agreement, in each case in form satisfactory to the other set of Creditors.

15. **Further Assurances**. Each of [A/R Lender] and CRG Agent, on behalf of CRG Creditors, agrees to execute such documents and/or take such further action as the other Creditor may at any time or times reasonably request in order to carry out the provisions and intent of this Agreement, including, without limitation, ratifications and confirmations of this Agreement from time to time hereafter, as and when requested by the other Creditor.

16. **Counterparts**. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

17. **Governing Law; Waiver of Jury Trial** (a) This Agreement and the rights and obligations of the parties hereunder shall be governed by, and construed in accordance with, the law of the State of New York without regard to principles of conflicts of laws that would result in the application of the laws of any other jurisdiction.

(b) EACH CREDITOR WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREIN.

18. Entire Agreement. This Agreement represents the entire agreement with respect to the subject matter hereof, and supersedes all prior negotiations, agreements and commitments. Each Creditor is not relying on any representations by the other Creditor, Borrower or any other Obligor in entering into this Agreement, and each Creditor has kept and will continue to keep itself fully apprised of the financial and other condition of each Obligor. This Agreement may be amended only by written instrument signed by the Creditors.

19. Relationship among Creditors. The relationship among the Creditors is, and at all times shall remain solely that of creditors of Obligors. Creditors shall not under any circumstances be construed to be partners or joint venturers of one another; nor shall the Creditors under any circumstances be deemed to be in a relationship of confidence or trust or a fiduciary relationship with one another, or to owe any fiduciary duty to one another. Creditors do not undertake or assume any responsibility or duty to one another to select, review, inspect, supervise, pass judgment upon or otherwise inform each other of any matter in connection with any Obligor's property, any Collateral held by any Creditor or the operations of any Obligor. Each Creditor shall rely entirely on its own judgment with respect to such matters, and any review, inspection, supervision, exercise of judgment or supply of information undertaken or assumed by any Creditor in connection with such matters is solely for the protection of such Creditor.

20. No Modification. Notwithstanding anything contained herein, no provision of this Agreement shall be deemed to waive, amend, limit or otherwise modify any term or condition of the CRG Credit Agreement and the A/R Facility Documents.

21. Severability. Any provision of this Agreement which is illegal, invalid, prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent such illegality, invalidity, prohibition or unenforceability without invalidating or impairing the remaining provisions hereof or affecting the validity or enforceability of such provision in any other jurisdiction.

22. Notices. All notices, demands, instructions and other communications required or permitted to be given to or made upon any party hereto shall be in writing and shall be delivered or sent by first-class mail, postage prepaid, or by overnight courier or messenger service or by facsimile, message confirmed, and shall be deemed to be effective for purposes of this Agreement on the day that delivery is made or refused. Unless otherwise specified in a notice mailed or delivered in accordance with the foregoing sentence, notices, demands, instructions and other communications in writing shall be given to or made upon the respective parties hereto at their respective addresses and facsimile numbers indicated on the signature pages hereto.

[Signature pages follow]

IN WITNESS WHEREOF, the undersigned have executed this Intercreditor Agreement as of the date first above written.

[A/R Lender]:
[INSERT NAME OF A/R LENDER]

By _____
Name: [_____]
Title: [_____]

Address for Notices:

[_____]
[_____]
[_____]
Tel: [_____]
Email: [_____]

CRG AGENT:
CRG SERVICING LLC

By _____
Name:
Title:

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

Acknowledged and Agreed to:

BORROWER:
DYNAVAX TECHNOLOGIES CORPORATION

By: _____
Name: [_____]
Title: [_____]

Address for Notices:

2929 Seventh Street, Suite 100

Berkeley, California 94710
Attn: [_____]
Tel.: [_____]
Fax: [_____]
Email: [_____]

Exhibit H-15

Exhibit I
to Term Loan Agreement

FORM OF NON-DISTURBANCE AGREEMENT

THIS AGREEMENT, made as of this_____day of_, 20 , by and among [INSERT NAME OF BORROWER OR OTHER GRANTOR] ("***Licensor***") and [INSERT NAME OF LICENSEE] ("***Licensee***"), as parties to the License Agreement (as defined below), and the Administrative Agent (as defined below) as the holder of the Security Interest (as defined below).

W I T N E S S E T H:

WHEREAS, Licensor and Licensee [are parties to/will enter into] that certain [License Agreement] [dated [as of/on or about] , 20[ ] (the "***License Agreement***"), providing for a collaboration, license, joint venture, partnership, royalty agreement or similar agreement or other research, development, manufacturing or other commercial exploitation arrangement with respect to certain intellectual property and other property owned or controlled by Licensor (the "***Licensed Property***") for the term and upon the conditions set forth therein; and

WHEREAS, Licensor has entered into that Term Loan Agreement (the "***Loan Agreement***") dated as of February 20, 2018 with the lenders from time to time party thereto (the "***Lenders***") and CRG Servicing LLC, as administrative agent and collateral agent (in such capacities, the "***Administrative Agent***") and has entered into a Security Agreement and related documents in the forms attached to the Loan Agreement (collectively, the "***Security Documents***", and together with the Loan Agreement, the "***Loan Documents***") with the Administrative Agent (together with the Lenders and other secured parties thereunder, the "***Secured Parties***") pursuant to which Licensor has granted to the Administrative Agent and the other Secured Parties a security interest in some or all of the Licensed Property (the "***Security Interest***"); and

WHEREAS, Licensee has requested that the Administrative Agent agree not to disturb any of Licensee's rights with respect to the Licensed Property granted under the License Agreement (the "***Licensee Rights***") in the event that upon an Event of Default (as such term is used in the Loan Documents), the Administrative Agent or any Secured Party takes possession of, sells, assigns, grants a license with respect to or otherwise exercises its rights and remedies under the Loan Documents with respect to all or any portion of the collateral constituting Licensed Property (in each case, a "***Foreclosure***").

NOW, THEREFORE, in consideration for the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and of the mutual benefits to accrue to the parties hereto, it is hereby declared, understood and agreed as follows:

1. The Administrative Agent, acting on its own behalf and on behalf of the other Secured Parties, acknowledges that it has received and reviewed a copy of the License Agreement attached hereto as **Exhibit A**. To the extent consent is required under the Loan Documents for Licensor to execute, deliver or perform under the License Agreement, the

Administrative Agent, acting on its own behalf and on behalf of the other Secured Parties, consents to Licensor's execution, delivery and performance of the License Agreement attached hereto as **Exhibit A**, provided that such consent shall not extend to Licensor's execution, delivery and performance of an amended License Agreement that (A) is materially different from the form attached hereto as **Exhibit A**, or (B) would constitute a breach or default under the Loan Documents. Licensee acknowledges that the Licensed Property and the License Agreement will constitute Collateral under the Security Agreement [and][,] consents to the Security Interest [, and consents to the transfer of the Licensed Property and the License Agreement in connection with any Foreclosure subject to the provisions of Section 2 hereof][11].

2. In the event of a Foreclosure, it is agreed as follows:

(a) Any transfer of Licensor's rights in the Licensed Property or the License Agreement to Secured Parties or any other purchaser at a secured parties' sale or other disposition (any such transferee of the Licensed Property, a "***Successor Licensor***") shall be subject to and not free and clear of the Licensee Rights and none of the Licensee Rights shall be discharged, waived, modified, impaired or terminated solely as a result of such transfer of the Licensed Property, in each case subject to the terms of **Section 2(b)** and **Section 2(d)**.

(b) Provided that (i) the License Agreement is in full force and effect and (ii) Licensee is not in default or breach of the License Agreement in a manner that would permit the Licensor to terminate the License Rights, (x) neither Secured Parties nor any Successor Licensor will disturb, diminish or interfere with the Licensee Rights, including, without limitation, any sublicenses granted or permitted to be granted thereunder, and (y) the Administrative Agent, on behalf of itself and the other Secured Parties, undertakes that it shall notify any Successor Licensor of Licensee's rights to use the Licensed Property (including, if applicable, any rights to use Licensed Property on an exclusive basis) described in the License Agreement and cause the Successor Licensor to acknowledge the same.

(c) Subject solely to the limitations set forth in **Section 2(a)** and **Section 2(b)**, the Secured Parties and any Successor Licensor shall have any rights of Licensor in the Licensed Property and the License Agreement to the extent such rights were transferred to Secured Parties or Successor Licensor by operation of the Foreclosure or applicable law.

(d) Notwithstanding the foregoing, except to the extent expressly undertaken in writing, neither Secured Parties nor any Successor Licensor who acquires an interest in the Licensed Property or the License Agreement as a result of any such Foreclosure or other enforcement action or proceeding (the date on which the Secured Parties, Successor Licensor, or such other party acquires such interest, hereinafter called the "***Acquisition Date***") shall be (i) liable for any act or omission of Licensor under the License Agreement or otherwise or for any damages arising as a result of a breach of the License Agreement by the Licensor (and Licensee shall have no right to offset against royalties due to the Successor Licensor under the License Agreement or any other defenses that Licensee would have against Licensor); (ii) liable for the return of any payments made by the Licensee to the Licensor under the License

[9] NTD: Include if appropriate based on License Agreement's anti-assignment provisions.

Agreement prior to the Acquisition Date; or (iii) required to perform or be liable for any affirmative obligations or covenants of the Licensor under the License Agreement, or liable for any of the representations or warranties of the Licensor under the License Agreement, or liable for any indemnities of the Licensor (other than, with respect to any Successor Licensor, any violation by the Successor Licensor of any exclusive rights of Licensee to use the Licensee Rights after the Acquisition Date).

3. This Agreement is for the express benefit of Licensee, any of its successors-in-interest, and any of its sublicensees under the License Agreement.

4. This Agreement may be executed in one or more counterparts, all of which when taken together shall constitute a single instrument.

5. This Agreement was prepared in the English language, which language shall govern the interpretation of, and any dispute regarding, the terms of this Agreement. This Agreement and all disputes arising out of or related to this Agreement or any breach hereof shall be governed by and construed under the laws of the State of New York, without giving effect to any choice of law principles that would require the application of the laws of a different state.

[SEE ATTACHED SIGNATURE PAGES]

IN WITNESS WHEREOF, the undersigned have executed this instrument as of the day and year first above written.

[INSERT NAME OF LICENSEE]

By _____
Name: [_____]
Title: [_____]

Address for Notices:

[_____]
[_____]
[_____]
Tel: [_____]
Email: [_____]

CRG SERVICING LLC

By _____
Name:
Title:

Address for Notices:
1000 Main Street, Suite 2500
Houston, TX 77002
Attn: Portfolio Reporting
Tel.: 713.209.7350
Fax: 713.209.7351
Email: notices@crglp.com

Acknowledged and Agreed to:

[INSERT NAME OF BORROWER OR OTHER GRANTOR]

By _____
Name:
Title:

Address for Notices:

[2929 Seventh Street, Suite 100
Berkeley, California 94710]
Attn: [_____]
Tel.: [_____]
Fax: [_____]
Email: [_____]

EXHIBIT A
to Non-Disturbance Agreement

LICENSE AGREEMENT

[See attached]

Exhibit 31.1

Rule 13a-14(a) Certification of Chief Executive Officer

CERTIFICATIONS

I, Eddie Gray, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Dynavax Technologies Corporation (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ EDDIE GRAY

Eddie Gray
Chief Executive Officer
(Principal Executive Officer)

Date: May 9, 2018

Exhibit 31.2

Rule 13a-14(a) Certification of Principal Financial Officer

CERTIFICATIONS

I, Michael Ostrach, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Dynavax Technologies Corporation (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ MICHAEL OSTRACH

Michael Ostrach
Chief Financial Officer
(Principal Financial Officer)

Date: May 9, 2018

Exhibit 32.1

Certification Pursuant to Section 1350 of Chapter 63
of Title 18 of the United States Code

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), I, Eddie Gray, Chief Executive Officer of Dynavax Technologies Corporation (the "Company"), hereby certify that, to the best of my knowledge:

(i) The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2018 (the "Periodic Report"), to which this Certificate is attached as Exhibit 32.1, fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

(ii) The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

In Witness Whereof, the undersigned has set his hand hereto as of the 9th day of May, 2018.

By: /s/ EDDIE GRAY

Eddie Gray
Chief Executive Officer
(Principal Executive Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Dynavax Technologies Corporation under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

Exhibit 32.2

Certification Pursuant to Section 1350 of Chapter 63
of Title 18 of the United States Code

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), I, Michael Ostrach, Chief Financial Officer of Dynavax Technologies Corporation (the "Company"), hereby certify that, to the best of my knowledge:

(i) The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2018 (the "Periodic Report"), to which this Certificate is attached as Exhibit 32.2, fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

(ii) The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

In Witness Whereof, the undersigned has set his hand hereto as of the 9th day of May, 2018.

By: /s/ MICHAEL OSTRACH

Michael Ostrach
Chief Financial Officer
(Principal Financial Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Dynavax Technologies Corporation under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.